

# THE NORTHERN BLACK SEA IN ANTIQUITY

NETWORKS, CONNECTIVITY,  
AND CULTURAL INTERACTIONS

EDITED BY VALERIYA KOZLOVSKAYA







## THE NORTHERN BLACK SEA IN ANTIQUITY

The Northern Black Sea region, despite its distance from the centers of classical civilizations, played an integral role in the socioeconomic life of the ancient Greco-Roman world. The chapters in this book, written by experts on the region, explore topics such as the trade, religion, political culture, art and architecture, and the local non-Greek populations, from the foundation of the first Greek colonies on the North Pontic shores at the end of the seventh and sixth century BCE through the first centuries of the Roman imperial period. This volume closely examines relevant categories of archaeological material, including amphorae, architectural remains, funerary and dedicatory monuments, inscriptions, and burial complexes. Geographically, it encompasses the coastal territories of modern Russia and Ukraine. *The Northern Black Sea in Antiquity* embraces an inclusive and comparative approach while discussing new archaeological evidence, offering fresh insights into familiar questions, and presenting original interpretations of well-known artifacts.

Valeriya Kozlovskaya is a lecturer at Mount Ida College. She has many years of experience working in the Black Sea region and has published articles on the archaeology of the Northern Black Sea.



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*In memory of Heinz Heinen,  
colleague and friend,  
with respect and admiration.*





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## PREFACE

The idea for this book was conceived during my term as a Visiting Research Scholar at the Institute for the Study of the Ancient World (ISAW) at New York University in 2008–9. The resources generously provided by the Institute gave me the opportunity to think about the direction of my research and to discuss some of my thoughts in stimulating informal conversations with the other Visiting Fellows, all specialists in different areas of Ancient Studies. I am very grateful to ISAW and to my colleagues there for their role in helping to shape the initial idea of this volume.

During that time, I also realized that it would not be possible for me to achieve singlehandedly a comprehensive interdisciplinary volume on the Northern Black Sea in antiquity. This realization resulted in a fruitful collaboration with the many wonderful scholars whom I was very lucky to have as contributors to this volume. I wish to thank all of them for bearing with me during the long process of translating and/or editing their chapters and compiling the bibliographies, for their patience and understanding, and for their unwavering dedication to this book. This commitment has been especially admirable in the last year of our work on this project, when the geopolitical events in Russia and Ukraine, the very region that is the focus of our book, threw some of their lives into turmoil.

I would also like to express my deep gratitude to Beatrice Rehl, who was archaeology editor at Cambridge University Press at the time when I submitted the preliminary proposal for the volume five years ago. Her advice and enthusiasm were invaluable throughout the initial stages of the project. To Asya Graf, who later replaced Beatrice Rehl in her position and saw the volume to publication, I am eternally indebted for her unceasing support and for providing guidance during the writing and editing process. I am also much obliged to Barbara Barletta for reading the chapter on the local architectural styles in the Northern Black Sea region and offering insightful comments, and to my formidable copy-editor, Christopher Feeney. And, finally, very special thanks go to James Wright, Corey Brennan, Glenn Bugh, John Humphrey, and Larissa Bonfante, who, each in their own way, have encouraged me at various stages of my career, thus helping this project come to fruition.

## NOTE ON TRANSLITERATION AND TERMINOLOGY

Naturally, many geographical and personal names featured in this volume have been transliterated from Ukrainian and Russian. For these terms, the ALA-LC (American Library Association – Library of Congress) Romanization Tables were used. The same system was employed in the bibliography for the transliteration of titles and names in non-Roman scripts. More common geographical names, often featured on maps and in general public discourse, are used throughout the text of the book in their customary form. As to the local names of individuals and places in antiquity, they mostly appear in their original Greek form (in transliteration), apart from where tradition or common sense dictates otherwise. Thus, for example, “Pontus” and “Bosporus” are Latinized for reasons of consistency, because although they can certainly be used in their Greek form, in our volume these names sometimes occur alongside the name of the Roman province “Bithynia-Pontus” and the modern name of the strait connecting the Black Sea with the Sea of Marmara – “Bosp(h)orus.” The names of well-known (and not so well-known) ancient authors are given in their customary versions, i.e., sometimes anglicized and sometimes not, but always following the prevailing English spelling convention.

Special terminology and names referring to local realia are mostly explained in the respective chapters. Broad terms, unless otherwise specified, should be understood in their general meaning. Thus, for example, “barbarian/barbarians” usually indicates the non-Greek peoples of the region and does not necessarily have any additional connotations. In some other instances, however, a term or a name may have several meanings, which cannot always be deduced from the context. In such cases, additional indications are provided to avoid misunderstandings and misinterpretations. For example, in the region in question, “Bosporus” can stand either for the strait connecting the Black Sea with the Azov Sea, the territories around this strait, or for the polity located in these territories, depending on the context. To differentiate between these meanings in passages when they may not be immediately clear, we apply “Cimmerian Bosporus”/ “Strait of Kerch” to the strait connecting the Black Sea with the Azov Sea and “Bosporan Kingdom” to the polity, reserving “Bosporus” for the lands on each side of the strait. The “Thracian Bosporus” is used to indicate the strait connecting the Black Sea with the Sea of Marmara. Similarly, the name “Pontus” can refer either to the whole Pontus Euxinus/Black Sea (or the sea with the adjacent coastal territories), the Pontic regions of Asia

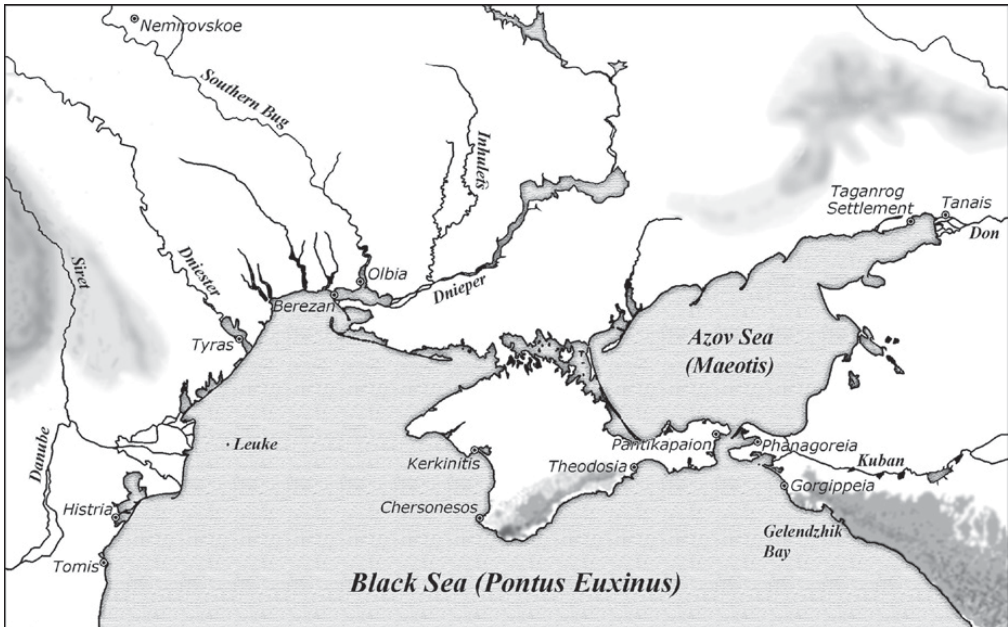
Minor, the so-called Pontic kingdom of Mithridates VI Eupator, or a particular part of the Roman province of Bithynia-Pontus. In this volume, “Pontus” and “Pontic” usually have the first of these meanings, if not otherwise specified or clear from the context.

## ABBREVIATIONS

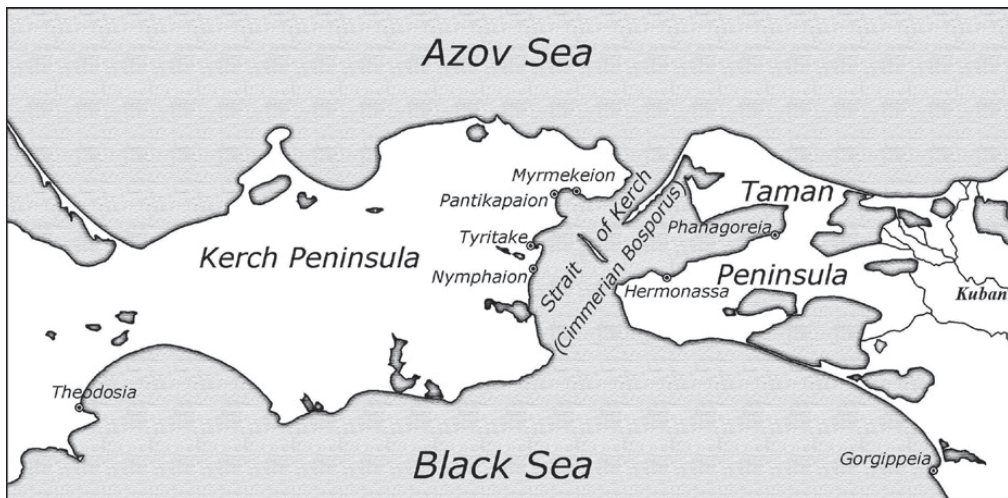
<i>AA</i>	<i>Archäologischer Anzeiger</i>
<i>ACSS</i>	<i>Ancient Civilizations from Scythia to Siberia</i>
<i>AF</i>	<i>Archäologische Forschungen</i>
<i>AJA</i>	<i>American Journal of Archaeology</i>
<i>AM</i>	<i>Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung</i>
<i>AMA</i>	<i>Antichnyi mir i arkheologîia</i>
<i>AntJ</i>	<i>Antiquaries Journal</i>
<i>AR</i>	<i>Archaeological Reports</i>
<i>ASGE</i>	<i>Arkheologicheskii sbornik Gosudarstvennogo Ėrmitazha</i>
<i>BASP</i>	<i>Bulletin of the American Society of Papyrologists</i>
<i>BCH</i>	<i>Bulletin de correspondance hellénique</i>
<i>BCH Suppl.</i>	<i>Bulletin de correspondance hellénique. Supplément</i>
<i>BSA</i>	<i>Annual of the British School at Athens</i>
<i>CIL</i>	<i>Corpus inscriptionum latinarum</i>
<i>CIRB</i>	V.V. Struve, ed., <i>Corpus inscriptionum regni Bosporani</i> (Moscow and Leningrad, 1965)
<i>CIRB Album</i>	A. K. Gavrilov, ed., <i>Corpus inscriptionum regni Bosporani. Album imaginum</i> (St. Petersburg, 2004)
<i>CRAI</i>	<i>Comptes rendus des séances de l'Académie des inscriptions et belles-lettres</i>
<i>Etym.Magn.</i>	<i>Etymologicon Magnum</i>
<i>FGrHist</i>	F. Jacoby, <i>Fragmente der griechischen Historiker</i> (Berlin, 1923–)
<i>GRBS</i>	<i>Greek, Roman and Byzantine Studies</i>
<i>I.Aphr.</i>	J. Reynolds, C. Roueché, and G. Bodard, eds., <i>Inscriptions of Aphrodisias</i> (2007): <a href="http://insaph.kcl.ac.uk/iaph2007">http://insaph.kcl.ac.uk/iaph2007</a>
<i>I.Beroia</i>	L. Gounaropoulou and M. B. Hatzopoulos, <i>Ἐπιγραφές κάτω Μακεδονίας</i> , vol. I, <i>Ἐπιγραφές Βεροίας</i> (Athens, 1998)
<i>I.Boubon</i>	F. Schindler, <i>Die Inschriften von Bubon (Nordlykien)</i> (Vienna, 1972)
<i>I.Histria</i>	D. M. Pippidi, <i>Inscriptiones Daciae et Scythiae Minoris antiquae. Series altera: Inscriptiones Scythiae Minoris Graecae et Latinae</i> , vol. I, <i>Inscriptiones Histriae et Viciniae</i> (Bucharest, 1983)

<i>I. Iasos</i>	W. Blümel, <i>Die Inschriften von Iasos</i> , vols. I–II. <i>IGSK</i> 28.1–2 (Bonn, 1985).
<i>I. Ilion</i>	P. Frisch, <i>Die Inschriften von Ilion</i> . <i>IGSK</i> 3 (Bonn, 1975)
<i>I. Olbia</i>	T. N. Knipovich and E. I. Levi, <i>Nadpisi Ol'vii</i> (Leningrad, 1968)
<i>I. Pergamon</i>	M. Fränkel, <i>Die Inschriften von Pergamon</i> , vols. I–II (Berlin, 1890–5)
<i>I. Perge</i>	S. Şahin, <i>Die Inschriften von Perge</i> . <i>IGSK</i> 54 (Bonn, 1999); <i>IGSK</i> 61 (Bonn, 2004)
<i>I. Priene</i>	F. Hiller von Gaertringen, <i>Inschriften von Priene</i> (Berlin, 1906)
<i>I. Stratonikeia</i>	M. Ç. Şahin, <i>Die Inschriften von Stratonikeia</i> , vols. I–II. <i>IGSK</i> 21 (Bonn 1981); <i>IGSK</i> 22.1 (Bonn, 1982); <i>IGSK</i> 22.2 (Bonn, 1990).
<i>I. Tomis</i>	I. Stoian, <i>Inscriptiones Daciae et Scythiae Minoris antiquae. Series altera: Inscriptiones Scythiae Minoris Graecae et Latinae</i> , vol. II, <i>Tomis et territorium</i> (Bucharest, 1987)
<i>IG</i>	<i>Inscriptiones Graecae</i> (Berlin, 1873–)
<i>IGAIMK</i>	<i>Izvestiia Gosudarstvennoi akademii istorii material'noi kul'tury</i>
<i>IGBulg</i>	G. Mikhaïlov, ed., <i>Inscriptiones graecae in Bulgaria repertae</i> , 5 vols. (Sofia, 1958–97)
<i>IGR</i>	<i>Inscriptiones graecae ad res romanas pertinentes</i> (Paris, 1901–27)
<i>IGSK</i>	<i>Inschriften griechischer Städte aus Kleinasien</i> (Bonn, 1972–)
<i>IJNA</i>	<i>International Journal of Nautical Archaeology and Underwater Exploration</i>
<i>IOSPE</i>	V. Latyshev, <i>Inscriptiones antiquae orae septentrionalis Ponti Euxini graecae et latinae</i> (St. Petersburg, 1885–1901)
<i>Iscr. Cos</i>	M. Segre, <i>Iscrizioni di Cos</i> , vols. I–II (Rome, 1993)
<i>IstMitt</i>	<i>Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Istanbul</i> (= <i>Istanbuler Mitteilungen</i> )
<i>IstMitt-BH</i>	<i>Istanbuler Mitteilungen. Beiheft</i>
<i>JdI</i>	<i>Jahrbuch des Deutschen Archäologischen Instituts</i>
<i>JRA</i>	<i>Journal of Roman Archaeology</i>
<i>KSLA</i>	<i>Kratkie soobshcheniia Instituta arkheologii</i>
<i>KSIIMK</i>	<i>Kratkie soobshcheniia Instituta istorii material'noi kul'tury</i>
<i>LEC</i>	<i>Les études classiques</i>
<i>LIMC</i>	<i>Lexicon iconographicum mythologiae classicae</i> (Zurich and Munich, 1974–)
<i>MAMA</i>	<i>Monumenta Asiae Minoris Antiqua</i> , vols. I–X (London, 1928–93)
<i>MIA</i>	<i>Materialy i issledovaniia po arkheologii SSSR</i>
<i>MLAK</i>	<i>Materialy i issledovaniia po arkheologii Kubani</i>

<i>NEPKh</i>	È. I. Solomonik, <i>Novye èpigrafičeskie pamiatniki Khersonesa</i> , vols. 1–II (Kiev, 1964 and 1973).
<i>OJA</i>	<i>Oxford Journal of Archaeology</i>
<i>ÖJh</i>	<i>Jahreshefte des Österreichischen archäologischen Instituts in Wien</i>
<i>PAPhA</i>	<i>Proceedings of the American Philosophical Society</i>
<i>PIFK</i>	<i>Problemy istorii, filologii i kul'tury</i>
<i>P.Oxy.</i>	<i>Papyri Oxyrhynchi</i> (London, 1898–)
<i>RE</i>	G. Wissowa, <i>Paulys Real-Encyclopädie der classischen Altertumswissenschaft</i> (Stuttgart, 1893–)
<i>RE Suppl.</i>	G. Wissowa, <i>Paulys Real-Encyclopädie der classischen Altertumswissenschaft</i> (Stuttgart, 1893–). Supplement
<i>REG</i>	<i>Revue des études grecques</i>
<i>RLA</i>	<i>Reallexikon der Assyriologie und Vorderasiatischen Archäologie</i> (Berlin and Leipzig, 1928–)
<i>RosArkh</i>	<i>Rossiiskaia arkheologiia</i>
<i>SCI</i>	<i>Scripta Classica Israelica</i>
<i>SEG</i>	<i>Supplementum Epigraphicum Graecum</i>
<i>SHA</i>	<i>Scriptores historiae Augustae</i>
<i>SovArkh</i>	<i>Sovetskaia arkheologiia</i>
<i>TAM</i>	<i>Tituli Asiae Minoris</i> (Vienna, 1901–89)
<i>TAPA</i>	<i>Transactions of the American Philological Association</i>
<i>VDI</i>	<i>Vestnik drevnei istorii</i>
<i>ZOAO</i>	<i>Zapiski Odesskogo arkheologicheskogo obshchestva</i>



Map 1. The Northern Black Sea region.



Map 2. The Bosphorus.





# INTRODUCTION: "PONTIC NETWORKS"

Valeriya Kozlovskaya

Heinz Heinen, who was writing on the Roman Imperial period in the Northern Black Sea region for this volume, planned to call his chapter "The Long Way to Pontic Unity." He originally decided on this title because, in a very concise way, it described the situation on the northern shore of the Black Sea both before and during the period in question. Later, at any rate, he admitted that the term "unity" did not seem adequate to him: "Pontic Networks," he said, would be "more realistic." The piece was never written – Professor Heinen died in July 2013 – but his deliberation on his chapter's title reflects, in many respects, the ideas that permeate the entire book.

The volume opens with Askold Ivantchik's exploration of the early perception of the Pontus Euxinus by the Greeks prior to the period when the first colonies were founded on its shores ([Chapter 1](#)). The author argues that before the Greeks discovered and investigated the northern and eastern coasts of the Black Sea, they may have identified this whole body of water with the "Ocean" (which, in his opinion, accounts for the relatively late colonization of the region). But once it had been established that the Black Sea is a closed basin (which happened probably no later than the last third of the seventh century BCE), the Greeks began to perceive it as a geographic unity with a specific outline.

By introducing this notion of "unity," Ivantchik establishes a point of departure for the discussion within and amongst the chapters in this volume. The rest of the chapters focus primarily on the archaeological material and, in most cases, present the results of the contributors' life-long research, rather than a one-off exploration written specifically for this book. Each chapter could stand alone and each part of the volume treats a specific topic or theme (such as trade and economy, political culture, art and architecture, and the non-Greek populations of the region), often focusing on a certain category of the archaeological material (including amphorae, epigraphical material, burial complexes and funerary monuments, and architectural structures). Chronologically, the volume covers the period from the foundations of the first Greek colonies on the North Pontic shores at the end of the seventh and in the sixth centuries BCE to the Roman period, i.e.,

the early centuries CE; geographically, it encompasses the coastal territories of modern Russia and Ukraine, to which today we refer as the Northern Black Sea region.

Modern scholarship maintains that in antiquity the latter was formed by three major sub-regions: the Northwestern (with Olbia, Nikonion, Tyras, Histria, Kallatis, and Tomis);<sup>1</sup> Tauris (i.e., the larger part of the Crimea, with Chersonesos as its main center); and the Northeastern, including the Bosphorus (from Theodosia to Gorgippeia) and the Azov Sea coast (with the settlements of Elizavetovskoe and – later – Tanais).<sup>2</sup> Even from this brief description it is obvious that these sub-regions can be further broken down into more specific zones: thus, for example, the Northeastern sub-region comprised the European Bosphorus (the eastern part of the Crimea, or the Kerch Peninsula), the Asiatic Bosphorus (a part of the Taman Peninsula), and the Azov Sea area in the northeast. The exact division into the sub-regions differs from scholar to scholar, but the key areas remain the same, although it is clear that their boundaries must have fluctuated over time. The same refers to the entire Black Sea region in antiquity, although it must be said that the emerging picture does not necessarily correspond to our present-day conventional (and convenient) division of the region into the Eastern, Southern, Western, and Northern Black Sea coasts.<sup>3</sup>

The irregular line of Greek *apoikiai* founded on the Black Sea shores established a network – or, rather, networks – of economic relations, leading, over time, to the formation of the pan-Pontic market, which maintained close ties with the Mediterranean and ultimately became part of the Roman imperial market. In a maritime context, the points that are most closely associated with the notion of networks are harbors, and my own contribution to this book is devoted to this particular subject (Chapter 2). It provides an overview of the Greek harbors along the North Pontic coast, while specifically focusing on the Northwestern Black Sea harbor networks, examining them in the framework of the socio-political development of this region and within the larger “pan-Pontic” maritime community.

This essay is complimented by Ilya Buynevich’s introduction to the regional geological context (Chapter 3), which aims to facilitate our understanding of ancient settlement and navigation patterns in the area in question. When using geological data in archaeology, we rely on accurate reconstructions of coastal landforms and sea-level history, which are meant to reveal the former shoreline positions, locations and dimensions of ancient river mouths and inlets, and the extent of coastal bays and harbors. To date, the nature and magnitude of relative sea-level changes along the North Pontic coast in antiquity are still a point of contention. In his attempt to clarify this issue, Buynevich focuses, in particular, on the coastal evolution of the Northwestern Black Sea. His chapter also underlines certain pitfalls that one is likely to encounter when working on this

subject – from misinterpretation of the local geological context to oversimplification of its historical reconstruction.

From the topic of harbors the discussion naturally moves on to overseas trade in Part II, dedicated to the amphora trade in the North Pontic region from the Archaic period to the third century CE: the chapter by Sergey Monakhov and Elena Kuznetsova ([Chapter 4](#)) handles the finds up to the Hellenistic period, while Sergey Vnukov takes over for the introduction of the material from the first century BCE onwards ([Chapter 5](#)). No other category of archaeological evidence has such significance for the study of trade and economy of the Greco-Roman world as amphorae, for the reason that “they are not so much a commodity in themselves as a trace element reflecting the movement of the various commodities which they contained.”<sup>4</sup> The general potential of this type of evidence, “at once a dream and nightmare,” has been outlined elsewhere,<sup>5</sup> but this volume’s contributors present the most recent and most detailed chronological and typological classifications of amphorae that were both imported by the North Pontic region and locally produced. The authors start their account from the establishment of stable economic contacts between the Northern Black Sea and the Mediterranean after the foundation of the Greek colonies on the North Pontic coast, followed by the emergence of the South Pontic centers and the intensification of the inter-Pontic trade. They then proceed to the development of local wine production in the North Pontic centers and the involvement of the Western and Eastern Black Sea regions in regional and interregional trade, and conclude with the question of the formation of the pan-Pontic market and its evolution within the Roman imperial market. The analysis of the distribution patterns of various amphora types and of the changes in the dynamics of their production and import take a considerable part of both chapters, but the most important conclusions based on this analysis concern, in a more general way, the overall economic history of this region in antiquity.

The intensive connections between all the macro- and micro-regions must have generated not only a notion of “the Pontus as a region whose economy and society were largely self-contained,”<sup>6</sup> but also some sense of regional identity. In [Chapter 6](#), which focuses on the political culture of the Northern Black Sea cities in antiquity, Angelos Chaniotis discusses, among other topics, the case of “Pontic” identity, along with other identities that may or may not have been assumed by the inhabitants of these cities. Greek and Roman historians and geographers, who contributed to the creation in the minds of their audiences of the image of the Pontus as a world apart,<sup>7</sup> wrote about the people who dwelled around that sea,<sup>8</sup> sometimes referring to them collectively as “Pontici/Pontikoi.”<sup>9</sup> We also know that the terms “Pontikos/Pontios/Ponticus,” when used in relation to the identity of an individual or a group of people, could have had an array of meanings.<sup>10</sup> Based on the morphological

analysis of the forms “Pontikos” and “Pontios,” it has been demonstrated that the former must have been coined by Greeks from outside the Black Sea region and was originally associated with goods rather than people, while the latter applied only to those who literally dwelled in the Pontus Euxinus, i.e., the divinities rather than human beings, and that either form could denote someone’s *ethnika* only because of this person’s association with the sea.<sup>11</sup>

In his chapter, Chaniotis presents, among various other pieces of epigraphic evidence, a translation of the honorific decree for Orontas of Olbia issued by the people of Byzantion in the early first century CE (*IOSPE I*² 79). This document directly mentions the *Pontic ethnos* (τὸ Ποντικὸν ἔθνος),<sup>12</sup> which is particularly significant in view of the location of Byzantion on the Thracian Bosphorus (the Propontis), near the entrance to the Pontus, “somewhat outside the parts of the world ordinarily visited,” as Polybius put it (4.38).<sup>13</sup> We do not necessarily know whether the population of Byzantion associated themselves with the *Pontic ethnos*, but if they did, this would be the only instance of such self-identification, since in all the other examples available to us it was always the outsiders who referred to the people living on the shores of the Black Sea as “Pontici/Pontikoi.”

In general, the epigraphic evidence from the North Pontic coast demonstrates that the inhabitants of this region must have felt stronger about their other identities than about being a part of the Pontic community. Chaniotis suggests that this may be explained with the specifics of the region, where the often difficult balance between the Greeks and their neighbors, the constant tension between cooperation and conflict, and the pressures from other inner and outer forces all had a strong impact on one’s self-identification – especially in the cases when one’s loyalty was concerned. Thus, while Hellenic identity probably had more meaning to these people than Pontic identity did, the loyalty to their respective *poleis* must have been even more important, so that the most prominently manifested identity throughout the entire period of the existence of Greek cities on the northern coast of the Black Sea seems to have been the civic one.

The notion of cultural identity and the interactions between the Greeks and various non-Greek populations of the North Pontic region, both sedentary and nomadic, is further explored in the chapter by Maya Muratov on Bosporan art (Chapter 7). The subject of art is not frequently treated in publications on the Northern Black Sea in antiquity, and even when it is, the predominant approach is the stylistic one. Muratov, on the contrary, examines specific groups of art objects, such as grave stelai and commemorative slabs, in their social context, which allows her to offer innovative and insightful interpretations of some well-known artifacts. She demonstrates how the recurrent visual formulas, although undeniably associated with the Greek pictorial tradition, reflect the developments that took place within

Bosporan society and manifest the emergence of the new – Bosporan – cultural identity.

Characteristically local features are also detectable in the architecture of the ancient cities in the Northern Black Sea region, although their presence is less conspicuous in the case of the structures built in a specific architectural order. This may have to do with the fact that such structures were, to a great extent, public buildings and, therefore, were bound to follow in their style the standards of Greek architecture. In general, it is considered that the architecture of the Ionian colonies in the North Pontic region developed in accordance with the architectural traditions of their Greek mother-cities. Alla Bušikikh's chapter in the present volume ([Chapter 8](#)) revisits this argument and meticulously analyzes the available evidence, concluding that the beginning of the formation of the local North Pontic architectural style may be traced back to the Late Archaic period, although the evidence is still rather sporadic and does not necessarily testify to the existence of a local architectural school during that period. However, according to Bušikikh, there is enough evidence to demonstrate that at least two regional architectural schools – northeastern and northwestern – already existed during the Classical period. Moreover, the Hellenistic period witnessed not only the formation, but also the evolution of three regional architectural styles, associated with the three major centers of the North Pontic region – Olbia, Chersonesos, and the Bosporus.

Beyond these centers, the hinterlands of the Northern Black Sea coast were inhabited by various peoples, with whom the Greek *apoikiai* had rather unstable relations. The two major powers among them, which played a key role in the history of the North Pontic region in antiquity, were the Scythians and the Sarmatians. Both names are known to us from ancient historians, and the presence of these peoples in the Northern Black Sea region is well documented archaeologically, yet the correlations between the remains of their respective material cultures and the evidence provided by the ancient written sources are anything but straightforward. In relation to the Scythians, this question has been addressed more than once within the last few decades,<sup>14</sup> and it is clear that the term “Scythians” has been used in reference to different entities, depending on the context: thus, the “Scythians” described by Herodotus and the “Scythians” of the Archaic period known from archaeological material are different from those of the fourth century BCE. One also needs to take into consideration that both the Classical literary tradition and modern scholarship tend to mythologize Scythian history and that such views may still dominate our perception of this people and their culture.<sup>15</sup>

In the case of the Sarmatians, on the other hand, the discourse on how their constructed ethnic identity interferes with our interpretation of archaeological evidence has been initiated only recently. The Sarmatians,

too, were a nomadic people described by ancient writers and studied by modern scholars. Various theories of migrations have been generated seeking to explain the diffusion of the “Sarmatian” material culture across large territories. According to the currently prevailing scholarly opinion, the Northern Black Sea region witnessed a steadily increasing accumulation of the “Sarmatian” features by the inhabitants of the Greek cities from the third century BCE to the middle of the third century CE, as well as a gradual extension of the “Sarmatian” culture westward. In her contribution to this volume, Valentina Mordvintseva ([Chapter 9](#)) discusses the complex historiography of the question and presents her conclusions concerning the Sarmatians, both as a historical people and as an entity created by modern scholarship. Based on her study of the archaeological material from numerous burial complexes, Mordvintseva argues that the people who populated the region between the Volga-Don basin and the Ural steppes (known as the “Sarmatian Motherland”) and left behind the kurgan burial-grounds that were characteristic of that region were not the “Sarmatians” who inhabited the Northern Black Sea region prior to the first century BCE.

The question of identity is one of many addressed in several chapters of this book. Together, the nine chapters comprising the volume cover a broad variety of topics, but by no means offer an exhaustive study of the region – a task that is not necessarily impossible to complete, but certainly not in a single volume. In my experience, the study of this particular part of the Greco-Roman world requires, most of all, perseverance, and for me, working on this book was yet another reiteration of this experience. Although the past, recent, and ongoing events in Russia and Ukraine, the two states that share the Northern Black Sea coast today, have been drawing attention to this region, to the scholars of antiquity it still very much remains a “world apart.” This is why I, as the editor, find great satisfaction in the fact that this volume, incomplete as it may be, brings this world closer to those who wish to study it and have the necessary perseverance to do so.

## THE GREEKS AND THE BLACK SEA: THE EARLIEST IDEAS ABOUT THE REGION AND THE BEGINNING OF COLONIZATION\*

Askold Ivantchik

The Greek colonization of the Northern Black Sea region was part of the larger phenomenon of Greek colonization, which, in turn, was probably the most important phenomenon in Greek history from the eighth to sixth century BCE. It resulted in Greeks settling on almost the entire coast of the Mediterranean and the Black Sea – from modern Spain in the west to Georgia in the east and from North Africa in the south to the mouth of the Don in the north.

In the context of the larger process of Greek colonization, the colonization of the Pontic region occurred quite late – towards the end of the period. When we compare the dates of the foundation of the first Greek colonies in the Northern Black Sea region with those in South Italy and Sicily – another important region where Greek colonies were established – the result is rather surprising. The earliest Greek colonies in Italy were founded in the middle of the eighth century BCE, whereas the first colonies in the Northern Black Sea region date to the third quarter of the seventh century BCE, which is over a hundred years later. This contrast becomes even more striking if we compare the evidence for pre-colonial contacts of the Greeks with the two regions in question. The earliest Greek contacts with South Italy and Sicily are well attested by numerous finds of Mycenaean imports;<sup>1</sup> in some cases, these finds can even be interpreted as traces of temporary settlements of Mycenaean

traders. Although these contacts became less intense after the collapse of the Mycenaean civilization, they never stopped, which is testified by finds of Protogeometric ceramics in Italy.

In the Pontic region, the situation is completely different. It seems that no substantial contacts (at least, over the sea) existed between the Aegean and the Black Sea prior to the middle of the seventh century BCE. No Greek imports of the earlier periods have been found in the Black Sea region, despite the fact that the region has been well studied.

The same can be said about Mycenaean material. The few objects that had been interpreted as evidence for contacts between the Pontus and the Aegean have turned out to be locally produced, and even if they show some similarity to artifacts manufactured in the Aegean, we can talk here only about cultural influences resulting from overland contacts through many intermediaries, and not about direct imports. In the early 1990s, Stefan Hiller tried to revisit the hypothesis of the existence of regular maritime contacts between the Mycenaean civilization and the Black Sea region and collected available archaeological data that allegedly supported it.<sup>2</sup> However, this data actually showed the weakness of his arguments – none of it can withstand critical examination.<sup>3</sup> The only undisputed presence of Mycenaean objects in the larger Black Sea region is testified by the finds from Maşat Höyük in Eastern Anatolia.<sup>4</sup> But Maşat Höyük is located about 150 km from the coast and separated from it by mountains that are difficult to traverse. These mountains isolated the Black Sea coast from the inner parts of Asia Minor during the Mycenaean period and later: for example, the Babylonians, most likely, were ignorant about the very existence of the Black Sea,<sup>5</sup> although they were familiar with Central Anatolia. It is not surprising then that merchants who traveled via land-routes in Asia Minor may have not even known about the sea that lay on the other side of these mountains. Mycenaean vessels were found here along with ceramic fragments from Cyprus, and already their discoverer thought that they had arrived at the site “not from the north,” but “from the south,”<sup>6</sup> i.e., via land-routes. Therefore, these finds cannot prove that Aegean seafarers traveled the Black Sea during the period in question.<sup>7</sup> They testify rather to the existence of contacts between Mycenaean Greeks and Central Anatolia, which have been attested not only by archaeological finds,<sup>8</sup> but also by the fact that the Mycenaeans are mentioned in Hittite texts under the name of *Ahhiyawa*.

Therefore, there are no reasons to assume that Greeks had any contacts with the Pontic region prior to the seventh century BCE. If such contacts did exist, they must have been rather insignificant, since they did not leave any traces in material culture.

There had to be some reason, however, why the Greek colonization of a region that was located so close to the Aegean started much later than the



colonization of more distant regions. This question has received much scholarly attention, but no convincing explanation has been offered so far. Thus, it has been suggested that sailing on the Black Sea had not been possible before the invention of the *penteconter* because of the strong counterflow in the Bosphorus Strait, which allegedly did not allow the Greeks to pass through the strait until the beginning of the seventh century BCE.<sup>9</sup> This hypothesis was later refuted.<sup>10</sup> It is possible that the difficulty of sailing through the strait was indeed an additional factor that slowed down the penetration of the Black Sea by the Greeks, but the main reason, in my opinion, was different. It must have lain not in the material realm, but rather in the sphere of geographical and cosmological views of the Greeks in the eighth to seventh century BCE – in particular, in the Homeric period.

The problem of Homer's geographical knowledge already attracted scholarly attention in antiquity. Strabo, who was very dedicated to Homeric studies,<sup>11</sup> sided in his opinion with such authorities as Eratosthenes and Apollodorus (7.3.6; 12.3.24–7). They denied Homer's knowledge not only of the Northern Black Sea region, but also of the entire Pontic coast. Strabo himself, although he was fond of Homer, admitted that the poet was ignorant of the Ister and the Phasis, let alone the Northern Black Sea (12.3.26).<sup>12</sup> Many modern scholars of Homeric geography have also shared the same view.<sup>13</sup>

Strabo also offered another interesting observation about the views of the Pontus in Homer's time (1.2.10): "In his time people absolutely regarded the Euxine as a kind of second Ocean, and placed those who had crossed it in the same list with navigators who had passed the Pillars."<sup>14</sup> This passage states directly that the Greeks originally viewed the Black Sea as the Ocean.

The mythological tradition which includes the concept of the Ocean may have preserved other evidence for the identification of the Black Sea with the Ocean. Therefore, it is necessary to re-examine the mythological cycles associated with the Black Sea from this point of view. This is especially important because discussions of pre-colonial contacts of the Greeks with the Northern Black Sea have been based precisely on mythological sources.

#### PONTIC ACHILLES AND THE IMAGE OF THE PONTUS

Traces of the idea that the Black Sea was part of the Ocean can be found in the myths that have the oldest connections with the former. The most important of them is the cycle about the Pontic Achilles and his cult on the island of Leuke (the modern island of Zmeinyĭ at the mouth of the Danube).<sup>15</sup> The most convincing hypothesis is that Achilles originally was venerated as the lord of the dead and his cult was associated with ancient beliefs concerning the afterlife on the Isles of the Blessed (μακαρῶν νῆσος).<sup>16</sup> Although this interpretation has been criticized, some of the counterarguments were not

correct, and those that could be accepted are not strong enough to refute the entire theory.<sup>17</sup> Regardless of the origins of the cult of Achilles, it is important that the legends connected with it presuppose the identification of the island of Leuke with the Isles of the Blessed or Elysium,<sup>18</sup> and some sources mention this identification directly (Plin. *HN* 4.93; Fest. Avien. *Descr. orb. terr.* 723–5, 728; Pind. *Ol.* 2.70–2, 79–80 and *Nem.* 4.49–50; Quint. Smyrn. 3.775–7 and 14.223–4). The “Isles of the Blessed” and “Elysium” are two names that stand for the same mythical locality, the concept of which existed long before the discovery of the island of Leuke in the Black Sea. The latter was just one of the many areas on the actual geographical map that were identified with this mythical place in antiquity. The island itself, called Λευκή, or “White,” was not a similar mythical concept – it was a real island in the Black Sea, and its name became synonymous with the “Isles of the Blessed” and “Elysium” only after the island had been identified with them.<sup>19</sup> This is important for establishing the date when such identification may have occurred.

The earliest sources that testify to this identification include not only Pindar’s texts, mentioned above, but also a fragment from Alcaeus: Ἀχιλλεύς ὁ γὰρ Σκυθίας μέδεις (fr. 354 Lobel–Page = 14 Diehl, γὰρ ε τας var. *accent. corr. Bergk*). This fragment confirms that during the time of Alcaeus (the end of the seventh to the first third of the sixth centuries BCE) Achilles was already associated with the Northern Black Sea region (i.e., with the island of Leuke first of all) and, most likely, his cult on the island already existed. This is indicated by the word μέδεις, which was usually used with the names of the gods in references to their cult places.

This conclusion is supported by archaeological evidence: the earliest ceramic fragments discovered on the island date to the end of the seventh century BCE.<sup>20</sup> There was no settlement on Leuke (the texts specifically state that it was prohibited not only to live on the island, but also even to spend a night there), and there hardly could have been one since the island has no water and almost no soil, so that these fragments may only be associated with the sanctuary of Achilles. Fragments of architectural terracottas found on the island date to the middle or the second half of the sixth century BCE and must have belonged to the temple of Achilles, which was built around this time.<sup>21</sup> Starting from the second half of the century, the existence of the cult of Achilles is confirmed by the presence of numerous graffiti dedicated to him, found on the islands of Leuke and Berezan’, as well as in Olbia and its surroundings.<sup>22</sup> Particularly important are the materials from the excavations at the site of Beïkush, located on a cape between the Berezan’ and Beïkush limans west of Olbia.<sup>23</sup> Here, a sanctuary of Achilles was discovered, with many cult complexes, remains of sacrifices, and dedicatory graffiti with his name. Based on the finds, the sanctuary must have functioned from the second quarter or even the beginning of the sixth century BCE onwards. Most of the cult structures were built into

the ground, often at a considerable depth; in two cases, actual underground caves were constructed. Moreover, dedicatory graffiti indicate that in one of these caves Achilles was worshipped together with Hecate. This form of cult demonstrates that Achilles was venerated as a chthonic deity, associated with the Underworld and the mythology of death, which is another confirmation of the interpretation of his cult on the island of Leuke mentioned above. Therefore, Leuke must have been identified with the Isles of the Blessed no later than the end of the seventh century BCE: this identification was the *raison d'être* of the cult of Achilles on this island. The veneration of Achilles in adjacent territories and the emergence of sanctuaries there can probably be explained by this identification and were secondary in relation to it.

There is also other evidence that confirms this early date for the emergence of the cult of Achilles on the island of Leuke and the identification of the latter with the Isles of the Blessed. There is, for example, a tradition according to which either Leonymus or Autoleon of Croton visited the sanctuary on Leuke (Paus. 3.19.11–3; Phot. *Bibl.* 186.18). Some details in this story suggest that the sanctuary was mentioned in Stesichorus' poem Πάλινωδία, dating to the first half of the sixth century BCE.<sup>24</sup> Another piece of information pointing towards this date is the theophoric name of Achillodorus, the author of a letter written on a lead tablet discovered on Berezan'.<sup>25</sup> In this letter, probably written no later than the end of the sixth century BCE, Achillodorus addresses his grown-up son, and this suggests that he himself must have received his name some four decades earlier. Therefore, the cult of Achilles must have already existed in the *polis* of Olbia at that time. Finally, the same date can be deduced from the scene depicting Achilles transferred to the island of Leuke after his death on a black-figure Attic vase of the Leagros group, dated to the 540s BCE, currently in the British Museum (B 240).<sup>26</sup>

It is possible, however, that the identification of the island of Leuke with Elysium took place even earlier. According to the summary of the *Aethiopis* by Arctinus of Miletos, preserved in Proclus' *Chrestomathy*, Thetis brought Achilles after his death to the island of Leuke.<sup>27</sup> Unfortunately, the history of transmission of this textual evidence does not allow us to securely assume that the passage in question from the *Aethiopis* features in the *Chrestomathy* in its original form,<sup>28</sup> but there are also no special reasons to presume that it does not. If the island of Leuke, indeed, was mentioned in the *Aethiopis*, then its identification with the Isles of the Blessed must have occurred no later than the date when the poem was composed. This date is not necessarily clear, but most likely it is the seventh century BCE – possibly, its first half.<sup>29</sup>

The mention of the Λευκάς πέτρη in Homer's Δευτερονέκυια (*Od.* 24.11), located in the Ocean, on the way to the realm of the dead, should be compared with the text of the *Aethiopis*. The oceanic context differentiates this rock from other “white rocks” mentioned in ancient texts and allows us to identify it

with the Isles of the Blessed – the White Island in the Black Sea. The affinity between the *Aethiopsis* and the Δευτερονέκκεια has been repeatedly pointed out,<sup>30</sup> so that the mention of the “White rock” in the Ocean may be another indication that the island of Leuke as the Isles of the Blessed was mentioned for the first time in the *Aethiopsis*.<sup>31</sup>

If this assumption is correct then the identification of Leuke with the Isles of the Blessed can be dated to the period prior not only to the foundation of Olbia, but also of the other earliest colonies on the Black Sea coast (Berezan', Histria, Orgame, Taganrog Settlement, and Sinope). This hypothesis is fully in agreement with the usual practices of Greek colonization. Plutarch reports that in addition to other instructions concerning the place where a future colony would be established, the founders of new colonies also often received from the Pythia information about previously unknown tombs of Greek heroes in these areas, which, naturally, would later be venerated in the newly founded *polis* (*De Pyth. or.* 27.407–8). New hero cults, introduced in such a way, played for the Greeks a significant role in the process of their settling in new territories: becoming a part of their mythological past, these unknown foreign lands were thus included in the Greek world, where such mythological connections with local topography were always numerous and very important in religious life.<sup>32</sup> Therefore, the identification of the island of Leuke with the Isles of the Blessed, where Achilles was placed after his death, was particularly appropriate at the earliest stage of the Greek colonization of the Black Sea, when the colonists needed to recreate their traditional structures, including the cultic ones, in their new place of habitation. It is possible that the cult of Achilles was especially popular in the Northwestern Black Sea region in later times precisely because he was the very first Greek hero localized in these territories. It should be noted that the cult of Achilles was not widespread in the Greek world. In those places where it existed, Achilles was venerated together with the Nereids and his cult was not the primary one.<sup>33</sup> Worshipping Achilles as an important hero and even as one of the main deities was specific to the Pontic region and, most likely, can be explained by the circumstances of the emergence of this cult and its original close connection to the Black Sea.

Thus, the material discussed above allows us to suggest that the island of Leuke in the Black Sea was identified with the Isles of the Blessed no later than the end of the seventh or the beginning of the sixth centuries BCE and possibly even in the first half of the seventh century BCE. This identification, in turn, presupposes the identification of the Black Sea with the Ocean, since the Isles of the Blessed had always been localized in the Ocean.<sup>34</sup> Therefore, Ionian seafarers would have been able to recognize the newly discovered island as Elysium only under the condition that they had considered the sea where they found the island a part of the Ocean. The identification must have then

occurred before the beginning of the intensive colonization of the Northern Black Sea region, which is fully in agreement with the proposed date.

The view of the Black Sea as the Ocean, where the Isles of the Blessed were located, explains the association of the Black Sea with the realm of the dead, preserved in some traditions, because the image of the Ocean was always closely connected with the mythology of death. Thus, for example, the name of the city of the Laestrygonians in the *Odyssey*<sup>35</sup> – Τηλέπυλος (10.82) – has been interpreted by many scholars as a euphemism for the gates to Hades, while the names of the Laestrygonians themselves were probably also associated with the same beliefs.<sup>36</sup> In addition, the Planktai, or the Symplegades (Hom. *Od.* 12.59–72, 23.327; Pind. *Pyth.* 4.208; Soph. *Ant.* 966; and others), should probably be viewed as a gate into the realm of the dead.<sup>37</sup> Moreover, the image of Aeetes and his land Aea, the goal of the journey undertaken by the Argonauts, is linked to the mythology of death (see below). The same views possibly also explain the fact that in the *Odyssey* Homer connected the entrance to Hades with another of the Black Sea realia known to him – the Cimmerians (11.14–15).<sup>38</sup> Thus, the cult of Achilles, preserved on the island of Leuke throughout antiquity, must have been a trace of the ancient belief according to which the Black Sea was identified with the Ocean, and its only island – the island of Leuke – with the Isles of the Blessed.

#### THE EARLY ARGONAUTICA AND THE VIEWS OF THE BLACK SEA

Another mythological cycle associated with the Black Sea, but not connected with the previous one, is the myth about the voyage of the Argonauts to Aea. This myth has been repeatedly used as evidence of pre-colonial contacts between the Aegean and the Eastern and Northern Black Sea regions. However, Aea was originally imagined as a land on the coast of the Ocean or an island in the Ocean. The myth of the Argonauts is clearly older than the beginning of direct contacts between the Aegean and Pontic shores, and originally it was not connected with Colchis on the eastern coast of the Black Sea, as was the case in later periods. As with the myth about Achilles and the Isles of the Blessed, this myth also reveals close links with the mythology of death and with beliefs concerning the realm of the dead. Already Ulrich von Wilamowitz-Moellendorff pointed out that the myth of the Argonauts is a variation of the myth about a journey to the Underworld, the final destination of which was the mythical land of Aea – a variation of Elysium.<sup>39</sup> This conclusion has never really been questioned and was later developed by Albin Lesky, who suggested the possibility of identifying Aeetes with the god of the Underworld, and his land with the realm of the dead.<sup>40</sup> This corresponds also to the etymology of the name of Aeetes, which, according to Jacob Wackernagel, was close to that of Hades.<sup>41</sup>

In addition, one of the earliest mentions of the voyage of the Argonauts – a fragment from Mimnermus (the last third of the seventh century BCE) (fr. 11 West, Allen = 10 Gentili–Prato) – says explicitly that the journey's destination, the land of Aetes, was located on the shore of the Ocean.<sup>42</sup> Thus, the voyage across the Ocean was an integral part of the most ancient versions of the *Argonautica*, and the final destination of the Argonauts – Aea – featured in these versions as a land associated with the Ocean.

The material from the earliest versions of the *Argonautica*, which is most likely preserved in the *Odyssey*, also confirms this conclusion. After the works of Adolf Kirchhoff, Ulrich von Wilamowitz-Moellendorff, and especially the book by Karl Meuli,<sup>43</sup> the view became widespread that the material used in books 10–12 of the *Odyssey* partly came from an earlier epic poem about the Argonauts that associated their voyage with the Black Sea. The author of that older poem must have been familiar with some of the Pontic realia that he included in his narrative. This hypothesis adequately explains the obvious contradictions in the localization of Odysseus' journey featured in Homer's story – clearly, one part of it took place in the west, and the other part, in the remotest east. The details that are connected with the east were probably borrowed from the early version of the *Argonautica*. All the Pontic features related to the voyage of the Argonauts were used by Homer particularly in his description of the Ocean, and in this he probably followed his source. The ship of the Argonauts is also directly mentioned in the *Odyssey* (12.70) in the oceanic context, which implies that the Argonauts must have sailed over the Ocean. Thus, in Homeric time, the voyage of the Argonauts was localized in the Ocean and in the Black Sea at the same time, which also confirms the hypothesis that one was identical with the other.

The non-Homeric tradition too testifies that the destination of the Argonauts, Aea, was in early period localized in the Black Sea, and therefore so was also Odysseus' Νέκυια, closely linked to it. Thus, Pherekydes (early fifth century BCE) explained South Pontic toponyms, including the name of Sinope, through the names of Odysseus' companions, which means that there was a tradition during his time that associated Odysseus' journey to the Underworld with the Black Sea (*FGrHist* 3 F 144).<sup>44</sup>

As to the localization of the mythical Aea, it reflects the expanding geographical knowledge of the Greeks. Every time the localization of this land changed, it was placed at the remotest point of the known world.<sup>45</sup> At a certain stage of the development of the tradition, Aea became identified with the real Colchis, located in the eastern part of the southern coast of the Black Sea, west of the river Çoruh.

A fragment from Eumelos of Corinth is usually considered the first source testifying to the identification of Aea with Colchis (fr. 3 Bernabé). However, the poem Κορινθιακά and other poems attributed to Eumelos, although they may

include earlier elements, were probably not fixed in their written form before the sixth century BCE, and then Eumelos was credited with their authorship as the most famous Corinthian poet.<sup>46</sup> Therefore, the presence of later elements in the fragments of Eumelos' writings is understandable, and they cannot be used as accurate evidence for the chronology. Apart from Eumelos, Colchis is mentioned in connection with the Argonauts by Epimenides of Crete, who probably wrote in the last third of the seventh century BCE, and in the *Catalogue of Women* (fr. 241 Merkelbach–West). However, Near Eastern sources allow us to date the identification of Aea with Colchis to an earlier period. The toponym Κολχίς is the Greek transcription of the name *Qulḥa* mentioned in the inscriptions of the Uartian king Sarduri II (762–735 BCE).<sup>47</sup> Based on cuneiform texts and archaeological data, *Qulḥa* must have existed as an independent flourishing state during the second half of the eighth century BCE, but hardly survived the end of the century. Therefore, it could have been identified with the mythical Greek Aea only during that period. And the identification of Pontic Colchis with oceanic Aea presupposes also the identification of the Black Sea with the Ocean, which, consequently, must have existed during that period. Clearly, at that time the Greeks could have only heard of *Qulḥa* as a distant land far east, probably reached more often by land than by sea.

Later, with the expansion of geographical knowledge and in view of the fact that *Qulḥa* no longer existed on the political map of the region, Aea, identified with Colchis, was placed farther east: it was localized on the Caucasian coast of the Black Sea, at the mouth of the river Rioni. However, traces of the old ideas about the localization of Colchis were still preserved for some time. Thus, Xenophon reports that Trapezous lies in Colchis (*Anab.* 4.8.22).

Therefore, the myth of the Argonauts cannot be used as an argument in support of the existence of contacts between the Aegean and the Caucasus in the pre-colonial period. The Aea of the oldest versions of the *Argonautica* was not located in the Caucasus.<sup>48</sup> At about the end of the eighth century BCE this mythical land was identified with *Qulḥa*, which lay not in the Caucasus, but much farther west. The identification of the Black Sea with the Ocean was one of the main reasons for the localization of the myth of the Argonauts in Colchis and significantly influenced the entire development of the tradition concerning this myth.

#### OTHER LEGENDS ASSOCIATED WITH THE PONTUS

In addition to the mythological cycles discussed above, the link with the Black Sea is also evident in the myth about Iphigenia and her transportation to Tauris after her death. The analysis of the myth demonstrates, however, that the connection between Iphigenia and Tauris is rather late and first appeared during the period between the beginning of the sixth and the



middle of the fifth centuries BCE, when the Black Sea was already well known and numerous colonies existed on its shores.<sup>49</sup> It is understandable then that there are no traces of the views of the Black Sea as the Ocean in this myth – they disappeared, naturally, first of all among the Pontic Greeks, i.e., exactly in the place where the early version of the myth of Iphigenia in Tauris emerged. And clearly, such traces cannot be found in the purely literary version of the myth created by Euripides at the end of the fifth century BCE in Athens.

There are also a few marginal myths that also have been interpreted as evidence for pre-colonial contacts between the Greeks and the peoples inhabiting the Black Sea region. These stories, however, are mostly based on mythographic constructions and popular etymologies by scholars from relatively late periods – first of all, the Hellenistic one.

One of those stories is the account by Stephanus Byzantius of the son of Aeetes taking part in the foundation of Pantikapaion (s.v. Παντικάπαιον, cf. Eust. *Ad Dion. Perieg.* 311), which has been used as evidence for pre-colonial contacts of the Greeks with the Northern Black Sea.<sup>50</sup> However, this particular part of the text by Stephanus Byzantius is corrupted: where the name of the founder of Pantikapaion should be there is a lacuna, and the name of the Scythian ruler Ἀγαήτου looks like a result of dittography (ΑΙΗΤΟΥ – ΑΓΑΗΤΟΥ). Even if we accept the suggested version of the text, it still must be a later mythographic construction that cannot be dated to the time prior to the foundation of Pantikapaion in the beginning of the sixth century BCE. The obvious goal of this construction is to trace the history of the capital of the Bosporan Kingdom to a famous mythical character. Moreover, in Ionian colonization practice, the *oikist* who founded a colony was considered a hero and the patron of this colony, and often this patron was not the real founder (as, for example, in the case of Phasis), but a hero or a deity (in Milesian colonies, it was usually Apollo), to whom, in this way, the role of *oikist* was ascribed.<sup>51</sup> We do not, however, have any information about the veneration of Aeetes or his son in Pantikapaion, despite the fact that the cult of the founder was always very important for a *polis* and that the religious life of Pantikapaion has been well studied. In addition, it was not at all characteristic of Greek colonization practice, in general, and of Milesian colonization, in particular, to consider a hero with local connections to be the *oikist* of a newly founded colony. Moreover, the image of Aeetes in mythology has nothing to do with colonization. All this indicates that the story related by Stephanus Byzantius was a purely literary creation, dating to a rather late period.

Other relevant mythological stories about the foundation of cities also tend to link them with large mythological cycles associated with the Black Sea – most often, the myth of the Argonauts. Thus, the foundation of Sinope is attributed to the Argonauts.<sup>52</sup> In other cases, the same heroes are considered to



be the companions of Heracles in his campaign against the Amazons. All these legends connecting the history of individual Black Sea *poleis* with pan-Hellenic mythological cycles are part of the mythogenesis of these *poleis* reflecting local patriotism and, therefore, date to a rather late period.

The links between the Caucasus and Prometheus are also relatively late.<sup>53</sup> The localization of this myth in the Caucasus is connected with the development of Greek geographical writing in the fifth century BCE and appeared, most likely, not long before Aeschylus' time – if, in fact, it had not been invented by him. In any case, Hesiod in his detailed rendering of the myth of Prometheus does not mention the Caucasus (*Theog.* 521–2): in his account, Prometheus is bound to a pillar, which can probably be identified with one of the “tall pillars” (κίονας μακράς) mentioned by Homer as “keeping earth and heaven apart” (*Od.* 1.53–4).<sup>54</sup> The depictions of the myth often found on Greek vases of the sixth and the first half of the fifth centuries BCE correspond to Hesiod's version of the story: Prometheus was usually shown bound to a pillar or just sitting on the ground, with his hands tied.<sup>55</sup> He was never depicted bound to a rock or a mountain – this motif became popular in the Late Hellenistic and Roman periods. The earliest such depiction known to me dates to the middle of the fourth century BCE.<sup>56</sup> The emergence of this type of image was probably prompted by Aeschylus' tragedy.

Another myth that reveals traces of the early views of the Black Sea as the Ocean may be the myth about the origins of the Scythians preserved by Herodotus (4.8), according to which the Scythians were the descendants of Heracles. This genealogical myth has been discussed in detail by many scholars,<sup>57</sup> and its analysis has proven that it was a Hellenized Scythian myth. One of the added Greek features was the combination of the Scythian genealogical story with the myth of Geryon: this was, clearly, the result of mythographic activity, when the plot combined elements that were not connected in their origins and came from different sources. The reason for this combination must have been the oceanic localization of the island of Erythia where Geryon lived. The prevalent tradition, also mentioned by Herodotus in his account, placed this island on the western periphery of the known world. We can assume that there was also another localization of Erythia in the eastern part of the Ocean, i.e., in the Black Sea. The existence of this second tradition is confirmed by the report of the mythographer of the second half of the fourth century BCE, Palaephatus, whose writings are preserved in excerpts from the Byzantine period: he placed the myth of Geryon in the Pontus Euxinus (24 Festa), also offering a rationalistic explanation of the story, which was typical of this author.

This hypothesis is supported by the fact that in the ancient tradition many peoples and places associated with the Ocean – such as the Cimmerians, Aea, the Planktai, the Isles of the Blessed, the Ethiopians, and others – similarly had a

double localization in the west and in the east: in the description of the Ocean, the west and the east appeared as if merged together.<sup>58</sup> When one attempts to connect the details of the oceanic “landscape” with actual geographical points, they inevitably duplicate themselves, emerging simultaneously in the west (on the shores of Italy or Spain) and on the coast of the Black Sea. This double localization of the realia connected with the Ocean, well known in ancient tradition, confirms once again that in the pre-colonial period the Black Sea was identified with the Ocean.

#### THE CIMMERIANS AND THE CIMMERIAN BOSPORUS

There is another tradition that can be traced back to the early view of the Black Sea as part of the Ocean, and although it is usually considered a historical one, on a closer inspection it turns out to be one of the Greek pseudo-historical stories.<sup>59</sup> This is the tradition that placed the Cimmerians on the shores of the modern Strait of Kerch, which, because of them, was called the Cimmerian Bosphorus, in contrast to the Thracian Bosphorus, which preserved its name until today in the form of the *Bosp(h)orus*.

The shores of the Cimmerian Bosphorus, both the European and the Asiatic, did not attract the attention of Greek colonists during the first wave of colonization, although the Greeks clearly passed through the strait in order to reach the mouth of the Don, where the Taganrog Settlement – one of the earliest in the region – was probably founded sometime around the third quarter of the seventh century BCE.<sup>60</sup> The Greeks probably started to settle in the Asiatic part of the Bosphorus only in the second half of the sixth century BCE,<sup>61</sup> although the results of the most recent excavations, presently unpublished, point towards an earlier date around the beginning of the sixth century BCE.<sup>62</sup> Pantikapaion on the European shore of the strait was probably also founded around that time, at the very end of the seventh or the beginning of the sixth century BCE, as proven by the recent excavations at this site, the results of which have not yet been published, either.<sup>63</sup>

The name of the Cimmerian Bosphorus cannot be easily explained,<sup>64</sup> and this statement refers to both parts – the name itself and the epithet Cimmerian. The meaning of the name Βόσπορος was not clear even in antiquity, and popular etymology traced its origin to the name Βοόσπορος or Βούσπορος – “cow-crossing.” According to this etymology, the strait received its name because Io, transformed into a cow and pursued by Hera, crossed it. Such an explanation is present already in the earliest mention of the Cimmerian Bosphorus – the one by Aeschylus (*Prom.* 729–34).<sup>65</sup> In antiquity, this interpretation was very popular, sometimes in a rationalized form – allegedly, the strait was so shallow that cows were able to cross it. In modern times, this explanation also became widely accepted.<sup>66</sup>

Another interpretation of the name *Bosporus*, followed also by some modern scholars, suggested that this word may have referred to any strait.<sup>67</sup> A detailed analysis, however, prompts us to reject both these hypotheses and to accept the view according to which Βόσπορος was a Hellenized form of the local – most likely, Thracian – name originally used for the strait that connected the Sea of Marmara – and, consequently, the Aegean Sea – with the Black Sea.<sup>68</sup> Later, when the Greeks became familiar with the Black Sea, they transferred the same name to the strait that is now called the Strait of Kerch. However, such a transfer of a toponym was very uncharacteristic of antiquity, so that there must have been some special reason for the Greeks to apply the name Βόσπορος to the newly discovered strait. It is not very likely that the only such reason was the similarity between the two straits connecting the two large bodies of water. We can suggest that in the early period, when the Black Sea was perceived as part of the Ocean, the Greeks used the name *Bosporus* not just for the strait between the two seas but specifically for the strait leading to the Ocean, having borrowed this name from their northern neighbors, the Thracians. It is also possible that when the Greeks became acquainted with the Black Sea, the name *Bosporus* was transferred to the modern Strait of Kerch for the same reason. At that time, the Greeks already knew that the Black Sea was a closed basin, but may have still thought that the Azov Sea, lying beyond the strait, was linked to the Ocean. Thus, as the Greeks learned more and more about the new territories, they did not reject the idea of the Ocean that surrounded the inhabited land, but placed it farther and farther east, in the periphery of the known world. A similar development of their ideas about the localization of mythical Aea was discussed above.

This view of the Azov Sea may have existed for a long time in the Archaic period, since the only Greek settlement on the Azov Sea beyond the Bosporus was the Taganrog Settlement (Kremnoi?), while its other shores had not been colonized. When it became clear that the Black Sea was not the Ocean, but a closed basin, apart from one strait, then it was natural for the Greeks to assume that the real Ocean lay just beyond this strait and that the strait itself was the real Βόσπορος, i.e., the mouth of the Ocean. In full agreement with this assumption was also the idea about Lake Maeotis (modern Azov Sea) being the “mother of Pontus,” featured already in Herodotus (4.86), which probably originated from the view that the body of water stretching after the Bosporus was the “progenitor of Pontus,” i.e., the Ocean. The Bosporus as the entrance to the Ocean is directly mentioned by Lucan (3.277–9), a Roman epic poet of the first century CE, who probably used some geographical work from the Hellenistic period, which, in turn, may have used more ancient sources. Thus, we can assume that the Greeks started to call the modern Strait of Kerch the Bosporus because they thought that it led to the Ocean.

And then we have to face another question: why did they call it Cimmerian? This word cannot be analyzed separately from other “Cimmerian” toponyms associated with the Bosphorus, such as the area called Cimmeria, as well as the Cimmerian isthmus, Cimmerian walls, and Cimmerian ferries. These names are found already in Aeschylus (*Prom.* 733) and Herodotus (4.12).<sup>69</sup> But how did this toponymy, which presupposed the association of the Cimmerians precisely with the area of the strait, emerge amongst the Bosporan Greeks? The easiest explanation – i.e., that in antiquity the Cimmerians lived on the shores of the Bosphorus and the Greeks met them there – cannot be accepted. Indeed, there are no traces in this region of any significant presence of a pre-Scythian or Early Scythian steppe population that could be identified with the historical Cimmerians, neither in the second half of the seventh century BCE, when the first Greeks came to the region, nor in the first half of the sixth century BCE, when they settled there. None of the archaeological cultures that have been associated with the Cimmerians had any territory adjacent to the strait within the main zone of their habitation.<sup>70</sup> If the strait had received its name from the name of a neighboring barbarian people, then we would rather expect the Greeks to call it “Sindic” or “Tauric,” after the names of the peoples who gave the names to Sindike and Taurike/Tauris, between which the modern Strait of Kerch is located, because these people actually lived in the territories adjacent to the strait.

Thus, the reasons for the emergence of “Cimmerian” toponyms in connection with the Bosphorus do not lie in the actual ethnogeography of the region. Ancient tradition localized the Cimmerians in various places, including those where they had never lived. Thus, for example, many (or maybe even most) ancient authors place them in Italy, at Lake Avernus near Cumae; another tradition localizes them near Herakleia Pontike. It is universally accepted now that these localizations were based only on ancient commentaries to one passage from Homer (*Od.* 11.14), where the Cimmerians are mentioned.<sup>71</sup> In that passage, Homer recounts Odysseus’ journey to the realm of the dead, undertaken in order to learn from the deceased prophet Teiresias how and when he would be able to return to Ithaca. Describing the entrance to the Underworld on the coast of the Ocean, Homer mentions that the “people and the city” of the Cimmerians were located nearby, submerged in eternal darkness.<sup>72</sup> Because of Homer’s enormous popularity, the Cimmerians became a necessary attribute of the infernal landscape, such as, for example, the river Acheron. Therefore, the Cimmerians were almost automatically placed there where the entrance to the Underworld – and, consequently, oracles of the dead, *nekuomanteia* – were located because for most Greeks they were first of all the inhabitants of an area at the entrance of Homer’s Hades, rather than a semi-forgotten people who in the past raided the cities of Asia Minor. This explains the emergence

of legends about the Cimmerians living in ancient times at Lake Avernus or near Herakleia Pontike: these were the places where famous “entrances” to the Underworld and oracles of the dead were located.

To become associated in the minds of the Greeks with the entrance to Hades, a place had to display certain natural characteristics, such as a deep crack or cavern in the ground, emissions of subterranean gases or fumes, sulfuric springs, or a swamp. The territories adjacent to the Strait of Kerch have all these features. This area, in general, is one of the largest zones of mud volcanoes: both the Taman and Kerch peninsulas have numerous active mud volcanoes of various sizes.<sup>73</sup> The activity of these volcanoes is characterized not only by mud outflows, but also by emissions of gas and hot vapors; next to them, sulfuric springs are located, which must have been perceived by the Greeks as a sign of a nearby entrance to Hades. In addition, some areas on the Taman Peninsula and in the adjacent territories were covered with swamps, because the river Kuban constantly changed its configuration and its delta consisted of many branches, including parts of the old river-bed that no longer functioned. All these factors must have prompted the identification of this place with an entrance to the Underworld.<sup>74</sup> Indeed, archaeological data confirms that sanctuaries dedicated to female chthonic deities directly connected with the Underworld were established on the Taman Peninsula near the mud volcanoes at least from the end of the sixth century BCE onwards. One such sanctuary was discovered at the beginning of the nineteenth century on the Mountain of Boris and Gleb after an eruption and a landslide;<sup>75</sup> another was excavated between two craters on the Mountain of Maïskaïa,<sup>76</sup> and yet another at the foot of the Mountain of Kuku-Oba.<sup>77</sup> All these sanctuaries were located on the island situated between the two arms of the Cimmerian Bosphorus.

In the last two cases, where the sanctuaries were discovered by means of archaeological work, a large crack was found next to the sanctuary, which, in combination with the nearby mud volcano, most likely, was perceived as the entrance to Hades. Based on preserved dedicatory inscriptions, the goddess could have been venerated at these sanctuaries under the names of various female deities: Demeter, Persephone (Kore), Aphrodite, Artemis, and even Astara (*CIRB* 1015) – i.e., Semitic Astarte/Ishtar.<sup>78</sup> Numerous protomes depicting different iconographic types of all these goddesses and dating from the sixth to second century BCE, discovered in a *favissa* at the sanctuary on the Mountain of Maïskaïa, supposedly bear testimony to the diversity of the religious images of the female deity venerated there.<sup>79</sup> It is possible that the great popularity of the cult of Aphrodite *Apatouros* on the Asiatic Bosphorus is connected with this complex of ideas. In this context, one detail from the myth about this goddess preserved by Strabo is particularly important (II.2.10). According to this myth, Aphrodite was attacked by the Giants, and she disposed of them by means of treachery: the goddess hid Heracles in a cave

or cavern (κευθμών) and then invited the Giants, one by one, inside, where Heracles killed them. Even if we agree that Strabo's source here was a mime and the story itself was not a temple legend,<sup>80</sup> the motif of κευθμών used in this hypothetical mime probably refers to a real attribute of Taman's goddess (in general, the connection of the so-called Great Goddess with caves and caverns is well documented).<sup>81</sup> It should be noted that Strabo's account by itself does not allow us to deduce which of the two sanctuaries mentioned in his text is associated with this legend – the Apaturum or the Phanagorean sanctuary: the myth is related by Strabo to explain the epithet *Apatouros* (allegedly coming from ἀπάτη – “deceit” or “treachery”), which Aphrodite had at both sanctuaries, but there is hardly any doubt that the Apaturum was the main one and that the myth was first of all linked to this sanctuary.<sup>82</sup>

The connection between the cult of a female deity and the entrance to the Underworld was not a specifically Bosphoran feature. Thus, for example, there was an oracle of the ψυχομαντεῖον type in Hierapolis in Phrygia, the main center of the Magna Mater cult (Strabo 13.4.14; Plin. *HN* 2.208); an entrance to Hades was also located in Eleusis, at the sanctuary of Demeter (Paus. 1.38.5; Orph. *H.* 18.15). Most likely, the report about the Cerbesian pit or cave (βόθυνος Κερβήσιος), emitting deadly fumes (Strabo 12.8.21), refers to the sanctuary at Hierapolis (although this testimony may also concern the sanctuary at Myus), as does also the Cimbrian (Κίμβρος βόθυνος) pit in Phrygia (Antig. Car. *Histor. Mirab.* 123 [135] Keller). The names of this βόθυνος probably reflect two of the most popular interpretations of the name of the Cimmerians found in Hellenistic Homeric studies – one (Κιμμέριοι – Κερβέριοι)<sup>83</sup> traced back to Krates of Mallos, the head of the Pergamene philological school of the second century BCE, and the other (Κιμμέριοι – Κίμβροι), to Poseidonios, the famous scholar and philosopher of the end of the second to the first half of the first centuries BCE (Plut. *Mar.* 11). These reports may preserve the tradition that localized the Cimmerians in this area, which could also be connected with the interpretation of the local name of this cave. The link to the Corybantes, suggested by Erwin Rohde,<sup>84</sup> may also have existed in popular etymology, similarly to those mentioned above (Κιμμέριοι – Κερβέριοι – Κίμβροι – Κορύβαντες, etc.). The same connection between the female deity and the entrances to the Underworld is implied in the numerous reports about the entrance to Hades through which Kore was led away (Paus. 2.36.7; *Schol. Soph. OC* 1590, 1893; Diod. 5.3.3; and others).

Thus, the localization of the Cimmerians on the Bosphorus and the emergence here of “Cimmerian” toponymy based on this localization should probably first of all be associated with the placement of an entrance to the Underworld in this area, which, in turn, was prompted by the specific local natural phenomena.<sup>85</sup> The closest analogy to this localization can be found

in the traditions that place the Cimmerians at Lake Avernus in Italy or near Herakleia Pontike: all of them are fictitious and go back to local myths, associated with interpretations of the famous passage from Homer.

The special connection between the Cimmerians, the entrance to the Underworld, and the cult of a female deity, which is attested in the Bosphorus and other places, is also confirmed by a gloss of Hesychius (K 2702 Latte): Κίμμερις Θεά · ἡ μήτηρ τῶν θεῶν – “the Cimmerian goddess: the mother of the gods.” Some Cimmerian goddess is identified here as the mother of the gods. Most likely, this is a reference to some particular literary text (perhaps a poem) as always in Hesychius, and the gloss goes back to a commentary on this text. Clearly, it is impossible to determine whether this text has any connection with the Bosphorus, but it does directly link the Cimmerians to a female deity, as was the case in the Bosphorus, according to our reconstruction.

Therefore, the emergence of the name Cimmerian Bosphorus is connected with the fact that the Black Sea and the modern Strait of Kerch were associated with the Underworld in the minds of the first Greek colonists who arrived in these territories: in their view, here was the entrance to Homer’s Hades, located on the shore of the Ocean. And this was the reason why they named the second strait the Cimmerian Bosphorus, in order to differentiate it from the previously known Thracian Bosphorus.

## CONCLUSION

Thus, the main mythological cycles associated with the Black Sea since the Archaic period, i.e., the myth about Achilles dwelling on the Isles of the Blessed after his death and the *Argonautica*, as well as some less important myths, contain details that allow us to assume that in early times the Black Sea was identified with the Ocean. The localization of the Cimmerians and the entrance to the realm of the dead on the shores of the modern Strait of Kerch reflect the same idea and explain the ancient name of the strait, the Cimmerian Bosphorus. The Greeks were not very familiar with the coast of the Black Sea at that time, and there is no reason to speak of any significant pre-colonial contacts with these territories. They were probably better acquainted with the Western Black Sea coast – especially Thrace. It is important, however, that in Homer’s time Thrace was still considered a land located on the most northern boundary of the known world. Thus, Homer refers to Boreas, thought to live in the very north, as the inhabitant of Thrace (Hom. *Il.* 9.5; 23.200, 229–30; cf. Hes. *Op.* 553).<sup>86</sup> Homer’s Hippemolgi (*Il.* 13.3–6), most likely, represent the inhabitants of the farthest southwestern periphery of the Eurasian steppes, the nomads who were in direct contact with the Thracians living in the area of the Danube.<sup>87</sup> Only after the Greeks became familiar with the Northern Black Sea



region, did they begin to perceive Scythia as the place of habitation of Boreas, which is reflected in the pseudo-Hippocratic treatise *De aere aquis et locis* (19.2), as well as in Damastes (*FGrHist* 5 F 1).

If the Greeks had some information about the southern (Qulḥa) and western (Thrace) coasts of the Black Sea before the colonization of the region, there is no reliable evidence confirming that they had any such knowledge about the northern and eastern coasts. All available data allows us to assume that as long as the Black Sea was identified with the Ocean, the Greeks were not aware of the existence of its northern and eastern coasts. They thought that this space was occupied by the Ocean. The insignificant contacts that they had with the Black Sea region were limited to the southern and western coasts. Such views persisted probably until the last third of the seventh century BCE. In this context, the discovery of the actual outline of the Black Sea must have been a real sensation, destructive to the concept of the Ocean. Indeed, prompted by this discovery, Herodotus, for example, rejected the mere idea of the existence of the Ocean (3.115; 4.45) and criticized the Ionian geographers for their adherence to this concept, which, according to him, was purely speculative.<sup>88</sup> He also emphasized that, despite all his efforts, he was not able to find any trustworthy information about the eastern and northern boundaries of Europe (4.16–36). The discovery of the northern seas must have revived the concept of the Ocean. And, indeed, it reappeared in Hellenistic geography – in particular, that of Eratosthenes (*Strabo* 11.11.6), who thought that the Caspian Sea, and not the Black Sea, was part of the Ocean.

Archaeological data does not contradict these conclusions. The earliest Greek sites in the Black Sea region (Berezan', Histria, Orgame, and the Taganrog Settlement) yielded sporadic finds of ceramic fragments of the second and third quarters of the seventh century BCE, but they start to appear in considerable quantities only from the last quarter of the seventh and the beginning of the sixth centuries BCE onwards – the period to which the earliest stratum at Berezan' is dated. Starting from the third quarter of the seventh century BCE, Greek imports also appear at barbarian sites – in the burials of the local elites, such as the kurgan of Temir-gora,<sup>89</sup> and at settlements, such as the settlement of Nemirovskoe.<sup>90</sup> Obviously, these imports are associated with the trade of Greek colonists, who settled on Berezan' and in the mouth of the Don.

The Northern Black Sea region has been thoroughly investigated by now, so that there is hardly any chance of the discovery of new archaeological material that would allow us to move the date of the foundation of the first North Pontic Greek colonies to an earlier period. The archaeological data, of course, cannot date the discovery of the Northern Black Sea by the Greeks with great precision, because the earliest contacts did not necessarily leave any material



traces. It is, however, hard to imagine that during the period of Greek colonization a long time could have passed between the discovery of such an attractive land and its colonization.

The identification of the Black Sea with the Ocean was, most likely, the main reason for the late start of the colonization of this region in comparison with the mainstream of colonization, which began almost two centuries earlier. The idea itself may have hindered the colonization of the Black Sea region: indeed, the Ocean was associated with the realm of the dead, as well as with chaos. The Greeks were terrified by the Ocean,<sup>91</sup> so that for them to settle on the shores of the Ocean/Black Sea would have been like settling in the realm of the dead or in an environment ruled by chaos.

The Greeks renounced the identification of the Black Sea with the Ocean around the last quarter of the seventh century BCE. By that time, the inhabitants of the settlement on Berezan', the first Greek colony on the North Pontic coast, and of the Taganrog Settlement, which was probably founded a little later, had slowly familiarized themselves with the northern coast of the Black Sea and determined the outline of the Pontus. After these developments, the colonization of the Black Sea region continued at a faster pace, so that numerous colonies were founded there within the first quarter of the sixth century BCE.



PART I

HARBORS



## ANCIENT HARBORS OF THE NORTHWESTERN BLACK SEA COAST

Valeriya Kozlovskaya

“If we imagine a cartography based on the degree and nature of connectivity experienced by localities at a given time, tracing lines of equal connectivity in the manner of contours, and so delineating ‘connectivity gradients’, it would map a universe of waterborne communications comprising the Mediterranean and extending along rivers and through lagoons as coherent territory.”<sup>1</sup> This striking image drawn by Nicholas Purcell represents an approach to the study of coastal communities that reveals the interconnections within the complex system of micro- and macro-environments in a region. Recent scholarship on the ancient Mediterranean has increasingly adopted this approach;<sup>2</sup> but for some other parts of the ancient world, where the relevant evidence is less abundant, similar studies have yet to be undertaken.

The present chapter is an overview of what we currently know about ancient harbors on the Northwestern Black Sea coast and an attempt to reconstruct one part of the North Pontic regional maritime (and, to some extent, riverine) network. The overview considers not only large harbors associated with major coastal settlements, but also smaller ones and those that lay farther inland. However, it should be noted that the available evidence for the smaller harbors is very limited, mostly confined to stray archaeological finds, and rarely supported by any information from literary sources. Therefore, some of the inferences presented below are partly based on analogies and comparisons, and partly on general topographical and geological data and some other evidence



Fig. 2.1. The Lower Bug area (after Kryzhiŭskii, Buiskikh, and Otreshko 1990, figs. 4, 9, 14).

that is often incomplete. Nevertheless, our conclusions demonstrate clearly and unequivocally that ancient harbors in the Northern Black Sea, very much like those in the Mediterranean, did “obey a regional logic” and “cannot be understood as solitary and fixed points.”<sup>3</sup>

The scope of this chapter does not allow a detailed presentation of the entire North Pontic coast; it focuses only on its northwestern part, examining local harbors in their relation to each other within the regional system of short- and long-range communications and in the broader context of the development of the entire Northern Black Sea littoral. The northwestern part of the Northern Black Sea provides a perfect case study, in this respect, partly because it has proven rather suitable for underwater investigations,<sup>4</sup> but mostly because it has been explored more thoroughly and systematically than many other parts of the North Pontic coast.

The most prominent ancient site in the Northwestern Black Sea region is the site of Olbia, a Greek colony founded on the right bank of the Bug liman (ancient Hypanis), near its confluence with the Dnieper liman (ancient Borysthenes) (Fig. 2.1) no later than the second quarter of the sixth century BCE, but possibly as early as the end of the seventh to the beginning of the sixth centuries BCE.<sup>5</sup> For most of its existence, Olbia was the center of the larger Olbian *polis*. As previous research has shown, the city of Olbia had a

harbor that during the Classical and, especially, Hellenistic periods must have been comparable to major contemporaneous Mediterranean harbors, both in terms of structure and organization.<sup>6</sup> The harbor of Olbia was undoubtedly the most important in the region, but there were numerous other, smaller harbors, which lacked any kind of special installations – a phenomenon well known throughout the Greco-Roman world.<sup>7</sup> Most of these smaller harbors were linked to sites that were part of the Olbian *polis*, located not only in the immediate rural surroundings of Olbia (such as settlements of Olbia's *chora* and extra-urban sanctuaries under Olbia's patronage), but also in the more distant territories that may have been under Olbia's control at some point in antiquity.

#### HARBORS OF OLBIA'S *CHORA*

Waterways were essential for Olbia's communication with its *chora*. The earliest evidence for this is a graffito on a fragment of an amphora in the Fikellura style (inv. no. 0-69/232), dated from the middle to the third quarter of the sixth century BCE. This graffito attests that both people and materials (such as wood) traveled to a place called Hylaia and to other destinations in the Lower Dnieper area and back to Olbia by means of water.<sup>8</sup> The rural settlements around Olbia were primarily situated on the shores of the limans or on the banks of the rivers.<sup>9</sup> They formed a local network of waterborne communications, which, in turn, was a part of a larger regional network. Some places within Olbia's *chora* may have had special harbor facilities, such as moles, although the present evidence is rather scarce. The possible remains of ancient jetties have been found underwater near the sites of Staraïa Bogdanovka and Kozyrka, and traces of a reportedly ancient pier made out of stone blocks have been detected near the site of Ochakovskoe (Fig. 2.1).<sup>10</sup> The topography of the site of Sofievka also suggests that the ancient settlement located there consisted of two parts – the upper fortified one (Sofievka 2/Glubokaïa Pristan') and the lower one with a harbor (Sofievka 1).<sup>11</sup> A stone anchor was found during a test excavation of this site, and two more during the excavations of the ancient settlement on the site of Stanislav 2, the last site on the right bank of the Dnieper liman before Sofievka (Fig. 2.1).<sup>12</sup>

While Olbia's harbor undoubtedly was the focal point of the local network, the statuses of the smaller harbors, the purposes they served, and the importance attached to each of them must have varied significantly. Many of them were probably used mainly for fishing, but some participated in commercial activities. Among the latter, the production center of Ĭagorlyk stands out (Fig. 2.1). It began to function in the early sixth century BCE, even before the first rural settlements emerged at the mouth of the Berezan' liman during the second quarter of the sixth century BCE.<sup>13</sup> Conveniently located on the shore of Ĭagorlytskii Bay, the site must have offered excellent harboring opportunities

for Greek ships that were passing by. On the basis of the archaeological finds from Źagorlyk, it has been suggested that its advantageous location prompted the emergence of trade or exchange between local craftsmen and Greek merchants.<sup>14</sup> The nature of this enterprise, however, was different from that of many other rural settlements in the area, because the local people who benefited from the natural setting of the production center were also the ones involved in the manufacturing of the items used in trade or exchange. In this case, the manufacturing component of the small harbor associated with the production center of Źagorlyk clearly prevailed over the service component. Once the production center stopped functioning (around the beginning of the fifth century BCE, at the latest),<sup>15</sup> the commercial aspect of the harbor also lost its importance, which indicates that this particular harbor probably always played a subsidiary role in the local and, especially, regional network, despite its very favorable location.

The situation must have been completely different – if not indeed the opposite – in the case of settlements and their harbors that functioned as gateways, i.e., those that “controlled the point of contact between two rather strongly contrasted economic and social systems.”<sup>16</sup> The site of Sofievka/Glubokaia Pristan’, already mentioned above, probably belonged to this category. It was the largest settlement of Olbia’s *chora* throughout the period from the end of the fifth to the third centuries BCE,<sup>17</sup> located on the right bank of the Dnieper liman, near the mouth of the Dnieper, at the most eastern boundary of the Olbian *polis* and in the border zone between the territories of the latter and those of the barbarians (Fig. 2.1). This location and the fact that the site of Sofievka was the only fortified rural settlement of Olbia’s *chora* suggest its special status.<sup>18</sup> Whether this status was in any way manifested in the appearance and structure of the harbor, we will never know; but the site clearly played a major role in the contacts between the Greeks and the barbarians.<sup>19</sup> So, in this particular case “we can detach the idea of a gateway from that of a settlement,”<sup>20</sup> in the sense that the function of the site as a gateway and its contacts with the barbarians were primary, while the settlement itself was secondary. This may also explain why the site of Sofievka continued to function for almost another century (and so did the site of Stanislav, the second-most-distant point of Olbia’s *chora*, located on the right bank of the Dnieper liman just before Sofievka), after the majority of the rural settlements in the territory of the Olbian *polis* had ceased to exist around the middle of the third century BCE.<sup>21</sup> The harbor (or harbors) associated with this site must have also stayed in use during that time, despite what happened to other rural settlements and small harbors in the area.

### *Koshary*

In the other direction along the Northwestern Black Sea coast, to the southwest of Olbia, some remote settlements of Olbia’s *chora* may have been located



as far down the coast as halfway between Olbia and Odessa Bay, such as the ancient settlement excavated on the site of Koshary (Pl. I).<sup>22</sup> The site is situated on the right bank of the Tiligul'skiĭ liman (ancient Aksiakos), on a high promontory above the silted delta of the liman, and encompasses the remains of a fortified settlement, accompanied by a necropolis and an open-air cult-complex, all dating from the end of the fifth to the second quarter of the third centuries BCE. In antiquity, a lower part of the city probably also existed outside the city walls, with a small harbor at the foot of the promontory. The excavated parts of the settlement display clear evidence for city planning, with the majority of the streets going towards the liman.<sup>23</sup> Amphora fragments comprise 70 to 80 percent of all the ceramic finds and represent primarily the production of Black Sea centers (mostly Herakleia, but also Sinope and Chersonesos) and Thasos, but also of other centers in the Aegean (Chios, Mende, Kos, Peparethos, Knidos, Akanthos, and Rhodes). A large number of pits used for grain-storage were also discovered in the territory of the settlement, both inside and outside the city walls.<sup>24</sup> The presence of these storage pits and the predominance of transport amphorae over any other category of ceramics indicate that the settlement was actively involved in trade. In this respect, the location of the site was most convenient: it gave access to the sea and was connected to the inland territories both via waterways, since it was situated on a river, and via land-routes, the existence of which has been deduced from aerial photographs.<sup>25</sup>

Remains of other ancient settlements were discovered in the area,<sup>26</sup> including a fortified site located farther inland, also on a high promontory, on the same side of the Tiligul'skiĭ liman as the settlement of Koshary and contemporaneous with it. This site was briefly investigated in the 1950s, but since then it has been destroyed by natural causes, and its ruins are now submerged. According to the excavation reports, amphora fragments were the predominant category of the ceramic finds there as well.<sup>27</sup> These settlements may all have been involved in trade, one way or another: underwater explorations of the seabed along the opposite shore of the liman also revealed a concentration of Hellenistic amphora fragments and sherds of hand-made pottery near the mouth of the liman.<sup>28</sup> The harbor of Koshary probably served as the main harbor in the area and a transit point from where goods traveled farther inland along the river and land-routes. Moreover, it must have been the most important harbor in the entire territory between Olbia and Odessa Bay, where the next cluster of settlements was located.

#### HARBORS IN THE ODESSA BAY AREA

In his book on Odessa, Charles King wrote that around the city, “the water does not so much meet the land as complete it” and “the sea floor ... forms a continuation of the steppe.”<sup>29</sup> He was actually drawing an image of the

city of Odessa of more recent times, but it could be an equally perfect description of Odessa Bay in antiquity. He also wrote that “other modern cities on or near the Black Sea ... all have ancient pedigrees. Beneath modern concrete and asphalt lie Greek, Roman, and Byzantine ruins. But Odessa has none of this.”<sup>30</sup> This latter statement, however, is only true to a certain extent: ancient settlements and harbors located on the site of modern Odessa may or may not have been important regional centers, such as Olbia was, but the territory around Odessa Bay was, in any case, relatively densely populated. The remains of at least eight settlements dated to the Archaic period and at least twelve settlements dated to the Classical and Hellenistic periods have been discovered in the area.<sup>31</sup> Not all these sites have been equally well excavated, and much data is still missing, but some preliminary conclusions can be drawn at this point.

The first excavations in the area took place on the site of Luzanovka, located in the northern part of Odessa Bay at the mouth of the Kuīāl’niṭskii liman, on its left bank (Pl. I). Archaeologists established that the ancient settlement, discovered there in 1929, must have been in existence by the end of the fifth or the beginning of the fourth century BCE, at the latest, and functioned until at least the second half or the end of the third century BCE. The excavations revealed considerable architectural remains, including those of walls and buildings with stone foundations.<sup>32</sup> Amphorae comprised the absolute majority of finds from this site, and their numbers exceeded by many times the second-most-numerous group of ceramics, i.e., local hand-made pottery. According to Valentin Selinov, who excavated the site from 1937 to 1940, amphorae of the fourth to third century BCE were found *in situ* in several rooms.<sup>33</sup> On the basis of these finds, Selinov identified some structures as storage facilities for amphorae (excavations of 1930, 1937, and 1938) and grain (excavations of 1930 and 1938).<sup>34</sup> He also pointed out that a number of other ancient settlements must have existed on both banks of the Kuīāl’niṭskii liman, in close proximity to Luzanovka.<sup>35</sup>

Some other sites have been excavated in the area, such as the remains of an ancient settlement (or settlements) on the Primorskiĭ Boulevard in modern Odessa<sup>36</sup> and a settlement (roughly contemporaneous with that at Luzanovka) located on the eastern slope of Mount Zhevakhova between the Khadzhibeiskii and Kuīāl’niṭskii limans (Pl. I).<sup>37</sup> As in Luzanovka, fragments of amphorae and locally produced hand-made ware were the most numerous finds among the ceramic material from the site at Mount Zhevakhova.<sup>38</sup>

Although the remains of possible storage facilities have been found only at Luzanovka, and no signs of harbor structures have been discovered at any of these sites, there is no doubt that more than one harbor must have functioned in the area. It is clear that virtually all these settlements were located either directly on the sea coast or on the shores of the two limans – Kuīāl’niṭskii and

Khadzhibeiskii.<sup>39</sup> Presently, these and other limans in the vicinities of Odessa, including the Tiligul'skii liman where the site of Koshary is located, are completely separated from the sea, but in antiquity this was not the case. Selinov discussed in his notes several sources that reported discoveries of ancient anchors in the waters of the Khadzhibeiskii and Kuial'niiskii limans. In particular, he quoted a report by Ernst fon-Shtern saying that “at some time in the past an ancient anchor was found in the Khadzhibeiskii liman, but its location is now unknown” and concluding that “this discovery proves that in antiquity Greek ships were able to sail into the liman.”<sup>40</sup> Selinov also referred to a publication by Nikolaï Zagorovskii, who mentioned that several anchors had been found in the Khadzhibeiskii liman (the dates of the anchors are not specified) and that an anchor of a “Genoese” type had been recovered from the silt on the seabed of the Kuial'niiskii liman.<sup>41</sup> Zagorovskii studied limans around Odessa in the 1920s and pointed out in another of his articles that a channel connecting the Tiligul'skii liman with the sea was still visible on some nineteenth-century administrative boundary maps of the region. He also drew attention to the presence of several small lakes and channels in the areas between the Tiligul'skii, Kuial'niiskii, and Khadzhibeiskii limans and the sea, which, according to him, was another indication that in the past these limans had been connected with the sea.<sup>42</sup> In addition, Zagorovskii maintained that the entire steppe zone of this region had once been permeated by small rivers that no longer existed during his time.<sup>43</sup>

Thus, in antiquity the Tiligul'skii, Kuial'niiskii, and Khadzhibeiskii limans had access to the sea and to the cabotage sea-route along the western coast that connected the southern shores of the Black Sea with the northern. We also know that even small rivers were navigable in antiquity and could have been used for transporting goods farther inland.<sup>44</sup> This means that in antiquity the limans in question were also part of the riverine network that provided direct access to local inland markets.<sup>45</sup> Therefore, the settlements and the harbors located on the shores of these limans must have served not only local traffic, but also as transit points and redistribution centers within the regional and interregional trading networks: they were not the final point of a cargo's destination – the goods were either transported farther inland or continued their way to other destinations along the Black Sea coast. It seems, however, that none of the settlements in the Odessa Bay area grew to become large harbor cities, despite their favorable location and the important role they played.<sup>46</sup> A number of factors may have been accountable for this. First of all, although several small rivers connected these settlements with their hinterland, as demonstrated above, there were no major rivers in the area, comparable to the Borysthenes, the Hypanis, or the Ister (modern Danube). Secondly, the nature of the relations between the settlements around Odessa Bay and the larger Greek cities farther north and south along

the coast is also not quite clear. For example, we still cannot be sure whether in antiquity the area in question was under the protectorate of Olbia or Tyras, another important Greek colony located farther down along the western Black Sea coast (Map 1). The widely accepted view that it was part of Tyras' territories has been repeatedly challenged; instead, it has been suggested that during the fourth to third century BCE and during the Roman period this area was under the direct control of Olbia.<sup>47</sup> In either case, the settlements around Odessa Bay were probably located in a buffer zone between the spheres of influence of the two major Greek colonies that contested the ownership of these territories. Such instability may have been another reason why many of the settlements established in the area only functioned for a rather short period of time, i.e., from the end of the fifth to the third centuries BCE. And finally, the fact that there were many coastal settlements and several harbors in this area must have stimulated competition between them for the same hinterland, thus preventing any specific settlement from becoming a major local or regional center.

Also, local harbors did not necessarily have to be associated with particular settlements. We find indirect evidence for this in ancient literary sources from the later period. Several of them mention the toponyms "harbor of the Istrians" and "harbor of the Isiakoi." Thus, Arrian in his *Periplus Ponti Euxini*, written during Hadrian's reign, describes the Black Sea coast between Olbia and the mouth of the Ister as follows (20.2–3):

On the Borysthenes, upstream, a Greek city, called Olbia, has been built. From the Borysthenes to a small island, deserted and nameless, is 60 stades. And from there to Odessos, 80. In Odessos there is a mooring for ships. After Odessos comes the harbour of the Istrians. It is 250 stades to there. After there comes the harbour of the Isiakoi. It is 50 stades to there. And from there to the mouth of the Ister called Psilon, 1,200. The stretch between is deserted and nameless.<sup>48</sup>

The anonymous *Periplus Ponti Euxini* also mentions the "harbor of the Istrians" and the "harbor of the Iakoi," but indicates the distance between them as 90 stades (13v23–24 Diller = *FGrHist* 2037 F 90). Already in the nineteenth and early twentieth century numerous attempts were made to localize the "harbor of the Istrians" and the "harbor of the Isiakoi" on the coast of the Black Sea between the Tiligul'skii liman and Odessa Bay.<sup>49</sup> The exact locations of both "harbors" in antiquity are still a matter of dispute, but the majority of scholars place them in the territory of modern Odessa. However, these continuous attempts to identify the "harbor of the Isiakoi" with the settlement on the Primorskii Boulevard, among other sites, and the "harbor of the Istrians" with the settlements at Luzanovka, Mount Zhevakhova, or on the Primorskii Boulevard,<sup>50</sup> as well as with some other sites in the area,<sup>51</sup> have been criticized as methodologically problematic. Indeed, while it is possible that in antiquity each of the

two toponyms was used in reference to a specific location in the territory of modern Odessa, there is no reason to think that they were necessarily associated with settlements – at least, not for the entire duration of their existence.<sup>52</sup> It has been repeatedly pointed out that nowhere in the ancient sources are the corresponding locations called anything other than λιμένες, and therefore they should be viewed as such – harbors that were not a part of any particular settlement, but must have been used by everyone, serving the needs of the entire area.

#### HARBORS ATTACHED TO SANCTUARIES AND CULT SITES

Another category of ancient harbors includes those linked to extra-urban sanctuaries and cult sites. There seem to have been a number of such harbors in the Northwestern Black Sea region, and they too varied in structure, organization, and purposes. Of particular interest, in this respect, are shrines dedicated to Achilles: first of all, because for the entire pre-Roman period this cult is known to have existed in the Pontic region only on the northern coast of the Black Sea, with a particular prominence in its northwestern part;<sup>53</sup> and secondly, because of the significance of this cult for the political development of the Olbian *polis*.

#### *Beïkush and the Tëndrovskaïa Spit*

The sanctuary of Achilles at Beïkush was probably the earliest in the area around Olbia, functioning from the second quarter of the sixth to the first third of the fifth centuries BCE.<sup>54</sup> The site is located on a cape at the confluence of the Berezan' and Beïkush limans (Pl. I) and has been identified as an Archaic sanctuary of Achilles based on the archaeological material found there (graffiti, votive gifts, structures of a ritual character, etc.).<sup>55</sup> The data that could possibly shed light on the existence of a harbor at Beïkush is very scarce. Underwater investigations suggested that in antiquity the cape probably stretched much farther in the southwestern direction.<sup>56</sup> Two primitive limestone anchors were found during excavations at Beïkush in layers dated from the third quarter of the sixth to the first quarter of the fifth centuries BCE; one of these anchors was part of a small altar (no. 45).<sup>57</sup> A third limestone anchor was discovered in a pit (no. 97) filled with layers of ash and clay soil. The ash contained numerous fish bones and shells of soft-shell animals. The anchor was found *in situ* in a niche, dug out at the transition of the floor to the wall of the pit. It was placed on the top of a net weight, made out of a polished fragment of a red-clay amphora, bearing a graffito AXI.<sup>58</sup> The secondary usage of these anchors is similar to that attested in Olbia and Berezan' (although for a slightly later period),<sup>59</sup> and therefore suggests their sacred function. The

anchor found in a niche may have been used as a votive gift, probably dedicated by a local fisherman, judging from the accompanying fishnet weight. Another relevant group of finds from the site are representations of ships on pottery fragments. Particularly interesting is a depiction on the bottom of a black-glazed kylix from the third quarter of the sixth century BCE discovered during the 1985 excavation of complex no. 5. The graffito shows a ship with a ram and one row of oars and is probably the earliest drawing of a warship found in this region.<sup>60</sup>

Other sites associated with the cult of Achilles may have been located on the Tendrovskaiâ Spit and on the Kinburn Peninsula south of Olbia (Pl. I). Scholars almost unanimously identify the Tendrovskaiâ Spit with Ἀχιλλεῖος δρόμος mentioned in several ancient literary sources as a place sacred to Achilles.<sup>61</sup> There, the 1824 excavation of an ash hill on the northern tip of the spit revealed fragments of ancient ceramics and marble reliefs, dedicatory inscriptions, and hundreds of ancient coins.<sup>62</sup> In 1984, underwater visual exploration was conducted along the coast of the spit; the majority of finds, however, still resulted from the surface examination of the shore and consisted mostly of marine-abraded amphora fragments, dating to the period between the sixth to fifth century BCE and the early centuries CE.<sup>63</sup> Although the earliest finds are from the Archaic period, everything that can be unequivocally interpreted as evidence for the existence of an extra-urban sanctuary of Achilles (such as epigraphic and numismatic material) dates to the later period – from the second century BCE to the fourth century CE.<sup>64</sup> The dedicatory inscriptions, in particular, have all been dated to the second century CE: two out of the five inscriptions found in the area mention Achilles (*IOSPE* 1<sup>2</sup> 328; 329), one was dedicated by a κυβερνήτης (*IOSPE* 1<sup>2</sup> 331), one by a ναύτης (*IOSPE* 1<sup>2</sup> 332), and one was a token of gratitude for being rescued (*IOSPE* 1<sup>2</sup> 330).<sup>65</sup> But even if the sanctuary on the Tendrovskaiâ Spit came into existence as early as that at Beikush, it is not clear whether it was established by Olbia, as part of the Olbian *polis*, or emerged spontaneously, as an initiative of passing sailors. The latter seems more likely and must have been prompted by the presence of a convenient anchorage in the area.<sup>66</sup> Although underwater exploration did not reveal any traces of an ancient harbor there, Strabo mentions a mooring place.<sup>67</sup> In antiquity, this part of the sea was particularly dangerous,<sup>68</sup> and it is only natural that seafarers would have used the place in question both as a shelter and as a cult site dedicated to their patron. These functions did not necessarily require any special harbor structures or facilities beyond the presence of a simple anchorage.

The sanctuary at Beikush, on the other hand, must have been of a different nature. It served not only the needs of travelers, but also – or, rather, primarily – those of the local population, judging by the votive graffiti found at Beikush

and on the sites of the ancient settlements around it.<sup>69</sup> Most importantly, its emergence clearly followed the formation of the Olbian *polis* and roughly coincided with the appearance of other extra-urban sanctuaries, including those of Achilles, in the Northwestern Black Sea region.<sup>70</sup> Thus, for example, the existence of the cult of Achilles on the island of Berezan' is archaeologically attested from the Archaic period onwards, based on votive graffiti found there, mostly dating from the fifth to fourth century BCE.<sup>71</sup>

### *The Island of Leuke*

The most significant center of the cult of Achilles, however, was the island of Leuke, located about 45 km from the mouth of the Danube (Map 1). The evidence for it comes from ancient literary sources, as well as from numerous finds of votive gifts and dedicatory inscriptions.<sup>72</sup> Graffiti on fragments of East Greek ceramics dating from the second quarter to the middle of the sixth century BCE indicate that during that period the sanctuary must already have been in existence.<sup>73</sup> Its main architectural feature – a temple of Achilles – was erected about the middle or the second half of the sixth century BCE. Although no remains of the temple were preserved *in situ*, architectural terracotta pieces and other details, as well as traces of the possible foundations of the temple that were discovered and documented by earlier explorers,<sup>74</sup> allowed archaeologists to propose tentative reconstructions of this monumental structure.<sup>75</sup> At least from the sixth century BCE onwards, the island of Leuke was an important point on the maritime routes in the northwestern part of the Black Sea,<sup>76</sup> and the temple of Achilles, which was apparently built on the only elevated part of the island,<sup>77</sup> may have served as a navigational mark for the ships or even functioned as a lighthouse.<sup>78</sup>

The underwater investigations undertaken in the vicinity of the island confirmed the existence of numerous ancient anchorages.<sup>79</sup> In 2011, a shipwrecked commercial vessel was discovered 650 m northwest of the island at depth of 34 m. Its cargo included more than 3,000 amphorae from Peparethos, dating to the fourth century BCE, as well as black-glazed fine wares.<sup>80</sup> Submerged ceramic material was also found in other places around the island – for example, along the shore of the North Bay. The main concentration of amphora fragments and roof tiles – a so-called amphora field (about 200 × 200 m) – was located in the central part of the area, the earliest pieces dating from the end of the seventh to the beginning of the sixth centuries BCE. Remains of ancient anchors were found there as well.<sup>81</sup> The entire assemblage of anchors recovered in the vicinity of the island is the largest in the North Pontic region.<sup>82</sup>

Based on the results of these explorations, it has been suggested that in antiquity the island, most likely, had simple anchorages rather than a harbor (or



harbors) with any special facilities.<sup>83</sup> At first glance, this assumption seems reasonable, especially if we consider what categories of people visited the island.<sup>84</sup> According to Arrian, the visitors included, on the one hand, those who came specifically to the sanctuary and brought offerings, and, on the other hand, those who were just seeking a shelter from bad weather.<sup>85</sup> The needs of all these people could have been satisfied by a number of anchorages and did not necessarily require the existence of a well-equipped harbor. The same can be said for pirates, who either attacked passing ships, while using the island as their base, or plundered the sanctuary on the island, as attested by epigraphic evidence (*IOSPE* 1<sup>2</sup> 325).<sup>86</sup>

However, the possibility that in antiquity a harbor with special structures and facilities may have existed on the island of Leuke should not be dismissed, for a number of reasons. First of all, one should consider the political significance of the site and the island for the Olbian *polis*. Most scholars agree that at least from the end of the fifth century BCE onwards the sanctuary on the island of Leuke was under the patronage of Olbia. Some suggest that Olbia was actually the founder of this sanctuary in the first place.<sup>87</sup> In either case, it is beyond doubt that the motives behind Olbia's interest in this sanctuary were political.<sup>88</sup> The relation between the idea of land possession and the establishment of extra-urban sanctuaries has long been demonstrated, both for Archaic Greece and for Greek colonies elsewhere.<sup>89</sup> In particular, the establishment of a hero cult in a new geographical area was instrumental in a colony's attempts to assert its sovereignty over the land where the hero supposedly lay buried.<sup>90</sup> In our case, the early rural sanctuaries of Achilles (along with some sanctuaries of other Greek deities) may have indicated the extent of Olbia's territories and marked the boundaries of the Archaic *polis*.<sup>91</sup> Moreover, all the shrines to Achilles mentioned above emerged in key places that allowed the city to maintain control not only over the surrounding land, but also over local waterways, which, as we know, were vital for Olbia's communication with its *chora*. At the same time, Olbia may have also sought to affirm its presence in the more distant waters, by founding the sanctuary of Achilles on Leuke or extending its patronage to it. Since the island was located on important regional and interregional trade routes that crossed this part of the Pontus, establishing a protectorate over the sanctuary on Leuke allowed Olbia to claim regional supremacy and gain control over these routes and – ultimately – over the entire Northwestern Black Sea.<sup>92</sup>

These developments took place during the early period in the history of the Olbian *polis*, which was characterized by relative instability, both economic and political, and ended in the disappearance of the majority of rural settlements in the area by the first third of the fifth century BCE.<sup>93</sup>



Life on Olbia's *chora* resumed at the end of the fifth to the beginning of the fourth centuries BCE and reached its peak during the second half of the fourth to the middle of the third centuries BCE. The total number of known rural sites in the Lower Bug area dating to this period is over 150,<sup>94</sup> and some others may have been located farther down the Western Black Sea coast, such as the settlement of Koshary, discussed above.<sup>95</sup> The territorial growth of the rural surroundings, the increase in the number of the sites, and the fact that all but one (Sofievka 2/Glubokaïa Pristan') of the settlements were unfortified indicate a rather stable development of the *chora* during this period.<sup>96</sup> This also suggests that Olbia's connections with its environs were relatively secure and that there was no need for the city to reinforce its position in the area. This may be one of the reasons why the sanctuary of Achilles at Beïkush was not re-established after it had stopped functioning in the fifth century BCE. The layer dating to the period of prosperity of Olbia's *chora*, i.e., the second half of the fourth to the middle of the third centuries BCE, was discovered during the excavations in 1986 and 1995 at Beïkush, but it did not yield enough evidence to determine the character of the site during this period as exclusively sacred.<sup>97</sup> In general, the evidence attesting to the significance of the cult of Achilles in the area during this period subsides dramatically, reduced to some pottery fragments with graffiti, dating from the fifth to fourth century BCE, found at a number of sites, including Berezan', and to a single find from the Kinburn Peninsula, located south of Olbia. In 1885, fishermen pulled out of the waters on the western coast of this peninsula a cylinder-shaped altar with an inscription, which later was dated to the period from the fourth to third century BCE. The text of the inscription mentions the dedication of an altar and a pine cone to Achilles (*IOSPE* 1<sup>2</sup> 327): Ἀχιλλεῖ τὸμ βωμόν καὶ τὸ κέδρον.<sup>98</sup> However, this find does not necessarily mean that the altar was either originally located in the territory of the peninsula or that it was part of a larger sacred precinct there.<sup>99</sup> Other questions that cannot be unequivocally answered at this point concern the dates during which this sanctuary may have existed, as well as the nature of the relationship between the hypothetical sanctuaries on the Kinburn Peninsula and Tendrovskaiâ Spit, on the one hand, and Olbia and the rural Greek settlements of the Kinburn Peninsula, on the other.<sup>100</sup>

The only cult center of Achilles that clearly continued to function during this period was the Panhellenic sanctuary on Leuke, administered by Olbia.<sup>101</sup> And this brings us back to the question of the harbor. The sacred character of the island and the fact that its harbors did not have any commercial significance does not necessarily presuppose that none of the special structures existed there, as similar cases from other parts of the ancient Greek

world show. For example, the underwater investigations in the ancient harbor of Panormos near Miletos (which probably was used primarily by visitors to the Didymeian oracle, since no settlement associated with this harbor has been found) produced remains of a wooden jetty at a distance of 80 m from the present shoreline.<sup>102</sup> Remains of ancient ship-sheds were reported to have been found at Cape Sounion in Greece, the location of the famous sanctuary of Poseidon,<sup>103</sup> where the harbor did not have any commercial significance either. However, the latter must have been of military importance, since the *ephebic* garrison is known to have been stationed at Sounion and remains of defense structures have been discovered there.<sup>104</sup> Similarly, it has been argued that Roman forces were stationed on the island of Leuke in the early centuries CE, as attested by the finds of roof tiles with fragmentary stamps, which were discovered during archaeological work in 1968 and restored as CLASSIS FLAVIA MOESICA and LEGIO V MACEDONICA.<sup>105</sup> It is known that during this period several Roman legions were stationed in Lower Moesia, including *Legio I Italica*, *Legio V Macedonica*, and *Legio XI Claudia Pia Fidelis*. The naval squadron – *Classis Moesica* – was primarily based in Noviodunum on the Lower Danube, but other locations have been also attested elsewhere in the region, including Tyras and Chersonesos. It has been suggested that the island of Leuke may have also served as a base for Roman naval forces, because of its important strategic position on the route between Noviodunum and Chersonesos.<sup>106</sup> If this, indeed, was the case, then it would have been rather unlikely that no harbor structures, such as ship-sheds, existed on the island at least during the Roman period.

As has been mentioned earlier in this chapter, the larger part of Olbia's *chora* ceased to exist around the middle of the third century BCE. Only a small number of settlements located immediately around Olbia and on the left bank of the Bug liman continued to function (including the sites of Sofievka/Glubokaia Pristan' and Stanislav, which remained in use until the middle of the second century BCE). No traces of rural settlements from the end of the second to the first half of the first centuries BCE have been found in the Lower Bug area.<sup>107</sup>

### *Cult of Achilles during the Roman Period*

The second revival of the *chora* took place around the end of the last quarter of the first century BCE and during the first quarter of the first century CE.<sup>108</sup> Over sixty sites in the surroundings of Olbia yielded material dating to the early centuries CE, and they differed from the sites of the previous periods in several aspects. The most important change in the character of the settlements was the presence of fortifications.<sup>109</sup> The location of these fortified settlements

led some scholars to believe that together they must have formed a continuous defense line.<sup>110</sup> Moreover, the fortification complexes discovered at some sites, such as that of Didova Khata on the right bank of the Bug liman (Fig. 2.1), have been interpreted as Roman camps, on the basis of the similarities in plan, topography, size and type of the structures, and other archaeological remains.<sup>111</sup> Therefore, on the one hand, the Roman period witnessed a general decrease in the number of settlements; on the other hand, fortified settlements appeared and possibly formed a system of defense, which encompassed a territory comparable in size to that of the previous periods.<sup>112</sup> These facts, together with the Roman presence, indicate that Olbia's position in the area was less secure than during the Hellenistic period.

In addition, Olbia was no longer able to maintain its patronage over the sanctuary of Achilles on the island of Leuke: by the end of the first century CE, it seems to have passed to some other West Pontic city, probably Tomis.<sup>113</sup> This switch in sovereignty can only mean that Olbia lost at least some of its former influence in the Northwestern Black Sea, which must have prompted its effort to re-establish control over land and sea, both locally and within the larger region. Under these circumstances, it is hardly surprising that a sudden increase of sites associated with the cult of Achilles occurred, similar to that which took place during the early stages of Olbia's history. During the Roman period, it became one of the main cults in the *polis*. Dio Chrysostom reports in his *Borysthenitic Discourse* that a temple of Achilles was erected in the city, as well as in other places (36.9).<sup>114</sup> From the beginning of the second century CE onwards, at the latest, Achilles was particularly venerated as *Pontarches* – the epiclesis attested only for this period and only for the region in question – and with this, the cult seems to have acquired a new dimension.<sup>115</sup> Dedicatory inscriptions to Achilles *Pontarches* were found at several sites west and northwest of Olbia, all located near water. The distribution pattern of the epigraphic material corresponds, to a certain extent, to the distribution of the sites associated with the cult of Achilles known from the earlier period, discussed above.

First of all, the site of Beïkush was in use once again after a prolonged interruption, and this is probably significant. It is not clear whether the sanctuary was re-established there, but archaeological finds – especially inscriptions – testify that Achilles *Pontarches* was worshipped at Beïkush during the early centuries CE.<sup>116</sup> Secondly, as was mentioned above, the Tendrovskâia Spit yielded archaeological evidence for the presence of the cult of Achilles, dating from the second to fourth century CE, with the dedicatory inscriptions, in particular, all dating to the second century CE.<sup>117</sup> Furthermore, the island of Berezan' became the new center of the cult of Achilles *Pontarches*,<sup>118</sup> and scholars unanimously agree that this development stands in direct connection with Olbia's

loss of its patronage over the sanctuary of Achilles on the island of Leuke at around the same time.<sup>119</sup>

Thus, after a period of dominance in the Northwestern Black Sea, Olbia found itself in a situation where it no longer had control over this region and probably was under constant threat of becoming a part of the Roman province of Lower Moesia.<sup>120</sup> As a result, it must have turned its attention to closer waters, and, in particular, to the island of Berezan'. The island was of strategic importance: on the one hand, it guarded the entrance to the Dnieper-Bug estuary, which provided access both to Olbia and to the waterways in the area around it (Fig. 2.1); on the other hand, Berezan' lay on the sea-route that led farther to and along the Northern Black Sea coast and, particularly, to the Crimean Peninsula. In an attempt to secure its positions in the region, Olbia established the cult center of Achilles *Pontarches* on Berezan', which allowed the city to exercise a certain degree of control over both local waters and the interregional sea-routes. It is possible then that there was a harbor functioning on Berezan' during this period, which would have served the needs of visitors to the sanctuary and the inhabitants of the local settlement that came back to life with the revival of Olbia after its destruction in the middle of the first century BCE and may even have experienced a period of relative prosperity in the second to the beginning of the third centuries CE.<sup>121</sup>

At the same time, Olbia must have tried to re-establish its position in the larger region and to re-integrate the more distant territories farther down along the Western Black Sea coast into its zone of influence. Several dedicatory inscriptions to Achilles *Pontarches* dating to the Roman period have been found on the left bank and at the upper reaches of the Tiligul'skiĭ liman (at the modern settlement of Sofievka) and in the territory of modern Odessa (Pl. I), which may have constituted Olbia's farthest frontiers in the Northwestern Black Sea region.<sup>122</sup> The fact that all these inscriptions were found on the coast or along the shores of the limans, and especially the discovery of epigraphic material at the upper reaches of the Tiligul'skiĭ estuary, may be an indication that by establishing cult sites of Achilles *Pontarches* and setting up stelai with dedicatory inscriptions to the Lord of Pontus, Olbia sought not only to reinforce its presence in these distant territories, but also to secure its control over the riverine network in the region, which, in turn, provided access to land-routes. This also means that the local waterways were used to the same extent as before, if not more intensively, and that the network of small harbors in the area must have been as elaborate and diverse as during previous periods.

## CONCLUSIONS

The outline of the harbor network in the Northwestern Black Sea region presented in this chapter is still rather general and does not fully reflect the complexity of its structure or the nuances of its development. However, even in the absence of direct archaeological evidence for the existence of specific harbor facilities, the detailed analysis of the available sources allows us to deduce some information about the status of various harbors within local, regional, and, in some cases, interregional hierarchies and to establish certain tendencies in their development.

It is possible that during the early stage of the Greek colonization of the Northwestern Black Sea coast in the last third of the seventh century BCE Greek imports still came to the wooded-steppe zone of this region (such as, for example, the local settlement of Nemirovskoe situated on the right bank of the Dnieper) from the western coast, i.e., via the harbors of Histria and Orgame, as well as from that of Borysthenes.<sup>123</sup> But after the foundation of the Olbian *polis*, its harbor became the most prominent in this part of the North Pontic region and remained such throughout the entire period of its existence. It must have had better and larger facilities than any other harbor on the Northwestern Black Sea coast, and, most importantly, it was the major regional and interregional entrepôt and redistribution center.<sup>124</sup> The latter is especially true for the Hellenistic period, when, at the highest point of its prosperity, the city was intensely involved in maritime trade within the Black Sea region and beyond. A clear indication of the role that Olbia and its harbor played in this interregional trade is the fact that a copy of the Olbian coinage decree – the so-called Kanobos decree on money (*IOSPE* 1<sup>2</sup> 24), dated to the second or the third quarter of the fourth century BCE – was installed at Hieron, at the very entrance to the Black Sea.<sup>125</sup>

While the dominant position of Olbia's harbor as the central node in the Northwestern Black Sea remained stable, other harbors in the Olbian *polis* were all part of a shifting network. As local harbors appeared and disappeared and their statuses and functions changed from period to period, the “degree and nature of connectivity” within each microregion and between different microregions may have fluctuated significantly. As we have seen above, several types of harbors can be identified even within Olbia's immediate *chora*. Some of them were just small “opportunistic” harbors,<sup>126</sup> such as that of the production center of Tagorlyk, which emerged spontaneously at a convenient location and probably existed only as long as the settlement and production center did, serving as a stop-over for ships and as a place of small-scale trade or exchange. Others, like the harbors linked to the settlements of Sofievka and

Stansilav, were located at the interface of a network and functioned as gateways. Because of their role, such harbors may have remained in use even after the settlements associated with them went into decline and other settlements in the area ceased to exist.

In addition to these various types of small harbors in the immediate *chora* of Olbia, there were others, located farther away in the territory of the *polis*, such as the harbor at the settlement of Koshary on the right bank of the Tiligul'skiĭ liman. It is not possible to determine whether any special structures were ever built there, but judging by the size of the settlement and the presence of warehousing facilities, its harbor must have been the major hub in the local network (although the settlements that surrounded it probably had their own – smaller – harbors). On the one hand, it lay on the way of those ships that were going to Olbia and other North Pontic cities using the cabotage route along the western coast rather than crossing the open sea. On the other hand, it also had excellent access to inland territories through riverine and land-routes. This exceptional position, in combination with the fact that it was probably the most distant major harbor of the Olbian *polis* in the west, made the harbor of Koshary an important regional transit point and subsidiary redistribution center, secondary to that of Olbia.

The original characteristics of the harbors in the Odessa Bay area farther down along the coast were similar, but the resulting structure of the local network was rather different. These harbors were also located on the shores of the limans, connected with the sea and the hinterland, which made their position advantageous for trade and communication. However, the overall location on the fringes of the territory that may or may not have been under Olbia's control during some periods made the harbor network in this microregion less stable: among the numerous settlements that existed there none seems to have played a dominant role, and the same was probably true for the harbors associated with these settlements. Moreover, it is likely that some harbors, prominent enough to have been mentioned in ancient sources, were not attached to any particular settlement. Placed in a border zone between two or more larger networks, all these harbors must have served, to a great extent, the needs of the local population on the coast and in the immediate hinterland, and although they could have accommodated a certain amount of the intra- and interregional maritime traffic, their role within the larger networks probably remained marginal.

The emerging picture is still rather basic, but even in this simplistic form it appears to be more complex than a two- or three-tier hierarchy constructed out of large harbors and principal entrepôts vs. subsidiary redistribution centers and smaller local harbors. In this respect, it would be possible to apply to the Northwestern Black Sea region various theoretical models of

maritime connectivity and trading routes suggested recently for the ancient Mediterranean.<sup>127</sup> However, most of these models are based on economic activities and commercial traffic, whereas not all harbors were directly involved in trade, and those that were not, may still have held a prominent place within a multi-level hierarchy. Such harbors included, first of all, those linked to sanctuaries and cult sites: they too were an integral part of the seascape and, therefore, played an important role in maritime communications.<sup>128</sup>

In the Northwestern Black Sea, this category encompassed, in particular, the sites associated with the cult of Achilles, among which the island of Leuke was the most famous. Located in a zone where major long-distance navigational routes converged, this place was central to the regional and interregional communication network, although it had no particular commercial significance. Its harbor – or a cluster of harbors – offered shelter to Olbian and foreign ships that frequented the island. In addition, the island itself – and its sanctuary with a temple, which may have also served as a lighthouse – were used as a point of reference by all seafarers in this part of the Pontus.<sup>129</sup> At the same time, it probably also marked the extent of Olbia's maritime hinterland during the periods when the sanctuary was under the patronage of the Olbian *polis*.<sup>130</sup>

Already in the early days of archaeological explorations at Olbia and Berezan', it was noted that these sites must have been chosen by the Greek colonists because of their "Milesian topography."<sup>131</sup> Miletos, "the greatest of Greek mother cities,"<sup>132</sup> had an extremely advantageous position on the coast, at the crossroad of major sea-routes. It also had several natural harbors and was situated at the mouth of the Meander, which provided access to the inland territories and networks.<sup>133</sup> These factors clearly contributed to the prosperity of the city during the Archaic period, and when the Milesian colonists went to the Black Sea, they were probably looking for similar settings for their new settlements. However, finding a location that would be conducive to trade and easily defensible was not enough. As the history of Miletos showed, the key to prosperity was an ability to maintain control over the territories around the city at large, which could have been achieved only through dominance over the adjacent sea and local waterways.<sup>134</sup> And this must have been Olbia's intention when it established and re-established the sanctuaries of Achilles in the early stage of the city's existence and in the later period of instability. These sites may have acted as markers of Olbia's political frontiers not only on land, but also on water, since all of them had access to the sea and many were connected to the inland via rivers. Clearly, all of them had harbors – simple unequipped anchorages or natural harbors with no built structures, which functioned mostly on a local level before and after the emergence of the cult site in the same place. During the existence of the latter, however, these harbors must have played a



more important role in the regional network, owing to the significance of the sites themselves.

These transformations within the multi-level hierarchy of the harbor network relate to the changes that occurred in the socioeconomic and political situation in the Northwestern Black Sea region. As we have seen, they affected both smaller harbors and those associated with large settlements and/or sanctuaries, such as the one on the island of Leuke. In the case of the latter, however, they had to be of a more profound nature than we are able to recognize now. Thus, the status of the harbor (or harbors) at the island of Leuke during the Roman period may have been completely different from that of the previous periods: it has been suggested, for example, that the island served as a base for the Roman navy (which would probably require the presence of a military harbor) and/or that a customs station was located there (which would have been, most likely, reflected in the appearance and the structure of the commercial harbor).<sup>135</sup> Presently, however, the evidence in this respect is inconclusive.

The general structure of the harbor hierarchy in the Northwestern Black Sea and the particularities of its individual components were, to a great extent, specific to this region. The same can be said about other parts of the North Pontic coast, such as the Western Crimea with Chersonesos, the Northeastern Azov Sea area with Tanais, or the Bosporan Kingdom (Map 1). The latter, situated on both sides of the Cimmerian Bosphorus (modern Strait of Kerch), clearly had a larger and more complex network of waterborne communications, both because of the nature of this polity and the extent of its territories. This implies, first of all, that there was more than one center on both the Kerch and Taman peninsulas (Pantikapaion, Theodosia, Phanagoreia, and others) whose harbors not only played the role of major nodes in this local network, but also were of interregional significance. Secondly, the Bosporan Kingdom exercised a certain degree of control over its harbors and maritime trade, including state-directed transactions, coordinated access to the main ports, and supervision of related facilities. Thirdly, being the largest state on the Northern Black Sea coast, it possessed a relatively substantial navy, which also had to be maintained during peacetime and, therefore, required specially equipped harbors. The topographic diversity of the microregions within the Bosporan Kingdom was another decisive factor. In antiquity, the Taman Peninsula consisted of three islands (one large and two small ones), separated from the mainland by a strait, which, like the Cimmerian Bosphorus, connected the Black Sea with the Azov Sea and was navigable at least until the second century CE.<sup>136</sup> For these islands, the presence of harbors was essential, because the only way they could have communicated with the rest of the region was via water,<sup>137</sup> and the same applies, to a certain extent, to the settlements



located on the shores of this second strait. However, among this category of harbors, some must have been more important than others, because of their strategic location at the entrance to the Azov Sea. Even this superficial overview shows that in order to create a more nuanced diachronic reconstruction of the harbor networks in other regions of the Northern Black Sea one would need to take into consideration all the available evidence and perform an analysis similar to that presented here for Olbia and its surroundings, because the structure of such networks and their operational mechanisms can only be understood in the wider context of the development of the entire region.

## THE GEOLOGICAL CONTEXT FOR COASTAL ADAPTATION ALONG THE NORTHERN BLACK SEA (700 BCE–500 CE)

Ilya Buynevich

### INTRODUCTION

The non-tidal, enclosed basin of the Black Sea contains a diverse suite of coastal landforms that were the sites of early and persistent settlement by ancient Greeks.<sup>1</sup> From protective headlands to navigable river channels and enclosed bays, many parts of the Pontic basin underwent rapid landscape transformations on decadal to centennial scales.<sup>2</sup> In addition to other factors, these ongoing environmental changes, punctuated by extreme events (storms and floods), doubtlessly had a profound effect on the existence of coastal settlements – their foundation, development, longevity, and long-term distribution patterns.

The importance of coastal sites lies not only in their access to sea, but also to navigable links with the inland. Therefore, coastal regions played a key role in interactions between the Greeks and the nomadic steppe cultures of the Scythians and Sarmatians.<sup>3</sup> However, despite sustained research and increasing emphasis on a multidisciplinary geoarchaeological approach to the investigation of ancient coastal sites, challenges remain in integrating diverse geological databases and archaeological research. The aim of this chapter is to provide a general framework necessary to evaluate the geological context for coastal adaptation along the Northern Pontic basin between 700 BCE and 500 CE (i.e., 2,700–1,500 calendar years before present,<sup>4</sup> or 2.7–1.5 ka). It also offers a brief review of recent literature, complemented with a model

of barrier coast evolution based on recent findings along the Northwestern Black Sea margin.

#### COASTAL EVOLUTION: DRIVING FORCES AND PRODUCTS

Before addressing physiographic (landscape) changes and their role in coastal adaptation in antiquity, it is important to clarify the key terms used in geological, geoarchaeological, and historical literature. Whereas some of these are used as synonyms (e.g., transgression and rising sea level), care must be taken in areas where changes in sediment supply and vertical land movements may force massive reorganization in continental shelf evolution and coastal configuration.<sup>5</sup> *Sea-level rise* and *fall* refer to vertical movements of water level in the basin, whereas *transgressive* and *regressive* are typically applied to stratigraphy (i.e., a sequence of layers reflecting a particular paleoenvironment).

*Progradation* and *retrogradation* identify seaward (*net accretion*) and landward (*net erosion*) shoreline movement, respectively. Retrogradation can happen along mainland coastlines fronted by bluffs and beaches or coastal barriers – barrier islands, barrier spits (attached to mainland at one end), and baymouth barriers (attached to mainland at both ends) – where the total sediment volume may be conserved during landward rollover, i.e., transfer of sand from the seaward to landward (bay) side of the barrier.

It should also be noted that the term *spit* (“kosa” in Russian) is locally applied to submerged sandbars, and *bar* is sometimes used for a variety of coastal accumulation forms.<sup>6</sup> In this chapter, *barriers* refer to subaerially exposed landforms separated from the mainland by a bay (shore-normal or circular basin) or lagoon (shore-parallel water body), whereas *bars* stand for submerged sediment accumulations of various morphology and often shifting outlines. At present, baymouth barriers separate the sea from the fresh-to-hypersaline flooded courses of former river valleys, locally known as *limans*. Larger accumulations, such as the Odessa Bank in the Northwestern Black Sea shelf, form prominent bathymetric features that were likely temporarily exposed over the past millennia.<sup>7</sup>

With no changes in sediment supply or land movement (uplift or subsidence), sea-level fall will cause shoreline progradation (forced regression) and sea-level rise will result in retrogradation and accompanying transgressive stratigraphy (marine sediments overlying coastal or terrestrial facies).<sup>8</sup> This mode of coastal evolution was first described in detail in scientific literature based on early studies along the Dniester baymouth barrier. In a regime of rising sea level, storm-driven landward movement of sand through *overwash* or *breaching* (inlet formation, called “*prorva*” in Russian) helps maintain barrier volume and prevents submergence.<sup>9</sup> These landward-directed flows are also responsible for moving a variety of cultural remains, as well as paleontological materials often

used for radiocarbon dating.<sup>10</sup> Regardless of sea-level trends, overwash, as well as alongshore and seaward sediment movement, must be given serious consideration when attempting paleogeographic reconstructions in coastal regions.<sup>11</sup>

On the other hand, even in a regime of rising sea level, increased sediment supply and/or uplift of coastal blocks will result in progradation with its regressive sequences. These prograded complexes are typical of river deltas (e.g., the delta of the Danube) and can be found at several locations along the Black Sea and the Azov Sea coasts. Such accumulations serve as ideal archives for long-term coastal evolution, where important chronological constraints are provided by archaeological sites (i.e., structures *in situ*) or artifacts transported from older horizons or from the seafloor.

Stable sea level (*stillstand*) is typically accompanied by vertical upbuilding (*aggradation*) through *aeolian* (wind-driven) accumulation. This mode of coastal evolution is poorly developed along the Northern Black Sea due to southerly (offshore) prevailing winds, which result in minor coastal dune formation.<sup>12</sup>

#### SEA-LEVEL CHANGES AND COASTAL ADAPTATION

Sea-level changes in the Black Sea basin during the Holocene (past 10,000 years) have received attention both in the early literature on the geography of the region and in the renewed research efforts of the past decade.<sup>13</sup> Although much of the recent interest has been focused on the flooding of the Black Sea basin during the Early Holocene (ca. 8,000 years ago),<sup>14</sup> a number of investigations also addressed the Late Holocene patterns of natural and cultural changes over the past 3,000 years.<sup>15</sup>

Most scholars agree that the following changes in the Black Sea level occurred during the time in question, roughly correlating each of them with a particular historical period:<sup>16</sup>

*Dzhemetinian Transgression* (3.8–2.6 ka) – Archaic period

*Phanagorian Regression* (2.6–2.0 ka) – Classical and Hellenistic periods

*Nymphaean Transgression* (2.0–0.7 ka) – Roman period and Late Antiquity

Extensive research has been carried out at several prominent Crimean sites (including Chersonesos), as well as at the ancient city of Olbia, with detailed paleogeographic reconstructions aiding archaeological investigations.<sup>17</sup> Over the past decades, researchers have relied on submerged archaeological sites of a known age, chronologically centered at ca. 2.5 ka (500 BCE), to place a sea level anywhere from 10–12 m<sup>18</sup> to 3 m below present<sup>19</sup> during the so-called Phanagorian Regression. The supporters of the former estimation partially explain it, along with subsequent two minor regressions, by neotectonic activity (land subsidence), but the latter estimation appears to be more reasonable, based on recent geological investigations along the Northern Black Sea basin.<sup>20</sup>

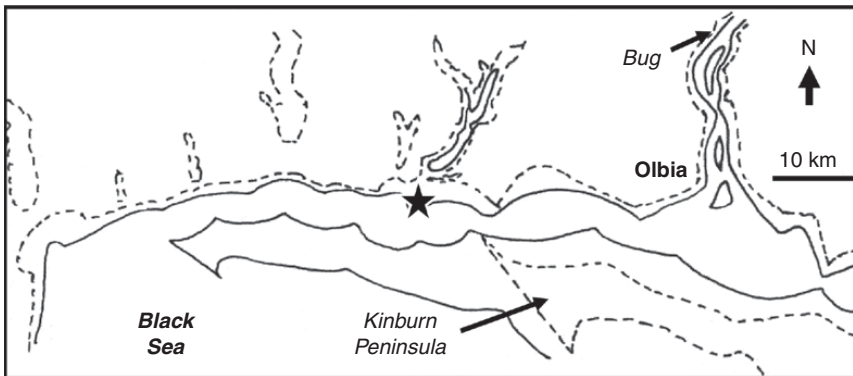


Fig. 3.1. Paleogeography of the liman coast east of Odessa, with Phanagorian coastline based on the reconstruction by Shilik (1975). Solid line – the Phanagorian coastline; dashed line – the modern coastline; a star – the location of the island of Berezan’.

The lower-than-present sea level, even by 1–2 m, would have been conducive to the coastal settlements in the North Pontic region. It is important to note that in contrast to headland coasts, especially those formed in bedrock (e.g., Chersonesos), even minor changes in sea level have dramatic influence on the dynamics of barriers, mainland beaches, and deltas.<sup>21</sup> Although numerous researchers relied on present-day nearshore bathymetry to predict coastal outline at lower sea-level stands (Fig. 3.1),<sup>22</sup> this is only warranted if the modern seafloor is a relict surface dating back to the time period of interest<sup>23</sup> or in the case of a very rapid base-level change. More likely is a scenario of adjustment of coastal and nearshore profiles to changing sea-level position.

When considering coastal embayments fronted by barriers, investigators must take into account the balance between: (1) enlargement and deepening of coastal bays and lagoons caused by rising sea level and (2) shrinking and shoaling of these water bodies due to coastal retrogradation driven by storms during the same period. In the absence of massive coastal protective structures away from key settlements and ports, the resulting hypsometric changes (spatial distribution of bathymetry) will have a primary influence on connections to the sea, navigability of shallow bays, and ultimate access of watercraft to numerous river channels.

#### BARRIER EVOLUTION AND COASTAL NAVIGATION

Because coastal barriers formed at lower sea-level positions have been submerged or reworked on the continental shelf, investigations of prograded landforms, such as strandplains (i.e., beach-ridge plains backed by bluffs) can be used to examine the recent coastal evolution.<sup>24</sup> Recent detailed investigations along the coasts of the Bessarabian limans (located between the Dniester and

the delta of the Danube) indicate that most coastal barriers and strandplains formed within the past 2,000 years. For example, the oldest *catenary* (concave basinward) ridges along the southwest edge of the Budak liman, located just west of the Dniester liman, date to 320–540 CE (Pl. II).<sup>25</sup> The ridges can only develop in the presence of a protective landform, so that this date provides a minimum age for the main baymouth barrier that separates this liman from the sea. A similar geochronological approach has to be applied to other Black Sea barriers, while keeping in mind the possibility that datable materials (mollusks) may have been reworked from older deposits. There is growing evidence that barriers and strandplains formed less than 1,500 years ago incorporate shells of marine fauna dating back between 7 and 40 ka.

It is likely that during lower stands of sea level and through the final transgressive phase, many embayments were open to the sea, thereby allowing direct access to the rivers (Pl. IIIA). When sediment supply outpaced sea-level rise, chains of barrier spits and barrier islands must have existed seaward of the present shoreline (Pl. IIIB). This configuration allowed connections between the sea and embayments via inlets. In addition, shallow lagoons located between the barriers and mainland would have provided safe navigation for shallow-draft vessels, protecting them from storm waves of the open sea and larger enemy ships. In both of the above scenarios, connections existed between the bays offering ready travel between adjacent river systems (Pl. IIIA–B).

Due to the non-tidal nature of the basin, morphological changes in the position and depth (i.e., navigability) of coastal inlets and river mouths are related to the interplay between long-term (sea-level and sediment supply) and event-scale (storms and floods) processes. A slight deepening of the channel due to rising water level may be negated or overtaken by sediment accumulation resulting from increased erosion. On the other hand, base-level lowering, while causing temporary shoaling, will also trigger incision (downcutting) of the channel. Lateral channel movement or formation of new inlets during storms would have played an important role in the links between the bays and sea.<sup>26</sup> Aside from morphological changes, fluctuations in water salinity either during floods (freshening) or during droughts and storm surges (salination) must have had major impact on fishing, coastal vegetation, potable-water supplies, and changes in groundwater in the adjacent agricultural lowlands.

During the subsequent period of 1.5–0.5 ka (500–1500 CE) and possibly earlier, many liman mouths became blocked by spits, baymouth barriers, or deltaic progradation (e.g., the westernmost Odessa region), either precluding navigation between adjacent bays or severing entry from the sea (Pl. IIIC).<sup>27</sup> Similar landward barrier migration and compartmentalization of formerly interconnected ponds took place as recently as 200–300 years ago in other parts of the world.<sup>28</sup>

Today, only some of the larger limans have natural or engineered inlet mouths and only a few of the water bodies bearing different names are

physically connected (Pl. IIID). Extensive geoarchaeological work that combines traditional field techniques with onshore and offshore imaging technology (geomagnetic research, resistivity, seismic reflection, ground-penetrating radar), complemented with detailed radiocarbon, optical, and other – emerging – chronologies, will be needed to determine the presence of ephemeral barrier chains along sections of the Northern Black Sea.

Sea-level changes and century-scale climatic shifts within the Pontic basin have been traditionally considered the main forcings of coastal evolution;<sup>29</sup> however, their effects on storminess have received little attention. From Plato and Strabo to Genoese mariners of the fifteenth century, hostile tribes, pirates, and devastating storms of the Black Sea were part of the written record.<sup>30</sup> Based on research along the Georgian coast, Igor' Balabanov proposed that decadal-to-centennial trends in storminess greatly influenced Pontic navigation.<sup>31</sup> Whereas long-term fluctuations in wave climate are pertinent to circumnavigation and erosion of coastal structures, individual intense storms and occasional tsunamis would have induced instantaneous changes along sandy shorelines, at times reflected in written accounts.<sup>32</sup> Studies of paleo-storm signatures in coastal deposits<sup>33</sup> and the possibility of recognizing storms as causes of some ancient shipwrecks<sup>34</sup> provide valuable insights into the impact of extreme events on maritime activities and coastal adaptation.

## CONCLUSIONS

It is likely that a temporary lowering of the sea level during the Classical period may have aided the development and prosperity of Greek settlements along the northwestern coast of the Black Sea. Even in the absence of a basin-wide drop (the Phanagorian Regression), the sea level would have been 1–3 m below present at that time.<sup>35</sup> Subsequent rise caused the submergence of many sites, while modifying the shapes and elevations of dynamic coastal landforms. This must have substantially influenced the movement of trade and military vessels, from decreasing the navigability of some waterways, on the one hand, to providing natural protection from intense storms and deep-draft enemy vessels, on the other.<sup>36</sup> Much of the physical evidence for these sand-dominated landforms (barrier islands and spits) has been modified during the most recent phase of sea-level rise, with a large part of their sediment either redistributed on the shelf or incorporated into modern equivalents and prograded strandplains.<sup>37</sup> An integrated multidisciplinary approach that combines detailed geological investigation of coastal accumulation forms and geoarchaeological research allows a fuller understanding of coastal adaptation along the Northern Black Sea margin in antiquity.<sup>38</sup> Such efforts, in turn, provide solid geophysical, sedimentological, and geochronological foundations for future archaeological investigations.





## PART II

### OVERSEAS TRADE (BASED ON AMPHORA STUDIES)



## OVERSEAS TRADE IN THE BLACK SEA REGION FROM THE ARCHAIC TO THE HELLENISTIC PERIOD

Sergey Yu. Monakhov and Elena V. Kuznetsova

### THE ROLE OF AMPHORAE IN THE STUDY OF ANCIENT TRADE

It is well known that of all categories of archaeological material, amphorae are the most representative finds in terms of the developments that took place in ancient trade. Pointed amphorae, in particular, were the main type of containers used for the overseas transportation of the most important products – first of all, wine and olive oil.<sup>1</sup> This probably also explains the fact that amphorae comprise 45 to 90 percent of all finds in the cultural layers of ancient settlements.<sup>2</sup> In other words, amphorae (and, most of all, amphora fragments) directly reflect the situation in trade in various products, such as wine, olive oil, pickled fish and *garum*, pickled meat, marinated olives, honey, figs, pomegranates, nuts, tar, oil, and others.<sup>3</sup>

Another important factor is that until the Roman period almost every large center exporting these products manufactured its own amphorae, whose shape differed from the shape of the containers produced in other *poleis*.<sup>4</sup> It is possible that an average buyer or consumer was able to recognize amphorae that contained “Chian,” “Thasian,” or “Lesbian” wine just by looking at them.<sup>5</sup>

### CLASSIFICATIONS OF CERAMIC CONTAINERS FROM THE ARCHAIC TO THE HELLENISTIC PERIOD

The specifics of amphora production in the Greek world made it necessary to develop detailed typological and chronological classifications of amphorae

from various centers very early in the process of their study. In the 1930s, Virginia Grace and Boris Grakov laid the foundations for amphora studies as a discipline by presenting a typology of amphorae from Thasos, Rhodes, Chios, and some other centers and proposing a general chronology for them.<sup>6</sup> Later, their conclusions were modified and extended. Thus, the work of Irida Zeest was a real breakthrough in amphora studies – in particular her last book, which for the first time presented an overview of amphora production in many centers of the Eastern Mediterranean and the Black Sea region.<sup>7</sup> This scholar studied an enormous amount of ceramic material from the North Pontic region, which made her publication the first of its kind in this field.

Work in this direction was continued by Iosif Brashinskiĭ, who in his last book focused on solving some important methodological problems.<sup>8</sup> His research did not necessarily aim at improving the existing classifications of ceramic material, but rather at answering questions of a paleoeconomic character, which was a great achievement in itself. From the 1980s onwards, several other scholars worked on creating typological and chronological classifications of amphorae from various centers. Such projects are usually very laborious and take many years to complete, and this is why the resulting publications do not appear frequently, in contrast to standard publications of excavated material.<sup>9</sup>

Later, a number of publications highlighted the main trends in the development of amphora shapes of some specific centers. Jean-Yves Empereur and Antoinette Hesnard published a retrospective overview of ceramic containers from a number of Hellenistic centers,<sup>10</sup> while a similar catalogue of amphorae from Western Mediterranean centers came out at about the same time.<sup>11</sup> In the 1990s and 2000s, attempts were also made to localize the amphorae from the so-called unidentified production centers, such as Kolophon, Peparethos, Mende, Kos, Erythrai, Akanthos, Ouranopolis, and the South Pontic centers.<sup>12</sup> Containers from the Black Sea centers of the Roman period were also studied.<sup>13</sup>

For a long time, the main method used to determine chronological sequences in amphora classifications was the method of stratigraphic observation. However, it soon became clear that in order for the classifications to be reliable and complete, they had to be based on a comprehensive analysis of a large number of ceramic complexes. Such an analysis would provide a basis for more complex typological classifications and make it possible to establish a detailed chronology for each amphora type and variant. Zeest used eight such complexes, all coming from settlements.<sup>14</sup> Brashinskiĭ analyzed forty-six complexes, most of them associated with burials, which are particularly important for establishing a chronology.<sup>15</sup> In 1999, one of the authors of the present chapter published a book featuring the data from 200 ceramic assemblages, dating from the seventh to the end of the second centuries BCE.<sup>16</sup> A considerable part of these complexes was, once again, associated with burials, where amphorae were often deposited very soon after their production.

As a result of these studies, the most important factors that contribute to the formation of a ceramic complex were established, including the following:

- 1 Most often, assemblages consist, to a great extent, of amphorae from the largest production centers, representing only a small part of multiple and diverse trade connections. Some trade partners – especially those that participated in trade only for a short period – are not represented at all in the materials of ceramic complexes.<sup>17</sup>
- 2 Ceramic complexes were formed as a result of an uneven trade flow, when products from a particular center arrived at the market in bulk and at certain intervals.
- 3 Ceramic complexes do not allow one to trace the continuous evolution of amphorae coming from various centers, since not all periods are represented equally well. Moreover, several types of standard containers usually coexisted in most of the large production centers.<sup>18</sup>
- 4 The formation of a ceramic complex depended on specific conditions, which cannot always be determined. The deposition of a complex into a cultural layer of a settlement may have been the result of the destruction or the reconstruction of the latter, as well as of other developments. Thus, in the case of the Elizavetovskoe settlement, the range of the represented ceramic containers is very broad because the settlement not only consumed imported wares, but also was an intermediary in the trade with the steppe population.<sup>19</sup> Exports of commodities in amphorae to an average rural settlement were irregular; in addition, they were always of the cheapest kind. Thus, for example, at the settlement of Panskoe I in the *chora* of Chersonesos amphorae from Chersonesos were by far the most prevalent, while those from Thasos, Chios, and Mende were quite rare.<sup>20</sup> In addition, empty containers could have been used in rural settlements in the course of many years for household needs (as, for example, at the settlement of Usad'ba Litvinenko, where a storage facility revealed thirteen amphorae from Peparethos, Chios, and Herakleia Pontike, dating from the 380s BCE to the first half of the 340s BCE).<sup>21</sup>
- 5 Ceramic assemblages from shipwrecks are more informative, since it is clear that all the amphorae on a wrecked ship had been produced around the same time, with no more than a few years in between. Such chronologically homogeneous complexes are known from the shipwrecks at Porticello,<sup>22</sup> Kyrenia on Cyprus,<sup>23</sup> Serçe Limanı,<sup>24</sup> the island of Leuke,<sup>25</sup> and certain other places,<sup>26</sup> where volumes of amphorae from undoubtedly the same ship have been found on the sea bottom.
- 6 The formation of ceramic complexes associated with burial sites was also determined by a number of factors. Thus, for example, elite Scythian kurgans of the fourth century BCE in the Northern Black Sea do not present a chronological continuum, but date mainly either to the first third or to the third quarter of the century.<sup>27</sup> And although all the amphorae must have been deposited into a

burial at the same time, it does not necessarily always mean that they were manufactured in the same year (as in the case of kurgan 26 at the burial site of the Elizavetovskoe settlement, excavated in 1911, where amphorae dating to different periods were found).<sup>28</sup>

- 7 Remains of funerary feasts always reveal a large amount of ceramic fragments, sometimes including dozens of amphorae. This type of monument is rather common and requires special attention. The standard approach to the study of remains of a funerary feast is to establish stratigraphic correlation between them and one of the burials with which they are associated (most often, the earliest one) and then to date all the material from the funerary feast to one and the same period. This often leads to erroneous conclusions. A classic example, in this respect, is the case of the Chertomlyk kurgan: the date of this monument is based on the interpretation of four amphora stamps found in the burial mound, which, cumulatively, date to the second half of the fourth century BCE.<sup>29</sup> However, only the Herakleian stamp of the magistrate Pisistrates from the mound, associated with the earliest funerary feast dating from the end of the 340s to the first half of the 330s, can be used as the chronological marker for the royal burial at Chertomlyk. The rest of the stamps must belong to other funerary feasts, especially in view of the fact that the high status of the deceased presupposed recurring funerary rituals in the course of several years.<sup>30</sup>
- 8 The above does not contradict Brashinskiĭ's conclusion that amphorae are usually the latest category of finds in ceramic complexes. In most cases, they stayed in circulation for a relatively short period, especially in Scythian nomadic communities. But we should also keep in mind that nomads received wine in relatively large quantities, at irregular intervals, so that one delivery could have included wine and amphorae produced in different years. The difference in the time of production was probably no more than four or five years. Thus, for example, Thasian amphorae discovered in the Berdianskiĭ kurgan featured stamps of four different magistrates.<sup>31</sup> Wine was kept in pithoi, sometimes for many years, and mostly poured into amphorae just before being sold.<sup>32</sup> However, some expensive sorts of wine could also have been kept in amphorae for a long time,<sup>33</sup> which obviously does not facilitate our interpretations of ceramic complexes.

The last decade witnessed a growing interest in the analysis of ceramic complexes. In particular, Emilian Teleaga published a formidable monograph about Greek imports in the necropoleis of the Northwestern Black Sea region.<sup>34</sup> Sergeĭ Polin prepared three monographs, where he analyzed about a thousand Scythian burial complexes with an abundance of Greek ceramic imports, including numerous amphorae.<sup>35</sup> Many articles can also be added to this list of recent publications.<sup>36</sup>

All this work led to several important conclusions. First of all, in many cases a reliable date has been determined both for ceramic complexes, in

general, and for amphorae in these complexes, in particular. Secondly, secure chronological markers have been established for the most numerous series of ceramic containers, while the synchronization of stamped amphorae in some complexes improved our knowledge of the chronology of amphora stamping in certain production centers in the fourth to third century BCE. Thirdly, series of amphorae from these complexes allowed scholars to trace the evolution of some groups of amphorae within a longer period. Moreover, in some cases, it was possible to attribute series of amphorae to specific production centers, previously referred to as “unidentified,” and to identify new types of standard amphorae. Finally, the ceramic complexes provided scholars with a broad selection of amphorae from various production centers that exported their wares to the Northern Black Sea region from the seventh to second century BCE. The study of this material allowed scholars to determine the main tendencies in the evolution of amphora shapes and lay foundations for the creation of detailed typological and chronological classifications of ceramic ware of many large production centers for the period in question. The results of these studies were first presented in a 2003 monograph,<sup>37</sup> which contributed to the chronological and typological classifications of amphorae from such production centers as Klazomenai, Miletos, Samos, Lesbos, Chios,<sup>38</sup> Erythrai,<sup>39</sup> Kos,<sup>40</sup> Ikos,<sup>41</sup> Akanthos,<sup>42</sup> and some others.<sup>43</sup>

The reconstruction of the dynamics of amphora production in the main centers exporting commodities in ceramic containers is still a work in progress. The main part of this work is the developing of amphora classifications. However, the classifications themselves are only an instrument that allows one to determine the main trends in the evolution of amphorae and to establish more detailed and precise chronologies. Catalogues used for the identification of whole amphorae also help create catalogues that can be used for the identification of amphora parts (such as rims and toes). And based on this data, regardless of the presence of ceramic stamps in an assemblage, one can move from a general evaluation of trade to the statistically informed analysis of trade relations on the basis of the entire assemblage of amphora fragments.<sup>44</sup> This subject will be discussed later in the present chapter.

#### THE ANALYSIS OF THE CERAMIC COMPLEXES FROM THE ARCHAIC TO THE HELLENISTIC PERIOD

The analysis of the ceramic complexes from the Archaic to the Hellenistic period led to the following conclusions about the exports of products in amphorae to the Northern Black Sea market. From the time of their foundation onwards, North Pontic Greek *apoikiai* had stable economic contacts with

the Mediterranean, receiving the products of Mediterranean workshops and food products that were not available in the colonies (especially, wine and olive oil that were so important to the Greeks) in exchange for local raw products. The volume of this trade is hard to evaluate, but it is clear, on a very general level, that already in the sixth and fifth centuries BCE it was quite significant, even in comparison to the Late Classical period. The proportion of amphorae and amphora fragments in the overall ceramic material recovered from the Greek settlements of the sixth, fifth, and fourth centuries BCE is approximately the same.

However, our knowledge about ceramic containers of the Archaic and the Early Classical periods is very incomplete, especially in comparison to the information we have for the fourth century BCE. The reason is the fact that finds of whole amphorae from those early periods are rather rare and only very few of them come from large ceramic complexes. At first glance, the low number of the sixth- and fifth-century-BCE amphorae can be explained by the supposition that the overseas trade of the Pontic centers reached a truly significant level only in the fourth century BCE and the level of exports of wine and olive oil into the Northern Black Sea region before that time was much lower. It is true that the North Pontic market had grown by the fourth century BCE through the increase of the population in the local Greek settlements and through the involvement of barbarians in trade, which is reflected by burial goods in the kurgans of the local barbarian aristocracy. This, however, does not mean that a sudden increase in the volume of trade between the North Pontic region and the Mediterranean centers took place. From the fourth century BCE onwards, the factor of inter-Pontic trade, which involved such important trade partners as Herakleia and Sinope, has to be taken into consideration. These centers were squeezing the Mediterranean exporters who had previously dominated the region out of the market. In addition, local wine production started to emerge in Chersonesos in the last third of the fourth century BCE, which took over a part of the North Pontic market. Some other Northern Black Sea centers also produced their own wine, which, however, they used for their own needs rather than for trade. The earliest containers used for wine pressing found in the Bosphorus date to the fourth century BCE. Therefore, we can conclude that in the sixth and fifth centuries BCE, when the exports to the Black Sea region came mainly from the Aegean, the volume of imported wine and olive oil was hardly any lower than during the Late Classical period, although the exact amount cannot be calculated.

The fact that the finds of intact amphorae of the Archaic and the Early Classical periods in the urban centers of the Northern Black Sea region are relatively rare can be explained by the poor state of preservation of the early cultural layers in these settlements, which, in addition, are covered by later layers of many meters, and, therefore, have been studied only fragmentarily. With



the notable exception of Berezan', Archaic layers of the North Pontic urban centers have been excavated only in small areas, with large lacunae. As a result, we have a large amount of amphora fragments of the sixth century BCE, but only a very few ceramic complexes with synchronous groups of containers.

The finds of intact amphorae of the Archaic and the Early Classical periods are much more frequent in the necropoleis of the North Pontic centers, but there are still not enough of them to form a substantial database. The reason for this, however, is not so much the bad state of preservation of Archaic burials or the infrequent finds of amphorae in them, but rather the lack of attention to this material on the part of the archaeologists who excavated these necropoleis in the first half of the twentieth century. Pointed amphorae, considered "plain material," were not catalogued or preserved, as, for example, was the case with the excavations of Olbia's necropolis, conducted by Boris Farmakovskii. The publication of excavated material from this necropolis does not feature a single description of a pointed amphora (since none are preserved in the museums), although it is clear from the text that about half of the burials contained such amphorae, and often more than one.<sup>45</sup> In contrast to black-glazed and painted ceramics, Farmakovskii did not send amphorae to the Hermitage, but left them at the site, where they later perished. The situation was similar at Berezan' and at the sites of the Bosporan cities. As a result, for the sixth century BCE we have only individual amphorae, often with no knowledge of their archaeological context, some amphorae from necropoleis, and very few ceramic complexes containing amphorae from specific production centers.

For the fifth century BCE, when all Greek *apoikiai* in the Northern Black Sea region were developing, we have a more representative selection of material. Large-scale reconstructions, building activities, and changes in the layouts of the settlements took place during that time. From that period, we have a series of large complexes, sometimes including several dozens of amphorae. In kurgan burials, material from the sixth and fifth centuries BCE is presented in similar proportions. This is associated with the fact that barbarian tribes (first of all, the Scythians) were gradually becoming involved in the with the Greeks. Therefore, while there are only very few complexes with Greek imports dating from the end of the seventh to the sixth centuries BCE, for the fifth century BCE we have dozens of them.

#### *Complexes of the End of the Seventh to the Sixth Centuries BCE*

Complexes of the end of the seventh to the sixth centuries BCE with synchronous groups of ceramic containers from various production centers are extremely rare: in the last hundred years, only about a dozen of them have been found. Their chronological distribution within the period is very uneven. For most of them, the date can be narrowed down to a quarter of a century,

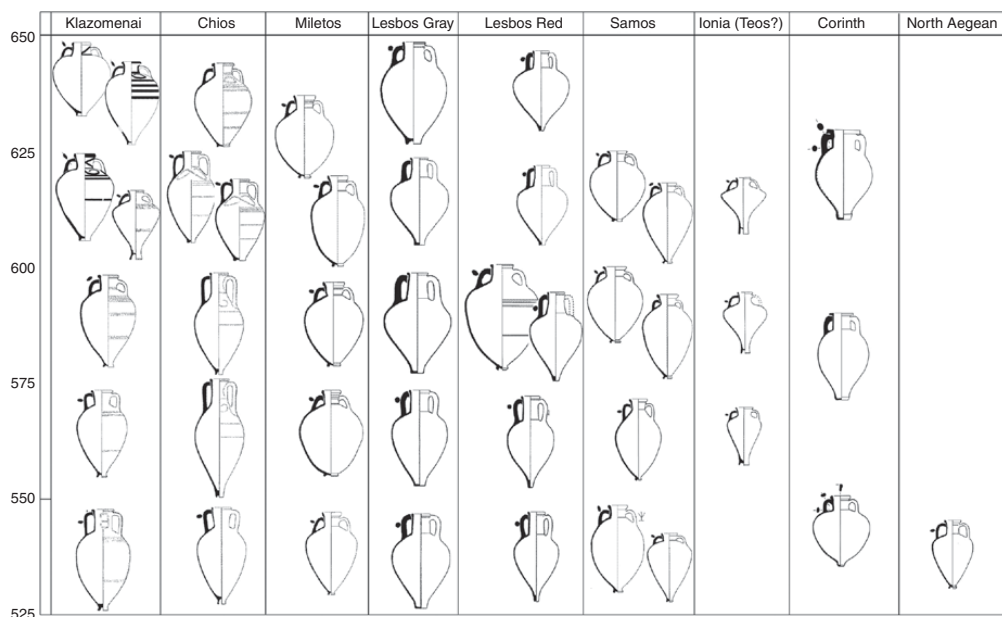


Fig. 4.1. Shapes of Greek amphorae from various centers (650–525 BCE).

but in some cases, when painted pottery is present, a more precise date can be assigned, although tentatively. In general, these complexes provide a fairly complete picture of ceramic containers from the leading exporting centers of the Archaic period: Chios, Klazomenai, Samos, Miletos, Lesbos, Corinth, Thasos, the Northern Aegean, and some others (Fig. 4.1).

Thus, although the earliest stage of the trade between Greece and the Northern Black Sea region is represented by materials from only a very small number of ceramic complexes, they include imports from all important trade centers. The emerging picture is still rather schematic and incomplete. The gaps in the typology of containers can be filled, to a certain extent, through the study and comparative analysis of amphorae found outside such complexes.

#### *Complexes of the End of the Sixth to the First Half of the Fifth Century BCE*

The most reliable chronological indicator for the complexes of the end of the sixth to the first half of the fifth centuries BCE undoubtedly are Chian amphorae. They allow us to determine, on the one hand, the complexes of the end of the sixth and the beginning of the fifth centuries BCE (the 490s and 480s), and, on the other hand, the later complexes of the 480s and 470s BCE. Starting from the second quarter of the fifth century BCE, other groups of amphorae can also be used as such indicators – first of all, those from Thasos and Mende (Figs. 4.2, 4.3). With reliable dates available for some of the ceramic complexes,

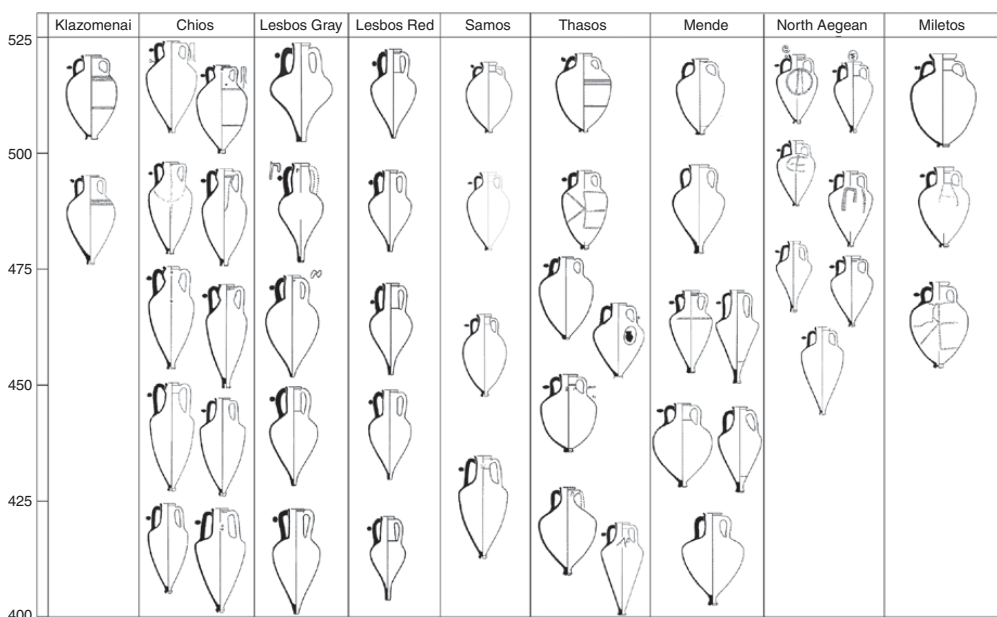


Fig. 4.2. Shapes of Greek amphorae from various centers (525–400 BCE).

the others too can be dated to narrow chronological periods, such as the 470s to 460s BCE, the 460s to 450s BCE, etc.

From the first half of the fifth century BCE we have only about two dozen complexes. However, the quality of this material and its informative value allow us to answer some questions. First of all, these complexes represent the entire variety of the Mediterranean products that were exported to the Northern Black Sea region in ceramic containers in the first half of the century. It can be securely stated that at the very beginning of the fifth century BCE the group of exporting centers known from the previous period did not change much: the influx of the products from Chios, Klazomenai, Samos, Miletos, Lesbos, Corinth, and the Northern Aegean was as intense as before (Figs. 4.2, 4.3).

Noticeable changes in the list of the main exporting centers occurred in the first quarter of the fifth century BCE. Ceramic containers from Miletos and Klazomenai have not been found in the complexes and assemblages of amphora fragments dated to the 480s BCE. Most likely, this development can be associated with the events that took place in the beginning of the fifth century BCE, when Miletos was destroyed and the economy of the largest Ionian centers in Asia Minor went through a period of decline after the Ionian Revolt had been crushed in 494 BCE. It is, however, possible that Miletos, which was rebuilt after 479 BCE and, most likely, restored its *chora* very soon after, was also able to revive its own amphora production. It is also highly possible that the so-called proto-Thasian amphorae (which have nothing to do with Thasos)

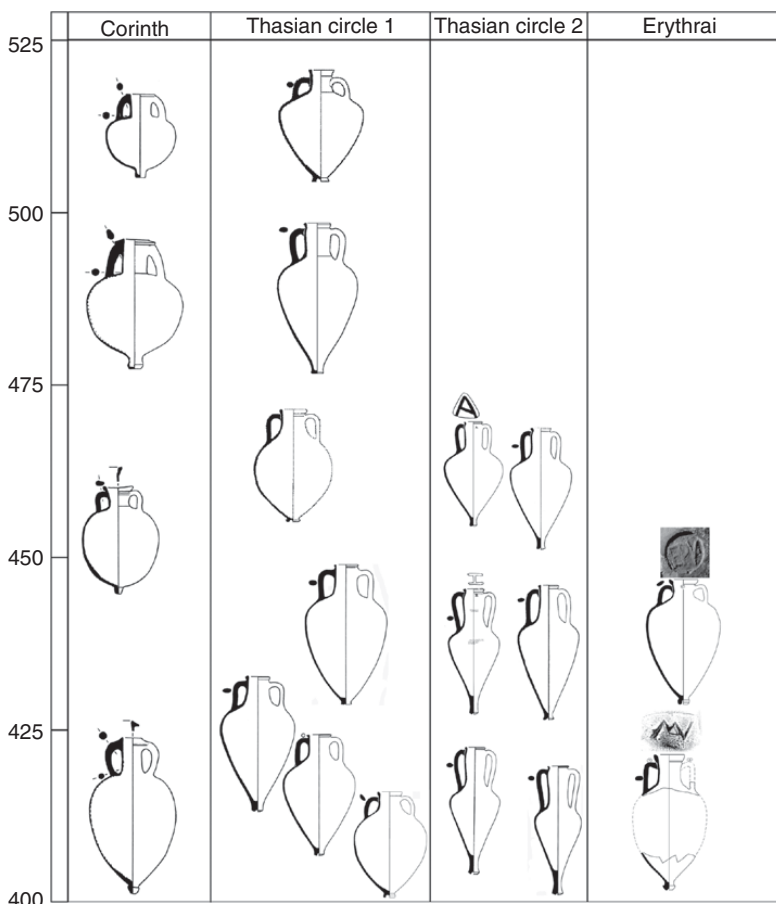


Fig. 4.3. Shapes of Greek amphorae from various centers (525–400 BCE).

of the second quarter of the fifth century BCE, with some features similar to those of the amphorae from Miletos and Samos of the end of the sixth to the beginning of the fifth centuries BCE, will turn out to be Milesian containers of the 470–460s BCE (Fig. 4.2). This is less likely for Klazomenai, since the rather characteristic clay of the Klazomenian amphorae has not been identified in the tremendously large group of amphorae and amphora fragments of the second quarter of the fifth century BCE.

The situation with Samian ceramic containers is rather different. In contrast with the Milesian and Klazomenian amphorae, Samian amphorae did not stop circulating and the import from this center remained stable and continued without any noticeable interruptions (Fig. 4.2). The Samians joined the Ionian Revolt at the beginning, but at the critical moment they abandoned their allies and secured victory for the Persians, having thus avoided their own destruction (Hdt. 6.13); this may possibly explain the fact that there were no interruptions in amphora production on Samos in the first third of the fifth century BCE.

Similarly, there seem to have been no interruptions in Chian imports (Fig. 4.2), although, unlike the Samians, the Chians took part in the Ionian Revolt until the very end and were punished by the Persians. However, after the battle at Mykale in 479 BCE, Chios freed itself from Persian domination and for a long time remained one of the most important members of the Delian League.

Aeolian imports, like Chian, remained quite stable during the entire first half of the fifth century BCE, with no noticeable interruptions. One detail is, however, conspicuous: red-clay amphorae, which are traditionally considered to be of a Lesbian origin, are almost entirely absent in the complexes of the second quarter of the fifth century BCE. Another interesting feature characterizing Aeolian wine imports is the fact that the amphorae of the so-called Nadlimanskoe type (according to the classification of Monakhov)<sup>46</sup> emerged in the first quarter of the fifth century BCE, in addition to the well-known standard red- and gray-clay Lesbian amphorae. The new type possessed some characteristics characteristic of Lesbian containers (the shape of the rim, the toe, and the handle), but had different body proportions (Fig. 4.2). This development may be explained by the existence of several rather large production centers on Lesbos, each of which could have manufactured its own specific containers with the same morphological prototype.<sup>47</sup> In this case, the temporary disappearance of red-clay amphorae (while the production of various types of gray-clay amphorae continued) could be tentatively explained by differences in the development of various Lesbian *poleis* after the Ionian Revolt.

All this information allows us to conclude that a noticeable decrease in the volume of commodities imported in amphorae from the largest Greek centers in Asia Minor, with a possible exception of Chios, took place in the 480–470s BCE. They were replaced on the Northern Black Sea market by other exporters – first of all, by the *poleis* of Northern Greece and Thrace.

It is possible that Thasos had already started to export its wine at the end of the sixth century BCE, and in the fifth century BCE the volume of Thasian imports increased considerably. The commodities were first exported in “pithoid” amphorae, but starting from the second quarter of the fifth century BCE a few new series of amphorae appeared. There is hardly any doubt that the latter were manufactured on Thasos, especially because we know that the anepigraphic stamps (Fig. 4.2), which are clearly Thasian (as convincingly argued by Yvon Garlan),<sup>48</sup> first appeared on the amphorae in question.

Mende (or another center that was close to this *polis*) also belonged to this circle of new exporters – intensive export of wine in amphorae started there at the end of the first to the beginning of the second quarter of the fifth century BCE (Fig. 4.2). “Swollen-neck” amphorae, whose shape in some details resembled that of the amphorae from Thasos and Mende dating to the second quarter of the fifth century BCE, were probably produced in one of the

*poleis* in Thrace or Chalkidiki. In other words, the events of the first third of the fifth century BCE prompted some serious changes not only in the political, but also in the economic situation in the Aegean. The weakening of the positions of some large Ionian centers in Asia Minor allowed new centers of wine production in Thrace and Chalkidiki to enter the international market (Fig. 4.3).

### *Complexes of the Second Half of the Fifth Century BCE*

We have at our disposal almost two dozen complexes from the second half of the fifth century BCE with synchronous groups of ceramic containers. Most important among them are six amphora storage facilities, one of which contained over a hundred vessels.

Based on the study of the evolution of amphora shapes and on various independently dated groups of other ceramic material, several chronological amphora groups have been identified for this period, with the dates for each group narrowed down to one and a half or two decades. In this case, ceramic containers from Mende and Thasos – and, to a lesser extent, Lesbos – are being used as the most secure indicators, in addition to Chian amphorae.

Certain changes took place in the second half of the fifth century BCE in terms of the directions and dynamics of the trade connections between the Northern Black Sea region and the Greek centers in the Mediterranean. The so-called proto-Thasian amphorae disappeared after the middle of the century. Of all the other Ionian *poleis*, only Samos, Chios, and Erythrai exported their production to the Black Sea region (Figs. 4.2, 4.3).<sup>49</sup> Samian amphorae, however, are found not very frequently, which can probably be explained by the fact that they were used for the transportation of olive oil, not wine. Chios clearly was the leading exporter in the second half of the fifth century BCE, which is evident not only from the frequent finds of amphorae of this center, but also from the variety of types of standard Chian containers. In the 450s, Chios started to manufacture the so-called late bulging-neck amphorae (in which the bulge was often offset distinctly from the part of the neck below). They were produced at least until the 420s BCE. In the 440s BCE, at the latest, amphorae with a tall cylindrical neck started to be produced (along with the bulging-neck amphorae); their evolution can be traced until the very end of the century, when they were replaced by containers with the so-called proto-conical toe. Erythrai imported wine in amphorae with a profiled toe, which are close in their morphology to Samian amphorae.

During those fifty years, the import of wine in gray-clay Lesbian amphorae clearly became more intense – such amphorae have been found in various complexes from that time as often as in the complexes of the Archaic period. At the same time, red-clay amphorae of the “Lesbian type,” which

were represented in the complexes of the previous period, disappeared (Fig. 4.2).

Exports from the northwestern Aegean were increasing steadily. From the second part of the fifth century BCE onwards, the wine trade with Thasos and Mende became particularly important for the Northern Black Sea region (Fig. 4.2). On Thasos, the production of several variants of amphorae known from the complexes of the first half of the fifth century BCE continued in the middle and the third quarter of the century also. However, already in the 440s BCE, the production of “pithoid” amphorae with a spherical body began, along with that of early “biconical” amphorae, which became the predominant type of amphorae by the end of the century and later (at the transition from the fifth to the fourth century BCE) developed into the “classical” “biconical” type.

The production of Mende was also diverse. The origins of the main type of amphorae there can be traced back to the second quarter of the fifth century BCE, while the latest stage of their production dates to the very end of the century. “Pithoid” amphorae with a spherical body, resembling the contemporaneous Thasian vessels, were manufactured in the 440s–430s BCE (Fig. 4.2).

There is also the production of several unidentified centers conventionally referred to as the “Thasian circle.” Thus, imports of “swollen-neck” amphorae continued at least for the third quarter of the fifth century BCE (Fig. 4.3). The Black Sea *poleis*, which later (in the fourth century BCE) became so important in Pontic trade, most likely did not manufacture any ceramic containers in the second half of the fifth century BCE, with the probable exception of Herakleia Pontike (from the very end of the fifth century BCE onwards).

### *Ceramic Complexes of the Late Classical Period*

The number of ceramic complexes dating to the Late Classical period exceeds by far the cumulative number of the complexes dating to the Archaic, the Early Classical, and the Hellenistic periods. During that time the Black Sea polities were at the highpoint of their development, intensive building activities took place in the cities and rural settlements, and, consequently, a large number of ceramic complexes were deposited in these settlements (in cellars, wells, dumpsters, etc.). A large number of barbarian kurgan burials also date to this period, and most of them include black-glazed ware and amphorae.

### **The First Two Decades of the Fourth Century BCE**

Certain changes took place in the Pontic trade in the first two decades of the fourth century BCE. In addition to the traditional centers that already exported their products in the fifth century BCE, new Mediterranean exporters began to manufacture ceramic containers, which soon started to circulate on the Pontic market as well. These new centers included Peparethos, Ikos,<sup>50</sup> Knidos, Kos, an



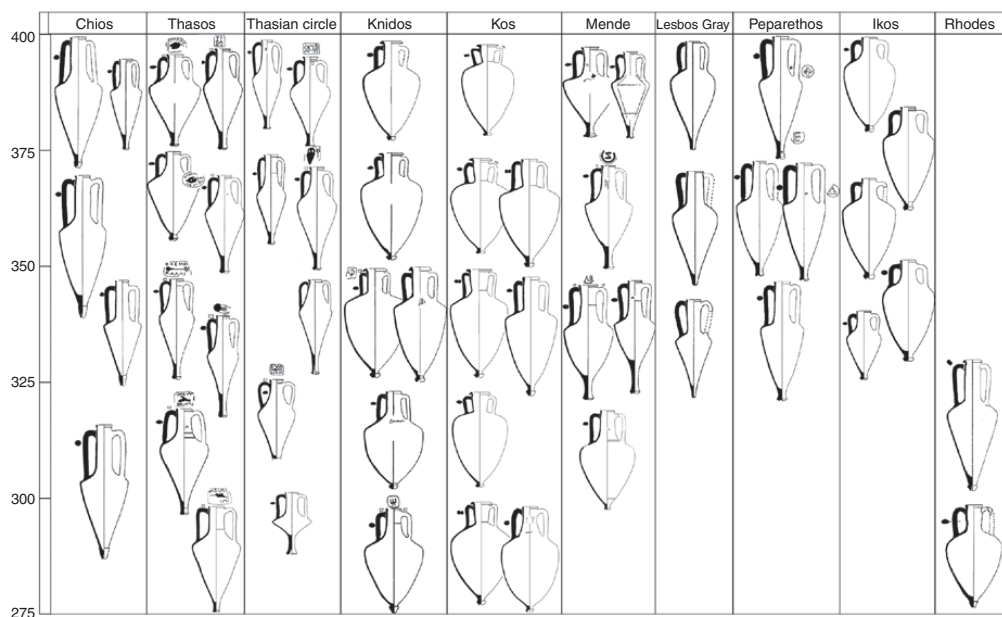


Fig. 4.4. Shapes of Greek amphorae from various centers (400–275 BCE).

unidentified center that manufactured amphorae of the so-called Murighiol type, and some others. Chios produced only one type of amphorae during that time – the “conical” one with conical toe. Lesbos, clearly, lost its leading position to Chios: Lesbian amphorae are rarely found in ceramic complexes and mass material. However, Lesbian wine was imported both in red-clay and gray-clay amphorae (Figs. 4.4, 4.5).

Thasian wine was exported to the Northern Black Sea market in two types of containers. The main type was the early variant of the “biconical” amphora. At the beginning of the 390s BCE, amphorae were not yet stamped, but starting from the middle of the 390s BCE, amphora stamping became a regular practice. This type of “biconical” Thasian container existed, with few modifications, until the beginning of the Hellenistic period (Fig. 4.4). However, another “pithoid” type of Thasian amphorae – the so-called Porthmean type – also emerged in the 390s BCE. The production of the “conical” amphorae must have started at about the same time.

Noticeable changes took place in Mendeian amphora production. Starting from the end of the fifth century BCE, containers of the new “Porticello” type with an angular body on a tall stem toe were manufactured there (Fig. 4.4). No later than the end of the 390s BCE, the famous Peparethan wine started to be exported to the Northern Black Sea region in large-size “conical” amphorae. So far, we can only be sure about one type of containers manufactured in this center. Like Mende, Peparethos did not stamp amphorae with magistrates’ names, but handles and necks of the vessels sometimes bear englyphic stamps



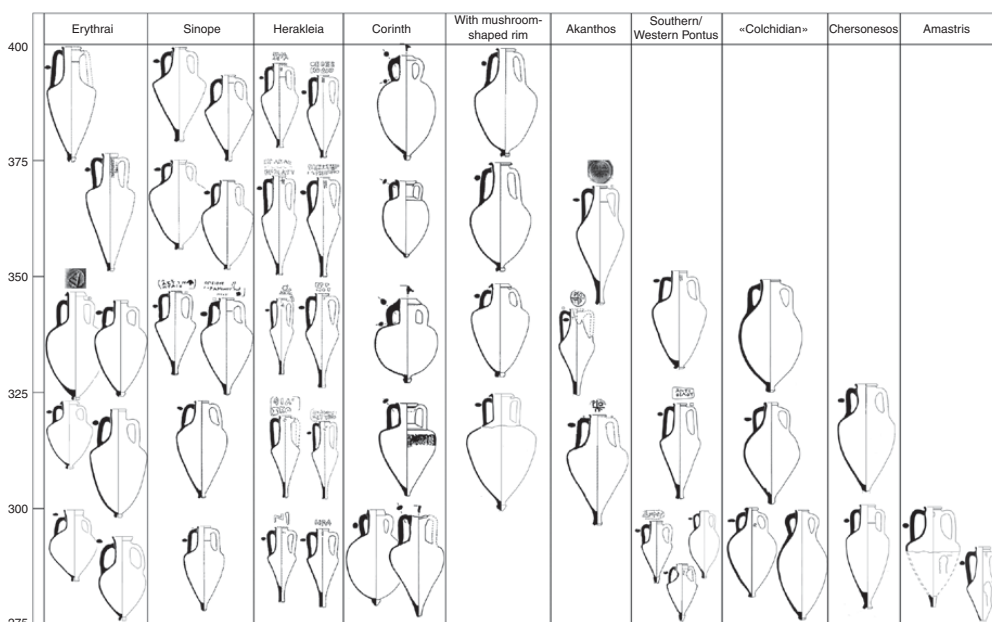


Fig. 4.5. Shapes of Greek amphorae from various centers (400–275 BCE).

featuring individual letters. Ikos also started to export wine to the Northern Black Sea region (Fig. 4.4).

Systematic wine import from Knidos and Rhodes (?) in large amphorae with mushroom-shaped rims presumably started during that time as well. Amphorae of these two centers cannot always be securely differentiated, especially because this type of rim was very popular in the fourth century BCE (Fig. 4.4).

The most important development in the first two decades of the fourth century BCE was the entrance of the South Pontic centers – Sinope and Herakleia – on the Pontic market. Sinope must have started exporting products in amphorae in the 390–380s BCE, long before the practice of amphora stamping was introduced. And Herakleia was undoubtedly the largest exporter in the early fourth century BCE: Herakleian amphorae have been found in the complexes of this period much more frequently than Chian and Thasian containers (Fig. 4.5). The practice of amphora stamping was introduced in Herakleia earlier than on Thasos, which also testifies to the more developed wine production of the former. However, early Herakleian stamps were those of the manufacturers, whereas Thasos witnessed right away the emergence of magistrates' stamping in the 390s BCE. In Herakleia, most amphorae were stamped: about 80 percent of early Herakleian amphorae of type I that are known to us bear on the necks stamps of the manufacturers, and from the 390s BCE onwards, stamps of the magistrates.

### **The 370s to the Middle of the 360s BCE**

Amphora complexes of the 370s to the middle of the 360s BCE contain, more or less, the same sets of imports, demonstrating no notable changes in terms of the directions and dynamics of trade connections. Herakleia, Sinope, Thasos, Ikos, Chios, Peparethos, and Mende remained the main exporters. Magistrates' stamping continued on Thasos and in Herakleia and started in Sinope by the end of this period.

During that time, Herakleia's exports to the Northern Black Sea region increased. Amphorae of type I were replaced by those of type I-A, characterized by more elongated proportions (Fig. 4.5). Most containers were stamped. Imports of wine and olive oil from Sinope became noticeable, and magistrates' stamping of the containers started there in the middle of the 360s BCE. Two types of amphorae were produced: amphorae of type I, with a conical body, very similar to the contemporaneous Thasian containers, and "pithoid" vessels of type II, which later became the main type of containers (Fig. 4.5).

Thasos continued to export wine in "biconical" amphorae known from the previous period, which demonstrated a trend toward elongated proportions. Amphorae of "Porthmean" and "conical" types were also still manufactured. Like Thasos, Mende, Chios, Ikos, and Peparethos also exported products in amphorae that were typical for the previous period, but showed a trend toward elongated proportions (Fig. 4.4).

Some unidentified centers of the "Thasian circle" exported wine in "biconical" amphorae to the Northern Black Sea region at the same time as Thasos did. We do not know the exact number of these centers on the Thracian coast, but in the 370s BCE one of them manufactured containers that were exact copies of Thasian "biconical" amphorae. Another center in the same region produced smaller amphorae of the so-called Murighiol type, starting from the beginning of the century (Fig. 4.4). Other Mediterranean centers, including Knidos, Rhodes, Erythrai, Ikos, Kos,<sup>51</sup> and some unidentified centers exported their products in small volumes and, most likely, not on regular basis (Figs. 4.4, 4.5).

### **The Second Half of the 360s to the Middle of the 320s BCE**

Fewer ceramic complexes are known for the period from the second half of the 360s to the middle of the 320s BCE. The reasons for this are not necessarily clear, but any interruption in the flow of imports can be associated with a number of factors. On the one hand, it is possible that the production centers were no longer able to export wine; on the other hand, it is also possible that there was no demand for such products on the Northern Black Sea market. The latter explanation is more likely, since for the period from the middle of the fourth century BCE onwards not only is the number of available ceramic

complexes, in general, lower, but also the number of amphorae imported from most of the exporting centers (such Chios, Peparethos, amphorae of the “Murighiol” type, and others).

From the 360s to the middle of the 320s BCE, certain changes occurred in the variety of amphorae coming to the Northern Black Sea region. Thasian wine was exported mostly in traditional “biconical” amphorae from the 360s to the first half of the 340s BCE, although amphorae of the “Porthmean” and “conical” types were still manufactured. The available material does not allow us to estimate the volume of Thasian imports, but Thasian amphorae have been found slightly more often in the complexes of this period than in those dating to the preceding decades (Fig. 4.4).

In the middle to the third quarter of the fourth century BCE, Mende remained one of the most important trade partners of the Northern Black Sea region. Some developments occurred in the typology of Mendeian amphorae: the containers of the “Porticello” type were replaced by those of the “Melitopol” type, characterized by elongated proportions. At the beginning of the last third of the fourth century BCE, Chian amphorae with a conical toe experienced noticeable modifications: the toe became a simple conical terminal of the body and the upper attachment of the handle moved 5–10 cm below the rim. In the second quarter to the middle of the fourth century BCE, Akanthos started to export products to the Northern Black Sea region, although not in great quantities. This center manufactured amphorae that were copies of the Thasian wheel-stamped containers of the “biconical” type (Fig. 4.4).

The products of Herakleia Pontike still dominated the market until the middle or the second half of the 340s BCE. From the 360s BCE, the main type of Herakleian amphorae were “conical” amphorae of type II. Vessels of “biconical” type III were also produced during the same time (Fig. 4.5).

In Sinope, two types of amphorae were manufactured, which had already existed in the previous period. The continuous tradition of the production of two strikingly different types of amphorae must have been associated with the fact that Sinope was the only Black Sea center where olives were cultivated, so that it exported not only wine, but also olive oil (Fig. 4.5).

In the third quarter of the fourth century BCE, the active trade with Peparethos resumed. The morphology of Peparethan amphorae of that time is characterized by elongated proportions. Knidian amphorae with mushroom-shaped rims circulated during the entire period; in rare cases they bear stamps with the monogram ΠΑΘ(–). Knidian amphorae with stamps featuring a “prow of a ship,” most likely, date to the end of the third and the beginning of the last quarter of the fourth century BCE. Wine from Ikos, Kos, and Erythrai came to the Northern Black Sea region in great volumes (Fig. 4.4).

### *The Hellenistic Period*

Ceramic complexes of the Hellenistic period demonstrate that the dynamics of trade relations remained more or less the same from the beginning of the fourth century until the middle of the 320s BCE. In the last quarter of the fourth century BCE the changes became more conspicuous, which must be associated with important political and economic developments that took place in the Mediterranean after the Macedonian conquest.

Three main characteristics of the Hellenistic ceramic complexes are particularly noticeable. First of all, we have fewer such complexes in comparison to the complexes of the previous period. To a great extent, this can be explained by the fact that the rare complexes associated with burials dating to this period come either from the necropoleis of Greek *poleis* or from the rare inhumation burials of the region around the river Kuban, since the tradition of constructing kurgans stopped abruptly in the Black Sea steppes in the third century BCE. The complexes from settlements prevail, and most of them are associated either with some rebuilding activities (rooms and wells) or with disasters (fires, destructions resulting from military conflicts, etc.). Secondly, the complexes that are known to us mostly date to the first third of the third century BCE and come from the settlements that were destroyed or abandoned under the advancement of the barbarians in the North Pontic region. Thirdly, important changes took place in trade relations. At the end of the fourth century BCE, Samos, Lesbos, Peparethos, and Ikos were no longer actively exporting wine and olive oil to the Northern Black Sea region. By the end of the first third of the third century BCE, or maybe even earlier, export from Herakleia Pontike ceased. Thasos, Chios, Sinope, Chersonesos, Knidos, Erythrai, Rhodes, Kos, and, according to the latest research, Mende continued to actively trade with the North Pontic region, as before.<sup>52</sup> In addition to these main trading partners, Kolophon,<sup>53</sup> Paros,<sup>54</sup> Amastris,<sup>55</sup> and some other centers also exported products, but in small volumes (Figs. 4.5, 4.6).

### **The Last Quarter of the Fourth to the Beginning of the Third Centuries BCE**

In the last quarter of the fourth to the beginning of the third centuries BCE, both the directions and the dynamics of the economic relations of the Northern Black Sea region changed considerably. Amphora production in Sinope reached its highest point during that period, which is evident from the versatility of the shapes of standard-size Sinopean amphorae and their fractional counterparts. The number of known types of Chersonesan amphorae and their fractional versions was also the highest at that time (Fig. 4.5).

At the end of the fourth to the beginning of the third centuries BCE, fractional versions of type-II amphorae (well known from the previous periods)

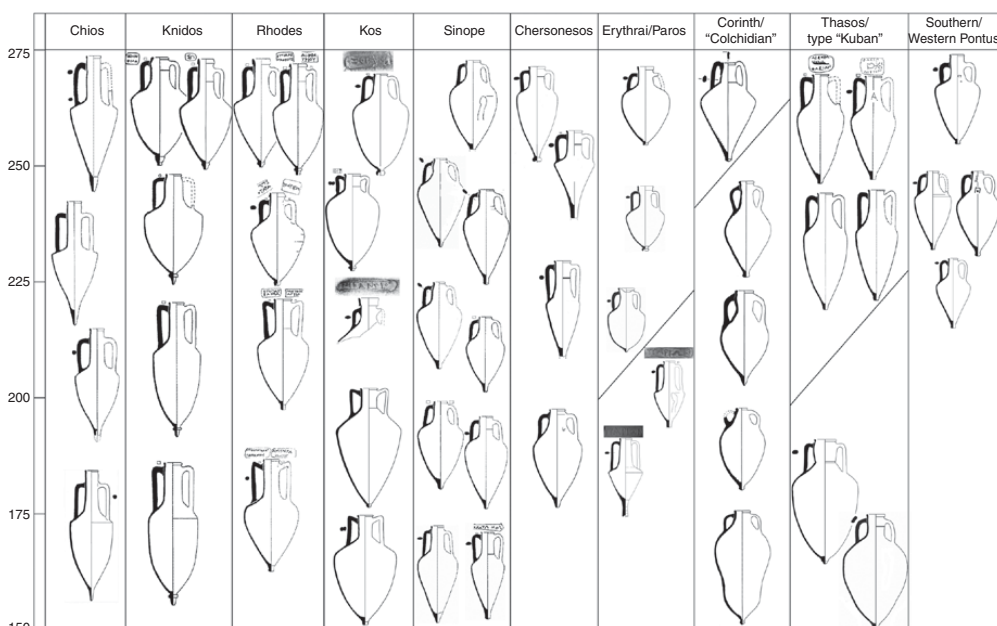


Fig. 4.6. Shapes of Greek amphorae from various centers (275–150 BCE).

were the most popular ones in Herakleian amphora production. At the very end of the fourth century BCE, Herakleia stopped stamping amphorae with magistrates' names, but the tradition of stamping them with manufacturers' names continued. In addition to Amastris, some other South and West Pontic centers may have started to produce amphorae and use englyphic stamps. The so-called Colchidian amphorae made out of brown clay, found in some ceramic complexes, must have originated in one of the South Pontic production centers (Fig. 4.5).

During the first fifty years of the Hellenistic period, some of the Mediterranean centers also continued to export their products to the Northern Black Sea region in great quantities. On Thasos, amphorae of the "biconical" type were replaced by those of the new "late-conical" type. By the end of the first third of the third century BCE, imports from Thasos decreased considerably, although the stamping of amphorae continued there until the beginning of the last quarter of the third century BCE (Fig. 4.4). In addition to Thasos, some Thracian centers also exported wine during the period from the end of the fourth to the first third of the third centuries BCE. One of these centers (possibly on the western coast of the Black Sea) produced amphorae of the "conical" type, with a stamp featuring the name of Antiphilos (Fig. 4.4).

Imports of wine from Rhodes, Knidos, Kos, and Erythrai were constantly increasing, starting from the fourth quarter of the fourth century BCE. A massive mushroom-shaped rim was characteristic of the Rhodian amphorae of

the end of the fourth century BCE. Later, the body of the Rhodian amphorae acquired a “pithoid” shape and retained it for a long time. The Knidian containers of the end of the fourth to the first third of the third centuries BCE had a “pithoid”-shape body on a ringed toe and bore stamps of the “Zenon group.” More and more imports were coming also from Kos (Fig. 4.4).

Chian wine was exported to the Northern Black Sea region in small quantities in “conical” amphorae until the third quarter of the third century BCE (Fig. 4.4). The level of imports from Corinth and Kolophon was rather low. Finds of various amphorae from unidentified Mediterranean production centers are much more frequent – the proportion of their products in the overall trade of the end of the fourth to the first third of the third centuries BCE must have been higher than during the previous period (Fig. 4.6).

### **The Middle of the Third to the First Half of the Second Centuries BCE**

There are only very few complexes dating from the middle of the third to the first half of the second centuries BCE. Based on this sparse material, we can trace the evolution of amphora shapes for about seven to ten leading exporters and identify some shapes for two or three other centers. It appears that Sinope, Thasos, Rhodes, Knidos, Kos, Erythrai, Chersonesos, and Paros, along with some unidentified centers, were the most active trade partners of the Northern Black Sea region from the middle of the third to the middle of the second centuries BCE. Rhodes clearly held the leading position in this respect; from the 260s BCE onwards, standard amphorae of a new shape with more elongated proportions and the traditional rolled rim were produced there (Fig. 4.6). An unidentified Aegean center producing amphorae of the so-called Kuban type (Fig. 4.7)<sup>56</sup> and an unidentified South Pontic center producing the so-called “Colchidian” amphorae (Fig. 4.6)<sup>57</sup> continued to export their products to the Northern Black Sea region. Thasian imports stopped coming by the end of the third century BCE, and Sinopean and Chersonesian ones in the first quarter of the second century BCE. Strictly speaking, one cannot be sure whether these centers, indeed, were no longer exporting products, since the systematic stamping of amphorae there stopped (although we know of some individual amphorae that were produced there afterwards, in the second half of the second century BCE) (Fig. 4.7).

### **THE ANALYSIS OF CERAMIC COMPLEXES AND THE TYPOLOGICAL AND CHRONOLOGICAL CLASSIFICATIONS**

Based on the analysis of ceramic complexes undertaken by various scholars and on the typological and chronological classifications that were based on this analysis, one can draw the following conclusions, which are important for the

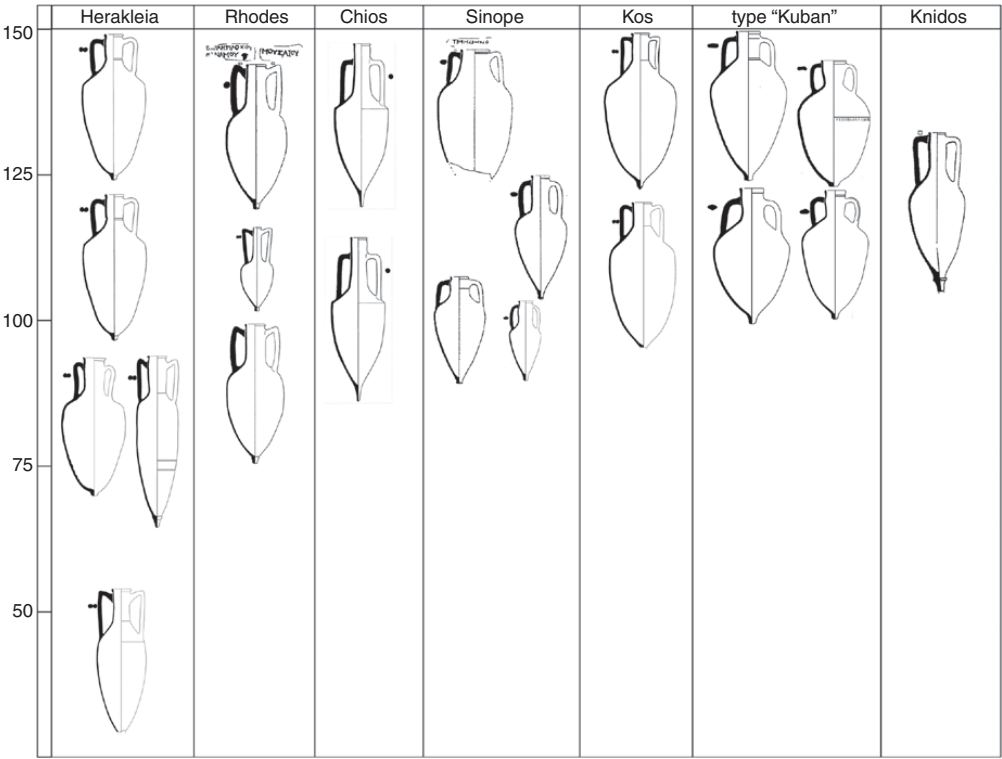


Fig. 4.7. Shapes of Greek amphorae from various centers (150–25 BCE).

reconstruction of the dynamics of overseas trade in the Northern Black Sea region from the Archaic to the Hellenistic period:

- 1 Overseas trade in the ancient Northern Black Sea region was an arrhythmic process: commodities were imported to the North Pontic market in large quantities, with irregular intervals in between.
- 2 Ceramic complexes do not fully represent the real situation in trade in antiquity: most often, they include amphorae from the most famous wine- and olive-oil-production centers and reflect only some of the diverse trade connections, while other trading partners (especially those that participated in trade only for a short time) are not represented at all.
- 3 Analysis of the morphology of amphorae from specific production centers and improvement of their chronologies resulted in the creation of comprehensive systems of typological and chronological classifications of ceramic containers, which allow one to trace not only the dynamics of the evolution of whole vessels, but also that of profile parts (rims, toes, etc.).<sup>58</sup>
- 4 These classifications are sometimes of a rather general character, mostly because of the limitations of the available ceramic assemblages, but also because standard capacities have not been established yet for most amphorae. The reconstructions



of these standards and of the dynamics of their evolution require special research,<sup>59</sup> which has to be undertaken before we can tackle the most important problem in studies of ancient trade – the comparative analysis of the dynamics of import and export.

Research in the field of ceramic epigraphy has been much more successful. Stamps on amphora handles and necks have always attracted scholarly attention, and, unlike amphorae themselves, have been meticulously collected and studied. Presently, museum collections have preserved over 300,000 ceramic stamps of about fifty production centers – first of all, Rhodes, Thasos, Knidos, Herakleia Pontike, Sinope, and Chersonesos.<sup>60</sup> Several corpora featuring ceramic stamps from specific sites or areas in the Northern Black Sea region have been compiled.<sup>61</sup> The most important among them is the fundamental corpus of North Pontic stamps by Evgeniĭ M. Pridik and Boris N. Grakov (IOSPE III).<sup>62</sup> This work served as a basis for the first comparative analyses of the dynamics of import and export, for which special statistical and combinatorial methods were applied as well.<sup>63</sup>

Special catalogues used for the identification of various kinds of stamps have also been published. For a long time, the only example of such a catalogue was the assemblage of ceramic stamps from Thasos published by Anne-Marie Bon and Antoine Bon.<sup>64</sup> In the last twenty years, similar catalogues of Chersonesian and Knidian stamps have come out,<sup>65</sup> followed by monographs on Thasian and Sinopean stamps from the Western Black Sea region.<sup>66</sup> Yvon Garlan has published his fundamental works on Thasian and Sinopean stamps.<sup>67</sup> Recently, Nikolaĭ Fedoseev has released a catalogue of the Bosporan stamps on roof tiles from the Kerch Archaeological Preserve.<sup>68</sup> Such catalogues serve several purposes, but, above all, they are a reliable instrument for the initial identification of stamps.<sup>69</sup> They are also necessary for the creation of a comprehensive database of all presently known stamps.<sup>70</sup> In general, one can say that ceramic epigraphy has experienced a real breakthrough, making this material the most reliable source for the chronology of ancient monuments and providing a basis for paleoeconomic reconstructions for the Late Classical and the Hellenistic period.<sup>71</sup>

At the same time, amphora stamps are not by any means the most numerous category of finds, so that focusing our attention on this material alone may result in a historical reconstruction that will not accurately reflect the situation in ancient trade. First of all, amphora stamps can be considered frequent finds only for the period starting at the transition from the fifth to fourth century BCE, thus not reflecting the situation in the previous period at all and only very poorly for the time after the second century BCE. Secondly, systematic stamping took place in relatively few *poleis*, and epigraphic evidence from ceramic material does not allow us to evaluate the volume of exports in ceramic containers even of such famous exporting centers as, for example,



Chios, Mende, Peparethos, Erythrai, Kos, Ikos, and certain others. Moreover, the practice of stamping was not synchronous in the main production centers, which makes a comparative export–import analysis problematic and requires special criteria to be used. In fact, such an analysis based on epigraphy material from ceramics is presently possible only for the following periods and production centers:

Period	Center
first quarter of the fourth century BCE	Thasos, Herakleia
second to third quarter of the fourth century BCE	Thasos, Herakleia, Sinope, Akanthos
last quarter of the fourth century BCE to the first third of the third century BCE	Thasos, Herakleia, Sinope, Knidos, Chersonesos
second third to the end of the third century BCE	Thasos, Sinope, Knidos, Chersonesos, Rhodes, Kos
first half of the second century BCE	Sinope, Knidos, Chersonesos, Rhodes, Kos
second half of the second century BCE	Knidos, Rhodes, Kos

Finally, the study of the dynamics of the export in ceramic containers from a particular center and the comparative analysis of the relative export volumes for different centers are impeded by the fact that such criteria as the coefficient of stamping (i.e., the ratio between stamped and unstamped amphorae)<sup>72</sup> and the evolution of the average amphora standards in each center are unclear. However, the epigraphic evidence from ceramic material contributes to the creation of some important paleoeconomic reconstructions, which will be presented later in this chapter.

#### THE ANALYSIS OF AMPHORA PARTS: RIMS AND TOES

The analysis of amphora parts found in large quantities, such as rims and toes, also allows us to draw some conclusions of a paleoeconomic character. The study of such mass material requires a certain approach and uniformity of methodology. The analyzed amphora parts have to be contemporaneous and comparable, i.e., of the same kind; they also have to be present at all of the sites in question.<sup>73</sup> The methods of study used for this material have been formulated and tested and can be summarized as follows:

- 1 Attribution, dating, and division of the material into individual chronological groups (each group usually corresponds to a quarter-of-a-century-long period).
- 2 Statistical calculations: when analyzing the data from chronological periods of various extents, one has to use the *index of the absolute density of the distribution* (or the so-called annual coefficient),<sup>74</sup> which allows us to trace qualitative changes in trade balance.

- 3 When studying assemblages of different sizes, one has to apply the *index of the relative density of the distribution*,<sup>75</sup> which allows us to overcome the quantitative differences between the assemblages.
- 4 Results of metrological studies have to be taken into consideration as well. Certain standards were clearly followed in amphora production,<sup>76</sup> but almost every center simultaneously produced amphorae of various standard capacities. For statistical calculations, we have to use the average capacity of amphorae in a particular chronological period (i.e., the sum of the known amphora capacities divided by the number of measured amphorae). It may appear more logical to use the *index of the standardization* (i.e., the sum of the known amphora standard capacities divided by their number). However, we do not know the correlation between the amphorae of standard capacities and the fractional ones. Presently, we do not have enough data in this respect, and the use of the average standard capacities may lead to erroneous results. For example, numerous measurements of the Chian amphorae of the so-called developed bulging-neck variant demonstrate that at least five standards and their fractional versions coexisted in the second quarter of the fifth century BCE.<sup>77</sup> The average *index of the standardization* in this case is calculated as 16.8 l. However, the statistics showed that only twelve out of forty measured vessels had volumes that corresponded to this number (i.e., from 13.5 to 18 l), while all the other amphorae were of a larger capacity. At the same time, the average capacity calculated for the same amphorae is 19.6 l, which, for the time being, reflects the correlation between the vessels of various capacities in a more realistic way. The extent to which the amphora standards of the main production centers have been studied varies because of the difference in the number of preserved intact vessels whose capacity can be measured by filling them up.<sup>78</sup> For damaged vessels, scholars have also presented and tested some formulae that would allow one to calculate the capacities of the containers of most shapes.<sup>79</sup>

The elimination of the average capacity of amphorae from the calculations may lead to predictably erroneous conclusions. The correlation between the fragments of the amphorae from Herakleia and Sinope – two major exporters on the Northern Black Sea market – provides a good illustration. When a site yields the same amount of amphora parts (such as rims and toes) from these two centers, the usual conclusion is that their contribution to trade was equal, while the differences in the capacities of the vessels are not considered. However, we know that vessels of a larger capacity prevail among the available intact Sinopean amphorae, which is not the case with the Herakleian containers.<sup>80</sup> Thus, even if the numbers of the amphora fragments from these two centers found at a particular site are the same, it would still mean that the volume of Sinopean imports was greater.

Thus, to reconstruct the trade connections of a specific region one would need to have information about the number of amphora fragments discovered at particular sites and to be able to identify and to date these fragments. Published material rarely provides such data.<sup>81</sup> In reality, the only reliable information in this respect is that obtained by personal handling and study of the material. To perform such a task for the entire North Pontic region is close to impossible, not only because of the scale of the work required, but also because mass material, such as amphora fragments, is rarely kept preserved. Most often, archaeologists handle it in the field, make some drawings, and discard the larger part of the material. For this reason, our description of the trade connections presented below is limited in terms of the territory, focusing mostly on the Asiatic Bosphorus and including some data from sites of the European Bosphorus and some Maeotian sites of the Kuban region.

For the analysis, we used assemblages of mass ceramic material from urban sites (Hermonassa and Phanagoreia) and rural settlements (Volna-4, Beregovoï-4, Chubovo, Krasnoarmeïskoe-1, Usatova Balka-3, and Usatova Balka-4) of the Asiatic Bosphorus,<sup>82</sup> as well as data from Patraeus.<sup>83</sup> For the European Bosphorus, we have information about the trade relations of Pantikapaion (from the end of the fifth to the first third of the third centuries BCE) and some rural settlements, including General'skoe-zapadnoe, Tugo-zapadnyï sklon, Pustynnyï Bereg-1, Pustynnyï Bereg-2, Pustynnyï Bereg-3, and Baklan'ia skala (Fig. 4.14).<sup>84</sup> Imports found at the Maeotian sites of the Kuban region have been analyzed for the period from the end of the seventh to the second centuries BCE,<sup>85</sup> but a detailed overview can only be presented for the fourth to second century BCE, since the material from the earlier periods is sparse.

Some other specific characteristics of the studied assemblages have also to be taken into consideration. The material from Hermonassa, for example, dates to the period from the middle of the sixth to the end of the fifth centuries BCE, while that from the settlement of Krasnoarmeïskoe-1 dates to the period from the fourth century BCE onwards.<sup>86</sup> Therefore, it seems logical to analyze the trade relations within two broader periods: from the last third of the sixth to the end of the fifth centuries BCE and from the fourth to third century BCE. This division would also allow us to use some data from other sites.

### *The Last Third of the Sixth to the End of the Fifth Centuries BCE*

The gradual increase in the volume of the imports at various Bosporan settlements must have started about the third quarter of the sixth century BCE, but in most cases the highpoint of this process fell within the second quarter of the fifth century BCE. Only at Phanagoreia and Volna-4 does it date to other periods – the first and the third quarter of the fifth century BCE, respectively (Fig. 4.8a, b).<sup>87</sup>

For the second half of the fifth century BCE, data from all the sites (with the exception of Volna-4) points toward the continuous decrease in import volume, which was the lowest in the last quarter of the fifth century BCE. It is noteworthy that the *index of the relative density of the distribution* for this period is almost the same for all the monuments in question (0.1–0.27), which indicates that the volume of imports was approximately the same at all these sites during this period (Fig. 4.8a, c).

Materials from Patraeus, however, present a somewhat different picture: the first peak of import fell within the last two decades of the sixth century BCE (when the import volume was also the highest for the entire period under discussion). Some decrease has been recorded for the beginning of the fifth century BCE, with a subsequent increase from 480 to 465 BCE. The latter was followed by another decrease, with the lowest import volume recorded in the period from the 450s to 430s BCE, after which it continued to grow until the end of the fifth century BCE.

Unfortunately, we cannot analyze data from other North Pontic regions since there are no comprehensive publications on the dynamics of their trade. It is certain that in Olbia the volume of imports dropped in the second half of the fifth century BCE.<sup>88</sup> It is noteworthy that scholars also register economic recession in Asia Minor, in general, especially in the second half of the fifth century BCE, stating that the reasons for it are not very clear.<sup>89</sup>

Several publications that came out in the last decade offered a reconstruction of the situation in the Asiatic Bosphorus in the Archaic and the Early Classical periods, based on the analysis of settlement patterns and studies of the necropoleis.<sup>90</sup> The authors maintain that at the end of the sixth to the first third of the fifth centuries BCE, many new rural settlements emerged in the environs of the cities in the territory of the Asiatic Bosphorus. Starting from about the 470s BCE, the situation was becoming increasingly unstable, as a demographic crisis occurred in the area and armed conflicts took place. After the middle of the fifth century BCE, the rural surroundings of the cities shrank and the volume of the imports decreased, but at the end of the fifth century BCE, the situation became more stable, with an evident trend toward growth of the population and increase in the volume of imports.

The results of our analysis of the import volumes at different sites in the territory of the Asiatic Bosphorus, in general, correspond to the above scenario. However, our data indicates a small decrease in imports in the second quarter of the fifth century BCE only for Phanagoreia (Fig. 4.8a, b). This development can be explained either by a decrease in the volume of imports coming from the cities that were affected by the Greco-Persian Wars, including the North Aegean centers, with which Phanagoreia apparently had special relations, or by the growing political instability on the Taman Peninsula. At the same time, this does not explain why the situation at Phanagoreia was different from the

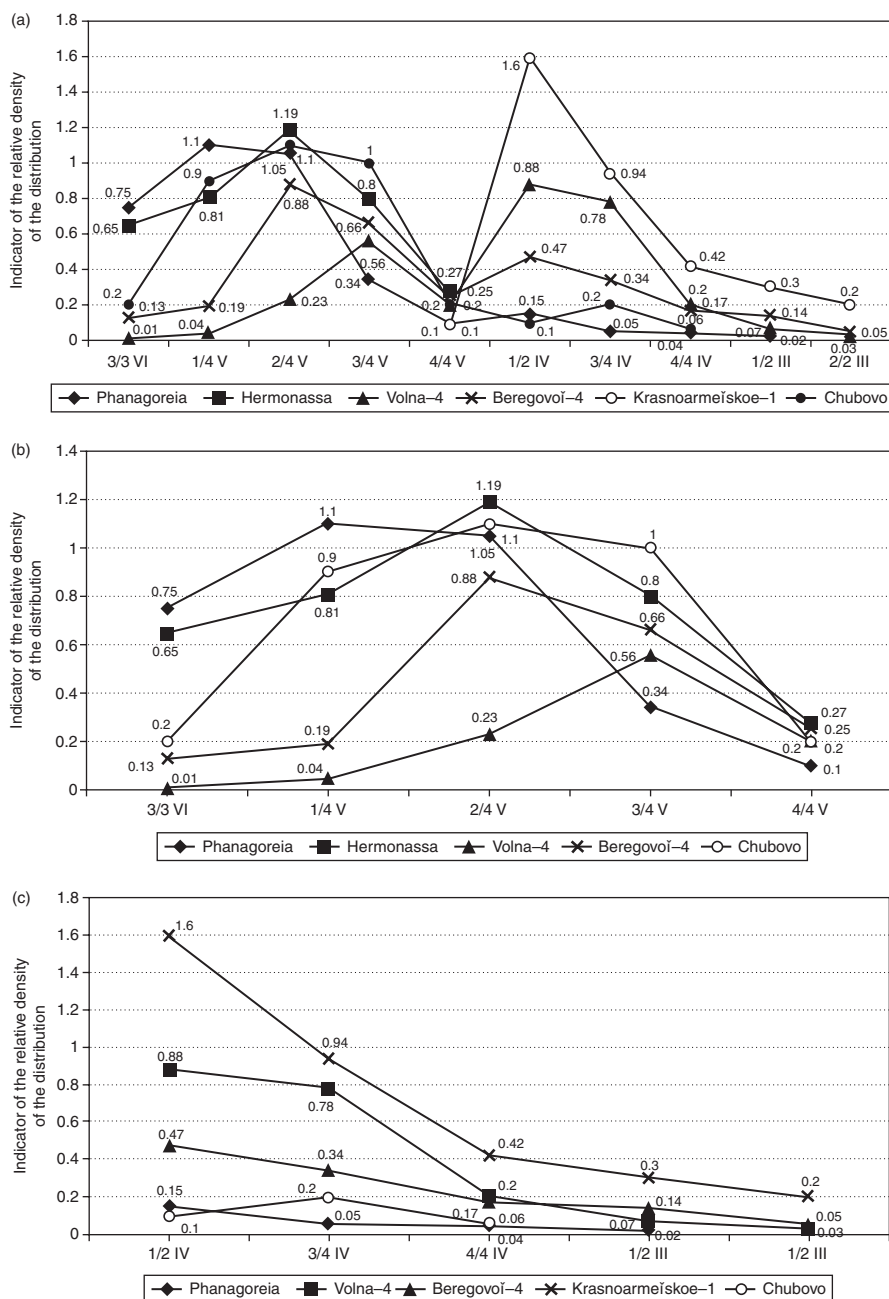


Fig. 4.8. Dynamics of the trade connections from the end of the sixth to the third centuries BCE: *a* – the entire period; *b* – the end of the sixth to the fifth centuries BCE; *c* – the fourth to third century BCE.

situation at most of the other sites, where the peak of imports fell within the second quarter of the fifth century BCE. If we assumed that in the 470s BCE there had been a migration of the rural population to urban centers (including Phanagoreia, which was not even fortified), then there would have been an increase in imports (since the urban population would have grown), and not the opposite. There may, however, be an alternative explanation: the influx of population to urban centers could have caused a certain crisis in the cities, which, in turn, could have resulted in general economic instability.<sup>91</sup>

The data from the site of Volna-4 is even more surprising, since it testifies to an increase in the volume of imports in the third quarter of the fifth century BCE, which was not characteristic of any other site in this region (Fig. 4.8a, b). At the same time, the materials from the other sites in the *chora* of Hermonassa demonstrate that in the second half of the fifth century BCE their development slowed down, becoming more intensive again only in the fourth century BCE.<sup>92</sup>

For the rest of the region, the situation in the second half of the fifth century BCE was similar – there was a noticeable recession in trade. At the same time, the results obtained by Abramov for Patraeus do not exclude the possibility that an increase in trade activity could already have started in the last third of the fifth century BCE. Since, however, we cannot divide other amphora material into such narrow chronological groups as Abramov did for Patraeus, we can only hypothetically suggest that this increase started at the very end of the fifth century BCE.

The comparative analysis of the contents and proportions of imports from various production centers undertaken for specific chronological periods at various sites produced interesting results. Since the list of the centers exporting their products in containers to the settlements in the Northern Black Sea region is fairly standard, closer attention should be paid to the proportions of the products from various centers represented at each site, which can be calculated by using the known capacities of the containers (Figs. 4.9–4.11).

Finds of the last third of the sixth century BCE include amphora fragments from four to six production centers. Chian imports are not necessarily predominant in all cases. Only at two sites (Hermonassa and Beregovoi-4)<sup>93</sup> do Chian amphorae form the largest group, only slightly surpassing the finds of the so-called Samos-Miletos group (at Hermonassa) and Lesbos (at Beregovoi-4 and Patraeus).<sup>94</sup> At Volna-4, the absolute majority of amphorae are from the Samos-Miletos group. At the settlement of Chubovo, containers of this group also surpass in number the Chian ones. At Phanagoreia, products from the North Aegean centers are prevailing during this period. The proportion of products from Klazomenai is rather high at all sites under discussion (varying from 7.5 percent at Chubovo to 21.1 percent at Volna-4) (Fig. 4.9a). Klazomenian imports are also well represented in the Kuban region. Vladislav Ulitin states that from the very end of the seventh to the

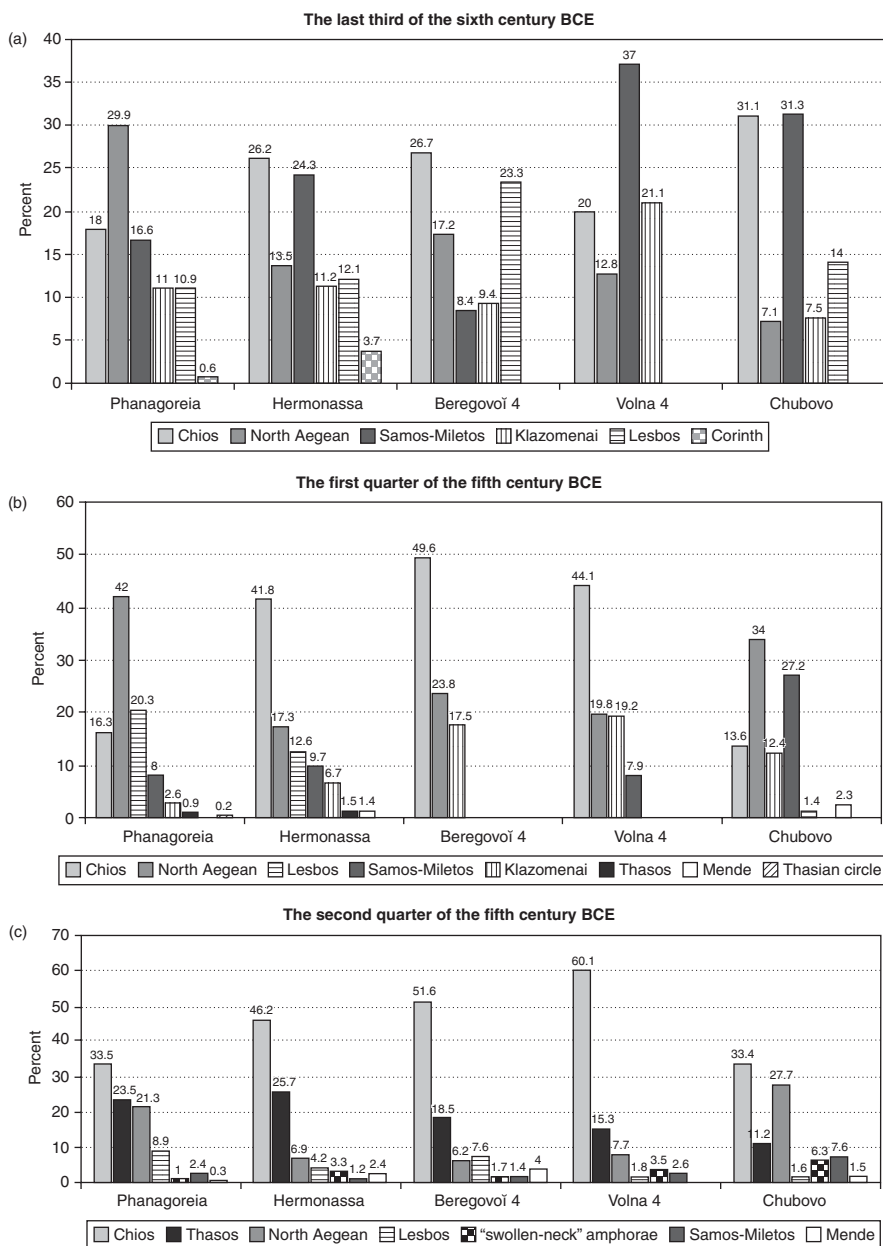


Fig. 4.9. Imports of the end of the sixth to the first half of the fifth centuries BCE: *a* – the last third of the sixth century BCE; *b* – the first quarter of the fifth century BCE; *c* – the second quarter of the fifth century BCE.

beginning of the fifth century BCE Klazomenai was one of the most active participants in trade with the local population of the Northern Black Sea region.<sup>95</sup>

In the first quarter of the fifth century BCE the amount of Chian imports increased dramatically, and Chios remained the leading exporter until the middle of the fourth century BCE. The only exception in this case was Phanagoreia, where products from the North Aegean centers prevailed. At the settlement of Chubovo, in addition to the predominant imports from these centers, the proportion of containers of the “Samos-Miletos” group is also very high. The rest of the studied assemblages demonstrate similar trends, i.e., the decrease in products from Klazomenai, Lesbos, and those imported in the amphorae of the “Samos-Miletos” group. Only the finds from Phanagoreia, Hermonassa, and Patraeus revealed the presence of containers from Thasos (at Patraeus, from the end of the sixth century BCE onwards) and Mende (only in Hermonassa, Patraeus, and the site of Chubovo) (Fig. 4.9b).

The end of the second quarter of the fifth century BCE witnessed practically identical trends everywhere in respect of the list of exporters: Chios still held the leading position, North Aegean imports decreased (to a lesser extent in Phanagoreia and Chubovo, in comparison to other centers), and so did those from Lesbos, while imports from Thasos increased considerably.<sup>96</sup> In addition, there was some increase in volume of imports from Mende (with the exception of Volna-4, where containers from this center have not been found so far) (Fig. 4.9c). About that time, production from Mende also appeared in the Kuban region.

Similar trends can also be detected in the third quarter of the fifth century BCE: the absolute prevalence of Chian products and the decrease in imports from all the other production centers. Only for Phanagoreia is the picture somewhat different: imports from Thasos, although decreasing almost by half, still comprise 37.6 percent of all imports. At Chubovo, the proportion of products from Thasos is also rather high – 19.9 percent. At Patraeus, Thasos is the second-largest exporter, although its products comprise only 10.2 percent, which corresponds closely to the data from the other sites, where it does not go over 13.6 percent (Fig. 4.10a).

The situation became more “balanced” in the last quarter of the fifth century BCE: the role of products from Thasos and Mende increased at all the sites of the region, including Patraeus.<sup>97</sup> However, at Phanagoreia, it was still different – products from Mende comprised a much smaller part of all the imports than they did at the other sites.<sup>98</sup> A similar picture also emerges for the site of Chubovo, where no amphora fragments from Mende dating to the last quarter of the fifth century BCE have been found (Fig. 4.10b).

Thus, the study of the ceramic containers from the last third of the sixth to the fifth centuries BCE shows that at the beginning of this period (until about the



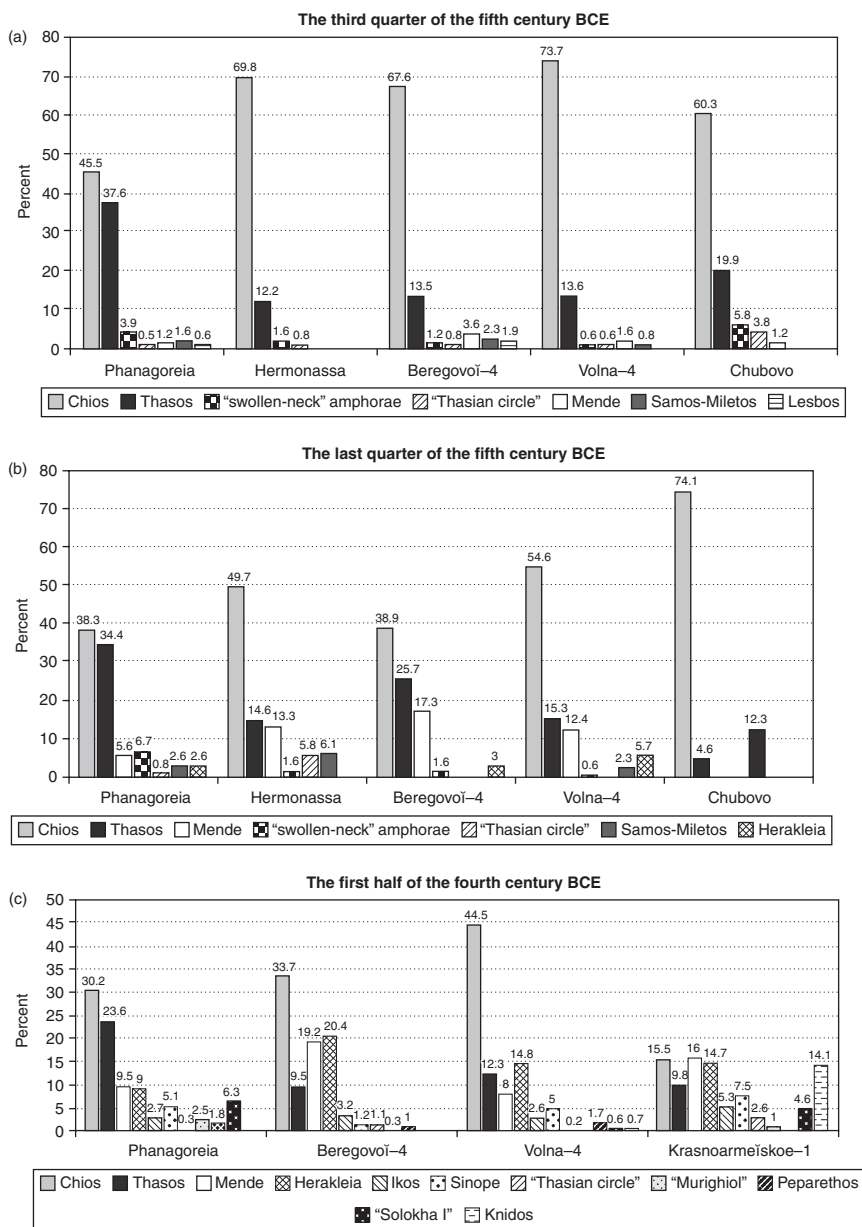


Fig. 4.10. Imports of the second half of the fifth to the first half of the fourth centuries BCE: *a* – the third quarter of the fifth century BCE; *b* – the last quarter of the fifth century BCE; *c* – the first half of the fourth century BCE.

second quarter of the fifth century BCE) the trade relations of the settlements under discussion evolved in different directions. The list of exporters and the proportion of their products in the overall volume of imported products varied from site to site, often significantly. From the second quarter of the fifth century BCE, however, a certain “unification” was taking place – for almost all the sites, the lists of the centers exporting their products in amphorae are identical. Moreover, the proportion of imports from various centers is about the same at all the sites. The situation was slightly different only at Phanagoreia and at the settlement of Chubovo, which, most likely, was close to Phanagoreia in terms of its development.

#### *The Fourth to Third Century BCE*

The increase in volume of imports, which started at the end of the fifth century BCE, continued also at the beginning of the fourth century BCE, reaching its peak in the second quarter of the fourth century BCE. However, the broadly accepted view about the economic upswing of the first half of the fourth century BCE has not been confirmed for all the sites. Thus, materials from Phanagoreia, Chubovo, and Beregovoï-4 prove that the respective *indices of the relative density of the distribution* do not surpass those calculated for the peaks of the economic development in the fifth century BCE (Fig. 4.8c).

At the same time, the volume of imports at the settlement of Volna-4 during this period grew by 1.5 times in comparison to the third quarter of the fifth century BCE. The lack of data from fourth-century-BCE Hermonassa does not allow us to determine any differences or similarities in the development of this part of the Asiatic Bosphorus. Scholars point out that cultural layers of this period revealed at the site are rather scarce in comparison to those of the preceding century,<sup>99</sup> but this observation is not enough to draw any reliable conclusions. At the same time, Sergeĭ Solovyov, who analyzed the situation in the *chora* of Hermonassa, including the settlement of Volna-1, maintains that the peak of the latter’s development fell within the fourth to third century BCE.<sup>100</sup> Moreover, according to him, the highpoint of the development of the entire *chora* of Hermonassa can be dated to the fourth century BCE.<sup>101</sup> At the site of the settlement of Volna-4, excavations revealed that a second construction period must have started there also at the beginning of the fourth century BCE.<sup>102</sup> It is, therefore, possible that at the beginning of the fourth century BCE an intensive growth of settlements started in the environs of Hermonassa, which led to the growth of the associated trade network.

The increase in volume of imports has been also recorded for the *chora* of Gorgippeia during this period, based on the materials from the settlements of Usatova Balka-3 and Usatova Balka-4.<sup>103</sup> In addition, there may have been similar developments at the settlement of Krasnoarmeiskoe-1 (Fig. 4.8c). By

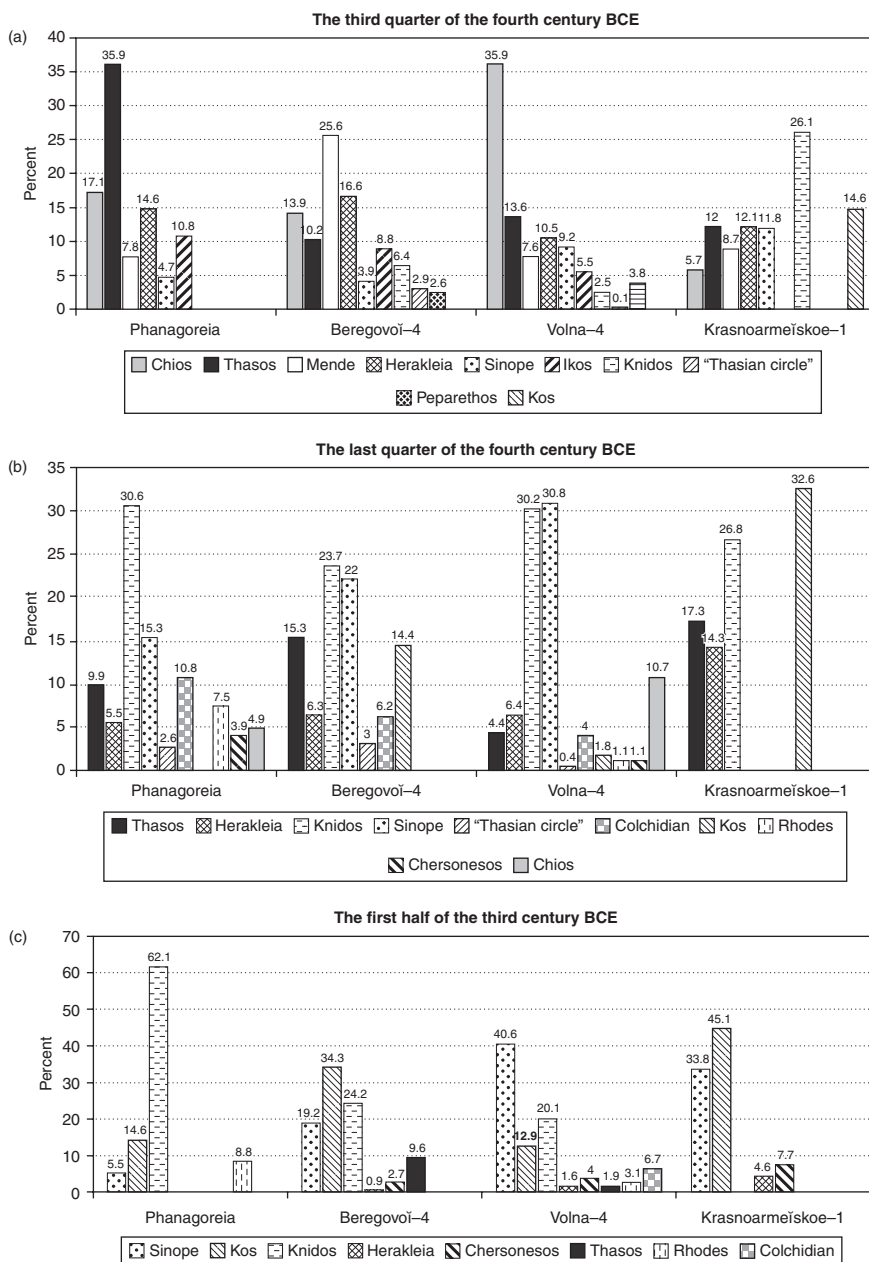


Fig. 4.11. Imports of the second half of the fourth to the first half of the third centuries BCE: *a* – the third quarter of the fourth century BCE; *b* – the last quarter of the fourth century BCE; *c* – the first half of the third century BCE.

contrast, the recent work at the *chora* of Phanagoreia – in particular, at the settlement of Solënyĩ-3 and the so-called sites 5 and 7 – revealed that in the first half of the fourth century BCE the volume of imports was lower than it had been in the second quarter of the fifth century BCE.<sup>104</sup>

From the middle of the fourth century BCE onwards, the volume of imported products started to decrease gradually, and this process continued during the third century BCE at all the sites in question.<sup>105</sup> Only materials from Beregovoi-4 demonstrate that there was an insignificant increase in the volume of imports in the first half of the third century BCE (Fig. 4.8c).

The data from the European Bosphorus shows a similar trend, i.e., a gradual increase in imports from the fifth century BCE to the second or third quarter of the fourth century BCE.<sup>106</sup> The data from the Kuban region, however, provides a somewhat different picture: the absolute peak of imports there fell within the third quarter of the fourth century BCE, followed by a gradual decrease in volume. Another relatively small increase has been recorded only for the third quarter of the third century BCE, i.e., a hundred years later.<sup>107</sup>

At the same time, the list of exporters and the proportions of their products at each site differ considerably from site to site. For the first half of the fourth century BCE, Chian imports prevail in most cases. Only at the settlement of Krasnoarmeiskoe-1 does the leading position belong to Mende (although here imports from Mende do not surpass those from Chios by much). In addition, the proportion of products from this center is high at Patraeus (where it prevails over imports from other centers),<sup>108</sup> Beregovoi-4, Usatova Balka-3, and Usatova Balka-4 (Fig. 4.10c). At the large settlements of the European Bosphorus – Pantikapaion and General'skoe Zapadnoe – the volume of imports from Mende is also rather high.<sup>109</sup> In the Kuban region, products from this center surpass products from other centers in the fourth century BCE.<sup>110</sup> The case is different only at Phanagoreia, Chubovo, and Volna-4. At Phanagoreia, the proportion of products from Thasos is very high, only slightly surpassed by Chian imports, while at Pantikapaion Thasian imports prevail. At Volna-4 and Beregovoi-4, the second-largest exporter is Herakleia. A high volume of Herakleian products has also been recorded at the settlements of the Kuban region, but only for the first quarter of the fourth century BCE.<sup>111</sup>

For the third quarter of the fourth century BCE, the situations at different sites are even more diverse. At Phanagoreia and Pantikapaion the leading position was taken over by Thasian imports. In general, the volume of Thasian imports is high at all the sites, but only at urban settlements do they prevail over products from other centers. At Beregovoi-4, the proportion of products from Mende is quite high, unlike any other site in the Bosphorus or the Kuban region. At all the sites, there are large quantities of Herakleian imports, as expected (Fig. 4.11a).

In the last quarter of the fourth century BCE Knidian and Sinopean imports increased at all the sites. However, in the Asiatic Bosphorus Sinopean products prevail only at Volna-4 (Fig. 4.11*b*), which contrasts with the situation in the European Bosphorus, where their prevalence is evident at all the sites under discussion. At the same time, the volume of Sinopean imports in the Kuban region is also rather low.<sup>112</sup>

The analysis of the list of exporters represented at the sites of the Asiatic Bosphorus reflects the very diverse trade relations of these settlements. Although certain similar trends can be detected at all the sites, there was still a considerable variety in terms of imported products. This refers not only to the largest exporting centers, but also to the less active trading partners of the North Pontic cities. At the same time, the situations in the capitals of the European and Asiatic Bosphorus, Pantikapaion and Phanagoreia, are similar to one another and different from the situations at the other sites: at the former, the proportion of Thasian products is very high, and from the middle of fourth century BCE (in Pantikapaion, from the beginning of the century) onwards, Thasos was the leading importer there. On the other hand, imports from Mende prevail at Patraeus, Krasnoarmeiskoe-1, Usatova Balka-3, Usatova Balka-4, and in the Kuban region and are very well represented at Beregovoi-4. However, their volume is rather low in both capitals and at the site of Volna-4.

These conclusions are especially interesting in the context of the reconstruction of the main routes in the Asiatic Bosphorus suggested by Ĭakov Paromov.<sup>113</sup> Analysis of his map of ancient roads reveals that the similarities in terms of the contents of imports – and, especially, of imports from Mende – are characteristic of the sites that are located near the road going from the crossing over the Cimmerian Bosphorus toward the central settlement of the region, Fontalovskaĭa 1.6. The fact that all ancient roads in this region led to the largest city, Phanagoreia, does not necessarily prove Phanagoreia's leading role in the distribution of products: this must have been the case for the rural settlements located near the city (which, to a certain extent, has been demonstrated by comparative analysis of materials from Phanagoreia, Chubovo, and Volna-4, which revealed the presence of common features in the contents of the imports found there), but not for the entire region. It is unlikely that all trade routes went via the capital of the Asiatic Bosphorus, Phanagoreia. Some of them must have gone directly from the crossing to the areas farther inland, as far as the central part of the Kuban region. Moreover, if Labrys, the capital of Sindike, had access to one of the sea straits at least until the Hellenistic period, as has been recently suggested,<sup>114</sup> then it seems more reasonable to assume that products were exported directly to Labrys rather than to Phanagoreia, from where they would have been consequently redistributed.<sup>115</sup> Equally plausible is the hypothesis that the main transit station in trade with the population of the Kuban region was Gorgippeia, which was conveniently located.

Unfortunately, mass amphora material from Gorgippeia and Labrys has not been studied in detail yet, so that we cannot undertake a comparative analysis of the dynamics and contents of the imports dating from the end of the sixth to the fifth centuries BCE found at these two sites. But the results of the analyses of the ceramic stamps from Phanagoreia,<sup>116</sup> Gorgippeia, Labrys, and Elizavetovskoe are available,<sup>117</sup> which allows a comparison between the volumes of imports at these centers for the period from the fourth to third century BCE.

In general, the methods of ceramic-stamp analysis used for the reconstruction of trade connections are fairly reliable.<sup>118</sup> To a great extent, they are similar to those described above (see “The Analysis of the Ceramic Complexes and the Typological and Chronological Classifications”) and employ the so-called coefficient of stamping, which deserves special attention here. Iosif Brashinskii, following Dmitrii Shelov, has already emphasized that the numbers of amphorae stamped by each center varied – on average, every fifth or sixth was stamped, according to the scholar.<sup>119</sup> This statement was made in reference to Herakleia, Sinope, Chersonesos, and Thasos, i.e., the centers with systematic stamping practices. Despite the numerous attempts to determine the indices of stamping for various centers, this question still remains open. The study of dump pits for ceramic rejects from amphora-production workshops on Thasos and in Sinope revealed that the numbers of amphora toes from each of these centers did not correspond to the respective numbers of stamps,<sup>120</sup> so that the coefficient of stamping varied from 0.4 to 1.0.<sup>121</sup> Nikolai Fedoseev also pointed out that the proportion of stamped Sinopean containers must have been rather high and may have changed with time.<sup>122</sup> Vladimir Kaŝ, who analyzed the correlations between the numbers of amphora toes and stamps from various centers found at different sites, reached the same conclusion.<sup>123</sup> When calculating the coefficients of stamping for the main production centers (Herakleia, Sinope, Chersonesos, and Thasos), he noticed that the results were rather similar for different centers and reasonably concluded that these coefficients do not necessarily have to be employed in the analysis of the ceramic assemblages that contain only the stamps from the main production centers. He maintained, however, that the presence of the stamps from Rhodes in the material makes it necessary to use the coefficient of stamping in the calculations.<sup>124</sup> Presently, it is not possible to determine the coefficient of stamping for the other trade partners of the Northern Black Sea region (such as Knidos, Kos, Mende, Amastris, Akanthos, and others), which sometimes were as active in trade as the main centers were.

Scholars who study trade relations do not aim to obtain the absolute numbers of products exported to a particular site (which would be impossible,

in any case).<sup>125</sup> The main goal of such studies is to identify the trends that existed during a particular period and to determine the dynamics of import and export at a site. Therefore, we suggest that it may not be necessary to use the coefficient of stamping in the calculations, while working with the stamps from all the main production centers, including Rhodes. For the latter, it is usually maintained that all amphorae were stamped (in most cases, twice), so that the coefficient of stamping used in the calculations equals two. At the same time, John Lund notes that at the beginning of the third century BCE, the ratio of stamped amphorae to unstamped ones on Rhodes may have been 1:12, and in later periods, 1:2 or 1:2.5.<sup>126</sup> According to him, scholars must have paid more attention to stamped amphora fragments than to unstamped ones, which would explain these results. Our own studies showed that out of forty-eight intact amphorae from Rhodes known to us twelve did not have stamps.<sup>127</sup> Thus, it may not be necessary to use the coefficient of stamping in calculations involving amphorae from all the main production centers mentioned above, including Rhodes. However, this suggestion still needs further proof.

Statistical calculations on ceramic stamps allow one to trace the dynamics of imported products and to determine fluctuations in trade within rather short chronological periods (10–15 years).<sup>128</sup> At the same time, if we compare the results of the study of Phanagoreia's trade connections that are based on the analysis of amphora stamps with those based on the analysis of amphora toes and rims, we will notice that the emerging pictures of the dynamics of imports from a specific center to Phanagoreia will be almost the same in both cases. The discrepancies could be explained by the differences in the number of fragments that were studied in each case and by the fact that sometimes all the fragments come from one and the same area of the site, as well as by other factors.<sup>129</sup>

Thus, the results of the analysis of amphora stamps published by Tatiana Kutinova and Vladimir Kaš allow us to compare the contents and the volume of imports at Phanagoreia, Gorgippeia, Labrys, and Elizavetovskoe. In their work, these scholars used the same chronological intervals and the same average volumes of the containers. The comparative analysis of import volumes shows that the peak of imports at all four sites fell within the period from 360 to 336 BCE. From 335 to 306 BCE, the volume of imports decreased, and from the end of the fourth century BCE onwards (from 305 to 271 BCE), the differences in the dynamics of trade at these sites become apparent – some decrease has been registered at Phanagoreia and Labrys, along with a short-term increase at Gorgippeia and Elizavetovskoe. During the next period (from 270 to 221 BCE), the volume of imports at Gorgippeia and Elizavetovskoe decreased as well, while staying at the same

level at Phanagoreia. The gradual decrease of the volume of imports continued through the end of the third and the entire second centuries BCE (Fig. 4.12*a*).<sup>130</sup>

For the Kuban region, the peak of imports fell within the third quarter of the fourth century BCE, according to Ulitin.<sup>131</sup> The data obtained from the analysis of amphora stamps does not contradict this conclusion. At the same time, Ulitin also studied unstamped material and noticed an insignificant increase in imports in the third quarter of the third century BCE, which has not been evident from the analysis of amphora stamps.

The comparative analysis of the import contents at Phanagoreia, Labrys, Gorgippeia, and Elizavetovskoe also produced interesting results. At the beginning (from 410 to 360 BCE), Thasian products prevailed at Phanagoreia and Labrys, followed by imports from Herakleia, which at Gorgippeia and Elizavetovskoe surpassed by far imports from the other centers. Products from Mende and Akanthos are also present in great quantities everywhere except Elizavetovskoe (Fig. 4.12*b*). During the next period (from 360 to 336 BCE), imports from Thasos still prevailed at Phanagoreia and Labrys, followed by Sinopean products, which surpassed those from Herakleia. Imports from Mende and Herakleia comprise the third-largest group at these sites. At the same time, over half of imported products at Gorgippeia were from Sinope, followed by those from Thasos, Herakleia, and Mende. At Elizavetovskoe, by contrast, Herakleian products prevailed, while Sinopean imports were also very well represented, followed by those from Thasos and Mende. Products from Akanthos and Knidos are also represented at all these sites, in approximately equal proportions (Fig. 4.12*c*).

The next period (from 335 to 306 BCE) witnessed changes on the Northern Black Sea markets. The imports at Phanagoreia during that time were almost identical to those at Gorgippeia (in particular, the prevalence of Sinopean products and the increase in imports from Knidos have been recorded). At Elizavetovskoe, imports from Sinope also prevailed, followed by those from Chersonesos. Thasos was the second-largest importer at Phanagoreia, Gorgippeia, and Labrys, and the third-largest at Elizavetovskoe. Knidian products were completely absent at the latter site, while at Labrys they surpassed by far imports from all the other centers. As at Elizavetovskoe, a relatively high proportion of products from Chersonesos was also characteristic of Labrys (Fig. 4.13*a*). From 305 to 271 BCE, the contents of imports at all these sites were almost the same: Sinopean products prevailed almost everywhere, followed by imports from Thasos at Phanagoreia and Gorgippeia and by those from Herakleia at Elizavetovskoe (Fig. 4.13*b*).



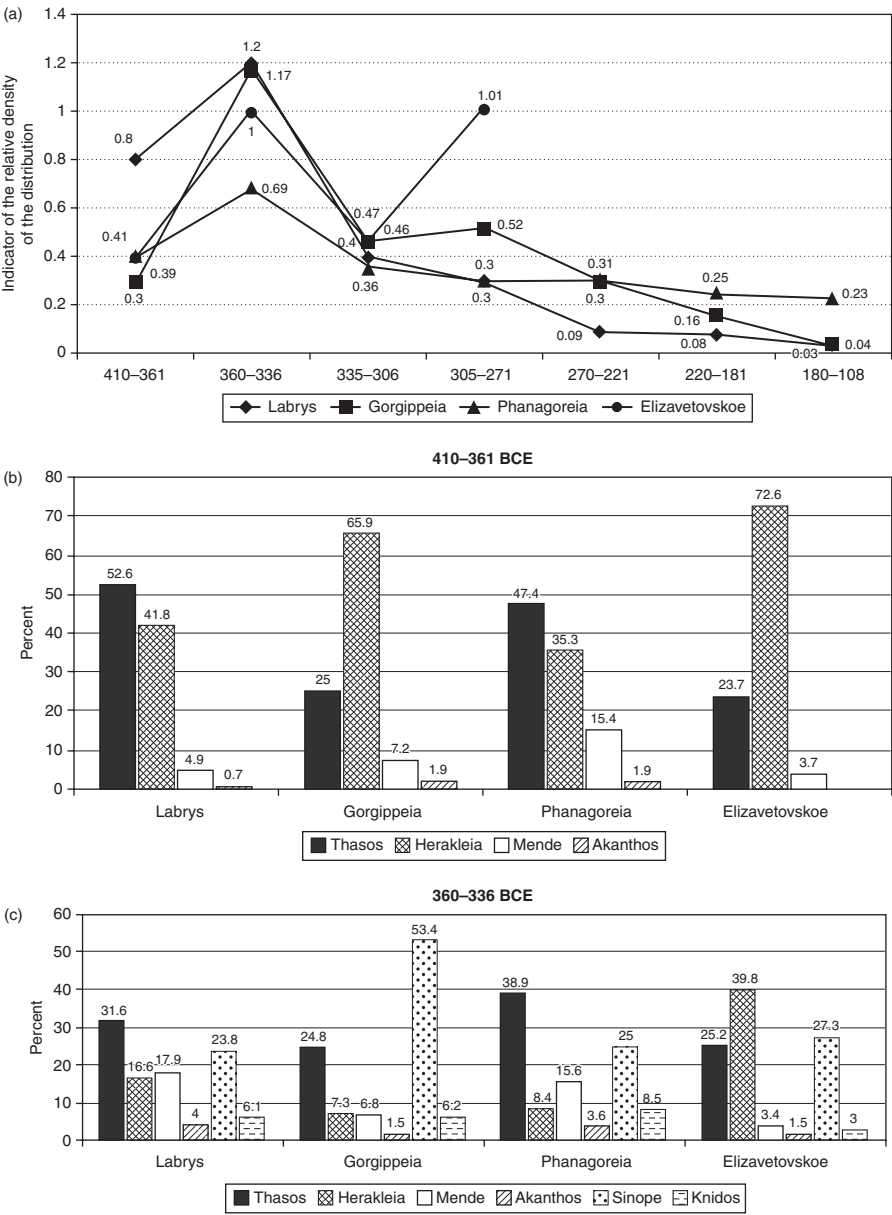


Fig. 4.12. Results of the comparative analysis of amphora stamps: *a* – dynamics of trade connections from the end of the fifth to the second centuries BCE; *b* – imports in 410–361 BCE; *c* – imports in 360–336 BCE.

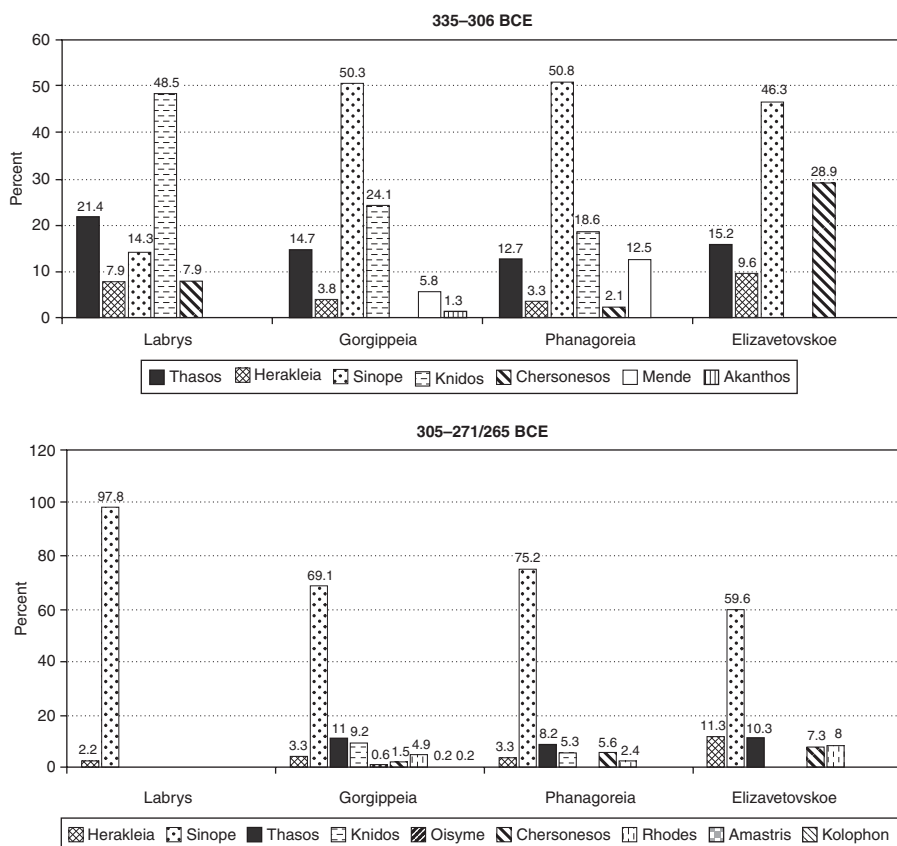


Fig. 4.13. Imports in 335–271/65 BCE: *a* – in 335–306 BCE; *b* – in 305–271/65 BCE.

Thus, it is evident that in the 330s BCE the Asiatic Bosphorus witnessed events that not only prompted a decrease in import volumes at all the sites in question, but also some major changes in the contents of the imported products. This is particularly true for Labrys, where Knidian imports prevailed after 335 BCE, with products from Thasos and Chersonesos present in high proportions. At the same time, imports at Phanagoreia, Gorgippeia, and Elizavetovskoe became almost identical, which was not the case during the previous period. The obtained results do not shed any light on the trade routes used for importing products to the Kuban region.

Presently, it would not be feasible to offer any reconstruction of the dynamics of Bosphorus trade connections for the later period. This is associated, first of all, with the absence of detailed typological schemes of the evolution of amphorae at various centers during the third and second centuries BCE, which makes the

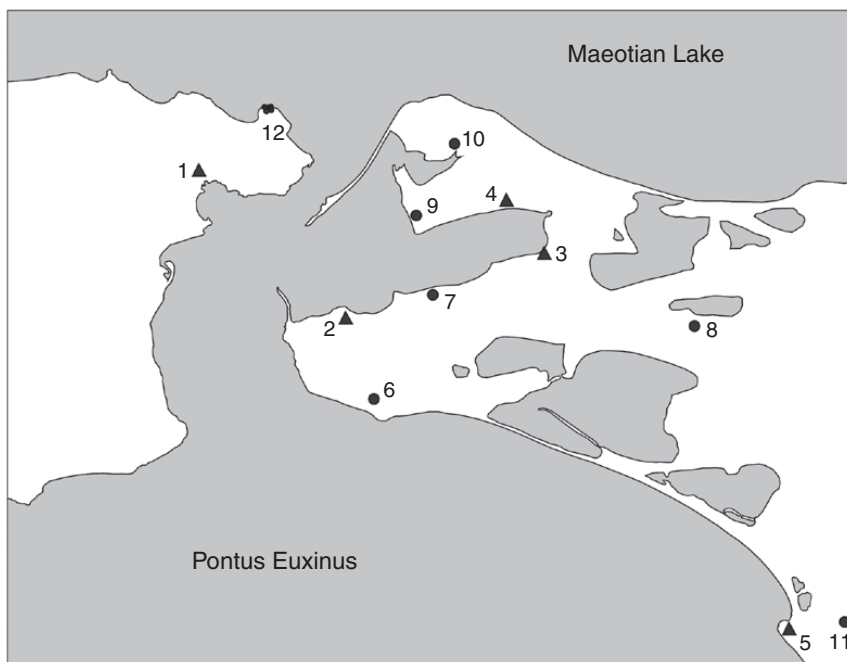


Fig. 4.14. Map of the Bosphorus: ▲ – cities (1 – Pantikapaion; 2 – Hermonassa; 3 – Phanagoreia; 4 – Patraeus; 5 – Gorgippeia); ● – rural settlements (6 – Volna-4; 7 – Taman – 3; 8 – Chubovo; 9 – Beregovoï – 4; 10 – Krasnoarmeiskoe – 1; 11 – Usatova Balka – 3, 4; 12 – General'skoe Zapadnoe, Pustynnyi Bereg I, Pustynnyi Bereg II, Pustynnyi Bereg III).

attribution of amphora fragments (toes and rims) within short chronological periods very difficult. In addition, the practice of amphora stamping ceased at most production centers in the beginning of the second century BCE. For all these reasons, we had to confine the paleoeconomic reconstruction offered above to the period from the fourth to second century BCE.

## OVERSEAS TRADE IN THE BLACK SEA REGION AND THE FORMATION OF THE PONTIC MARKET FROM THE FIRST CENTURY BCE TO THE THIRD CENTURY CE

Sergey Iu. Vnukov

### INTRODUCTION

The present chapter focuses on Pontic overseas trade during the period from the establishment of Roman domination over the region after the death of Mithridates VI Eupator in 63 BCE to the end of the Gothic Wars in the third century CE. This was a period of revival, flourishing, and collapse of Pontic trade. The study of the typology, chronology, and distribution of amphorae from the main Pontic centers allowed us to obtain information about the direction, content, dynamics, and volume of trade in the region. The main (but not the only) content of this trade was the exchange of South Pontic wine and, to some extent, olive oil for grain, fish, salt, products of animal husbandry, and slaves from the North Pontic region. The development of this exchange led to the formation of the regional Pontic market by the beginning of the first century CE, which later became connected to the pan-Roman market. During the time when this trade was flourishing, almost all Greek Pontic centers, as well as barbarian tribes and peoples populating the territories as far as the southern boundary of the wooded zone of Eastern Europe, participated in it.

The entire period discussed in this chapter can be tentatively divided into four stages. The first stage was marked by the establishment of Rome's regional administrative system, the slow recovery of the economy of the Pontic states after the Mithridatic Wars, and the revival of broken trade connections. This stage lasted until the beginning of the rule of Augustus and, in general, coincided with the time of the Roman civil wars.

The second stage, from the beginning of the reign of Augustus to the reign of Hadrian, is characterized by relative stability in the Southern Black Sea region and by the aggressive foreign policy of the Roman Empire, which was expanding its territory and subjugating Pontic states and tribes. During the first part of this stage (until the 60s CE), Rome mostly focused on establishing full control of the Western and Northern Pontus. By the end of this period, the Empire dominated the Northern Black Sea region and exercised supervision of its parts through the provincial administrations of Moesia and Bithynia-Pontus.<sup>1</sup> During the second part of this stage, the subjugation of the Western Pontic tribes was completed and the position of the Empire was reinforced in the Caucasus and Transcaucasia.

The third stage, from Hadrian's reign to the Gothic Wars of the third century CE, is marked by stable political and economic development in the region and a flourishing economy and trade. The Empire followed a policy of active defense of its own frontiers and the borders of the friendly buffer-states that protected these frontiers. This became especially apparent in the 140s CE during the invasion of the Northern Black Sea region by the tribes of the Late Sarmatian culture: Rome's intervention and the presence of Roman garrisons in Olbia and Chersonesos contributed to a quick stabilization of the situation.

The fourth stage started with the appearance of Germanic tribes in the Northern Black Sea region around the end of the 230s CE and the beginning of the Gothic Wars. From the 240s through 270s CE, the territories from the Bosphoran Kingdom and Cappadocia to Italy were under attack. Several cities of the Bosphoran Kingdom, including Tanais and Gorgippeia, were destroyed completely, as were Pityous in Colchis, Olbia and Tyras in the Northwestern Black Sea region, and Trapezous, Herakleia, and other centers in Cappadocia and Pontus. In the Western Black Sea region, Dacia, Moesia, and Thrace were attacked.<sup>2</sup> Some North Pontic territories were completely depopulated, others were occupied by settlements of the Cherniakhov Culture, which also included Goths. These developments lead to a deep crisis in the politics and economy of the Black Sea region and to a breakdown of trade relations. The latter resumed at the end of the third century CE, but in a different political and economic context.

Written sources provide very little information about trade in the Pontic region during the Roman period. Therefore, archaeological finds, including various imported items and remains of local workshops, are particularly important in this respect. The traded commodities consisted, to a great extent, of food products, which were perishable. For some of these commodities, the volume of trade can be deduced from data about the containers in which the products were carried – mainly amphorae, used for the transportation of wine, oil, and fish, as well as other liquid and dry products.

## MAIN VARIETIES OF PONTIC AMPHORAE

Amphora fragments are the most frequent ceramic finds at archaeological sites in the ancient Mediterranean and in the Black Sea region. At some sites, they comprise up to 90 percent of all ceramic finds. For this reason, data obtained in the study of amphorae is the most important source for the reconstruction of trade connections in the region.<sup>3</sup>

In the middle of the twentieth century, Iraida B. Zeest started to study amphorae produced in the Pontic region. She singled out the main varieties of such amphorae, but did not identify all of the specific centers of their production.<sup>4</sup> For the Roman period, the main groups that she named were the so-called light-clay and brown-clay amphorae, Sinopean vessels, and various containers that most likely were of Bosporan origin. Later studies improved the typology and chronology suggested by Zeest, and light-clay amphorae, in particular, received special attention.<sup>5</sup> Dmitrii B. Shelov combined all the existing classifications of the most numerous category of this variety of vessels – the narrow-necked amphorae – and divided them into six “types.”<sup>6</sup> He also suggested that they had been produced in Sinope, but this hypothesis was later refuted. The typology developed by Shelov has been used until very recently by most scholars, but, at the same time, it required serious revisions and additions.

The brown-clay amphorae from the Northern and Eastern Black Sea regions were studied as two isolated groups. Various centers have been suggested as their place of production, and chronological varieties of amphorae of the same type have often been mistaken for completely different contemporaneous types.<sup>7</sup> Only Gotcha Tsetskhladze has discussed the brown-clay amphorae from the Northern Black Sea region and Colchis together, in their chronological development, and has offered an overview of the general evolution of this group of vessels.<sup>8</sup>

As to the Sinopean amphorae of the Roman period, only one variety of them was known until very recently – “type” Zeest 31. A few other general varieties have been singled out, but only on the basis of general features, and they were not considered to be of Sinopean origin.<sup>9</sup> The Bosporan amphorae, whose area of circulation was considerably smaller, have not been studied after Zeest.<sup>10</sup> Her typology and chronology are very much out of date and in need of revision, but they are still being used.

In the last thirty years, I have systematically studied the morphology, chronology, petrography, and distribution of the Black Sea amphorae of the Roman period. This work has incorporated previous studies on this subject, as well as the most recent research (which concerned, first of all, the late Sinopean amphorae).<sup>11</sup> As a result, I have identified the major regional centers of amphora production:<sup>12</sup> most amphorae found in the Black Sea region were manufactured

in three Pontic centers – Herakleia, Sinope, and several places in Colchis – but by the middle of the second century BCE, the Bosphorus joined in. I have also suggested a more accurate and refined chronology<sup>13</sup> and a new typology of these amphorae, as well as their common nomenclature and terminology that are compatible with the previous most widely used classifications.<sup>14</sup>

In this present typology, amphorae are divided into *classes* (i.e., vessels that are morphologically similar to each other, have a common prototype, but were manufactured in different centers out of different clays), *types* (i.e., vessels of the same *class* produced in the same center), and chronological and local *variants* and *sub-variants* of these *types*.<sup>15</sup> Scholars working on amphorae of the Roman period have already started to use this typology, chronology, and attribution of the Black Sea amphorae.<sup>16</sup>

Pontic amphorae of the period in question can be divided into two groups: vessels of pan-Roman *classes*, which originally were not characteristic of the Black Sea region, and vessels of local *classes* that continued the evolution of Hellenistic amphora shapes. Vessels of the first group were manufactured in dozens of production centers and circulated everywhere in the Classical world.<sup>17</sup> Usually, their prototypes were the amphorae from centers where the most popular wine or oil was produced. The uniformity of shape cannot be viewed just as the result of counterfeit production of containers manufactured at the famous centers, as was the case in previous periods;<sup>18</sup> rather, it was probably prompted by the changes that took place in the production of commodities transported in amphorae and in trade itself after the unification of the Mediterranean region within the Roman Empire in the first century BCE. This development encompassed not only the expansion of the geographic area where certain types of amphorae were manufactured, but also the dissemination of the best recipes and technologies used for the production of agricultural goods transported in these containers (Cato *DA* 112.1–3) and the standardization of the production process of these popular articles of trade.<sup>19</sup> Most likely, commodities (in particular, wine) that were produced in different places but followed the same recipe, imitating the recipe of the “prototype” product, were initially transported in vessels of similar shape. The shape of amphora indicated only the sort of wine, but did not guarantee its authenticity, as was the case in earlier periods.<sup>20</sup>

Pontic amphorae of the pan-Roman *classes* were produced mostly from the middle of the first century BCE to the early second century CE. We can identify six *types* of such vessels manufactured in Herakleia and Sinope during this period:

### **Herakleian (light-clay) amphorae**

- a Pseudo-Coan (Dressel 2–4) amphorae of *type* S I.<sup>21</sup> They are further subdivided into *variants* S Ia (from the 60s BCE to the first quarter of the first century

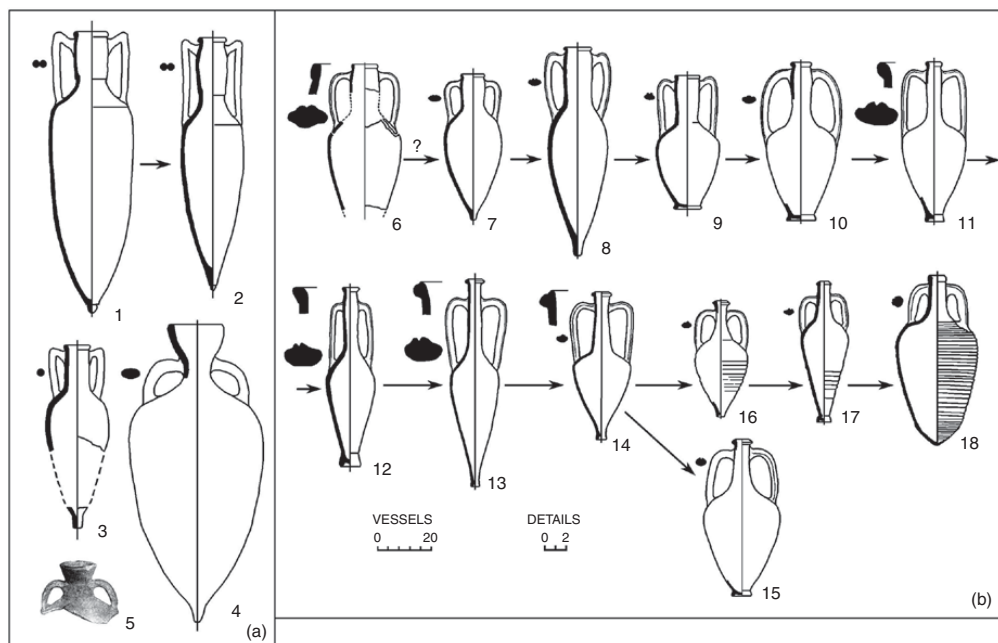


Fig. 5.1. Main varieties of Herakleian amphorae of the Roman period.

A Herakleian amphorae of pan-Roman shapes: 1, 2 – type S I, variants *a* and *b*; 3 – type S II; 4, 5 – type SV (4 – after Zeest 1960, pl. xxxvii, 90a; 5 – after Gaïdukevich 1958, fig. 21.1).

B Herakleian amphorae of local shapes: 6 – Late Hellenistic, Herakleian (?); 7, 8 – type S III, variants *a* and *b*; 9 – transitional variant S IVZ; 10 – subvariant S IVA<sub>1</sub>; 11 – subvariant S IVA<sub>2</sub>; 12 – subvariant S IVB<sub>1</sub>; 13 – subvariant S IVB<sub>2</sub>; 14 – variant S IVC; 15 – variant S IVJ; 16 – variant S IVD; 17 – variant S IVF; 18 – variant S IVE.

CE) and S Ib (from about 10 CE to the first third of the second century CE) (Fig. 5.1.1, 2).<sup>22</sup>

b Pseudo-Rhodian amphorae of type S II (from the middle to the end of the first century BCE) (Fig. 5.1.3).<sup>23</sup>

c Amphorae with cup-shaped mouth of type SV (third century CE) (Fig. 5.1.4, 5). Only individual fragments of such vessels manufactured in Herakleia are known.<sup>24</sup>

### Sinopean amphorae

a Pseudo-Coan (Dressel 2–4) amphorae of type Sin III (from the 40s BCE to the late first century CE) (Fig. 5.2.1). They are very similar to the vessels of type S I, but less common.<sup>25</sup>

b Flat-bottomed amphorae with a narrow neck and grooved handles (Dressel 28) of type Sin IV, which are further subdivided into chronological variants *a* and *b* (from the late first century BCE to after the middle of the third century CE, with variant *b* gradually replacing variant *a* around the middle of the second century CE) (Fig. 5.2.2, 3).<sup>26</sup>

c Pseudo-Rhodian amphorae (from the second half of the first century BCE to the first half of the first century CE), represented only by rare finds of handles, which



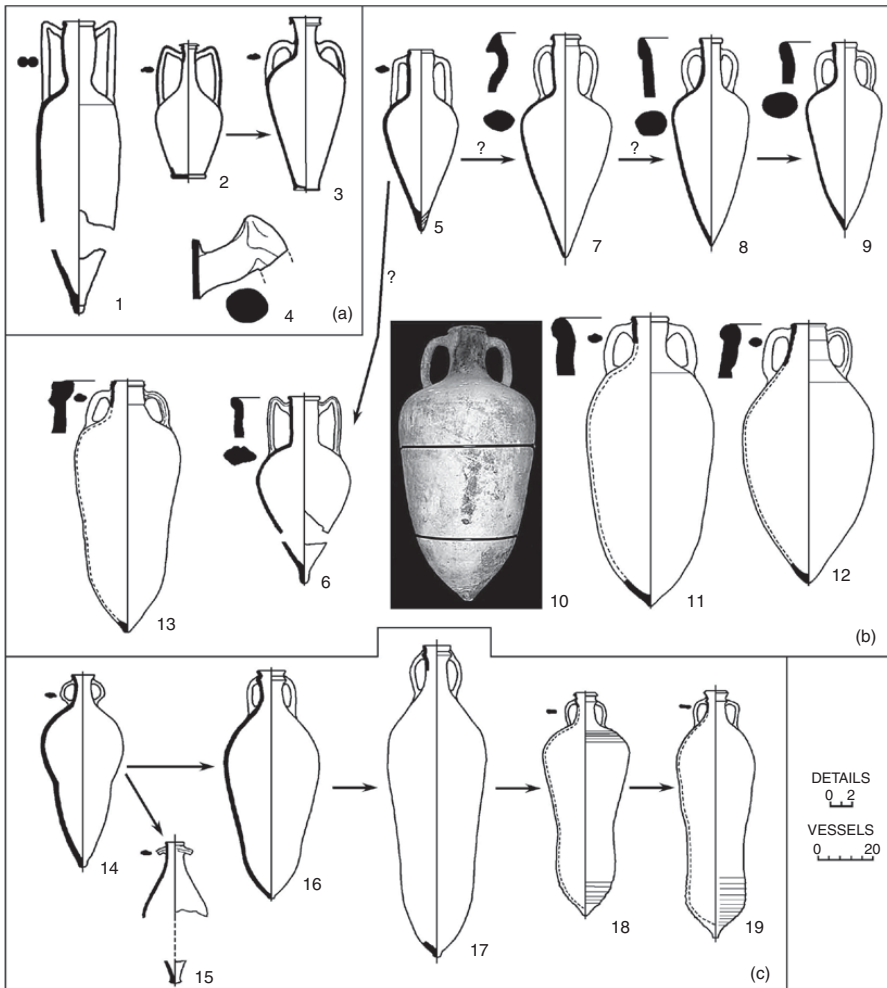


Fig. 5.2. Main varieties of Sinopean and Colchidian amphorae of the Roman period.

A Sinopean amphorae of pan-Roman shapes: 1 – type Sin III; 2, 3 – type Sin IV, variants *a* and *b*; 4 – pseudo-Rhodian.

B Sinopean amphorae of local forms: 5 – subvariant Sin Ic; 6 – type Sin V; 7 – type Sin II; 8 – transitional variant (?); 9 – type Sin VI; 10–12 – “group” Snp B, “types” B Snp I–III (after Kassab Tezgör 2010, pl. 15.1, 2b, 4); 13 – “group” Snp C, subvariant C Snp I 1.

C Colchidian amphorae of the Roman (after Kassab Tezgör, Lemaître, and Pieri 2003, pl. IX, 15). period: 14 – subvariant B<sub>2</sub>; 15 – subvariant B<sub>3</sub>; 16 – subvariant C<sub>1</sub>; 17 – subvariant C<sub>2</sub>; 18 – transitional variant C<sub>2</sub>–D<sub>1</sub>; 19 – subvariant D<sub>1</sub>.

are round in cross-section, with a sharp bend (Fig. 5.2.4).<sup>27</sup> We do not know anything specific about the shape of the vessel.

Amphorae of traditional shapes were manufactured in some Black Sea centers at the same time as vessels of the pan-Roman *classes*. Starting from the early second century CE, the former were gradually replacing the latter.

In Herakleia, the local tradition is represented by two related *types*. The earlier one is *type* S III with a wide neck, a spiked toe, and grooved handles (from about 20 to 15 BCE to the first third of the first century CE). It continues the development of the Late Hellenistic Herakleian amphorae (Fig. 5.1.6) and is further subdivided into *variants* *a* and *b* (Fig. 5.1.7, 8).<sup>28</sup>

By the second quarter of the first century CE, *type* S III transformed into the long-lasting *type* S IV (Fig. 5.1.9–18). These vessels are characterized by a narrow neck, grooved handles, and a foot ring (for the early variants), which later degraded. The shape of the amphorae of this *type* changed considerably in time,<sup>29</sup> so that we can use it as a chronological indicator. The design of this amphora *type* was influenced by the pan-Roman “fashion” – in particular, by the varieties of Dressel 29 and 30, Gauloise 1 and 4, and others.<sup>30</sup>

For the period in question, we can identify seven chronological *variants* of amphorae of *type* S IV, two of which are further subdivided:

- a transitional *variant* S IVZ (first quarter of the first century CE) (Fig. 5.1.9);
- b *sub-variant* S IVA<sub>1</sub> (from the second to the beginning of the fourth quarter of the first century CE) (Fig. 5.1.10);
- c *sub-variant* S IVA<sub>2</sub> (last third of the first century CE) (Fig. 5.1.11);
- d *sub-variant* S IVB<sub>1</sub> (from the late first to the early second centuries CE) (Fig. 5.1.12);
- e *sub-variant* S IVB<sub>2</sub> (first half of the second century CE) (Fig. 5.1.13);
- f *variant* S IVC (from the second quarter to the end of the second century CE) (Fig. 5.1.14);
- g *variant* S IVJ (from the middle to the end of the second century CE) (Fig. 5.1.15);
- h *variant* S IVD (from the last quarter of the second to the second half of the third centuries CE) (Fig. 5.1.16);
- i *variant* S IVF (from the late third to the early fifth centuries CE) (Fig. 5.1.17);
- j *variant* S IVE (from the late fourth to the early fifth [?] centuries CE) (Fig. 5.1.18).<sup>31</sup>

The development of Sinopean amphorae of traditional shapes is more complicated, and many details are still not clear. The manufacturing of the vessels of *variant* Sin Ic, which started during the Hellenistic period, continued at the beginning of the Roman period (Fig. 5.2.5).<sup>32</sup> It is likely that later vessels with a spiked toe of *type* Sin II (and Sin VI, which replaced them) originated from the vessels of *variant* Sin Ic (Fig. 5.2.7–9).<sup>33</sup> It is also possible that amphorae of the rare *type* Sin V derived from those of *variant* Sin Ic (Fig. 5.2.6).<sup>34</sup>

Another group of large Sinopean vessels that probably continued the local tradition in the evolution of amphora shape is described by Dominique Kassab Tezgör in her classification as “types” B Snp I–III (Fig. 5.2.10–12).<sup>35</sup> These vessels coexisted with amphorae of *type* Sin VI. And the last large group of Sinopean amphorae of traditional shape is the “group” Snp C (Fig. 5.2.13), according to Kassab Tezgör’s classification. The widely popular Sinopean “carrot” amphorae of the Late Roman period originated from these.<sup>36</sup>

The Sinopean amphorae mentioned above can be dated as follows:

- a *variant* Sin Ic (Fig. 5.2.5) – the first half of the second century BCE to the middle of the first century CE;
- b *type* Sin V (Fig. 5.2.6) – the middle to the second half of the first century CE;
- c *type* Sin II (Fig. 5.2.7) – the fourth quarter of the first to after the middle of the third centuries CE;
- d *type* Sin VI (Fig. 5.2.9) – the late second to the third centuries CE;
- e “types” B Snp I–III (Fig. 5.2.10–12) – the late second to the third centuries CE;
- f “variant” C Snp I–I (Fig. 5.2.13) – the middle of the third to the fourth centuries CE.

Petrographic analysis carried out on Sinopean and Herakleian amphorae revealed their mineralogical composition.<sup>37</sup> For Herakleian ware, two fabrics have been identified for the Hellenistic and Roman periods; these fabrics reflect the heterogeneity of the mineralogical composition of different layers of clay deposits in the vicinities of Herakleia. Both of them are characterized by a very calcareous clay matrix with rare grains of ferruginous minerals. The clay mass of fabric 1 is naturally tempered by fragments of acidic igneous and light sedimentary rocks, which are metamorphosed to different degrees. The grains of leucocratic minerals (quartz, plagioclases), which also occur in this type of clay, are constituents of the same rocks (Pl. IV.5–8).

Fabric 2 is characterized by additional tempering of the same raw clay by local sea sand. The sand contains granules of igneous rocks of normal acidity, such as andesite-basalt, as well as individual grains of pyroxene, hornblende, magnetite, and certain other minerals found in these rocks. Potters used such sand as an additive when the total amount of natural inclusions in the raw clay was low and its plasticity had to be reduced. As a result, Herakleian fabric 2 is more complex (Pl. IV.1–4). There is no correlation between the fabrics and the types or dates of Herakleian amphorae. Vessels of all types dating to the Roman period, as with stamped Hellenistic Herakleian containers, can be associated with either fabric – it depended on the specific layer of the clay deposit that a potter used and on the location of the workshop.

In terms of technology, the main difference between Hellenistic and Roman Herakleian amphorae is the change in the color of the ceramics. The reddish, gray-orange, and light-brownish colors are typical for Hellenistic ware, while Herakleian amphorae of the Roman period have whitish, yellowish, or light orange colors (Pl. IV.1–8). The difference in the color of the baked clay mass is caused by changes in the firing regime of the vessels.<sup>38</sup>

The fabric of Sinopean ceramics usually has a denser texture and a broad range of color variations. In the Roman period, the color varied from pale gray through yellowish, greenish, and bluish to violet, orange, and brownish-red. Depending on the firing conditions, we may see all these colors together

or only two or three of them in the same vessel. Grayish, blue, violet, and light orange or beige are especially typical for Sinopean ware of the Roman period and can be detected, in particular, in the center of a shard. Basalt sand is the main mineral additive in the Sinopean fabric. It consists of a large amount of pyroxene (visible to the naked eye as shiny black grains), rare crystals of plagioclase, and pieces of ferruginous rock groundmass. Rounded quartz, calcites, and, occasionally, mica are also present (Pl. IV.9–15).<sup>39</sup>

The production of a new *type* of amphorae from brown ferruginous clay started in the middle of the fourth century BCE, probably in Sinope's colony of Trapezous. Contemporaneous Sinopean amphorae served as the prototype for this *type*. Soon, similar vessels were manufactured also in other Greek and Colchean centers of the Eastern and Southeastern Black Sea regions from Trapezous to Abkhazia. They differed only in fabric, but not in shape. All these containers belonged to the same morphological *type*, which later went through considerable changes and continued to be produced until the Early Middle Ages. So far, no reliable correlation between the fabric and the morphological characteristics of the Colchidian amphorae has been established, so that it is still not possible to securely identify their local variations.<sup>40</sup>

The clay mass used for Colchidian vessels contains a large amount of iron compounds. These amphorae were fired in a neutral or slightly reducing atmosphere, and this is why their color usually varies from reddish-brown through brown to dark brown (Pl. IV.16–24). Colchidian amphorae were manufactured throughout the entire Eastern and Southeastern region, and while the clay matrix of the clay mass used for their production was almost the same everywhere, the mineral inclusions differed from place to place, which is compatible with the geological complexity of this mountainous area. Two main fabrics can be identified in this group of amphorae. Fabric 1 includes pyroxene and basaltic sand as the main minerals used for tempering (Pl. IV. 16–19). These additives are very similar to the additives in the fabric of the Sinopean ceramics. Outcrops of basalt and deposits of black sand occur in many places in the Southern (Sinope, Amisos, Trapezous, and others) and Eastern (Adjaria) Black Sea regions.

Fabric 2 is much more variegated. Its temper consists of grains of minerals and fragments of groundmass of various plutonic (granite, diorite), volcanic (basalt, liparite), and sedimentary (sandstone, shale) rocks, as well as of some other minerals that are rather rare in the Pontic region (such as olivine) (Pl. IV.21–4). This may be either sea or river sand of a complex composition, which is found in many areas of the Eastern Black Sea region. A similar temper is characteristic of local pottery and pithoi manufactured in Adjaria, Abkhazia, and in some other places.

Within petrographic group 2, several subgroups can be identified (Pl. IV.20–4), which differ from each other both in terms of qualitative composition of the

temper and the quantity of the represented minerals and rocks. These subgroups reflect the differences in geological deposits of various parts of the Central and Northern Colchis, where vessels associated with fabric 2 were produced. There is no apparent correlation between the morphological varieties and the fabrics of Colchidian amphorae of the Hellenistic and early Roman periods. A different temper could have been used in the production of containers of the same shape, and vice versa.<sup>41</sup> From the second century CE onwards, vessels associated with fabric 2 became predominant in the region.

In total, five morphological and chronological *sub-variants* of the Colchidian (brown-clay) amphora *type* existed during the period in question:

- a *sub-variant* B<sub>2</sub> (Fig. 5.2.14) – the middle of the first century BCE to the late first century CE;
- b *sub-variant* B<sub>3</sub> (Fig. 5.2.15) – the second (?) and third century CE;
- c *sub-variant* C<sub>1</sub> (Fig. 5.2.16) – the late first to the early third centuries CE;
- d *sub-variant* C<sub>2</sub> (Fig. 5.2.17) – the late second to the early fourth centuries CE;
- e *sub-variant* D<sub>1</sub> (Fig. 5.2.19) – the late third to the fourth centuries CE.

In the Bosporan Kingdom, the manufacturing of amphorae started in around the middle of the second century CE, when the Bosporan centers entered the Black Sea market as exporters of wine and fish products. The local amphorae were most likely produced in several centers of the European and Asiatic Bosphorus (Pantikapaion, Myrmekeion, Phanagoreia, and others), but they have not been securely identified yet.<sup>42</sup> The main variety of such amphorae is a large vessel, with smooth outlines, a pronounced rim, diversely grooved handles, and a conical toe. They differ in size, fabric, and details of the profile parts.<sup>43</sup> A new class of vessels that appeared in the Western Black Sea region and some other areas in the second half of the first century CE may have served as the prototype for these amphorae.<sup>44</sup>

Thus, in the first century BCE, transport vessels of several pan-Roman *classes* were produced, along with amphorae of traditional shapes, in Sinope and Herakleia, and later also in the Bosphorus. Their production in the South Black Sea region started after the Roman conquest of this territory and was probably associated with Rome's political and economic expansion. The fact that Herakleia and Sinope received Roman colonies must have been of particular importance, in this respect (Plin. *HN* 6.2; Strabo 12.3.6; 12.3.11).<sup>45</sup> Most likely, the production of wine that was made following the standard recipes was initially organized only in these colonies, as was also the manufacturing of amphorae of pan-Roman varieties, which did not have any analogies among the local Hellenistic vessels. At the same time, the production of amphorae of traditional shapes continued in the *poleis*. These developments explain the large number of coexisting varieties of containers produced in the South Pontic centers in the first century CE.<sup>46</sup>

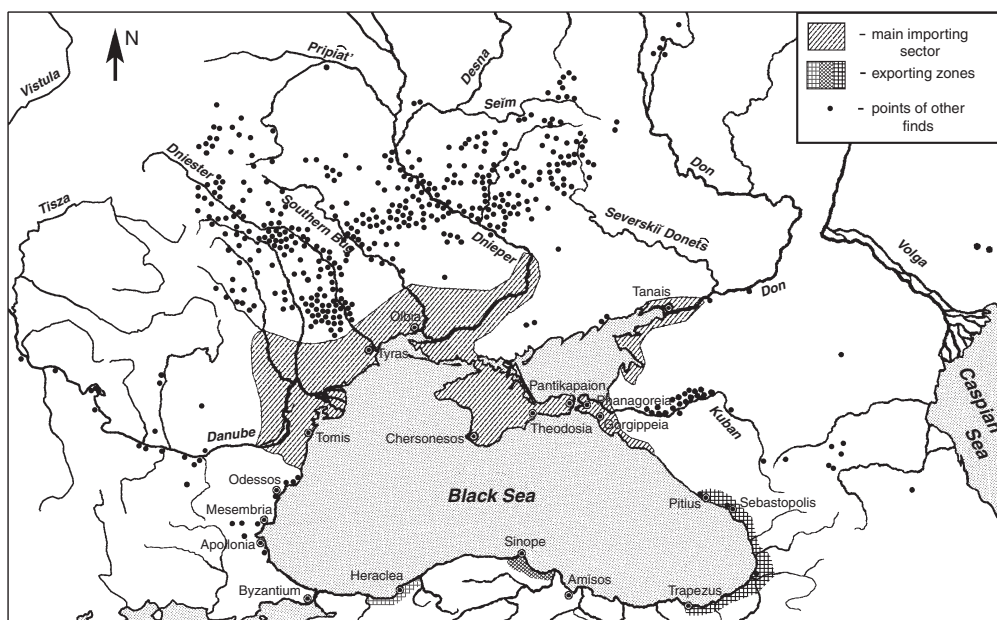


Fig. 5.3. Distribution of the Herakleian, Sinopean, and Colchidian amphorae in the Black Sea region from the second half of the first century BCE to the fifth century CE.

(The map includes information from Kropotkin and Kropotkin 1988, fig. 1; Dyczek 2001, 58–60, fig. 22; 217, fig. 138; 224, fig. 144; Bjelajac 1996, 66–7.) The borders of the main importing sector are given for the period when trade flourished.

#### GEOGRAPHICAL DISTRIBUTION OF PONTIC AMPHORAE

The entire Black Sea region can be conventionally divided into two zones – the one exporting commodities in amphorae and the other importing them. The exporting zone included the southern and eastern coasts of the Black Sea from Heracleia in the west to Abkhazia in the east (Fig. 5.3). Here, local amphorae prevail among the finds of transport vessels. The rest of the coast comprised the importing zone, where imported amphorae are the most common finds. It also included the Bosphorus and some sites in Colchis, where imported containers continued to prevail even after the local amphora production had started.

#### *The Importing Zone*

Two factors are important for the study of the volume and dynamics of the trade in question: the overall percentage of amphorae among all ceramic finds and the percentage of amphorae produced in each particular center in the entire assemblage of transport vessels. The first index represents the intensity of trade with the centers of Classical antiquity and the degree of penetration of

the local market by Greek food products. The second index shows the intensity of connections with particular exporting centers. The number of recovered amphora fragments does not reflect directly the actual amount of imported products, but only the relative amount of imports from various centers and the dynamics of this process. To determine the absolute volume of imports one needs to calculate the capacities of various amphorae and the number of such vessels imported over any particular period.<sup>47</sup>

Amphora fragments are the most numerous ceramic finds at all Greek and barbarian sites along the Black Sea coast. Farther inland, in the barbarian territories, their number is much lower.<sup>48</sup> Detailed calculations have been performed only for a few sites in the importing zone. Thus, for two sectors of Tanais – an *emporion* of the barbarians in the Lower Don area – amphora fragments comprise 77–96 percent of all ceramic finds in the Roman layers. This figure increases in the layers of the first to second century CE.<sup>49</sup> For the neighboring Maeotian settlements of Nizhne-Gnilovskoe and Podazovskoe, this figure is much lower, i.e., 55–64 and 52 percent, respectively.<sup>50</sup>

The percentage of amphorae is slightly lower at the Late Scythian settlements of the Northwestern Crimea (dating from the first century BCE to the first century CE). In the layers of the Central Tower at the settlement of Karatobe, it varies from 55 to 80 percent, increasing with time. At the Late Scythian settlement of Chaïka, it is 66 to 77 percent. In the Roman layers of the settlements of Olbia's *chora*, amphora fragments comprise 72.3–83.5 percent, while for Olbia itself this figure is about 68 percent, increasing to 76 percent in the second half of the third century CE.<sup>51</sup>

The waste layers at the site of the capital of the Bosporan Kingdom, Pantikapaion, revealed fewer amphora fragments.<sup>52</sup> In the lower layer (dating from the first century CE to the middle of the second century CE) they comprise only 46 percent, and in the upper layer (dating from the second quarter of the second to the first half of the third centuries CE), up to 60 percent. These figures (especially those for the lower layer) are significantly lower than those for the contemporaneous rural sites in the region.

For other settlements in the importing zone, these figures can only be estimated. Amphora fragments clearly comprise over 50 percent of all the ceramic finds at most rural Greek settlements, at the coastal and some inland Late Scythian settlements in the Crimea, and at some Maeotian sites in the Lower Don area. For some other inland Late Scythian settlements in the Crimea and in the Lower Dnieper area, as well as for the large Greek urban centers, individual Maeotian settlements in the Lower Don area, some barbarian sites in the Lower Danube area and northeastern Thrace, and coastal settlements of the Eastern Black Sea region, this figure is about 50 percent. For most barbarian settlements in Dobrudja, eastern Getic sites, individual southern settlements of



the Cherniakhov Culture, some Maeotian sites of the Eastern Azov Sea area, and other places, it varies from 20 to 40 percent.<sup>53</sup>

The importing zone of the Black Sea region can be conventionally further divided into two parts – the main sector and the sector of sporadic finds (Fig. 5.3). This division is based on the two factors mentioned above – the overall percentage of amphorae among all ceramic finds and the percentage of amphorae produced in Pontic centers in the entire assemblage of transport vessels.

### **The Main Importing Sector**

The main importing sector encompasses the sites where amphora fragments comprise no less than 25 percent of all ceramic finds and the Pontic amphorae comprise over 20 percent of these transport vessels.<sup>54</sup> The population of this sector had regular contacts with the Pontic exporting centers and consumed products transported in amphorae in their everyday life. In the first century BCE to the first half of the third century CE, this sector included all Greek and coastal barbarian settlements of the Northwestern, Northern, and Northeastern Black Sea region, as well as the Late Scythian settlements of the Lower Dnieper area and the Crimea, the Maeotian sites of the Eastern Azov Sea and the Lower Don areas, and some other sites. Its northern boundary, in general, went along the border of the steppe zone and sometimes reached the wooded steppe zone (Fig. 5.3).

The eastern border of the main importing sector, in general, coincided with the eastern boundaries of the Bosporan Kingdom. Not many fragments of imported amphorae come from the few barbarian sites located in the territories east of it, as far as Colchis, and these imports are mostly Colchidian. Colchis itself also imported Sinopean and Herakleian products in containers during the Roman period, despite the local production of wine (which was exported in local amphorae).

At the sites in the Western Black Sea region, the percentage of Pontic transport vessels decreases in the direction from north to south along the coast, as well as farther inland. The main importing sector here included the coastal Greek and barbarian settlements of Dobrudja and southeastern Dacian and Getic settlements.<sup>55</sup> Farther up along the Danube, finds of Pontic amphorae are less common; they are also rare in the territory of Thrace (Fig. 5.3).<sup>56</sup>

Thus, during the period when trade flourished (from the reign of Hadrian and to the Gothic Wars of the third century CE), the main importing sector encompassed Greek settlements and barbarian coastal sites located in the territory from the western border of Dobrudja to the eastern boundaries of the Bosporan Kingdom. In addition, it included many barbarian sites in the steppe zone of the Northern Black Sea region and in the northern part of the Western Black Sea region (Fig. 5.3).



### **The Sector of Sporadic Finds**

The sector of sporadic finds is marked by the sites where the percentage of discovered amphorae does not correspond to at least one of the criteria used for the main importing sector, as mentioned above. The population of the sector of sporadic finds consumed the products transported in amphorae only from time to time and did not have stable connections with the exporting centers of the Black Sea region. This sector included barbarian territories that lay farther inland and sites that traded with other regions.

During the period when the trade reached its highest level, the sector of sporadic finds surrounded the main importing sector and included the Bulgarian coast of the Black Sea, the Danube area up to modern Belgrade, the territory of Moldova, and almost the entire territory of Ukraine, as well as southern parts of Belorussia and southern and southwestern territories of the European part of Russia (Fig. 5.3). Most finds here come from the settlements located in the basins of large rivers in the wooded steppe zone, with the exception of the Don. In the barbarian territories, Pontic amphorae have been found at sites associated with the Late Scythian, Middle and Late Sarmatian, Maeotian, Zarubineț, Pshevor, Velbar, Cherniakhov Cultures, as well as the culture of the Carpathian Kurgans and the Late Zarubineț, Kiev, Geto-Dacian, and other cultures.<sup>57</sup> In the east, fragments of Pontic amphorae have been found in all areas of the North Caucasus as far as Dagestan and even in western Kazakhstan.<sup>58</sup> In the Mediterranean region, individual Pontic amphorae and amphora fragments have been discovered in the Aegean, in Israel, and west of it, as far as Italy.

### **Finds of Herakleian Light-Clay Amphorae**

Herakleian light-clay amphorae are the most common type of transport vessels found in the importing zone. They have been discovered at all of the settlements in the main sector, where they comprise up to 85 percent (or more) of all amphora fragments.<sup>59</sup> In fact, the finds of Herakleian amphorae mark the boundaries of the importing zone and its main sector. Their detailed typology and chronology allow one to trace the changes of these boundaries in time.<sup>60</sup>

Light-clay amphorae of the middle of the first century BCE to the early first century CE (S Ia, S II, and S III) (Fig. 5.1.1, 3, 6–8) have been found at settlements of the main importing sector and beyond, including all coastal settlements in the Northern Black Sea region, Late Scythian settlements in the Crimea and Lower Dnieper area, early Maeotian settlements in the Lower Don and Eastern Azov Sea areas, and some sites in Dobrudja. Apart from the main sector, such amphorae have only been sporadically found along the Thracian coast, at Getic settlements, and at the settlements of the Zarubineț Culture in the wooded steppe zone, as well as at the Maeotian sites of the Kuban region.

Herakleian amphorae of the second quarter of the first to the first quarter of the second centuries CE have been found in larger quantities and across a larger territory (S Ib, S IVA, and S IVB) (Fig. 5.1.2, 9–12). The main sector expanded around that time and included Getic sites and southern and eastern Dacian settlements (where vessels of *variant* S IVB are common finds in the layers associated with destructions caused by the Dacian Wars), as well as Sarmatian burials in the Crimea and in the Azov Sea and the Lower Don areas. In the sector of sporadic finds, amphorae dating to this period have been recovered at the sites of the Roman camps in Moesia, at the settlements of the Zarubineŭs Culture in the wooded steppe zone from Moldova to the Middle Dnieper area, and at some sites in the Upper Don area. The most northern find of this kind is a fragment of a Pseudo-Coan amphora discovered in the southern part of the wooded zone of Belorussia.<sup>61</sup> Such vessels also appear in Sarmatian burials in the Northwestern Black Sea region and at the Alan sites in the North Caucasus. A few Herakleian amphorae dating to this period and later have also been found in Colchis (at Pityous, Sebastopolis, Apsaros, and other sites),<sup>62</sup> and their number increases for later periods.

In the second quarter of the second century CE to the second quarter of the third century CE, the circulation area of Herakleian transport vessels continued to expand (*variants* S IVC, S IVJ, and S IVD) (Fig. 5.1.13–15). Amphorae of *variant* S IVD were the most common type of containers in the Black Sea region during the first half of the third century CE, and their finds usually mark the extent of the area of circulation of amphorae in this region, in general (Fig. 5.3). At the same time, the boundaries of the main sector remained almost the same.

In the sector of sporadic finds, Herakleian imports appeared in the territories of the “free” Dacians and the Carpi. In the north, they reached as far as the foothills of the Carpathian Mountains and the upper reaches of the Dniester (the culture of the Carpathian Kurgans) and the Western Bug (the Pshevor Culture). Amphorae have also been discovered at settlements of the Late Zarubineŭs Culture and the Kiev Culture in the Middle Dnieper area, as well as at sites of the Sarmatian period in the Upper Don area. The most northern finds of such vessels come from the wooded zone of Russia. Very few amphora fragments of this kind have been discovered at sites of the Early Cherniakhov Culture and in Sarmatian burials in the territory between the Don and the Volga. They have also been found at the Maeotian and Alan sites in the North Caucasus as far as western Dagestan. The most eastern discovery comes from the Sarmatian burial complex of Lebedevka in western Kazakhstan.<sup>63</sup> Individual Herakleian amphorae of *variants* S IVC–S IVE are also known from the Mediterranean (the Athenian Agora, the Villa of Dionysius on Crete, and other sites), as far as Italy (the *Thermae Nuotatore* in Ostia).<sup>64</sup>

After the beginning of the Gothic Wars, the import from Herakleia (late amphorae of *variant* S IVD and early amphorae of *variant* S IVF) (Fig. 5.1.16,

17) decreased dramatically. This development resulted in an abrupt shrinkage of the importing zone in the second half of the third century CE. During this period of crisis, the only sites that correspond to the criteria used for the main importing sector, as mentioned above, are the coastal settlements that either were not destroyed or were quickly rebuilt (including Olbia, Chersonesos, a number of Bosporan cities, some barbarian sites in the Crimea, and some other sites) and individual coastal settlements of the Cherniakhov Culture.<sup>65</sup> Farther inland, in the barbarian territories, sporadic finds of later amphorae of *variant* S IVD have been reported for no more than 10 percent of the settlements of the Cherniakhov Culture and Kiev Culture, as well as for a few burials of the nomads. In the north, individual discoveries have been made as far as the south of the wooded zone.<sup>66</sup> A slight increase in Herakleian import into the Northern and Western Black Sea regions can only be witnessed starting from the early fourth century CE (*variants* S IVF and S IVE) (Fig. 5.1.17, 18).<sup>67</sup>

#### QUANTITATIVE CHARACTERISTICS AND DYNAMICS OF PONTIC AMPHORA IMPORTS

The material from four settlements in two parts of the Northern Black Sea region, as well as from individual complexes at some other sites, has been used for the study of the dynamics of Pontic imports. The four case studies in question are the sites of Chaika and Kara-Tobe in the Northwestern Crimea and Tanais and Nizhne-Gnilovskoe in the delta of the Don.<sup>68</sup>

##### *Herakleian Amphorae*

The material from the Late Scythian settlements of Chaika and Kara-Tobe reflects the process that resulted in Herakleia's domination of the Black Sea market. The amount of light-clay amphorae among transport vessels found in the layers dating from the middle of the first century BCE to the early first century CE increased from 0 to 50 percent in Chaika and to 65–70 percent in Kara-Tobe. The percentage of these amphorae in the layers of the later periods remained stable.

The excavated strata of the settlements in the Lower Don area date from the middle of the first to the middle of the third centuries CE and represent a different situation. Until the middle of the second century CE, light-clay amphorae and their fragments comprised 75–80 percent of all containers in Tanais. Afterwards, this dropped abruptly to 57–66 percent, which must have been associated with the beginning of the Bosporan production of amphorae.

In the Maeotian settlement of Nizhne-Gnilovskoe, the light-clay amphora fragments also prevail. They comprise 76–95 percent, which is more than in the contemporaneous layers in Tanais. In the latest layers, this number increases

and reaches almost 100 percent. The commodities transported in amphorae to the Maeotian settlements of the Lower Don area were less diverse than those imported into Tanais. This is particularly obvious for the final stage of the existence of these settlements, when only inexpensive Herakleian products were brought there in amphorae.

The percentage of Herakleian transport vessels in the waste layers at the site of Pantikapaion, mentioned above, is 1.5–2 times lower than in the settlements of the Lower Don area.<sup>69</sup> In the lowest layer, the fragments of Herakleian amphorae comprise slightly over 50 percent of all finds of containers; in the uppermost layer, this decreases to 40 percent. These changes correspond to those observed at the site of Tanais.

In the sector of sporadic finds in the Black Sea region, the Herakleian amphorae also prevail. Out of 414 transport vessels recovered from 111 barbarian sites within this sector, 96 percent were Herakleian.<sup>70</sup> In the Roman military camp at the site of Novae (in the Danube area), light-clay amphorae also form the largest group and comprise 19 percent of all containers.<sup>71</sup>

It is noteworthy that the percentage of light-clay amphorae at contemporaneous sites of different types within the same region varies: it is higher in the rural Greek and barbarian settlements and lower in the large urban centers.<sup>72</sup> In Pantikapaion and Chersonesos, the percentage of light-clay containers is rather low, although they still form the largest group among all amphora finds.<sup>73</sup> This fact can be easily explained: large urban centers of the Northern Black Sea region, such as Chersonesos, Pantikapaion, Phanagoreia, Gorgippeia, and others, had regular trade relations with a larger circle of exporters than smaller Greek settlements (and even more so barbarian settlements) did. The population of these centers was interested in (and able to pay for) not just ordinary but also expensive wines, as well as olive oil. Therefore, the market for such imports there was more diverse. This is why the percentage of inexpensive products (such as those from Herakleia – see below) was lower on the markets of the large Black Sea centers. And, in contrast, the percentage of inexpensive wines in rural Greek and barbarian settlements was higher,<sup>74</sup> while olive oil was hardly consumed by the latter. This observation becomes particularly clear if one compares the finds from Tanais with the contemporaneous material from the surrounding territories.

Only in Olbia is the percentage of the light-clay amphora fragments discovered in the city not different from that of the fragments found at the settlements of the *chora*. Despite Olbia's relative prosperity during Roman times, only one third of the territory of the earlier Hellenistic city was populated. From Dio Chrysostom's account we also have a picture of the city's pitiful appearance (36.6), so that it is possible that its inhabitants were not much better off than the population of the *chora*.

Thus, in the main importing sector, Herakleian amphorae comprise, with rare exceptions, at least 40 percent of all transport vessels. This decreases

abruptly at sites located southeast of Gorgippeia, towards the upper reaches of the Danube and its arms, and south of Dobrudja (Fig. 5.3). In the second half of the first century BCE to the early first century CE, Herakleian imports into this sector were increasing steadily. In the second quarter or the middle of the first century CE, they reached their highpoint and remained at this level until about the middle of the second century CE. After that time, the percentage of light-clay amphorae at Bosporan sites and in the neighboring areas of the main importing sector went down slightly. This development was associated with the spreading of wines from the Bosphorus, Eastern Black Sea region, and non-Pontic centers. However, light-clay amphorae still prevail among the finds of containers of the second half of the second and the first half of the third centuries CE at the majority of sites in the region.

At the same time, the geographical area of distribution of light-clay amphorae also expanded and reached its maximum extent by the end of the second century CE. In the second half of the second century CE, some changes occurred in the trade in Herakleian wine, when an ever-larger part of it went to barbarian territories, via Greek centers. The number of Herakleian amphorae found at each individual barbarian site is not high, but there are hundreds of such sites. At the same time, the percentage of such amphorae at Eastern Black Sea sites increased, while they also made their appearance in the Mediterranean region.

### *Sinopean Amphorae*

The finds of Sinopean amphorae of the Roman period are much rarer in the main importing sector, but they have been reported for almost all areas within the sector. Transport vessels of the first century BCE and the first century CE (Sin Ic, Sin III, and Sin IVa) (Fig. 5.2.1, 2, 5) have been found at all Greek sites, at the Late Scythian settlements in the Crimea and in the Lower Dnieper area, and at the rural sites of the European and Asiatic Bosphorus, as well as at the Maeotian settlements in the Lower Don area. There is no information about such finds in the Western Black Sea region or outside the main sector.

The Sinopean amphorae of the second to the middle of the third centuries CE are even rarer (Sin II, Sin IVb, B Snp I–III, and C Snp I–I) (Fig. 5.2.3, 7, 9–13). They have been found in practically all areas of the main sector, but only at a few urban and rural sites. The number of such finds is, however, considerably higher in the Asiatic Bosphorus. For example, Sinopean amphorae (Sin IVb, B Snp I–III, and C Snp I–I) recovered from the complexes in the destruction layers of the middle of the third century CE in Gorgippeia comprise over 10 percent of all transport vessels found there.<sup>75</sup> Fragments of such amphorae have also been discovered at Pityous, Apsaros,<sup>76</sup> and Sebastopolis in the exporting zone.

After the Gothic Wars, the influx of Sinopean amphorae Sin VI, B Snp I–III, and C Snp I–I (Fig. 5.2.9–13) into the importing zone continued. A small number of fragments of such amphorae have been found mostly in the regional centers (Tyras, Olbia, Chersonesos, Pantikapaion, Tyritake, and others), including the Western Black Sea coast (Murighiol, Topraichioi, Mesembria, Iatrus, possibly Dimum, Novae, and others), where they comprise up to 4–6 percent of the containers from the fourth century CE.<sup>77</sup>

Sinopean amphorae, although they are relatively rare, remain the second most numerous category of transport vessels at sites of the importing zone. At the Late Scythian settlements of Chaïka and Kara-Tobe in the Northwestern Crimea, they comprise about 10 percent of all amphora finds, and this figure remains almost unchanged for the entire period of the existence of these settlements. In the waste layers at the site of Pantikapaion, the corresponding figures are lower: about 7 percent in the lowest layer and about 3.7 percent in the uppermost layer. At the sites of the Lower Don area, these vessels also comprise less than 10 percent of all amphora finds.<sup>78</sup> The estimated percentage of Sinopean amphorae at other sites in the Northern Black Sea region does not contradict our conclusion that the import of Sinopean products into the region was at a relatively low rate, but nevertheless remained steady. The amount of the Sinopean amphorae at most sites must be, indeed, close to 10 percent.

The dynamics of Sinopean imports into the Western Black Sea region are different: there is no information about finds of Sinopean amphorae of the first century BCE to the second century CE.<sup>79</sup> Sinopean vessels (Snp B) (Fig. 5.2.10–12) appeared in this region in small quantities (less than 2 percent of all amphorae) only in the first half of the third century CE, at the earliest.<sup>80</sup>

At the sites of the Eastern Black Sea region (the exporting zone), the earliest finds of Sinopean containers of the Roman period date to the end of the first century CE (*type* Sin II) (Fig. 5.2.7). From that time onwards, their numbers increased rapidly, and the Gothic Wars did not have any significant effect on the trade relations between these two regions. Based on the materials from the fortress at Sebastopolis, in the middle and the second half of the third century CE Sinopean amphorae may have comprised up to 35 percent of all transport vessels (Sin IVb, Sin VI, B Sin I–III, and C Snp I–I) (Fig. 5.2.3, 9–13). In the post-Gothic period, Sinopean amphorae also made their appearance in the Aegean.<sup>81</sup>

### *Colchidian Amphorae*

Brown-clay amphorae have been discovered almost everywhere in the Black Sea region and beyond, but they are even rarer than the Sinopean vessels. Fragments of the early amphorae of *sub-variant* B<sub>2</sub> have been found at most

Greek and barbarian sites in the main sector. The number of such finds decreases west of Colchis. The westernmost sites where individual vessels of this kind have been discovered are the Greek cities of Dobrudja.<sup>82</sup>

The area of circulation of the brown-clay amphorae of *variant* C had been expanding from the late second century CE onwards. Most finds come from sites located in the Asiatic Bosphorus, but there are also some from the European Bosphorus, Greek and Late Scythian sites of the Crimea, and Olbia. After the Gothic Wars, the amphorae of varieties C<sub>2</sub> and D (Fig. 5.2.17–19) made their appearance at many coastal and some inland North Pontic sites, especially in the eastern part of the Northern Black Sea region (the Kuban area, the Bosphorus, Chersonesos, and other places).<sup>83</sup> They were produced in Abkhazia, whose centers did not suffer from the attacks of the Goths. The amphorae of *sub-variant* D<sub>1</sub> have also been found in the coastal centers of the Western Black Sea region (Histria, Mesembria).

There is almost no information about finds of Colchidian amphorae in the sector of sporadic finds, but it does not necessarily mean that they have not circulated there at all. Some amphora fragments of *sub-variants* B<sub>2</sub> and C<sub>1</sub> have been found in Amisos in the Southern Black Sea region. Especially noteworthy is the discovery of three early amphorae of *sub-variant* B<sub>2</sub> in the complex that preceded the construction of the Trajaneum in Pergamon.<sup>84</sup>

The percentage of brown-clay amphorae from the layers of the four Northern Black Sea sites used as case studies is rather low. In the settlements of Chaïka and Kara-Tobe, they comprise about 5 percent of all transport vessels. Finds from Kara-Tobe also suggest that the import of such amphorae was increasing from the late first century CE onwards.<sup>85</sup>

Material from the waste layers at the site of Pantikapaion indicates the same tendency. The presence of brown-clay amphorae increases here from 2.3 to 3.3 percent in the layers of the second quarter of the second to the first half of the third centuries CE. Taking into account the overall increase of the percentage of transport vessels among the ceramic finds in the uppermost layer, these numbers indicate almost a doubling in imports of Colchidian amphorae.

The sites in the Lower Don area yielded even fewer brown-clay amphorae. Not all layers contained fragments of such vessels and, in total, they comprised no more than 2–3 percent of all amphora finds.

By general estimate, the finds of brown-clay amphorae in the layers of the first century BCE to the first half of the second century CE at other Black Sea sites are not numerous, but regular. More of them have been discovered in the Northeastern Black Sea region than elsewhere. In the second century CE, the situation changed and the percentage of brown-clay amphorae increased abruptly at the Bosporan sites on the Caucasian coast, so that by the middle



of the third century CE they may have comprised up to 30–60 percent of all transport vessels.<sup>86</sup>

On the Eastern Black Sea coast, fragments of brown-clay amphorae are prevailing already in the Hellenistic and Early Roman layers. The situation remains the same also for the later periods.<sup>87</sup> In the fortress at Sebastopolis, Colchidian containers of the third century CE comprise 33 percent of all amphora finds.

Thus, the finds of brown-clay amphorae are not very numerous at most sites of the main importing sector. In the layers of the first century BCE and the first century CE, they rarely comprise more than 5 percent of all transport vessels. This number is lower for sites located farther from Colchis. In the late first to the second centuries CE, the percentage of Colchidian amphorae seems to have increased at some sites. This tendency becomes clearer from the end of the second century CE onwards and indicates the growth in export of brown-clay amphorae and the expansion of the area of their circulation, which is particularly apparent for the Late Roman period.

As we have seen, Pontic products clearly prevailed among the commodities transported in amphorae to the importing zone. At some places, fragments of Pontic containers comprise over 90 percent of all amphora fragments. Different centers played different roles in this trade. Based on the amphora finds, Herakleia alone must have met from half to three-quarters (and more) of the demand for imported wine. We can even speak of a Herakleian monopoly on wine imports into some parts of the Black Sea region. The combined contribution of Sinope and Colchis in terms of imported products was relatively low and probably did not exceed 15 percent.

The study of the geographical and quantitative distribution of Pontic amphorae in the first century BCE to the middle of the third century CE shows that the trade relations of the centers located in the main importing sector were steady throughout this period; the directions of these relations remained the same during the entire period, only the volume of products imported into various areas was changing. The boundaries of the main importing sector also remained almost unchanged from the late first century CE onwards. Herakleian and Sinopean products were imported into all parts of this sector, while Colchidian products mostly went to the Northeastern Black Sea region. Contemporaneous assemblages of amphorae from various parts of the main importing sector are similar in terms of their composition and include all mass-produced varieties of Pontic amphorae, while the differences lie only in the quantitative aspect.

The changes in the volume of imports into the sector of sporadic finds resulted, in addition to local quantitative changes, in the transformation of the boundaries of the sector itself. In general, the area of circulation of Pontic transport vessels continued to grow until the beginning of the Gothic Wars and shrank abruptly right after them. Until the middle of the third century CE,



imports into the barbarian territories were increasing steadily, while more and more tribes and peoples became involved in the trade.

#### THE CONTENT OF PONTIC TRADE

For the reconstruction of the market, we need to analyze the export capabilities of the Pontic centers and the content of their trade. Amphorae were usually used for the transportation of agricultural products, such as wine and olive oil. To produce them, specific natural resources and climatic conditions were required. In the Southern Black Sea region, the landscape is mostly mountainous: there, wooded mountains, difficult to traverse, border from the south a relatively narrow hilly coastal plain. Not much of the land in this region can be used for agriculture, and the conditions are more suitable for viticulture and gardening, rather than crop cultivation.<sup>88</sup> Therefore, the products of the former activities, i.e., wine and olive oil, must have been the main commodities exported by the southern Pontic centers in great amounts, and both were transported in amphorae. However, the conditions in the two main exporting centers – Herakleia and Sinope – differed considerably.

In the area of Herakleia, there was “an abundance of grapes which yield a good sweet wine” (Xen. *Anab.* 6.4.6).<sup>89</sup> Herakleian wine was very popular in the Northern Black Sea region in the fourth and the early third centuries BCE. During the Roman period, Herakleia, most likely, started to produce wine following the “Coan” recipe, for which ordinary grapes and sea water were used (Cato *DA* 112). This inexpensive wine was probably transported in the pseudo-Coan amphorae of *type* S I.<sup>90</sup> There is no information about the specific characteristics of the wine that was transported in narrow-necked Herakleian amphorae, which prevailed among the imports into the Northern Black Sea region from the first century CE onwards, but probably this was the wine to which the Olbiopolitai referred as “bad” – οἶνον πονηρὸν (Dio Chrys. 36.25).

Herakleia did not export olive oil in significant amounts. Ancient sources report that cultivated olive trees did not grow around Herakleia and do not mention any such trees growing west of Sinope (Xen. *Anab.* 6.4.6; 6.6.1; Strabo 2.1.15; 12.3.12; 12.3.30).<sup>91</sup> Different kinds of mass-produced light-clay amphorae were used exclusively for wine, which is confirmed by the fact that they are often found in the remains of funerary feasts and at the sites of barbarians, and these people consumed hardly any olive oil.

At the same time, the city had only one area in its vicinity where crops were grown – the valley of the river Lycus (Memnon, *FGrHist* 434 F 34.2).<sup>92</sup> The local grain production did not always satisfy the needs of Herakleia’s population. Therefore, from time to time, Herakleia experienced shortages of bread and needed to import grain (Memnon, *FGrHist* 434 F 17). This need probably prompted the intensification of trade between Herakleia and the Northern

Black Sea region in the fourth to the early third century BCE, as can be deduced from the finds of Herakleian amphorae in the region. And during some periods Herakleia not only satisfied its own demand for bread by means of this trade, but also was able to re-export wheat to Greece or help its own neighbors when they, too, had a shortage of food supplies (Xen. *Anab.* 6.2.3; Memnon, *FGrHist* 434 F 16.2).<sup>93</sup>

The natural resources of Sinope were somewhat different. The landscape there is also mountainous and not very suitable for growing crops, but the climate is good for the cultivation of olives.<sup>94</sup> Strabo described large territories around Sinope where olive trees grew (2.1.15; 12.3.12). At the same time, ancient sources do not mention the existence of viticulture or wine-making in Sinope. Archaeological finds also point towards the prominence of the cultivation of olives and the production of olive oil in Sinope's agriculture and suggest that olive oil was the main export product.<sup>95</sup> Viticulture, wine-making, and growing of crops were therefore less important, and this was the main difference between the export capabilities of Sinope and Herakleia.

In the importing zone, there must have been much less demand for olive oil than for wine. Olive oil was mostly consumed by the Greek or Hellenized local population, while barbarians used it only sporadically and to a very small extent.<sup>96</sup> In addition, the average amount of olive oil consumed per person was much lower than that of wine. Therefore, the amount of Sinopean olive oil transported to the importing zone must have been much smaller than that of Herakleian wine, but in the end, the overall costs of both imported commodities did not substantially differ.

The distribution patterns of Herakleian and Sinopean amphorae in the Northern Black Sea region confirm this observation. As was mentioned before, Sinopean vessels comprised no more than 10 percent of all amphorae in the Northern Black Sea region. Not all of them were used for transporting olive oil. Despite the fact that wine production was less important for Sinope, it did export some wine. Pseudo-Coan amphorae of *type* Sin III and narrow-necked amphorae of *type* Sin IV were undoubtedly used for the transportation of wine. Amphorae of the *types* Sin I, Sin II, Sin VI, and "group" Snp C were probably used as containers for both products, while vessels of "group" Snp B were only used for olive oil (Fig. 5.2).

Despite the fact that not much of the land around the city was suitable for the cultivation of crops, Sinope might have had better access to grain than Herakleia did. There were some grain-producing areas and valleys located near the boundaries of Sinope's territories (Strabo 12.3.13; 12.3.15–16; 12.3.38). This circumstance made it easier for Sinope to obtain grain, possibly in exchange for olive oil or wine. During wartime, however, Sinope also experienced shortages of food supplies; still, it must have depended less on

exports from the Northern Black Sea region than Herakleia did (Memnon, *FGrHist* 434 F 37.6).

In Trapezous and Colchis, which transported their products in brown-clay amphorae, olives did not grow either. Therefore, the main contents of the brown-clay amphorae could have only been wine. But the overall volume of Colchidian exports was even lower than for Sinope.

Thus, Herakleia was the main producer of wine among those Black Sea centers that also manufactured amphorae during the period in question. This conclusion agrees with the fact that Herakleian amphorae are the most numerous finds among the transport vessels in the importing zone.

To calculate the overall amount of wine transported into the importing zone one needs to take into consideration several factors: the amount of wine consumed by various categories of the population, the number of Greek and barbarian inhabitants in the region, the capacity of amphorae of various types and their percentage in the assemblage of transport vessels from the sites of the region, as well as the volume of local wine production. The amount of wine transported into the importing zone at the time when the trade reached its highest point in the first century CE to the first half of the second century CE has been roughly estimated at 1,350,000 to 2,000,000 dkl a year.<sup>97</sup> The Pontic centers delivered, on average, 79 percent of this amount, i.e., about 1,000,000 to 1,580,000 dkl a year. Herakleian wine comprised 53–86 percent of the total amount of imported wine (on average, 69 percent), i.e., on average, 897,000 to 1,380,000 dkl. For Sinope and Colchis, these figures are, respectively, 5–10 percent (on average, 7.5 percent, or 93,000 to 142,000 dkl a year) and 2–5 percent (or, on average, 28,000 to 65,000 dkl a year).

Was it possible for Herakleia to produce so much wine? The potential volume of wine production has been estimated for the vineyards of only one center in the Black Sea region – namely, Chersonesos. Based on the calculations presented by various scholars (and these calculations differ considerably from each other) and on the number of land plots in the *chora* of Chersonesos, the city may have annually produced from 700,000–800,000 to 1,600,000 dkl of wine for sale.<sup>98</sup> As mentioned above, Herakleia must have exported about 897,000–1,380,000 dkl of wine a year. This amount may have been produced by 249 to 775 average-size households of the same type as those in Chersonesos. However, the climate and soil in Herakleia were more suitable for viticulture, and the *chora* of Herakleia was much larger than the immediate *chora* of Chersonesos. Therefore, Herakleia was capable of producing even the maximum possible amount of wine stated above.

In order to export Pontic wine, 330 to 1,345 ship voyages a year were required, depending on the freight-carrying capacity of each ship. Taking into account the time that different types of ships would need to accomplish one delivery, 18 to 269 ships of medium or small size were required to

transport this amount of wine during each navigation season.<sup>99</sup> Since most of the polities in the Black Sea region were involved in this trade, these numbers look quite realistic: the harbor of Theodosia alone was able to receive 100 ships (Strabo 7.4.2).

Thus, the South Pontic centers had all the necessary conditions for the development of vigorous overseas trade. This is particularly true for Herakleia: its viticulture and wine production were export-oriented, and the demand for Herakleian wine in the importing zone was steady. On the other hand, Herakleia was interested in acquiring grain – both for its own needs and for sale. Sinope participated in this trade to a lesser extent. The volume of exports of its main commodity (olive oil) was lower than that of Herakleian wine, which is reflected in the fact that the number of Sinopean amphorae found in the Northern Black Sea region is also considerably smaller.

The centers of the Northern and Western Black Sea regions had to pay somehow for the large amounts of wine they imported. They did not possess their own natural deposits of precious metals and thus were not able to pay for the imports with their own coinage. Products of local craftsmanship were not marketable outside the region. These centers also did not have at their disposal any natural raw resources that would have been in demand in other regions. Therefore, agriculture was the only source for products whose price would compensate for the trade deficit of the importing zone.

Starting from the Classical period, the North Pontic region exported food supplies. Ancient sources name grain, fish products, and products of animal husbandry (Dem. 20.31–32; Polyb. IV.38; Strabo 7.4.6; 11.2.3; Plin. *HN* 18.25; and others). The most important export product of the Northern Black Sea region was grain – especially, Pontic wheat, light in weight (Theophr. *HP* 8.4.5; Plin. *HN* 18.25). Paleobotanical research confirms that it was grown in many areas of the region; barley was another very popular agricultural product.<sup>100</sup>

The main producers of grain in the Northern Black Sea region were the populations of the Bosporan Kingdom, Tanais and the Maeotian settlements of the Lower Don area, and Olbia's *chora*, as well as the Late Scythians of the Lower Dnieper area and the Crimean steppe zone. The Bosporus remained the main producer of export grain in the region, although the volume of its exports must have decreased at least by half after the Classical period. At the same time, Chersonesos did not necessarily export grain, and even if it did, then only in small amounts and in good harvest years.

In the Roman period, the overall export of grain from the Black Sea region may have reached, on average, 20,000 to 30,000 t a year.<sup>101</sup> Such an amount would have satisfied the annual demand for grain of at least 100,000 people. In bad years, the centers of the North Pontic region were not only unable

to export grain, but actually had to import it (Polyb. IV.38). Most likely, the diverse natural conditions of the microregions along the coast of the Black Sea allowed some areas to compensate for their shortage of grain in a bad year by importing it from other areas. It is likely that the South Pontic centers purchased grain from different areas, depending on the harvest. This scenario also explains, to a certain extent, the fact that Herakleian amphorae have been found everywhere in the Black Sea region.

The Western Black Sea region, most likely, did not export grain to other Pontic regions in considerable amounts. A large part of it may have been used to supply Roman troops in the Danube area. In addition, Moesia had to deliver grain to Rome as part of its tax payment in kind (*annona*), first introduced by the legate of the province Plautius Silvanus (about 61–67 CE) (CIL XIV.3608).

Fish products were another important article of Northern Black Sea exports. Ancient sources often mention Pontic fish (Ath. 6.274f–275a; 7.284e; Strabo 7.4.6; 11.2.4). Fishing and fish processing were well developed in all centers of the region, but not everywhere were these activities commercial. Large fish-salting complexes of the first to third century CE have only been found in the Bosporus and Chersonesos.<sup>102</sup> In the third century CE, the cisterns in the southern and southeastern part of Tyritake alone may have produced over 2,800 t of salted fish a year.<sup>103</sup> Similar complexes have also been found at other sites of the Bosporan Kingdom. The total volume of the production of processed fish in the Bosporus was comparable with or even exceeded the volume of grain exports. Some part of those products was intended for local consumption, but there is no way to estimate its size. In Chersonesos, fishing and fish processing also went on a similar scale.<sup>104</sup>

Another center of commercial fishing was Tyras. The anonymous *Periplus Ponti Euxini* reports as follows: “This river Tyras is profound and produces a good food for fishes; there is a fish market for traders and a secure sailing upstream for cargo boats” (13v26–30 Diller = *FGrHist* 2037 F 91).<sup>105</sup> However, no fish-salting complexes have been found in Tyras so far.

The river Borysthenes was also rich in fish (13r31–13v1 Diller = *FGrHist* 2037 F 88), but, although fishing was well developed in Olbia, no traces of fish-salting complexes have been found there either. It is possible that they were located in the part of the Lower City that has been destroyed by the sea. If they did not exist at all, only dried and smoked fish could have been exported from Olbia.<sup>106</sup>

Therefore, fish products were also an important part of exports from the Northern Black Sea region. They were brought to overseas markets mainly from the Bosporus and Chersonesos and possibly from Tyras and Olbia. The volume of this export was comparable with that of the grain delivered from

the same region. However, imported fish products were probably not as popular in the South Pontic centers, where local fishing and fish processing were also well developed (Strabo 7.6.2; 12.3.11; 12.3.19; Plin. *HN* 9.92). Therefore, most of the fish products exported from the Northern Black Sea region probably went via South Pontic centers to other places.

Other exports included products of animal husbandry, which was an important component of the economy of the multiethnic population of the Northern Black Sea region. In the Hellenistic period, such products were exported to the Mediterranean (Polyb. 4.38). During that time, Olbia was probably one of the exporters of hides.<sup>107</sup> It is possible that the export of hides from Olbia continued in the later periods, but there is no direct evidence concerning the export of products of animal husbandry during the Roman period. The largest part of these exports probably consisted of products received from the nomads. Strabo writes about the Sarmatians trading hides in Tanais (11.2.3). In any case, the demand for the products of animal husbandry in the South Pontic centers could not have been very high either, since mountain pastures and valleys provided good conditions for the development of local stockbreeding (Strabo 12.3.13–15).

Strabo also mentions slaves, who were delivered by the Sarmatians in exchange for “the other things that belong to civilized life” (11.2.3).<sup>108</sup> Pontic slaves were highly valued in the Mediterranean (Polyb. 4.38). Most likely, the warlike nomads were the main suppliers of slaves during the periods of stability. There is, however, no information about the volume of slave export from the Northern Black Sea region during the Roman time.

One other possible commodity, exported specifically by Chersonesos and, probably, by Olbia, was salt.<sup>109</sup> It was obtained from the salty lakes in the lower reaches of the Dnieper (Dio Chrys. 36.3) and in the Western Crimea (Strabo 7.4.7). The amount of salt recovered in Chersonesos annually has been estimated at 2,500 t, and more than half of this amount may have been intended for export.<sup>110</sup>

Thus, the importing zone had the economic basis and the export products that were necessary for development of overseas trade. The main exported items that had to cover the costs of South Pontic imports were grain, fish, products of animal husbandry, salt, and slaves. The percentage of each of these articles in the overall export differed from center to center. Clearly, the products exported by the importing zone covered not only the costs of commodities imported in amphorae – a large part of the imports consisted of glazed pottery, metal and glass objects, clothes, luxury items, expensive building stone (such as marble), and other items. However, the large quantities of imported wine made it the most prominent commodity.

## TRADE IN THE VARIOUS PONTIC REGIONS

*The Western Black Sea Region*

The analysis offered above allows one to establish the specific features characteristic of the local markets of various Black Sea regions during the period in question. In the Western Black Sea region, most finds of Pontic transport vessels come from Dobrudja and the left bank of the Lower Danube. The total percentage of such finds there is lower than in the Northern Black Sea region. To a great extent, the local population satisfied its demand for foreign wine and oil by imports from other regions. However, Herakleian amphorae still prevail here among the other finds of transport vessels, while Sinopean and Colchidian amphorae appear in considerable quantities only after the Gothic Wars.

Originally, the main consumers of South Pontic wine in this region were coastal Greek urban centers and barbarian settlements on both banks of the Lower Danube. Their trade with the Southern Black Sea region developed gradually, prompted by the establishment of the province of Moesia. All of the early varieties of Herakleian amphorae have been found here, but only in relatively small numbers. It is still not clear what products were exported from this region during the early period of trade development, but it is unlikely that they were much different from those exported from the Northern Black Sea region.

After the conquest of Dacia, the situation changed. Many Dacian settlements were destroyed, Roman *castra* were built, and Roman colonists settled in the area. Initially, the volume of trade might have decreased. Amphorae of *variant S IVC* have been found in the settlements of Dobrudja and in the territory of *Dacia libera*; only very few such amphorae have been discovered in the Roman province of Dacia. It is likely that, in general, this province was more involved in Danubian than in Pontic trade.

The Roman troops of the Danube limes stationed in the region were large consumers of food products. Moreover, as mentioned above, from the 60s CE onwards, Moesia had to pay *annona* to Rome. Therefore, it is unlikely that the Western Black Sea region would have been able to export food supplies in great amounts. It is particularly interesting, in this respect, that Herakleian amphorae have been found in large quantities at some sites where Roman troops were stationed.<sup>111</sup> The local population in these places clearly did not have any surplus food products that could have been exported in exchange for wine. It is possible then that the imports of South Pontic wine were purchased for the army by the administration of the province. It is also possible that the Roman administration received some of the South Pontic wine as part of the tax paid in kind and supplied it to the troops in the Danube area.



In the second half of the second century CE, the connections between the Danube area and the southern and eastern Pontus became more intense. Amphorae of *variant C IVD* have been found in a larger area of the Western Black Sea region as far as the Carpathian Mountains. However, their percentage among other transport vessels is still relatively low. In the third century CE, brown-clay amphorae of *sub-variant C<sub>2</sub>* made their appearance in the Western Pontic region, but such finds are rare.

The main waterways of the region in question are the Danube and its arms. They were used to transport wine to distant barbarian settlements, including the tribes of the Carpi in the Carpathian Mountains. In the provinces, there was also a network of land-routes.

The trade connections between Thrace and the southern and eastern Pontus were considerably less intense, and sometimes even sporadic. Thrace's main interests lay in the Danube area and the Eastern Mediterranean.

During the Gothic Wars, the Lower Danube area repeatedly became an arena of military conflicts. The trade network there was destroyed.

### *The Northwestern Black Sea Region*

All of the popular types of the Pontic amphorae have been found in Tyras and Nikonion. Their export included mainly grain and possibly fish. We have no information, however, about the dynamics of this trade. Via Tyras, wine was distributed farther along the Dniester and its arms, as far as the foothills of the Carpathian Mountains.

After the destruction of Olbia by Goths in about 55 BCE, the Late Scythian settlements in the Lower Dnieper area became the main consumers of the imported wine. In the second half of the first century BCE to the early first century CE these settlements flourished, but by the beginning of the second century CE many of them were abandoned. It is possible that part of their population moved to the revived *chora* of Olbia. All of the varieties of Pontic amphorae that circulated during the period in question have been found at the sites of these settlements. Their inhabitants exported mainly agricultural products – particularly, grain. The agricultural productivity of the Lower Dnieper area must have been not much different from that of the Late Scythians in the Crimea. The Scythians in the Dnieper area transported the wares via the river and its arms, but the development of trade was hindered by the absence of a local trade center, which explains the interest of the local population in the rebuilding of the city of Olbia (Dio Chrys. 36.3).

Olbia, rebuilt in the beginning of the first century CE, became an *emporion* for the neighboring population. The trade reached its highest point in the middle of the first to the middle of the third centuries CE. During that time, the volume of South Pontic imports was gradually increasing. All of the types of the Pontic amphorae that circulated during that period have been found at



Olbia. The percentage of transport vessels of Bosphoran and Aegean origins was increasing from the second half of the second century CE onwards.<sup>112</sup> A large part of the imported wine went to the settlements of Olbia's *chora*, from where grain came to the city.

Part of the wine imported by Olbia was further exported via rivers and land-routes to the Late Scythians, Sarmatians, tribes of the Zarubineŭs, Late Zarubineŭs, Cherniakhov Cultures, and other cultures of the steppe, wooded steppe, and the south of the wooded zone of Eastern Europe. Trade expanded despite the changes in the ethno-political situation in the region. In the third century CE, large amounts of the South Pontic wine went to the settlements of the Early Cherniakhov Culture, which appeared around Olbia and were gradually drawn into the Black Sea trading network.<sup>113</sup>

Fish products and grain produced in Olbia per se probably comprised a relatively small part of its exports. Much more important must have been the export of salt, as well as agricultural products, grain, and slaves received from the barbarians. However, the absolute volume of exports was still smaller than that of the Bosphorus.

As a result of the Gothic Wars, Olbia was destroyed and the regional trade network ceased to exist. The city was partially rebuilt by the end of the third century CE, but its size was considerably smaller.<sup>114</sup> The Dnieper and the Southern Bug were used for the sporadic transport of Herakleian and Sinopean wines to the tribes of the Cherniakhov Culture, but these connections were in no way comparable with those that had existed earlier.

### *The Western Crimea*

After the death of Mithridates, Chersonesos lost its territories in the Northwestern Crimea, inhabited by the Late Scythians. It remained in control only of the Herakleian Peninsula, which was not very suitable for growing crops. Therefore, the economic basis of Chersonesos during the Roman period was considerably weaker than before.

The Late Scythian settlements in the Northwestern Crimea flourished during the second half of the first century BCE. The Herakleian imports at these settlements are represented by all types of South Pontic amphorae, from the earliest ones to those of *variant C IVB*, which allows us to trace the increase in Herakleian imports into this area over time. In addition to Herakleia, the population of the Northwestern Crimea had stable connections with Sinope and the Eastern Black Sea region. The main product exported by the Scythians was grain. It was probably transported overseas by Chersonesan merchants, who acted as intermediaries and had direct contacts with the suppliers of wine.

After the military campaign of the Bosphoran ruler Aspourgios against the Late Scythians, which took place in about 17 CE, the settlements of

the Northwestern Crimea entered a period of decline.<sup>115</sup> Their population decreased, and so did the volume of trade. By the beginning of the second century CE, life ceased in these settlements. Therefore, the main importing sector in the Crimea shrank, as it did in the Western Black Sea region and in the Lower Dnieper area.

The connections of the settlements in the Northwestern Crimea with Chersonesos during the Roman period were less intense than before. Strabo does not refer to Chersonesos as a main trading center for the neighboring barbarians, as he does when he describes the Bosporan centers. Moreover, relations between Chersonesos and the Crimean barbarians were hostile from time to time, which also hindered the development of trade relations between them. Nevertheless, Chersonesos remained the closest market for the agricultural products arriving from the Northwestern Crimea. Neither Olbia, which was in the process of being rebuilt, nor the Bosporan cities could have played the role of *emporion* for the Late Scythian settlements in this region during the period of their flourishing. The relatively small amount of Chersonesian imports into the Northwestern Crimea can be explained, to a certain extent, by the economic problems experienced by Chersonesos. For this reason, like Olbia, Chersonesos may have re-exported some of the South Pontic products to the barbarians of the Western Crimea as a payment for grain delivered by the Scythians. In this case, Chersonesos remained the main middleman in the trade with the Late Scythians of the Northwestern Crimea.

The overseas trade of the Late Scythian settlements of the Southwestern Crimea also most certainly went through Chersonesos. The importance of this area grew after the population of the Northwestern Crimea migrated here in the early second century CE. This development prompted an increase in the volume of the trade between Chersonesos and the neighboring Late Scythian settlements in the second half of the second century CE.<sup>116</sup>

In a bad year, Chersonesos may have used all the grain received from the barbarians for its own needs. In this case, it would have mainly exported other items, such as fish products and salt.

Cheap Herakleian wine held a prominent place among the commodities delivered to the immediate *chora* of Chersonesos. The population of the rural settlements consumed it in larger amounts than the inhabitants of the city did.

Chersonesos itself did not suffer during the Gothic Wars, but it was affected by the destruction of the previously existing trade network. Herakleian and Colchidian amphorae of the second half of the third to the fourth centuries CE have been found at the site, but their percentage decreased abruptly.

*The Bosporan Kingdom*

The Bosporan Kingdom was the largest state in the Northern Black Sea region. It maintained connections with all Pontic exporting centers throughout the entire period in question. The trade in the various parts of this state had its own individual features.

At the end of the first century BCE, Strabo named only three Greek *emporía* in the Northern Black Sea region: Pantikapaion, Phanagoreia, and Tanais (7.4.5; 11.2.3; 11.2.10). Via these cities, Greek imports went to the European and Asiatic Bosphorus and to the Lower Don area, respectively. Gorgippeia and Theodosia, most likely, played an important role in the delivery of imports to their own surroundings. Other Bosporan cities may have also participated in overseas trade, but their role was less significant.

The main bulk of Pontic imports – and later also of the local Bosporan wine – went through these centers to the rural Greek settlements and to the Late Scythian settlements of the Eastern Crimea, as well as to the Maeotai and the Sarmatians of the Eastern Azov and the Lower Don areas. Some South Pontic wine, which reached the Sarmatians and other tribes in the foothills of the Caucasus and in the Caucasian Mountains, went via the Asiatic centers of the Bosphorus and then farther along the river Kuban and its arms or along land-routes. Throughout this period, Herakleian amphorae prevailed in the territory of the European Bosphorus, while in the Asiatic Bosphorus the percentage of Colchidian amphorae was higher than in the Crimea. In the surroundings of Gorgippeia, the latter are actually the most numerous finds among all transport vessels of the third century CE. For some reason, the Maeotai on the left bank of the Kuban seem to have not participated in the wine trade (Fig. 5.3).

The main product exported by the Bosphorus was grain, both locally produced and received from the barbarians. From the middle of the second century CE onwards, a considerable part of the export probably consisted of fish products. The sedentary populations of the areas mentioned above were the main producers of both these staples. After the war of Aspourgos, the Bosphorus may have also received agricultural products from the Late Scythian settlements in the Central Crimea. Part of these food supplies probably came as tax levies and tributes paid by both Greeks and barbarians. In addition, the Bosphorus exported products of animal husbandry, as well as slaves, delivered by the Sarmatians.

The economic basis of the Bosporan Kingdom was strongest in the Northern Black Sea region. But until the middle of the first century CE, the overseas-trade connections of this state were rather limited. During this period, the economy of the region was still recovering, and this process was hindered by the political struggles inside the kingdom. The war between the Bosphorus and

Rome in 44–49 CE also had a negative effect on the Bosporan economy. The Bosphorus became the main trade partner of the South Pontic exporters only under the reign of Kotys I, from the last third of the first century CE onwards. This was also the time of Rome's war with Parthia and the military actions in Transcaucasia, when large military forces were concentrated there. The demand for food supplies for the army may have stimulated further development of trade connections between this area and the Bosporan centers. In the second to third century CE, the largest amounts of South Pontic wine were imported and the largest amounts of food supplies were exported via these centers.

The stable economic situation in the Bosphorus and the favorable market conditions in the second to third century CE prompted the development of local Bosporan wine production. About the middle of the second century CE, some Bosporan centers started to manufacture amphorae and export local wine to the neighboring parts of the Black Sea region. This wine was competing with the South Pontic wine, but the export volume of the latter still remained high. The competition stimulated a search for new markets, as demonstrated by the finds of amphorae of *variants* S IVC and S IVD in Eastern Europe. This development can possibly also explain the discovery of a small number of these transport vessels in the Mediterranean.

### *Tanais*

The Lower Don area with Tanais as its center was a distant part of the Bosporan Kingdom. Describing the situation there at the end of the first century BCE, Strabo only mentions the nomads as those who participated in trade and exported “things as nomads possess” (Strabo 11.2.3).<sup>117</sup> During that time, the Maeotai just started to settle in the area and Pontic trade had not reached its highpoint yet. For this reason, Tanais, although it was the commercial center of the area, did not play the same role in trade as it would do later.

After the destruction of Tanais by Polemo at the end of the first century BCE (Strabo 11.2.3), life in the city and trade went into a period of decline, which lasted until the middle of the first century CE. Not many Pontic amphorae of that period have been found at the site. Tanais started to expand its overseas-trade connections in the last third of the first century CE, under Kotys I – at about the same time as the Bosphorus became the main trade partner of the South Pontic centers. By that time, the Maeotai finished settling in the Lower Don area, which strengthened the economic basis of the latter. The earliest Pontic transport vessels found in Tanais in great numbers are amphorae of *variants* S Ib and S IVA<sub>2</sub>.

At about the same time, the number of such amphorae in Sarmatian burials increased as well. The imported wine was mainly consumed by the Sarmatians of the Lower Don area, and only a small part of it went to the west, to the

steppes at the Azov Sea. Amphorae have not been found in the Middle Don area, but only farther north, above the mouth of the river Voronezh. Only individual Pontic amphorae have been discovered east of the Don (Fig. 5.3).

The main commodity exported by Tanais was grain, delivered by the Maeotai of the Lower Don area. In addition, Tanais exported slaves and products of animal husbandry, received from the nomadic Sarmatians.

#### THE PONTIC MARKET AND SUPPLYING FOOD TO THE ROMAN ARMY

As we can see, the regional Pontic market was a rather closed one. Only a limited selection of products (grain, fish products, and some others) was exported beyond its boundaries. Pontic products in amphorae rarely reached the Mediterranean centers. Nevertheless, the Black Sea market was not isolated from the market of the Roman Empire.

The estimated volume of grain exported from the importing zone may have satisfied the annual demand of about 100,000 people. Taking into account the fact that Herakleia also produced its own wheat (although on a small scale), this imported grain must have considerably exceeded the needs of Herakleia's population. In addition, some North Pontic centers exported fish products, for which there was not much demand in the Southern Black Sea region, because similar products were available locally. Therefore, if Herakleia indeed received most of these products in exchange for wine, we can assume that it must have re-exported the excess of these imports to other destinations.

At the same time, another important consumer of food products appeared near the Black Sea region in the first century CE – the Roman army. After the annexation of Armenia Minor and Commagene under Vespasian, two legions were installed in Transcaucasia and Colchis (Suet. *Vesp.* 8.4), as well as auxiliary forces, in total about 25,000 people, or even more.<sup>118</sup> Some of their food supplies may have been delivered from the Northern Black Sea region in exchange for wine.<sup>119</sup> But the overall volume of this export significantly exceeded the needs of the army. Therefore, it was possible, from the economic point of view, that North Pontic food products were not only supplied to the population of the South Pontic centers and to the Roman army in Transcaucasia and Colchis, but also that they were partly re-exported farther to the Mediterranean, where some Pontic products were known.

The export of food supplies from the Northern Black Sea region to the South Pontic centers during military conflicts at the end of the Hellenistic period is mentioned in ancient sources (Memnon, *FGrHist* 434 F 17; 32.2; 34.3–4; 34.8; 37.6). Later, this practice was renewed. Thus, the army of Corbulo, involved in the military actions in Transcaucasia during the war with Parthia, received food supplies “from the sea of Pontus and the town of Trapezous,” which were then transported farther via mountain roads (Tac. *Ann.* 13.39).<sup>120</sup>

After troops had been stationed on the eastern boundaries of the Empire, food products had to be delivered there on regular basis. The reconstruction of the old and the building of new roads in Asia Minor started at about the same time and continued afterwards.<sup>121</sup> It is possible that the road from Trapezous to Satala was constructed already around that time.<sup>122</sup> Among other things, the roads were supposed to guarantee the uninterrupted supply of food to the legions.

The state of Black Sea ports was also very important. Initially, Trapezous had just “a mooring where one could only ride at anchor in the summer” (Arr. *PPE* 16.5).<sup>123</sup> After the annexation of Pontus Polemoniacus in 63 CE, it was used both by commercial vessels and by the warships of the *classis Pontica*. Some of the latter were burnt there during the uprising of Anicetus in 69 CE (Tac. *Hist.* 3.47).<sup>124</sup> A harbor in Trapezous was constructed and equipped under Hadrian (Arr. *PPE* 16.5).<sup>125</sup> Most likely, all these developments were part of a unified plan for the incorporation of the new eastern territories into the Empire and their protection.

The mechanisms of the food deliveries from the Northern Black Sea region to the eastern Roman provinces are still not well understood. Apparently, they were rather diverse. The Roman administration of the provinces Bithynia-Pontus or Cappadocia may have taken part in the process. Thus, it may have delivered some of the wine received as part of the *annona militaris* to the Northern Black Sea region, where it would then purchase food supplies for the Roman army.<sup>126</sup>

Trapezous was the Black Sea port that was closest to the places where Roman troops were stationed, and it played an important role in the supplying of food to military forces. Another proof of this city’s importance to the Roman army is the Roman military itinerary map depicted on a shield discovered at Dura-Europos and dating to the late second or early third century CE.<sup>127</sup> It shows the route from Thrace to Transcaucasia via Olbia and Chersonesos. Then it continued across the sea to Trapezous and overland in a southern direction to Artaxata. This part of the route followed the route used for the transportation of the supplies for Corbulo’s army.

It was probably this role of the port as the main supplier of the Roman army that made Trapezous “a large and populous city” by the beginning of the third century CE (Zosimus *HN* 1.33).<sup>128</sup> The city did not have the necessary resources to export its own foodstuffs. Therefore, the Roman administration might have used Herakleia’s export potential for the purchase of food supplies in the North Pontic region – in the Bosporus, in particular.

The considerable economic potential of the Bosporan Kingdom, to a certain extent, explains Rome’s interest in this polity and desire to control the situation there. Most likely, there was a special imperial official in the administration of the province of Bithynia-Pontus, a freedman, who was in charge of Bosporan affairs (Plin. *Sec. Epist.* 10.63, 67; *SHA, Ant. Pius* 9.8).

It is possible that the influx of brown-clay amphorae to some sites in the Northern Black Sea region, especially in the Asiatic Bosphorus, is associated with the stationing of Roman forces in Colchis. The increase in the export of Colchidian wine can be explained not only by the improving economic situation in the area, but also by Rome's intention to increase the supply of food products to the army by employing resources of other parts of the Black Sea region. This meant that the exporting capacities of Colchis needed to expand. By the end of the second century CE, local settlements where wine production was developing arose around the Roman fortifications. In some of them (Apsaros), brown-clay amphorae were also manufactured. These developments may have contributed to the increase of wine export from the area.

#### CONCLUSION: SPECIFIC FEATURES AND PERIODS OF DEVELOPMENT OF THE PONTIC MARKET

According to the latest research, the isolation of the Pontic market from the Mediterranean began as early as the rule of Mithridates Eupator. The percentage of containers from the Aegean centers dating to that period drops to 20 percent of all amphora finds discovered at the Crimean sites. Products imported in amphorae mainly arrived from the Pontic centers of Sinope and Herakleia and from Colchis.<sup>129</sup> From the last phase of the First Mithridatic War onwards, the political situation was not favorable for the development of relations between the Pontic kingdom and the Mediterranean, and it became progressively worse over time. In the course of the Third Mithridatic War, Roman naval forces disrupted regular connections between the Black Sea region and the Mediterranean. And in the late 70s BCE, the South Pontic centers, besieged by the Romans, were blockaded (Plut. *Pomp.* 32.1; 39.1; Memnon *FGrHist* 434 F 34.8). After Mithridates' territorial possessions in Asia Minor had been captured by Rome and some of the centers there had been destroyed, contacts between the Southern Black Sea region and Northern Black Sea region, which still remained under the rule of Mithridates, ceased completely. This situation started to change only after the death of Mithridates Eupator, when Rome became the major power in the Black Sea region. These developments resulted in the formation of the isolated Pontic market, which later became linked to the pan-Roman market.

The analysis presented in this chapter allows us to determine four stages in the development of the Pontic trade during the Roman period. The first stage (from the middle of the first century BCE to the first quarter of the first century CE) witnessed the recovery of the broken connections within the Black Sea region. But the subsequent Roman civil wars hindered the broad development of Pontic trade. Therefore, it was mostly the regional



connections that were re-established during this period, i.e., the connections between the Pontic centers. Apart from the Greek centers in the Black Sea region, this process involved the Late Scythians of the Northwestern Crimea and the Lower Dnieper area, the Maeotai of the Eastern Azov Sea area, and the barbarian population of the Lower Danube area. By the end of this period, the general formation of the Pontic market as a regional and rather isolated system was completed. Trade was going on within the Black Sea region and with the neighboring areas, while South Pontic exports rarely reached the Mediterranean markets.

During the second stage (from the second quarter of the first to the middle of the second centuries CE), the overall volume of this trade reached its maximum level. The rebuilt city of Olbia, which became the main trade center in the Dnieper area, also became a part of this network. From the last third of the first century CE onwards, the Bosphorus was playing a more and more important role in this trade. At about the same time, Herakleia established an actual monopoly on wine imports to the Northern Black Sea region – in some areas, its products comprised as much as 85 percent of all foreign wine.

By that time, the Roman Empire gained total control of the Black Sea region and used the economic resources of the latter for its own interests. After the stationing of Roman troops in Transcaucasia, the Black Sea polities may have been involved in the procurement of food supplies for the army – a process that was based on a complex system of exchange. Pontic products sporadically appeared also in the Mediterranean. And thus, the Black Sea market became connected to the pan-Roman market.

During the third stage (from the second half of the second to the first half of the third centuries CE), the Bosphorus was the main constituent of trade in the North Pontic region. Trade during this period shows some signs of competition. In certain areas, the Bosporan and Colchidian amphorae were spreading and the imports from the centers outside the Black Sea region increased. These developments resulted in a decrease of the percentage of South Pontic imports in the main sector. More and more of them went to the barbarian territories, and this process led to the involvement of new barbarian tribes in the trade and to the expansion of the area of distribution of Pontic amphorae.

During that time, the Northern Black Sea region probably became a real strategic hinterland of the Roman Empire and the supply base for the Roman troops in Transcaucasia. The safety of the eastern borders depended, to a large extent, on stability in the Pontic region. The Black Sea centers specialized in the production and export of certain foodstuffs and imported from the neighboring provinces wine and oil, as well as products of craftsmanship and



important raw materials. And in this way, the regional Pontic market was integrated into the imperial one.

During the fourth stage (the second half of the third century CE), the well-functioning system of the Pontic trade was destroyed. Its slow recovery started only towards the end of the century. Herakleia lost its monopoly in the North Pontic wine market, while the exports from Sinope, the Mediterranean centers, and Colchis increased.

If we correlate the stages of the development of the Pontic trade with the periods of political development in the Black Sea region (see the [Introduction](#)), the connection between the two becomes obvious. The changes that occurred in the trade followed the political changes, but not immediately, since it took some time for the latter to influence the former and for these changes to become evident enough to be reflected in the material culture.

The Pontic trade had an enormous importance for the polities and tribes of the Black Sea region, allowing them to export the surplus of locally produced food supplies. The well-organized system of exchange of South Pontic wine for North Pontic agricultural products, which had functioned for centuries, satisfied the demand for these products among the populations in various parts of the region.

The Pontic market was able to remain economically stable for an extended period of time, if, on the one hand, there was no serious competition to Herakleian wine in the region, and, on the other hand, this city was able to satisfy the entire demand for wine. By maintaining connections with various parts of the Black Sea region, Herakleia took precautions against the consequences of potential bad-harvest years in individual areas and ensured the regularity of the deliveries of food supplies. The stationing of Roman legions in Transcaucasia also meant a guaranteed demand for products from the various parts of the Pontic region and stabilized the market.

The steady demand for the products of agriculture, viticulture, fishing, and animal husbandry prompted the growth of their production in the Pontic region. The specialization of individual areas in the production of particular staples stimulated the rational exploitation of local natural and climatic resources. This resulted in a regional division of labor and an increase in productivity and led to the overall economic growth of the entire Pontic region. These developments were possible only under the condition that the market was well organized, allowing for the continuous exchange of products between various parts of the Black Sea region.

In some Pontic areas, the introduction of imports may have prompted the development of analogous local products. Thus, a steady demand for wine and a relatively high level of agriculture and craftsmanship in the Bosphorus may have stimulated the production of commercial wine and the beginning of the manufacturing of local amphorae in the second century CE. The

Roman presence probably also contributed to the increase of wine production in the Eastern Black Sea region and to the expansion of its export. Consequently, competition with Bosporan (and, possibly, Colchidian) wine prompted the search for new markets for South Pontic products. And in this way, the Black Sea polities, tribes, and peoples who were not part of the Roman Empire were included into the pan-Roman economic system.

Roman authorities recognized the benefits of this well-functioning system and were interested in keeping the political situation in the North Pontic centers stable and, especially, in preserving the Roman-friendly regime in the Bosporus. Rome also cared about the harbors and ports along the sea coast and the safety of seaborne communications, as well as about the construction and maintenance of the roads in Asia Minor.

Therefore, we can conclude that the development of the Pontic market benefited all its constituents. Trade, apart from offering economic advantages, also contributed to the political stability within the region. And this was probably the reason why later historians named “commercial facility,” along with the “friendship for Rome” and “the gifts sent annually” to the Bosporans among the three main factors on which the political stability of the Bosporus was based (Zosimus *HN* 1.31).<sup>130</sup>

## PART III

### POLITICAL CULTURE



## POLITICAL CULTURE IN THE CITIES OF THE NORTHERN BLACK SEA REGION IN THE "LONG HELLENISTIC AGE" (THE EPIGRAPHIC EVIDENCE)

Angelos Chaniotis

### I KOINE: HELLENIC AND PONTIC

On the Greek mainland and in coastal Asia Minor, the institutions of the *polis* took shape in a period that predates the earliest literary and documentary sources. These institutions, which we can study only from the late seventh century BCE onward, result from a long evolution that transformed a Bronze Age heritage. Both local processes of change and external influences played a part in this evolution. By contrast, in the case of the colonies along the coast of the Black Sea, political, social, religious, and other institutions were introduced as a more-or-less coherent set at the moment of foundation. This holds true for offices, civic subdivisions, cults, festivals, social and religious rituals, calendars, and procedures of decision-making. This original institutional set became the starting point for further developments. Did these developments move along the same paths as in the world of the *poleis* of Greece and Asia Minor? Or did the local peculiarities of the Northern Black Sea region lead to divergent developments? These questions call for comparative studies.

Much of the important Pontic research has been an inquiry into origins. One important issue that has repeatedly been scrutinized is how the institutions of metropoleis are reflected by the institutions of colonies and, vice versa, how the study of the institutions of a colony may help us reconstruct the early institutions of its mother-city (or of the metropolis of its mother-city).<sup>1</sup> Naturally, in this process of comparison we must also consider later – Classical

and Hellenistic – developments, since they might “contaminate” our reconstruction of the original situation. The aim of many studies has been to reconstruct the circumstances at the moment of a given colony’s foundation and, to a lesser extent, to draw a complete and coherent picture of later developments. Admittedly, the latter is not an easy enterprise, especially since we lack narrative literary sources. But it is nevertheless an important enterprise, all the more so since the Hellenistic and Imperial periods are characterized by processes of cultural and political homogenization known by the term *koiné*. Were the northernmost Greek political communities part of this *koiné*?

The cities in the Northern Black Sea region present a special case for four reasons: because of their geographical position at the periphery of the Greek world; because they were under the direct or indirect control of kingdoms rooted in different traditions from those of the kingdoms founded by the Successors of Alexander; because they were more often exposed to the direct threat of barbarian tribes than the cities of Greece and Asia Minor; and because the Pontic region formed a separate network of exchanges although it was not at all isolated from the eastern Mediterranean.<sup>2</sup> We can recognize the existence of this network especially when we study two categories of sources that exist in large numbers: amphora stamps and inscriptions recording foreigners in the cities around the Black Sea. The circulation of both amphorae and people around the Black Sea was largely from one Pontic city to another.<sup>3</sup> When Theokles, son of Satyros, an Olbian, died (late second or early third century CE), several cities sent golden crowns to honor him, because he had assisted their citizens during their temporary sojourn in Olbia (*IOSPE* 1<sup>2</sup> 40). These cities represent the entire Pontic region: Odessos, Kallatis, Tomis, Histria, and Tyras in the West; Olbia and Chersonesos in the North; Bosporus (Pantikapaion) in the Northeast; and Byzantion, Herakleia, Amastris, and Sinope in the South and Southeast. Unsurprisingly, there were foreign residents also from Asia Minor, especially from its northern part (Nikomedeia, Nikaia, Kyzikos, Tios, Prousa, Miletos, Apameia), but the general impression that we get both from this list and from other evidence is that of traffic primarily from one Pontic city to another.

In the cities of the Northern Black Sea region, the main features of the political institutions correspond exactly to the main features of the *polis*-institutions all over the Greek world, from the colonies of Magna Graecia and the cities of Greece and Asia Minor to the military colonies founded by Alexander the Great and the Hellenistic kings in the Near and Middle East. This applies to the assembly (*ekklesia*), the council (*boule*), and the annual offices. Most designations of political functions are the same as in mainland Greece: *archontes* and *damiourgoi* (executive officers), *strategoi* (generals), *prohedroi* (presiding boards, usually of the assembly), *epi tes dioikeseos* (responsible for public finances),<sup>4</sup> *nomophylakes* (“guardians of the laws”),<sup>5</sup> *agoranomoi*

(supervisors of the market),<sup>6</sup> *tamiai* (treasurers),<sup>7</sup> and *gymnasiarchai/oi* (overseers of the *gymnasion*).<sup>8</sup> Some designations of offices are less widespread – e.g., the eponymous *basileus* and the *proaisymneon* in Chersonesos<sup>9</sup> – but still attested in a colony's metropolis and in a few other cities. These three elements of political life – assembly, council, magistracies – were very conservative. Only in rare cases were old offices abolished and new ones created; and only in rare cases do we find designations that are not attested elsewhere: for instance, the board of the *symnamones* in Chersonesos (*IOSPE* 1<sup>2</sup> 352) or “the Seven” (*hoi hepta*) in Olbia – a board of officials with supervisory functions (*IOSPE* 1<sup>2</sup> 26, 31, 32).

The aim of this chapter is not to offer a systematic, “encyclopediaic” description of the political institutions of each individual city. What I am concerned with is something less tangible: the political culture in the cities of the Northern Black Sea region, its evolutions from about the late fourth century BCE to the middle of the third century CE, and the degree in which this political culture followed the main trends of the Greek world after Alexander the Great. Our main sources for this study are inscriptions, especially one particular category of inscriptions – decrees (*psephismata*).

My study is not limited to the period traditionally called “Hellenistic” (about 323–30 BCE). My survey also covers the first three centuries of the Common Era, for two reasons: firstly, because the most important phenomena of the Hellenistic period – the survival of democratic institutions, the increasing dependence of the *poleis* from benefactors (“euergetism”), the concentration and inheritance of power within a small circle of elite families (“aristocratization”), and the strong influence of external powers (kings, Rome, dynasts) – continued and culminated after the unification of the Empire under Augustus;<sup>10</sup> and, secondly and more importantly, because the traditional periodization of Greek history (Classical, Hellenistic, Imperial periods) does not adequately reflect historical developments in the Northern Black Sea region. A study of the political culture can only be meaningful if it is conducted in a *longue durée*, covering the period from the late fourth century BCE to the middle of the third century CE. I designate this period “the long Hellenistic Age.” Important turning points in this long span are the reign of Mithridates VI of Pontus, when the Bosporean Kingdom and the Crimea came under his control (about 114 BCE); the death of Mithridates, the first establishment of Roman influence in this region, and the association of the Bosporean Kingdom with the Roman Empire as a client kingdom (63 BCE); the extension of Roman administration to the Black Sea under Nero (67 CE); and the devastating invasions of the Goths (250 CE).<sup>11</sup>

In the following pages, I shall attempt to sketch the convergence between political culture in the North Pontic region and that in Greece and Asia Minor through a study of the assembly and of popular participation, the concentration of power in the circle of a wealthy elite, and the evolution

of identities. Decrees of the Hellenistic and Imperial periods are particularly valuable as a source. Some long decrees, such as the honorary decrees for Protogenes, Theokles, and Karzoazos in Olbia or Diophantos and Titus Aurelius Calpurnianus Apollonides in Chersonesos,<sup>12</sup> are verbatim quotations or extended summaries of the orations with which the proposals were supported in the assembly. They thus present an excellent source for contemporary oratory, persuasion strategies, the political atmosphere, and the adaptation in the Pontic cities of practices that existed in the rest of the Greek world.

Except for minor differences, the decrees of the cities of the Northern Black Sea region generally follow the trends of the Hellenistic period; they use the same formulations; and their subject matter – grants of citizenship, grants of proxeny, tax exemption and other privileges, honoring of magistrates, envoys, and benefactors with crowns and public funeral, consolation of relatives – corresponds to the subject matter of decrees from Greece and Asia Minor.<sup>13</sup> More generally, the social and cultural institutions of the Greek world are also present in the North Pontic cities: the *gymnasion*, age classes for young men and their training in the institution of the *ephebeia*, agonistic culture.<sup>14</sup> Naturally, there are local peculiarities, such as using *telamon* for *stele* (*IOSPE* 1<sup>2</sup> 34), honoring a benefactor with a ring in first-century CE Pantikapaion – certainly under the influence of practices of the Bosporan royal court (*CIRB* 432) – dedicating *streptoi* (necklaces) to Achilles *Pontarches* by boards of Olbian *strategoï*,<sup>15</sup> or designating honorary citizenship in Chersonesos as *proxenias politeia*.<sup>16</sup> But the limited number of local peculiarities shows that the northernmost Greek cities were fully integrated into the political culture of the rest of the Greek world. The homogenization of formulations was the result of the intensive exchange of documents among Greek communities.<sup>17</sup>

Problems similar to those that confronted the rest of the Hellenistic world – debt, external threats, dependence on kings, the expansion of Roman power – led to analogous responses. Despite the late arrival of Roman authority in this region, Roman influence had the same impact as it did in Greece and Asia Minor. In the North Pontic cities, we observe the same trends that have been studied in Greece under Roman rule: the creation of small boards of magistrates;<sup>18</sup> the assimilation of the councilors (*bouleutai*) with the Roman *decuriones* and reservation of membership in the council to families with a certain property qualification; the election of magistrates from among a few propertied families and the development of a regime of “notables” (cf. *honoratiores*). In Roman Greece, these trends were both indirectly enhanced through acquaintance with Roman political institutions and directly implemented through the *lex provinciae* that set the rules for the organization of the council.<sup>19</sup> We shall see similar developments in the Northern Black Sea region, either under Roman influence or under the influence of Greek cities that had adopted the Roman



model earlier. But the process of aristocratization had already started earlier, namely, in the Hellenistic period.

In this chapter, I shall first sketch the broader historical context and the main features of political culture in the cities of the Hellenistic and Imperial periods (section 2). Then I shall examine the factors that limited freedom, equality, and democracy in the cities of the Northern Black Sea region (section 3) and explain how these cities closely followed the main developments of this period. I shall study three interrelated phenomena: the concentration of executive power in the hands of an oligarchy (section 4); the opportunities for the lower social strata to exercise pressure despite the domination of the popular assembly by this elite (section 5); and the means by which honorary decrees constructed and maintained the illusion of the people's sovereignty and, at the same time, highlighted the contributions of benefactors (section 6). Finally, I shall place the construction and display of identity in the cities of the Northern Black Sea region in the regional and historical contexts of the "Long Hellenistic Age" (section 7).

## 2 THE BROADER HISTORICAL CONTEXT: "DEMOCRACY" IN HELLENISTIC AND IMPERIAL CITIES

All recent studies of the *polis* in the Hellenistic and Imperial periods stress its vibrancy. Despite the undeniable influence of federations and the – at times direct – interventions of kings and Roman authorities, the *polis* remained the main framework of political and social life for the majority of Greek populations in Greece, Asia Minor, and the colonies.<sup>20</sup> Practices that merit the designation "democratic," such as the annual appointment of officials through election, the accountability of magistrates, the regular meetings of the assembly, and the confirmation of all political decisions by the assembly, continued to exist throughout the Hellenistic period and well into the Imperial period. This has led some scholars to challenge the prevailing view that popular sovereignty declined after the fourth century BCE and to argue that (moderate) democracy remained strong until at least the late second century BCE.<sup>21</sup> This view requires modifications. Although democratic institutions continued to exist, the prosopographical and documentary evidence strongly suggests that political life accrued oligarchic and aristocratic features: offices and political activity became the exclusive privilege of a small number of wealthy families, as in oligarchic regimes, and this power was inherited within these families, as in hereditary aristocracies.<sup>22</sup> Gradually and under Roman influence, the political privileges of the elite were institutionalized in the Imperial period; but the process of aristocratization is already visible in the Hellenistic period.

The increasing dependence of Greek cities on the contributions of wealthy benefactors has been recognized as one of the most important

social developments of the Hellenistic period. Its impact is clearly visible in the second century BCE and culminates in the Imperial period, when many aspects of public and religious life were funded through liturgies and voluntary benefactions.<sup>23</sup> With voluntary contributions benefactors displayed their willingness to spend part of their private property for the community. But this willingness was combined with the expectation that the community would accept their political leadership. Thus, the relation between the elite that monopolized power and the mass of the citizens that accepted this monopoly was based on reciprocity. It is this reciprocal relation that permitted Hellenistic – and to a certain extent Imperial – cities to maintain some democratic institutions and the illusion of popular sovereignty. But the discrepancy between democratic institutions and oligarchical reality can be observed in many Hellenistic cities, when sufficient source material survives. That the appointment of citizens to political functions by lot disappeared is not so important; the lottery system operated only in radical democracies – it was resurrected in Chersonesos for the appointment of judges under very specific conditions (see below). That some offices were reserved by law to the wealthiest citizens is not important either. Even in the radical democracies wealth was required for some financial offices.<sup>24</sup> What is really important for the understanding of the character of political life is the accumulation of offices and political functions; the iteration of office; the occupation of offices by members of the same families; the monopolization of political initiative by a small elite; and the acceptance of this power monopoly by the *demos* in exchange for the services that the elite provided through benefactions.

What in the Hellenistic *polis* was a de facto oligarchic rule gradually became an institutionalized and to a certain extent hereditary rule of a wealthy elite in the Imperial period.<sup>25</sup> While in the Hellenistic period the higher status of certain families (*euschemones*, *proteuontes*)<sup>26</sup> was recognized but not formally connected with political privileges, the concentration of power in the hands of a wealthy elite was later anchored in *polis* institutions. Usually, we cannot determine when and how this institutionalization took place, but we can see its results, for example, in the fact that the distinction between public functions occupied on the basis of election (*archai*) and those occupied on the basis of wealth (*leitourgiai*) became blurred; in the Imperial period, sometimes *arche* and *leiturgia* were used as synonyms.<sup>27</sup> This does not mean that the *demos* – the mass of the less privileged citizen-body – was politically irrelevant. It had both institutional and factual influence and could exercise pressure on the elite, making political life in the Imperial Greek city a complex system of negotiations of power. In the following pages we shall see how these general features of political life apply also to the cities of the Northern Black Sea region.

### 3 THE LIMITS OF FREEDOM: INTERNAL TENSIONS, EXTERNAL INTERVENTIONS, FINANCIAL DEPENDENCE

Recent studies of Hellenistic democracy and the *polis* institutions of the Imperial period usually do not consider the Black Sea except for references to the honorific decree for Protogenes of Olbia. Yet if one wishes to study the gradual transformation of democratic institutions into a rule of "notables," the Black Sea is an excellent place to start.

The Black Sea region had a long tradition of political controversies and active political life. This did not change in the Hellenistic period. We have direct evidence for rich political conflicts. Occasional references to reconciliation agreements and *staseis* show that political controversies could turn as violent in Olbia and Chersonesos as elsewhere in the Hellenistic world.<sup>28</sup> The most eloquent testimony is the citizen oath of Chersonesos (about 275 BCE?), which repeatedly exorcizes the fears of a community confronted with division, treason, and unrest:<sup>29</sup>

I will preserve concord for the sake of the protection and freedom of the city and its citizens and not betray to anyone, neither to Greek nor to barbarian, Chersonesos, Kerkinitis, Kalos Limen, the other forts, and the rest of the territory occupied by the people of Chersonesos now or in the past. Instead, I will guard them for the people of Chersonesos. I will neither abolish the democracy nor allow this to those who betray or abolish [the democracy], nor will I jointly conceal [these actions] but instead I will denounce this to the *damiourgoi* in the city. I will be an enemy of those who plot against or betray Chersonesos, Kerkinitis, Kalos Limen, the forts, and the territory of the people of Chersonesos, or cause them to defect ... I will not reveal any of the secrets that might harm the city, neither to a Greek nor to a barbarian. I will neither give nor receive a gift to harm the city and the citizens. I shall not contrive with unjust intention against any citizen who has not revolted ... I will not participate in a conspiracy, neither against the commonwealth of the Chersonesitans nor against any of the citizens who has not been proven to be an enemy of the people.

Two centuries later, in the same city, the honorific decree for Satyros (*IOSPE* 1<sup>2</sup> 355, first century BCE), though fragmentary, contains clear references to the establishment of tyranny, the wish of the citizens to overthrow it, and the participation of the armed people (τοῦ δήμου καθοπλισ[αμένου]) in this uprising.

This vibrant political life was to a large extent determined by external pressure. First, the cities were repeatedly exposed to threats from barbarian tribes, raids, and attacks against the urban centers, which they were often unable to face without external assistance.<sup>30</sup> The result was increased dependence that could range from the acceptance of royal overlordship – that of Mithridates VI – and

alliance with Rome to the complete incorporation into a kingdom (Pontus, Bosporan Kingdom), the presence of Roman troops, and the establishment of Roman provincial administration – as with the administrative incorporation of parts of this region into Moesia Inferior.<sup>31</sup>

Secondly, and as a result of the foreign threats, in many North Pontic cities and for long periods of time – especially from the late second century BCE onwards – we encounter forms of external intervention that are well known from Hellenistic and Roman Greece and Asia Minor: influential royal “friends,” that is, royal and later Roman garrisons and commanders. Even in the cities that were not part of the Bosporan Kingdom, the payment of tribute to kings and rulers of barbaric tribes and later the payment of taxes to Rome were limitations of freedom and were understood as such.<sup>32</sup> The cities managed to save face by giving this tribute less humiliating designations, e.g., *doron* (gift),<sup>33</sup> but this did not lighten the burden that such “gifts” were on the civic finances. During periods of foreign domination, cities preferred not to talk about it. It was only after a victory of Diophantos over the Scythians (about 108 BCE) that the Chersonesitans could admit that before they had been in a state of subordination (*IOSPE* 1<sup>2</sup> 352, lines 14–15): “in gratitude for these deeds the people honored him [Diophantos] with the appropriate honors, as if already relieved from the dominance of the barbarians (ἀπὸ τᾶς τῶν βαρβάρων ἐπικρατείας).” Later, in the Imperial period, references to more-or-less successful attempts to have freedom (*eleutheria*) restored to Chersonesos clearly show that true freedom was absent for long periods of time (*IOSPE* 1<sup>2</sup> 355, 423, 591).

Of course, the cities of the Bosporan Kingdom were directly and visibly dominated by royal power, and this is clearly reflected by the public inscriptions of the largest cities. The epigraphy of Pantikapaion and Phanagoreia primarily glorifies the monarchs and places them in the fore. Whereas from Chersonesos and Olbia we have numerous decrees from the third century BCE to the early third century CE that permit us to study political institutions, political culture, and political tensions, the situation is very different in the cities that were part of the Bosporan Kingdom. Here we find hardly any decrees, and most inscriptions are not expressions of popular sovereignty – true or imaginary – but of loyalty to the kings and (later) to Rome. In Pantikapaion, the kingdom’s capital, instead of finding civic officials in the public epigraphy, we find men assigned military and administrative duties by the king (*epi* + a task).<sup>34</sup>

These factors had a strong impact on the process of decision-making. As we shall see later, a feeling of powerlessness prevails, connected with unequivocal expressions of the people’s expectation that the contribution of the wealthy elite would save the day. The elite translated the *demos*’s expectations into concrete political power.

## 4 THE PARADOX OF AN ELECTED OLIGARCHY

The democratic institutions operated in the contexts that I have sketched above. An undeniably democratic feature – the regular (annual) appointment of officials through popular vote – is directly attested through the existence of a special meeting of the assembly dedicated to this task ("electoral assembly," *archairetike ekklesia*) and through occasional references to voting (*cheirotonein*, *cheirotonia*).<sup>35</sup> But unlike radical democracies, where important functions were determined by lot from a large pool of eligible citizens, those who stood for election in the Hellenistic democracies came from a small circle of families in which wealth, connections, prestige, education, claims to leadership, and duties towards the community were inherited. Although political functions were not hereditary, all the requirements for office were. Therefore, only the wealthy members of the elite served in offices. In Olbia, studies of the prosopography of men in public functions show that in the Hellenistic period the members of a few families occupied the offices; this is also the impression we get when we study an inscription that has plausibly been interpreted as a list of annual eponymous magistrates (from about the fifth to first century BCE).<sup>36</sup>

In this context, it is not surprising that as early as the Hellenistic period the honorific decrees for the members of the elite explicitly refer to family traditions in public service. These inherited traditions were a combination of obligations and privileges. A good example is provided by Protogenes in Olbia (*IOSPE* 1<sup>2</sup> 32, the middle of or the late third century BCE). Protogenes, one of the wealthiest men of the city (see below), was elected to the office of "the Nine" (probably treasurers), served as ambassador to King Sitaphernes, and was put in charge of the public finances, serving in this office for three years. The justification of the decree in his honor begins with a reference to the honorand's father, stressing the importance of family traditions and inherited duties:

Heroson, the father of Protogenes, has rendered many and great services to the city with regard both to money [*chremata*] and to the public affairs [*pragmata*]. Having inherited his father's goodwill towards the people, Protogenes has throughout his life continually done and said the best things.

Centuries later, the same idea of a convergence of inherited duties and a position of leadership is expressed in the honorific decree for Theokles, son of Satyros (*IOSPE* 1<sup>2</sup> 40, late second or early third century CE):

Descending from illustrious ancestors, who achieved many good things for our fatherland, undertaking embassies, serving in all the offices, and being benefactors of every citizen and the foreigners who come to our city, he followed the rank [*axioma*] of his ancestors, showing the illustrious spirit and his goodwill towards the fatherland exactly like his ancestors.

The praise of Kallisthenes, son of Kallisthenes (Olbia, early third century CE), starts with the formulation of similar ideas, this time explicitly associating the inherited property with the inherited civic virtues of a political leader and benefactor (*IOSPE* 1<sup>2</sup> 42):

Kallisthenes, son of Kallisthenes, has been a man of prominent ancestors, acquainted with the emperors, and who built the city and made benefactions during urgent times of crisis, men whose praise is hard to express with words but remains alive in memory in time. Originating in such ancestors, he not only inherited their property but also their virtue, adding more adornment to it. Not being forced by human necessity but educated by the providence of the gods, he possessed an inherent, incomparable love of wisdom. Upon adulthood he was engaged with public matters and became a trustworthy general, taking care of the guarding [of the city]; he also served four terms in the highest eponymous magistracies with modesty and justice. Making the best proposals and acting in a beneficial manner, he became father of the city.

As these texts show, in the Imperial period, when the process of aristocratization had been completed, the participation of a scion of an elite family in public life, through service in offices, liturgies, and benefactions, is referred to as fulfillment of the ἀξίωμα τοῦ γένους or τῶν προγόνων (“the rank of their family,” “the rank of their ancestors”).<sup>37</sup> This rank was a combination of rights that were based on ancestry and obligations that derived from family traditions. Expressions such as these highlighted the hereditary character of political leadership.<sup>38</sup>

In many cities of the Roman Empire the occupation of offices required the payment of money (*summa honoraria*), and this institutionalized the privileged position of the wealthy elite. There is direct and unequivocal – albeit limited – evidence for the payment of *summa honoraria* in Chersonesos. An inscription records that a certain Aurelius Hermokrates contributed to the construction of the temple of Aphrodite by paying the amount of 3,000 denarii, “payable for the exit from the office of the *agoranomos*” (about 150–200 CE).<sup>39</sup>

A triptych of services was expected of the small circle of wealthy citizens: to occupy offices and priesthoods, to undertake liturgies, and to serve in embassies.<sup>40</sup> Service as an ambassador was burdensome, costly, and risky, but it could make a man *sebastognostos*, that is, acquainted with the emperor. We can observe the political domination exercised by the elite in phenomena such as the accumulation of public functions, the repeated occupation of an office (iteration) and the occupation of offices by close relatives, and the monopolization of political initiatives in the council and the assembly (see below).

The accumulation of offices is already attested in Hellenistic Chersonesos. Apollodoros, son of Herogeitos, served in the office of the eponymous *basileus* in 179 BCE, an important year for the city, and as *epi tes dioikeseos*, that is,

responsible for public finances, in another year (*IOSPE* 1<sup>2</sup> 402 and 351). The services and offices of Agasikles, son of Ktesias, for which he was honored with crowns, are listed on the base of his statue (*IOSPE* 1<sup>2</sup> 418, about the third century BCE):

He proposed the [construction of the] guardhouse and constructed it. He conducted the delimitation of the area for vineyards in the plain. He was supervisor of the construction of the fortification. He constructed [?] the market place. He served as general. He served as priest. He served as supervisor of the *gymnasion*. He served as supervisor of the market.

In the middle of the second century CE in Chersonesos, Ariston, son of Attinas, occupied the important offices of *damiourgos*, *prodikos*, *nomophylax*, and *dioiketes*, served as priest, and repeatedly led important embassies to the emperor and the king of the Bosporan Kingdom (*IOSPE* 1<sup>2</sup> 423). Accumulation of duties means accumulation of prestige. Statues and rituals continually made the services visible and reminded a community of its obligation to display – if not feel – gratitude.<sup>41</sup> A good example is offered by the honorary decree for Demokrates in Chersonesos (*IOSPE* 1<sup>2</sup> 425, late second or early third century CE):

The highest council and the most sacred people set up the statue of Demokrates, son of Aristogeiton, who as a *prohedros* made respectable suggestions and addressed the assembly; who served twice in the most illustrious office; who served many times as ambassador to the emperors for free, in order to defend the fatherland's interests; who was honored by the city with eternal announcement of the honors; who served as chairman of a *thiasos* and fulfilled every liturgy; whose conduct as a citizen was pure; a constructor, an incomparable man, a lover of the fatherland; in recognition of his goodwill.

Occupying the same office repeatedly increased political influence. Theokles in Olbia died while serving as archon for the fourth time (*IOSPE* 1<sup>2</sup> 40), and Kallisthenes served as eponymous archon four times (*IOSPE* 1<sup>2</sup> 42); in Chersonesos, an anonymous statesman served as *damiourgos* three times (*IOSPE* 1<sup>2</sup> 420).<sup>42</sup>

As in Greece and Asia Minor, cities greatly depended on the voluntary donations of benefactors and on the services imposed upon wealthy citizens through the assignment of important public expenditure to members of the propertied class (liturgies). The best source for benefactions in the third century BCE is the honorific decree for Protogenes in Olbia (see above and below). But the evidence for benefactions is both abundant and widely distributed over time. For instance, in Chersonesos several inscriptions record the donations of individuals for the construction of columns for buildings and fortification walls.<sup>43</sup> That some public services are explicitly praised as voluntary (*authairetos*) implies that genuinely voluntary donations were not self-evident.



Some “voluntary” benefactions had been made under pressure (see [section 5](#)).<sup>44</sup> A city that depends on the goodwill of one single benefactor and stands under continuous pressure from barbaric kings may nominally be free and democratic, but both freedom and democracy were strongly curtailed.

## 5 ELITE LEADERSHIP AND POPULAR PRESSURE

Although the assembly remained responsible for the confirmation of all important decisions, the proposals that it was asked to confirm were submitted by a small circle of influential men. The so-called probouleumatic formula (“may it be resolved/it was resolved by the council and the people”; δεδόχθαι/ἔδοξεν τῇ βουλῇ καὶ τῷ δήμῳ) shows that the council conducted preliminary discussions on motions and presented them to the assembly.<sup>45</sup> The secretary of the council, attested in Chersonesos in the Imperial period, had the task of formulating and recording the motions and the decisions (*SEG* XLV 985; *IOSPE* 1<sup>2</sup> 359, 364). Unfortunately, we lack information about the number and mode of appointment of councilors, as well as about changes over the course of five centuries. In Chersonesos and Tanais, the council was chaired by a presiding committee of *prohedroi* and had its separate secretary.<sup>46</sup> In the Imperial period – and probably earlier – membership in the council and the presiding committee was an exclusive privilege of the elite, occasionally given as an honor to foreign benefactors for exceptional services (see below).<sup>47</sup> The council played an active part in the relations between a city and foreign communities, kings, and Rome.<sup>48</sup>

As already mentioned, the proposals that were presented first to the council and then to the assembly originated in the same narrow circle of citizens who also occupied the public offices. We can determine this by studying who suggested actions (εἰσηγεῖσθαι) and moved decrees (λέγειν). Suggestions were submitted to the council or to the responsible boards of magistrates by both individual citizens and by boards.<sup>49</sup> Whenever we have some information about the citizen who suggested an action (εἰσηγησάμενου), it turns out that he is known to have been politically active as a magistrate. This holds true for both the Hellenistic and the Imperial period.<sup>50</sup> These suggestions were formulated as motions and presented to the assembly by office-holders.<sup>51</sup> When motions were presented by individuals, these individuals are known to have served in offices.<sup>52</sup> When accepted, the motions were recorded by “the secretary of the city” (i.e., of the assembly; *grammateus tes poleos*), a magistracy attested in Tyras (*IOSPE* 1<sup>2</sup> 2, Imperial period). In the case of some honorific decrees, we may suspect that a close relation existed between the man who made the proposal and the man who was honored. In Chersonesos, Herakleidas, son of Parmenon, moved the decree in honor of Syriskos, son of Herakleidas – if not his son, certainly a close relative (*IOSPE* 1<sup>2</sup> 344);



Kallisthenes, son of Dadas, suggested the honors for his relative Kallisthenes, son of Kallisthenes (*IOSPE* I<sup>2</sup> 42).

This is not to say that the citizen assembly was a mute and passive mass manipulated by a few men. On the contrary, there is explicit information for pressure exercised by the assembly through shouting (*kataboēsis*, *anaboēsis*) and acclamations.<sup>53</sup> As Arjan Zuiderhoek remarks with regard to the Imperial period, "provincial elites in the Roman east were certainly not powerful enough to force assemblies into submission and have them merely applaud and rubber-stamp pre-arranged decisions in the manner of modern dictatorships,"<sup>54</sup> and this holds true even more for the Hellenistic period. We lack information about very important spaces of political discussions, such as the streets, marketplaces, and clubs. But we do have significant information about the meetings of the assembly. Certain formulations in the honorary decree for Protogenes (the middle of or the late third century BCE) allow us to recognize citizen participation and the pressure that the assembled people could exercise.<sup>55</sup> The author of the text repeatedly and with vividness and emotionality presents how the people were confronted with an impending disaster or humiliation (see the text of the decree in honor of Protogenes). He then describes how the people urged Protogenes and other wealthy citizens to act. In these instances, verbs such as *epikaleomai* ("call upon"), *axioo* ("request"), *parakaleo* ("beseech"), and *zeteo* ("ask") refer to oral demands expressed either by the assembled people through cries and acclamations or by public speakers through orations. A few passages from this text give an impression of this interaction and the significance of the assembly in the asymmetrical but reciprocal relation of power between people and elite in a Hellenistic city.

[H]e was called upon by the assembly and gave 400 gold pieces ... He was called upon by the assembly and gave 300 gold pieces. The assembly thought it necessary to build a sufficient stock of grain and invited those who had grain to do this ... The people called on all who were able-bodied to help and not allow their native city, after it had been preserved for many years, to be subjugated by the enemy ... The people asked that the debtors should be freed from the debts.

Of course, honorary decrees record only successful requests of the people, and this text, by comparing Protogenes' behavior to the far more egoistical behavior of other wealthy men, implies that his conduct was the exception, not the rule. Not all members of the elite yielded to the pressure of the assembled people. It is reported, for example, that the loud cries of the Athenians did not make Phokion participate in a voluntary subscription (*epidosis*).<sup>56</sup> A successful plea is described by Chariton in his novel *Chaireas and Kallirhoe*. Setting the scene in late fifth-century Syracuse but with the practices of the first century

CE in mind, the novelist narrates how the assembly forced a wealthy man to marry his daughter to a young man of limited means:<sup>57</sup>

A regular assembly took place at this time. When the people had taken their seats, their first and only cry was: “Noble Hermokrates, great general, save Chaireas! That will be your finest monument! The city pleads for the marriage today of a pair worthy of each other!” ... Hermokrates loved his country (*philopatris*) and could not refuse what it asked.

This practice of making demands through acclamations is directly attested in Chersonesos, where the council prepared a decree to honor Titus Aurelius Calpurnianus Apollonides, procurator of Moesia Inferior, in response to the demands of the people (*SEG* XLV 985 A 6–10, 174 CE):

With a voice of gratitude, all jointly shouted in the market that he should become a citizen, member of the council, and *prohedros*, and that he deserves to receive every honor in our city as reward for his benefaction.

Of course, such acclamations were sometimes staged and used to manipulate the people. Those members of the elite who were willing to respond to popular requests were honored, and the decrees in their honor indirectly – and sometimes also directly – criticize those who declined to provide their support.

## 6 ALL CITIZENS ARE EQUAL, BUT ...: PROPERTY CLASSES AND THE REGIME OF THE “FIRST CITIZENS” IN THE IMPERIAL PERIOD

Although the assembly continued to represent the sovereignty of the *demos* in the Imperial period,<sup>58</sup> we observe further steps towards the limitation of its power. The citizen-body was reorganized in property classes and a formal hierarchy of duties, rights, and privileges depending on property was introduced. Different hierarchical positions were now visible in appearance (e.g., in the right of an individual to wear a crown), in the position of individuals in rituals (e.g., separate dining in festivals, outstanding position in processions), in gift distributions, and in seating arrangements in theatrical performances and contests.<sup>59</sup> Unfortunately, we often lack direct sources about this development and its contributing factors. Roman influence is certain, but Roman authority may have been only one of the agents for this development; one should not *a priori* underestimate the influence exercised by the members of the elite and the royal courts. Despite these gaps in our documentation, we may still detect changes in the epigraphic evidence, both in the assembly and in the citizenship. The examples of the assembly in Olbia and the citizenship in Chersonesos illustrate this.

In Olbia, it seems that in the Imperial period membership in the assembly was restricted and limited only to a segment of the citizen-body that met certain property criteria. Only certain meetings of the assembly were open to all citizens. We infer this from the expression *πάνδημος ἐκκλησία*, that is, "assembly of the entire *demos*," attested in the late second and early third century CE.<sup>60</sup> In the inscriptions of the Imperial period, the attribute *πάνδημος* (cf. the adverb *πανδημεί*) usually refers to participation of the entire *demos* in an activity (e.g., in banquets) and to massive attendance (e.g., of funerals), without distinctions based on status.<sup>61</sup> It may also have the meaning "unanimous," especially in honorific inscriptions.<sup>62</sup> But as an attribute of *ekklesia* the word does not refer to massive attendance, but has a different, legal, meaning. It is used with the verb *συναθροίζειν* ("summon together") to distinguish an assembly that was summoned in order to be attended by all citizens (or all of the inhabitants?) from an assembly that was attended by only some. Such an "assembly of the entire *demos*" is also directly attested in Boubon in Lykia and in Phrygian Apameia.<sup>63</sup> In this regard, Olbia clearly follows a general pattern. We know nothing about the criteria by which participation was determined, but property qualification may have been required for the assembly that was not *pandemos*.

The evidence from Chersonesos concerns the division of different classes of citizens. One type of division is directly connected with the peculiar conditions in Chersonesos, a city suffering from the lack of citizens (*oliganthropia*). As we learn from an inscription regulating the organization of courts (*SEG* LV 838), there were not enough citizens to serve in the courts and, consequently, the lawsuits were delayed. For this reason, citizens were assigned to courts by lot. As we may infer from the onomastic material, it seems that a solution to the demographic problem was the grant of citizenship both to citizens of other Greek cities and to non-Greek population. But certain rights were reserved to the descendants of the original Chersonesitans, for whom different terms are used: "the natural/innate among the citizens" (*οἱ ἔμφυτοι τῶν ἀστῶν*), "those who are citizens through descent" (*οἱ ἀπὸ γένους πολεῖται*), and "those who are Chersonesitans from the beginning" (*οἱ ἀρχᾶθεν Χερσονησίται*). We learn about this distinction indirectly, when newly naturalized citizens were, in exceptional cases, granted the same political rights as the Chersonesitans by descent.<sup>64</sup> It has been suggested that the division of citizens was the origin of the division of the members of the council in three different *stichoi* ("rows"), but there is no evidence to support this assumption.<sup>65</sup> Also the use of expressions such as *προύχοντες*, "the outstanding citizens" (*IOSPE* I<sup>2</sup> 364, line 13), *πρῶτοι* (*SEG* XLV 985 A 28), and *πρωτιστεύοντες*, "the first/foremost citizens" (*IOSPE* I<sup>2</sup> 79) that designate citizens with special rights and privileges shows that in the second century CE the process of creating a distinctive hereditary elite of *honoratiores* had been completed.

## 7 HONORIFIC DECREES AND THE ILLUSION OF THE PEOPLE'S SOVEREIGNTY

Although the word *demokratia* was used from the third century BCE to the late second century CE in Chersonesos,<sup>66</sup> already in the late first century BCE the process that transformed the North Pontic cities from moderate democracies to aristocracies based on inherited wealth, inherited networks, and inherited privileges was very advanced. The members of the elite occupied offices repeatedly; only they proposed political measures in the assembly; they won the favor of the people through benefactions and liturgies; they engaged the members of their families in political life at a young age; they received honors that elevated them above the status of the ordinary citizen; and their services for the community were continually commemorated and were visible through public monuments and statues.<sup>67</sup> In this political context, characterized by great inequality, one of the aims of political oratory in the assembly was to retain the illusion of democracy and equality. The discrepancy between the sovereignty of the *demos* and the hereditary rule of the elite, between appearances and reality, was acceptable as long as a reciprocal relationship could be established between the elite and the mass of the citizens. The most effective means for strengthening this reciprocal relation were the display of goodwill and patriotism by the elite – in the form of benefactions – and the display of gratitude and the implicit formulation of expectations by the people – in the form of honors. This display assumed theatrical dimensions, and theatrical behavior was employed by the elite members to control the emotions and thoughts of the citizens and to create the illusion that they were not distant from the ordinary citizens.<sup>68</sup> These general trends of the Hellenistic and Imperial periods are also found in the cities of the Northern Black Sea region, especially in Chersonesos and Olbia.

In these cities honorary decrees were voted for benefactors in order to serve as *exempla* and motivate other wealthy citizens to acts of generosity, as is explicitly stated in the hortatory formula.<sup>69</sup> For instance, in the decree for the statesman and benefactor Theokles of Olbia, the erection of his statue in the *gymnasion*, the public announcement of his praise during his funeral, and the publication of the decree served as models for others; public service in office and through benefactions appears in this text as a continual competition among the members of the elite (*IOSPE* 1<sup>2</sup> 40):

Theokles shall be crowned [during the funeral] with a golden wreath and the herald shall make the announcement that the council, the people, and the cities of the foreigners, who are present here, are crowning Theokles, son of Satyros, who has become an all-time winner in the competition for the affairs that jointly concern all and for the interests of the city. A statue that represents him in armor shall be dedicated at public

expense in the *gymnasion*, whose construction he supervised. This decree shall be inscribed on a white stele and dedicated in the most prominent place of the city, so that all are informed that this man was courageous in valor, tireless in virtue, a rescuer of the citizens, and big-hearted towards foreigners, and to serve as admonition and encouragement for those who are in a position to show affection towards the *polis* and be benefactors.

Theokles' crowning is assimilated with the crowning of a victorious athlete and the announcement of the victory; Theokles' discipline was public service. Similarly, the decree of Karzoazos of Olbia explicitly explains the reason for the public inscribing: "so that those who read it receive an encouragement to imitate a [way of] life that is praised" (*IOSPE* 1<sup>2</sup> 39).

The use of emotional language and dramatic descriptions, which characterize the decrees of the Hellenistic and Imperial periods, are also well represented by decrees from Chersonesos and Olbia.<sup>70</sup> A good example is provided by the honorary decree for Protogenes in Olbia (the middle of or the late third century BCE).<sup>71</sup> A few passages of this long inscription illustrate this:

When King Saitaphernes arrived at Kaknytos and demanded the gifts due for his passage, and the public treasury was exhausted, he [Protogenes] was called upon by the assembly and gave 400 gold pieces. When the magistrates pawned the sacred vessels to repay the city's debt to Polycharmos for 100 gold pieces and could not redeem them, and the foreign creditor was taking the vessels to the moneyer, he himself paid in addition the 100 gold pieces and redeemed them ... When the Saioi came along to collect the gifts, and the *demos* was unable to give them and asked Protogenes to help in this crisis, he came forward and promised 400 gold pieces ... When king Saitaphernes came along to the other side of the river to receive favors, and the magistrates called an assembly and reported on the presence of the king and that the city's revenues were exhausted, Protogenes came forward and gave 900 gold pieces ... When the largest part of the city along the river was not fortified, and ... deserters were reporting that the Galatians and the Skiroi had formed an alliance, that a large force had been collected and would be coming during the winter ... because of this many were in despair and prepared to abandon the city ... Because of this the people met in an assembly in deep anxiety. Vividly presenting before their eyes the danger that lay ahead and the terrors in store, the people called on all who had power to help and not to allow their native city, after it had been preserved for many years, to be subjugated by the enemy. When no one would volunteer for all or part of the demands of the people, he promised he would himself build both the walls and would advance the whole cost of the construction.

The praise of Protogenes stresses his patriotic conduct but also allows us to recognize elements of performance in the phrases that describe how he came forward (*ἐπελθὼν ἐπὶ τὴν ἐκκλησίαν*) in critical situations and how he was the

first to volunteer (πρῶτος ἐπηγγέλαιτο). One gets the impression that in critical assemblies all eyes were turned towards him. As I have argued in a more detailed analysis of this text from the perspective of Hellenistic oratory and theatricality (see n. 55), the account of Protogenes' services is continually characterized by reversals which give the narrative a dramatic quality. Whenever the city was in despair, Protogenes came forward in the assembly as a *deus ex machina* and saved it. One of the passages that describes with *enargeia* a scene in the assembly, while the city was expecting an enemy attack, is noteworthy. The author of the decree relates how the public orators were painting vivid images of the impending catastrophe, like tragic poets (διδῶν πρό ὀφθαλμῶν ποιοῦμενος), using an expression that we find in Aristotle and Polybius in connection with dramatic descriptions.<sup>72</sup> When the pleas of the people remained unanswered, Protogenes came forward as a rescuer in the last minute. We find similar dramatic qualities in the honorific decree for Diophantos.<sup>73</sup> In these texts, the *demos* and the benefactor are assigned roles, like actors in a dramatic play. The *demos* plays the part of the powerless suppliant, the benefactor that of the benevolent rescuer. The happy ending is the honorific decree that not only displays the people's gratitude but also formulates the proper conduct in the reciprocal relationship between people and elite. The message is that the people will be willing to accept the privileged position and leadership of an elite, so long as the elite is willing to serve the community in times of need.

In the political imagination of the Imperial period, communal life is assimilated with a family, the commitment of the elite to the common good, with the duties of a son, and the elevated position of elite leaders, with the position of a caring father, whose authority must be respected. A clear expression of this illusion of the big family is found in posthumous honorific decrees that assimilate a community that has lost a benefactor with a family bereft of a father or a child. Public demonstrations of grief were a conscious attempt of the people to animate the elite for larger benefactions. The funeral of a benefactor was transformed from a family ritual to a public ritual. The participation of the entire community in the funeral – in other words, the incorporation of the community into a family ritual – created the fiction of the orphaned people.<sup>74</sup> This fiction of an intimate, indeed of a family relation between the people and the elite was also manifested through the honorary titles of “the father of the people,” “the son of the people,” “the daughter of the people,” etc.<sup>75</sup> These general trends of the Imperial period are also attested in Olbia and Chersonesos and, to a lesser extent, in other Pontic cities.

As we have already seen, Kallisthenes of Olbia was praised for his political leadership and his benefactions (see above). This behavior assured for him a unique hierarchical position: “making the best proposals and acting in an beneficial manner, he became father of the city.” This is not pure rhetoric. This honorary title was connected with political authority and social

prestige. Kallisthenes is mentioned as "father of the city" (πατήρ πόλεως) in an inscription immediately after the provincial governor and before the *archontes* (*IOSPE* 1<sup>2</sup> 174, 198 CE). By creating the illusion that the whole community was just a big family, honorary titles such as "father of the city" made inequality less visible and assimilated the position of the members of the elite with that of the father. The fiction of the family could be expanded to include resident foreigners. For instance, Karzoazos of Olbia (second century CE) "offered hospitality to the foreigners displaying πάθος συγγενικόν ("the affection that one shows to relatives," *IOSPE* 1<sup>2</sup> 39).

These titles also articulate the expectation that the members of the elite would take care of the *polis* exactly as good fathers or sons take care of their daughters and mothers. For this reason, already at a young age, the conduct of the scions of the elite families was closely observed by the public eye, and the expectations of benefactions were anything but subtle. The partly restored posthumous decree for Dados of Olbia, who died still a child, disappointing his city's hopes, is a nice example of this mentality (*IOSPE* 1<sup>2</sup> 52, second century CE):

Dados, son of Toumbagos, [educated] by his father [with care] and in accordance with the (social) worth of his family, showed his view, as no one older could, that he would be a lover of the fatherland; everyone praised him and hoped that he would fulfill all the liturgies in accordance with the rank of his family. But Fate, always victorious, appeared suddenly, and he was snatched away from the parents and from the fatherland with cruelty.

The offering of public funerals to benefactors is also attested in the cities of the Northern Black Sea region, and their communicative function does not differ from that which has been established for the Greek cities of the Imperial period. One of the earliest examples is the decree concerning the funeral of Neikeratos in Olbia, who in the early first century BCE saved the city from external threats and internal strife but was murdered by his enemies:<sup>76</sup>

In order that he receive a more outstanding honor by all, his body shall be brought to the city for the appropriate funeral; the workshops in the city shall be closed; all the citizens shall wear black garments and follow the funerary procession; and the *demos* shall crown him with a golden wreath on the occasion of the funeral.

Here, black dress and the closing of workshops and shops transformed the entire city into a community of mourners. Public honors during funerals are also attested for other public figures in Olbia, such as the statesmen Karzoazos and Posides, but also for Dados, a boy of noble family, whose premature death dashed the hopes of the Olbiopolitai for public services.<sup>77</sup>



As I have argued in a study of political life in the Hellenistic city, statesmen in Greek *poleis* employed theatrical behavior in their communication with the mass of citizens. Their carefully staged performances in the assembly and their public conduct elevated them above the rest of the citizens and, at the same time, created the impression of affability, of being close to the needs of the people. Contemporary portraits encapsulate in their facial expressions the vigor and the strain with which the members of the elite carried out toilsome duties as a service to the people. They represented the members of the elite with the mask of the virtuous citizen, in the proper dress and with facial expressions indicating exhaustion after their demanding efforts for public welfare.<sup>78</sup> Political leaders had to rely on complex performances in delivery and acting in order to receive enthusiastic approval for the proposals (*probouleumata*) that had been negotiated among the members of the elite in the council. A very important concept applied in this context is that of the *isotes*; originally meaning “equality” in the context of democracy, from the Hellenistic period on the word acquires a different meaning. *Isotes* is the affability displayed by those who were in a superior position in a society characterized by lack of equality.<sup>79</sup> The honorific decree for Theokles of Olbia, who died while he was serving as *archon* for the fourth time, is a Pontic illustration of this shift in the word’s meaning (*IOSPE* 1<sup>2</sup> 40).

In the offices in which he served, in his service as priest, and in all the liturgies he offered himself to the fatherland unpretentiously (ἀφελῶς) in all matters, behaving towards all in a calm and affable manner (ἡρεμον ἑαυτὸν παρέχων καὶ ἴσον), administering everything with honesty and justice. When he was serving in the highest office for the fourth time – as it was necessary that such men serve in office many times – his public conduct was that of concord, (he was) behaving like a brother to those of the same age, like a son to those who were older, and like a father to the children.

## 8 OVERLAPPING IDENTITIES

The historical context sketched above – external threats, dependence, development of clear hierarchies, inequality with regard to property and rights, concentration of political power in the hands of the elite, complex negotiations between people and elite in a system that combined inequality with reciprocity, preservation of the traditional values of freedom and democracy under conditions of subordination to external power and oligarchy – sets the stage for the way identities were constructed, felt, and displayed in the cities of the Northern Black Sea region.

According to a very simple definition, identity is the response to the question “Who are you?” Let us take, for instance, a passage in Herakleides’ description



of Greece, in which the author comments on the self-representation of the Plataians in the third century BCE (fr. 11 Pfister): "the citizens have nothing to say except that they are colonists of the Athenians and that the battle between the Greeks and the Persians took place in their territory." This is the Plataians' answer to the question "Who are you?" Such an answer involves a historical narrative, true or imaginary, and an association or affinity with another group ("we are Athenians"). What defines identity is the context in which this question is asked: who wants to know, what consequences will the answer have, what rights and privileges will be based on identity? The context of communication leads to very different, sometimes overlapping, sometimes contradictory concepts of identity.<sup>80</sup> The same individual or group may present different identities, depending on the context. The elementary and more clearly visible identity of a member of an ancient community was his civic identity, that is, the legally defined identity of a citizen of a *polis* or of a federal state (a citizen of Olbia, Chersonesos, etc.). But this civic identity could sometimes be undermined by other forms of consciousness, solidarity, and loyalty, especially by social identity – belonging to a family, a professional association, an age group, a civic subdivision, or a social group – loyalty to a political group, or adherence to a religion that demanded exclusive allegiance. Civic identity could also be overlaid by the feeling of belonging to a group broader than that of the civic community. The three most widespread forms of such identity in the Greek world are culturally defined Hellenic identity – based on language, custom, and common cultural memory; regional identity – e.g., Boiotians, Thessalians, Cretans, etc.; and kinship with another tribe, city, or group of cities – e.g., Dorians, Ionians, or settlements originating in the same founder. The media for the expression of identity were multifaceted and multi-layered. They include ethnic, civic or geographical designations (e.g., *Hellen*, *Olbiopolites*, *Pontikos*), personal names, symbols, attire, habitus, linguistic choice, or even culinary preferences or peculiar rituals and cults. Which identity is displayed and how it is expressed depends on the context of its manifestation: a festival, a commemorative anniversary, a meeting of the assembly, a religious celebration, an internal conflict, an external threat, a diplomatic mission, and so on.

Unsurprisingly, we encounter in the Black Sea area all of these different forms of identity. The media of identity expression are similar to those known from Hellenistic and Roman Greece and Asia Minor. There are, however, specific features that derive from the peculiar historical and geographical conditions of the Black Sea. Important factors in the Pontic context include direct proximity to barbarian tribes and common exposure to threats; various forms of interaction with the local non-Greek population – subordination, mixed marriages, etc.; the lack of political unity – with the exception of short periods; and, from the first century BCE onwards, the presence of Roman power.

A complete discussion of the development of identities in this region is not possible in this context. It requires detailed study of various expressions of ethnicity and a study of the onomastic material and its transmission within families – especially because of complex processes of migration and acculturation and because of intermarriages between Greeks and barbarians;<sup>81</sup> it also requires the study of symbols used in local coins, the iconography of funerary and honorary monuments, religious practices, local historiography, and commemorative practices. Some of this evidence has been discussed in recent scholarship, but a systematic study that takes into account the local material and also proceeds in comparisons is a desideratum of future research.<sup>82</sup> In accordance with the focus of this chapter on political culture and the epigraphic evidence, the following very brief sketch primarily considers the evidence provided by decrees and a few other public inscriptions. Although this evidence is of great value, because it originates in the public discourse that took place in the popular assembly, it is not suitable for generalizations.

As regards civic identity, there is an undisputed continuity from the sixth century BCE to the third century CE. Throughout the entire period under discussion here we find unambiguous references to the importance of the fatherland (*patris*) – that is, one's city.<sup>83</sup> The honorific decree for the local historian Syriskos of Chersonesos (early third century BCE) clearly reveals a sense of local pride:<sup>84</sup>

Whereas Syriskos, son of Herakleidas, has diligently made a written record of the miracles of the Virgin and has read them out, and has also narrated the affairs concerning the kings of the Bosphorus, and also written a historical account of the benefactions toward the cities in a manner favorable to the *demos*; in order that he receive the appropriate honors, let it be resolved by the council and the assembly to praise him for this; and the *symnamones* shall crown him with a golden wreath during the festival of the Dionysia, on the twenty-first day, and make the following public announcement: "The people crown Syriskos, son of Herakleidas, because he made a written record of the miracles of the Virgin and wrote a historical account of the benefactions towards the kings and the cities in a true and favorable manner towards the people."

Local pride, connected with the cult of the local divine patron, the Parthenos, is also visible in the honorific decree of Chersonesos for Diophantos, in the passage in which the Chersonesan orator narrates the final victory (*IOSPE* 1<sup>2</sup> 352, about 108 BCE):

When Palakos thought that the weather was giving him an advantage and gathered all his troops, inviting, in addition to them, also the tribe of the Rheuxinaloi, the Virgin, patron of the Chersonesitans on all occasions, who then was present next to Diophantos, foretold the deed that was about to be accomplished through the signs that occurred in her sanctuary, filling all of the troops with bravery and daring courage. Diophantos

prudently drew up his troops in battle-order, and so it occurred that a fair victory, worthy of memory for all time, was won for king Mithridates Eupator. For hardly any of the infantry (of the enemy) was saved, and of the riders, only a few escaped.

Naturally, most evidence for patriotic behavior is connected with the praise of benefactors, a praise that aimed to motivate others to a similar public conduct. For instance, Theokles of Olbia was praised because through his engagement in construction the city became more beautiful and more illustrious (περικαλλεστέραν καὶ ἐνδοξοτέραν, *IOSPE* 1<sup>2</sup> 40). But a clear expression of civic identity is the feeling of bitterness when death occurs far from the fatherland.<sup>85</sup> As has been observed in many communities with large numbers of immigrants, new citizens were keen in displaying loyalty towards their new home – whether genuinely felt or not. At least this is what the grave epigram for a certain Heliodoros from Amastris, who died at a young age in Pantikapaion (first century CE), asserts, designating the place of his burial as his new fatherland: “now I have two fatherlands (*patrides*); the one that earlier raised me, and the present one, in which I stay.”<sup>86</sup>

There were, however, undeniable fractures in this civic identity. The oath of Chersonesos (see above) is a document that clearly expresses the fear that citizens might feel stronger loyalty to a political cause than to their *polis*, to the extent of committing treason. And the honorific decree for Protogenes of Olbia (see above) not only expresses pride for a city, whose very name means “bliss” and whose citizens designated themselves as the “blissful citizens” (*Olbiopolitai*), but also sharply contrasts the egoistical behavior of the majority of the propertied classes with Protogenes’ generosity and genuine patriotism (see above).

Besides crisis and social inequality, external domination could also affect civic identity in a dramatic way. The establishment of Roman authority in the Black Sea and the complex negotiations of the Greek cities and the Bosporan kings with a dominant empire and its emperors made it necessary to put on a show of excessive loyalty. Extreme examples on the level of political communication between Roman authorities and the Black Sea communities include the renaming of the Phanagoritans as the Agrippeis, to honor Marcus Vipsanius Agrippa, who had intervened in the dynastic conflicts of 16 BCE; the assumption by the Bosporan kings of the attributes *philorhomaïos* and *philosebastos*;<sup>87</sup> and the rhetoric of subordination used by Greek communities, for instance in a petition of the Chersonesitans, in which the representative of Roman authority is called a “guardian” (κηδεμών). But such expressions of a new allegiance and a radical, albeit provisional, rupture with the past, such as the renaming of a community, remain an exception. On the contrary, the preservation of the memory of a city’s past remained strong.

As we would expect in a colonial context, a very significant part of this cultural memory concerned the bonds that connected a colony with its mother-city. The author of the Chersonesan honorific decree for Thrasymedes of Herakleia (*IOSPE* I<sup>2</sup> 357, first or second century CE) compares his conduct in Chersonesos to that of a good father towards affectionate sons (οἷα πατέρων ἀγαθῶν πρὸς υἱοῦς φιλοστόργους [εἶχ]εν <ε>ῥνοϊαν). He calls Herakleia “our mother” (*mater*). We find a similar vocabulary of affection in a decree of Chersonesos for Herakleia (mid second century CE). The Herakleiotēs are called “most pious fathers” (εὐσεβέστατοι πατέρες), and the city, “our ancestral great city, the first in Pontus” (*IOSPE* I<sup>2</sup> 362).

As already mentioned, the traffic among Pontic cities remained very intensive in the entire Hellenistic and Imperial periods, and this certainly contributed to a feeling of regional identity. When the local historian Syriskos was honored in Chersonesos for composing a local history (about 250 BCE),<sup>88</sup> Chersonesos’ services to “the *poleis*” (φιλάνθρωπα ποτὶ τὰς πόλεις) – that is, the cities of the Northern Black Sea region and the Bosporan Kingdom – belonged to the subject matter that he treated. Pontic identity was enhanced through the unifying impact of the Roman Empire. Already in the early first century CE, an honorific decree of Byzantion for Orontas of Olbia provides direct evidence for a Pontic identity (*IOSPE* I<sup>2</sup> 79):

Orontas, citizen of Olbia, son of Ababos who was a man of principal position (*pratisteusantos*) not only in his own fatherland but in the entire Pontic ethnos, who advanced even to be acquainted with the emperors, who has been useful to the city of the Byzantines both as regards the public needs and the protection of those who sail to the trading place [of Olbia], has succeeded his father in all the other things and also in the goodwill towards the people and in the position as *proxenos*. Since every one of our citizens who sails in Pontus testifies to his kindness (*philanthropia*) and care ... in view of his benefactions and the rank of this man and his ancestors, the city thought it appropriate not to leave his presence unnoticed/undecorated, and the people asked the generals to honor this man.

The stage of Ababos’ and Orontas’ public activity was not just their city but the entire Pontus, a geographical designation which was larger than the borders of a Roman administrative district.

Greek identity seems, however, to have been more strongly felt than Pontic identity. The proximity to the non-Greek populations in the hinterland and the endemic tensions between Greek cities and barbarian tribes probably made the citizens of the Greek cities wish to express a feeling of Greek solidarity, regardless of origin.<sup>89</sup> This is in sharp contrast with the increasingly frequent use of non-Greek personal names, which dominate the epigraphic

record especially in the Imperial period. The epigraphic material is only in part suitable for a study of feelings of identity and distinction, because explicit references to views about barbarians are found only in the context of confrontation and threat. A good example is offered by an honorific decree that narrates the military activity of Diophantos, the general of Mithridates VI, in and near Chersonesos (about 108 BCE). After the author has described how a victory of Diophantos had given the Chersonesitans the impression that "they had already been relieved from the dominance of the barbarians," he goes on to explain that "the Scythians demonstrated the faithlessness which is inherent in their nature, revolting from the king." Ethnic stereotyping is obvious here, combined with a sense of cultural and moral superiority.<sup>90</sup> The intermarriage of Greeks and non-Greeks (Sarmatians, Iranians, Scythians, etc.), which is reflected by the alteration of Greek and non-Greek names within the same family,<sup>91</sup> could coexist with feelings of resentment, especially in cases of external threat.

Greekness was felt as a strong form of solidarity under special circumstances, as the following two examples show. The first example concerns the unique situation in Tanais. Here, the Greek and Iranian populations were strictly separated into two communities under the leadership of a Ἑλληνάρχης and an ἄρχων Τανναϊτῶν, respectively; this system is attested for the Imperial period, but it may be of earlier origin.<sup>92</sup> The second example concerns the sanctuary on the island of Leuke which was regarded as a cultic place of the Hellenes in the North Pontic region; such a sanctuary could become the stage of expressions of solidarity, but also of competition. Naturally, an attack against Leuke was regarded as an attack against the Hellenes; in such a critical situation Hellenic identity was strongly felt. We may observe this in the Olbian honorary decree for a man who excelled in the defense of the island of Leuke from the attacks of pirates (*IOSPE* 1<sup>2</sup> 325, third century BCE?). The crime of the pirates, who had occupied the island, is specified as "robbing the Greeks" (*leisteia ton Hellenon*), and the city explains that the man's statue was set up "in order that his deeds are commemorated and the city makes clear to the Greeks that it cares a lot for the island, according to the ancestral tradition, and that it honors those who favor her while they are alive, and when they die she shows them the deserving gratitude." The Greeks appear in such a text as a community of spectators who carefully observe the behavior of one of their communities.

The wording of the honorific decree for Theokles (*IOSPE* 1<sup>2</sup> 40), son of Satyros, clearly shows a differentiation and hierarchy in the loyalties felt toward the fatherland and toward the Greeks. Theokles' feelings for his fatherland are designated as *philostorgia*, the affection that characterizes the relation between family members, whereas his behavior towards the Greeks is called *philoxenon*, the proper, friendly conduct toward guests.

Based on an account by Aristoxenos (Athenaios 14.632.a) concerning Poseidonia in the Tyrrhenian Gulf, Constantine Cavafy composed his poem “Poseidonians,” conveying a feeling of cultural nostalgia in a Greek colony:<sup>93</sup>

The Poseidonians forgot the Greek language  
after so many centuries of mingling  
with Tyrrhenians, Latins, and other foreigners.  
The only thing surviving from their ancestors  
was a Greek festival, with beautiful rites,  
with lyres and flutes, contests and wreaths.  
And it was their habit toward the festival's end  
to tell each other about their ancient customs  
and once again to speak Greek names  
that only few of them still recognized.  
And so their festival always had a melancholy ending  
because they remembered that they too were Greeks,  
they too once upon a time were citizens of Magna Graecia;  
and how low they'd fallen now, what they'd become,  
living and speaking like barbarians,  
cut off so disastrously from the Greek way of life.

Although more distant than the Poseidonians from the Greek mainland, the urban populations in the cities of the North Pontic region did not reach the state described by Aristoxenos. A few years before the beginning of the second century CE, in his Borysthenitic oration Dio Chrysostom sketched a gloomy picture of Olbia, a city in decline. Scholars agree that this picture is exaggerated in its negative features and influenced by the orator's philosophical ideas.<sup>94</sup> But even in this dark picture there is still place for traditional Hellenic culture. “Although, in general, they no longer speak clear Greek, as they live among barbarians, still almost all at least know the *Iliad* by heart,” Dio claims (36.9). The epigraphic evidence shows that the cities of the Northern Black Sea region remained vibrant units of political, social, and cultural life, fully integrated into the *koine* of the Greek culture of the “long Hellenistic Age.”

## PART IV

### ART AND ARCHITECTURE





## THE LANGUAGE(S) OF IMAGES IN THE ARTS OF THE BOSPORAN KINGDOM

Maya Muratov

This chapter does not aim to provide an overview of the arts of the Northern Black Sea region – a comprehensive study devoted to the objects of art produced and consumed in the Greek *apoikiai* of the North Pontic coast still remains a great endeavor for the future. Instead, it concentrates on one of the three main geographical and cultural formations of the region – the Bosporan Kingdom, an important “contact zone” in antiquity – and assesses a very specific function of the Bosporan visual culture, namely, its role as semantic vehicle for communication, an important “factor in the collective life of a society.”<sup>1</sup>

Similarly to what we can observe in the development of the architecture of the Ionic order in the Northern Black Sea region,<sup>2</sup> the visual culture of the multi-ethnic Bosphorus was firmly rooted in the Greek pictorial tradition; in fact, it was a peculiar local variation of the Hellenic one.<sup>3</sup> Although stylistically heterogeneous, it was deeply informed by the Greco-Roman pictorial conventions, which remained dominant at all times. Naturally, over time, local ethnic conditions and customs contributed to the Bosporan iconographic tradition; as a result, it occasionally exhibited an innovative spirit and produced some original pictorial formulas, which incorporated both Hellenic and indigenous conventions. Selecting the objects that would illustrate this idea proved a rather difficult task. Unlike architectural fragments, which conform to specific orders and therefore are standardized, objects that traditionally belong to the category of “art” exhibit much more diversity in function and type. For this very reason, one-of-a-kind monuments have not been included into this chapter, which

concentrates instead on the types of mass-produced objects common in the Bosphorus, such as grave-markers (stelai and sculpture in the round) and dedicatory slabs. The uniquely Bosporan visual formulas explored through these case studies include the notion of the Underworld, representations of ancestors/predeceased family members, and distinct depictions of local rulers.

## INTRODUCTION

An extensive look at the North Pontic ancient sites and archaeological material found there immediately reveals several factors that would greatly impede the progress of a comprehensive study of art objects from this region. The first issue to be taken into consideration is a broad chronological range determined by the lifespan of the *apoikiai* and of the polities associated with them – from the early sixth century BCE through the fourth century CE. Another difficulty has to do with the considerable size of the geographic area in question. Moreover, the existence within these territories of distinct state formations with their own social, political, and cultural developments,<sup>4</sup> which throughout the centuries maintained diverse and complicated relationships with each other, as well as with the non-Greek population, also has to be taken into account.

In addition to this, more often than not, the state of preservation of the archaeological sites, monuments, and objects in the Northern Black Sea region leaves much to be desired and at best could be described as “fragmentary.” After the 1830s, plunder was quite commonly practiced, alongside the private and state-sponsored archaeological explorations. In fact, the year 1830 marks a crucial moment in the history of the Northern Black Sea antiquities: it was the year when the famous Kul’-Oba barrow was discovered, excavated, and partially looted, thus setting off a “gold rush” in the region.<sup>5</sup> As for the marble and limestone fragments of ancient sculpture and architecture found on the sites, these were often destined for the limekilns – furnaces used to produce lime by burning marble and limestone. Lime was much needed for various local building activities.<sup>6</sup> The Second World War, which came later, inflicted terrible damage: besides the expected share of looting of the sites and museums, it also left a prominent physical mark on the sites. The site of ancient Chersonesos had to endure the eight-month siege of Sevastopol; in addition to heavy bombing, the territories of ancient Pantikapaion and Olbia were covered with military trenches dug by Romanian soldiers, some of which are still visible today. To add to this list of misfortunes, many of the ancient sites in the North Pontic region are partially or completely built over, making further archaeological exploration nearly or downright impossible. Furthermore, in many areas the erosion of the coastline inevitably leads to parts of the ancient sites literally crumbling into the sea or being submerged altogether.

Despite all these impeding factors, the Northern Black Sea region has always yielded large amounts of archaeological material and continues to do so.<sup>7</sup> However, most of the material is usually found in secondary contexts and often in a quite fragmentary state. For these and other reasons, these objects have been habitually treated as archaeological finds, and scholars concentrated on their classification, description, and search for *comparanda*, while the socio-cultural approach and critical examination were – and for the most part still are – sadly lacking. From its inception in the middle of the eighteenth century, the history of ancient art as a discipline was very closely associated with archaeology, and methods such as description, categorization, and grouping were common to both disciplines.<sup>8</sup> It has been noted that meticulous handling of the most insignificant archaeological mass finds (alongside the important ones, of course) was always one of the principal characteristics of Soviet classical archaeology.<sup>9</sup> Meanwhile, in the 1960s and 70s, the West saw a development of new approach(es) to art history, in general, and ancient art history, in particular, which aimed at contextualizing the objects, as well as exploring mutual influences among them and various aspects of a society that produced and consumed them.<sup>10</sup> Only recently has the situation in Northern Black Sea scholarship, marginalized for the best part of the twentieth century because of political and linguistic barriers, begun to change, and some recent works exhibit an interesting range of analytical approaches.<sup>11</sup>

### *The Bosporan Kingdom as the “Contact Zone”*

Established sometime in the fifth century BCE (Diod. 12.31), the Bosporan Kingdom (Map 2) was initially composed of several Greek *apoikiai*. By the late fifth or the middle of the fourth century BCE, the neighboring territories with their non-Greek populations were gradually added to this polity. Consequently, the population of the kingdom comprised Greeks from Ionia and from other cities around the Black Sea and the Mediterranean Sea, as well as of various indigenous tribes, such as the Sindoi, Maeotai, Toretai, Dandarioi, and Pessoi, known from literary and epigraphic sources. Groups of nomadic Scythians and (later) Sarmatians are also believed to have settled and stayed with a mixed population of Greeks and non-Greeks, presenting a cultural milieu that was Hellenic in its core but nevertheless complex.

Approaching art as a semantic system that “functions according to a sort of grammar”<sup>12</sup> seems particularly appropriate in the case of the Bosporan Kingdom. Obviously, this “system of visual language can never encompass all manifestations of art in a culture.”<sup>13</sup> But with various Greeks, non-Greeks, and Romans (at a later date), who either permanently lived in the Bosphorus or visited or settled in the region in due course, the communicative aspect of visual culture must have been very important.

This chapter explores several ways in which new iconographic concepts were developed and became part of the system of visual communication in the multi-ethnic Bosporus. At the same time, it suggests that stylistic and/or aesthetic considerations, as well as the realism of representations, were not of prime importance (if at all), as long as the appropriate message was conveyed through a certain visual formula.

Objects and monuments that will serve as our case studies include several funerary monuments and a group of commemorative/dedicatory stone slabs, all locally made.<sup>14</sup> None of them belong to the “autonomous realm of art”<sup>15</sup> – like most ancient objects, they are thought to have served specific purposes, as all of them were intended to be seen by and to communicate with everyone. From the cities and villages of the Greek and Roman *oikoumene*, the Bosporus inherited the culture of spectators; the visual accessibility of these artifacts and monuments and their ability to establish a dialogue with their beholders are the reasons why they were chosen for this study. As means of non-verbal communication, these objects were often meant to impress, but more importantly, to convey a specific concept or a particular belief, while participating “in the construction of the visual environment within which people lead their lives” and helping to “shape their sense of themselves and their place in the world.”<sup>16</sup>

Chronologically, the objects chosen for this study belong to the period from the late fourth century BCE to the third century CE. The reasons for that are quite straightforward: by the late fourth century BCE the territories with a sedentary non-Greek population were already incorporated into the Bosporan Kingdom and were contributing to the development of the Bosporan cultural identity. And in the course of the last two centuries BCE and the early centuries CE, numerous non-Greeks, including groups of Thracians, Scythians, and (later) Sarmatians, as well as Romans, gradually joined in, thus turning this territory into one of the most important “contact zones” of antiquity.

#### “GREEKS AND BARBARIANS” IN THE BOSPORUS: EMERGING OF BOSPORAN IDENTITY AND DEFINING OF “BOSPORAN ART”

In 1922, Michael Rostovtzev wrote:

South Russia has never been studied as an integral portion of the ancient world, and as one which took a share, sometimes a very important share, in the general development of Oriental and Greco-Roman civilization. Archaeologists, attracted by the astonishing wealth of the Greek, Scythian, and Sarmatian finds in South Russia, have been content to classify and to date the objects without utilizing them for the purpose of history: historians and epigraphists have applied themselves to tracing the history of the Greek colonies in Russia, and have not attempted to understand it as

part of a more general history – that of South Russia as a whole, and that of the entire Oriental and classical world.<sup>17</sup>

For the greater part of the twentieth century, however, the “mainstream” representatives of the Soviet scholarly community considered the approach advocated by Rostovtzev unacceptable and even offensive. By the 1950s, it was claimed that numerous Russian scholars who belonged to the pre-1917 school of thought, “except for a few progressive ones,” could not appreciate the unique local (i.e., non-Hellenic) elements in the art produced in the North Pontic region and ignored the “active role of the barbarians.”<sup>18</sup> The uniqueness and creativity of the culture in this region was enthusiastically emphasized. Very soon this concept was taken even further when the originality of the “artistic objects” produced in the Bosporan Kingdom and other areas of the Northern Black Sea region was considered a sign of the originality of national Russian art.<sup>19</sup> Although the situation has changed somewhat, the actual historical and, especially, cultural standing of this region and of its visual arts within the larger framework of Greco-Roman civilization has not been fully ascertained to this day.

The nature of cultural and other types of interaction between Greeks and barbarians remains one of the most hotly debated and complex problems in the scholarship dedicated to the Northern Black Sea.<sup>20</sup> First and foremost, we know surprisingly little about the ethnic situation on both shores of the Cimmerian Bosphorus. The general consensus is that these lands were scarcely populated and that most Greek *apoikiai* were established in unoccupied areas, as archaeological investigations did not uncover, at least thus far, any significant traces of pre-Greek occupation.<sup>21</sup> The names of the indigenous sedentary tribes believed to have been living in the surrounding regions came down to us from literary sources and from Bosporan inscriptions.<sup>22</sup> The Maeotai, traditionally placed along the eastern shore of the Azov Sea, were in all probability not an *ethnos*; rather, it may have been a collective term applied to a group of tribes living there.<sup>23</sup> Their material culture was quite unsophisticated, and we know virtually nothing about their large- or small-scale artistic production. The closest neighbors of the Greeks on the Taman Peninsula were the Sindoi. At this point, only one settlement (the site of Semibratnee, or Labrys) and its necropolis can be associated with this people. Based on the poorly published results of the limited excavations in the 1950s, it seems that by the second quarter of the fifth century BCE the Sindoi were thoroughly Hellenized.<sup>24</sup> As for the Toretai, Dandarioi, and Psessoï – the tribes mentioned in ancient texts and inscriptions – their whereabouts are unknown and they remain “archaeological phantoms.”

In the Eastern Crimea, traces of pre-Greek occupation have not been uncovered thus far and no indigenous tribes have been associated with

this area.<sup>25</sup> However, these territories may have been controlled from a distance. Because of their proximity to the Eurasian steppe belt, this area was subjected to periodic influxes of the nomadic tribes of Indo-Iranian stock, commonly referred to as the Scythians. It seems that from very early on and throughout their existence, the Greek *apoikiai* had to interact with the Scythians, at least occasionally.<sup>26</sup> As recent archaeological investigations of the Bosphoran cities testify, the early interactions were often anything but peaceful.<sup>27</sup> Thick strata containing evidence of destruction and burning, as well as Scythian arrowheads, uncovered in the past few years in Pantikapaion, for example, can be preliminarily dated to the first half of the sixth century BCE.

Later, as economic and political connections were being forged, various groups of non-Greeks settled near or even in the *apoikiai*. Naturally, Greek colonists had to adapt to their new surroundings, new climate, and to the new neighbors. Some of these adjustments included changes in traditional clothing: trousers, woolen hats, and thick cloaks, as well as caftan-like garments, which the Greek newcomers had to wear for practical reasons, unsurprisingly closely resembled those worn by the locals. For the same reasons of practicality, in order to be able to protect themselves and their new settlements, the Greeks had to quickly adopt the weapons and the combat techniques of their militant barbarian neighbors.<sup>28</sup> Horses, considered luxurious possessions and status symbols in the Aegean, became a basic commodity in the Northern Black Sea.<sup>29</sup> In other words, as the Greeks were settling in, they had to make necessary common-sense adjustments in their lifestyle, in order to adapt to their new living conditions.

In Soviet and post-Soviet scholarship, the cultural processes that took place in the Northern Black Sea region and involved the indigenous sedentary people, Greeks, Romans, and the nomadic Scythians and Sarmatians have been generally described as either a barbarization of the Greek culture or a hellenization of the barbarian one.<sup>30</sup> Such terms tend to simplify the complex and irregular transformations that took place in the multi-ethnic and multi-cultural societies, and “the need to replace one-sided concepts” has been emphasized on many occasions.<sup>31</sup>

It appears that in several areas of the North Pontic region different geopolitical and historical circumstances resulted in distinct scenarios of Greco-barbarian interactions. For example, the city of Chersonesos, an independent *apoikia* founded in the Southeastern Crimea in the fifth century BCE, remained antagonistic to non-Greeks from the very beginning and throughout its history. As a result, the Chersonesitans seemed to have been more conscious and protective of their identity, cultural and otherwise.<sup>32</sup> The political and cultural nature of the Bosphoran Kingdom was quite different, and it exhibited

much more open attitudes towards the non-Greeks. As new territories with the indigenous populations were being added to the polity, by the fourth century BCE it comprised people of different ethnic and cultural origins.<sup>33</sup> It seems that as a result of continuous interactions, a new state and cultural identity was gradually emerging. Considering these circumstances, the term “Bosporan identity” appears very useful and rather convenient.<sup>34</sup> It is important to bear in mind, however, that an identity of any kind, especially cultural, is never a fixed notion and that it develops and evolves constantly.<sup>35</sup>

*Bosporan Art: Some Remarks on Issues of Style, Chronology, and Production*

Although the expression “Bosporan art,” per se, is not a new one, an initiative to define it was put forward only relatively recently.<sup>36</sup> What would it convey, then? In the Bosporan Kingdom, with its cultural identity being eclectic by definition, what could be said about the visual arts?

For a long time now, attempts have been made to present Bosporan art as a fusion of Greek and barbarian pictorial traditions. However, it is important to reiterate here that according to the factual information at our disposal, the local sedentary tribes simply lacked a developed pictorial tradition prior to the coming of the Greeks. Scholars have also used Scythian anthropomorphic stelai (usually dated from the seventh to third century BCE) as a source of influence on local and Bosporan sculptural production,<sup>37</sup> but this argument does not appear to be valid. According to a meticulous study of 154 known Scythian stelai (including numerous fragments) and their distribution, only 23 of them have been found in the Crimea. Among them, only one was found in the Kerch Peninsula; the rest are confined to the Western Crimea.<sup>38</sup> Moreover, all twenty-three fragments have been dated to the fourth or third century BCE, more than two centuries after the arrival of the Greeks and long after the production of a local Bosporan sculpture had begun. The discrepancy in the dates and the distribution pattern of the finds make it highly unlikely that Scythian stelai could have informed local and Bosporan sculptural production.

In the art-historical literature of the twentieth century, priority was repeatedly given to issues of style and to the narrative of its development.<sup>39</sup> The truth is that our knowledge of chronology and style is far from certain, often even in the case of well-known monuments from Greece and Rome. Conflicting conclusions about the dating of such monuments are “symptomatic of a widespread lack of agreement among scholars that primarily, although not exclusively, permeates the entire field of sculptural studies.”<sup>40</sup> The task of dating Bosporan sculpture based on stylistic criteria is much more complicated and bound to be flawed because of the lack of any definitive stylistic chronology.

Therefore, dating Bosporan monuments on the grounds of style can only be done with great caution; such dating should always be preliminarily and must be supported by other evidence. “Style” is an artificial concept that could serve as a tool (wherever appropriate), and not as a driving force or the means of an aesthetic judgment.<sup>41</sup>

The sculpture found within the Bosporan Kingdom is not uniform in style, subject matter, and quality of execution. Related to the problems of stylistic dating are occasional difficulties in establishing the actual production spot of the artifact, considering the possibility of it being the work of a traveling artisan or an import.<sup>42</sup> Thus far, no traces of local workshops have been found anywhere in the Bosphorus, although their existence has never been questioned. Virtually nothing is known about the social organization of art production – all the assumptions are of a speculative nature and based on what is known about Greek workshops, in general. It is usually assumed that the local workshops sometimes hosted itinerant sculptors from mainland Greece and Asia Minor, who were either passing through the area or settling in. The possibility of Bosporan sculptors being trained locally or elsewhere (in Greece or Asia Minor) has also been suggested.<sup>43</sup>

There are no marble deposits in the Northern Black Sea region; therefore, all marble – worked or unworked – had to be imported from afar.<sup>44</sup> It is not surprising then that most (but not all) marble sculptures are rather small – perhaps because of the high costs of transport.<sup>45</sup>

It is also usually assumed that pieces made from limestone were locally made, as ample deposits of coquina, sandstone, and hard limestone of rather good quality were readily available in the area.<sup>46</sup> Unfortunately, since many of the sculptures come from secondary contexts, those made out of limestone are often badly damaged, which definitely contributes to negative modern aesthetic perceptions.

In fact, locally produced Bosporan art objects, especially the pieces dating from the early centuries CE, are often described as “linear” and “rustic” and dismissed as “crude, imitative, and decadent.”<sup>47</sup> But just how valid are questions of “quality” and aesthetics in relation to Bosporan art? It seems that modern aesthetic criteria have been – and still are – applied to these objects, whereas one simply cannot determine the aesthetic criteria of the ancient Bosporans. Could it be possible that in the multi-ethnic Bosphorus what mattered was rather the subject and the iconography (i.e., what was represented and how) and that the focus was not on the visual aesthetics?

## MONUMENTS

### *Funerary Stelai*

Funerary stelai and grave markers form perhaps the most numerous group of Bosporan sculptural monuments. The tradition of erecting tombstones



remained important throughout Bosporan history, and the fact that many of these stones were reused in later constructions increased their chances of being preserved through the centuries. Traditionally, grave markers share standardized visual motifs and thus present an ideal category for examining the “language of images,” since minor or major divergences from the established canons are easily detectable, as are iconographic innovations also. As already noted, the initial context for most Bosporan monuments is sadly lacking; in the case of funerary stelai, however, one can at least visualize and mentally reconstruct the original settings.

### **The Stele from the Trëkhbratnie Kurgans and the Entrance to the Underworld**

A funerary stele from the main kurgan of the Trëkhbratnie (“Three Brothers”) kurgans in the European Bosphorus is definitely the most notable of all Bosporan stelai of all periods (Pl. V).<sup>48</sup> It is also unprecedentedly large, standing 2.6 m tall and 1.65 m wide. Broken into several fragments, it was found in 1965 on the slope of the kurgan, atop a man-made platform of packed clay, literally on the spot where it once stood; the fragments were accompanied by five large limestone blocks, which used to be part of the support structure of the stele.<sup>49</sup>

This kurgan contained two underground tombs. One, probably that of a man, was plundered, whereas the second, excavated in 1965, contained a rich burial of a woman. A separate burial of a single horse was perhaps associated with this second tomb. The intact burial and the stele are dated to the last third of the fourth century BCE, based on the analysis of the grave goods and two bronze coins found in the tomb and next to the stele.<sup>50</sup>

The unprecedented iconography of the stele’s relief has been discussed in detail time and again.<sup>51</sup> A grand woman in a tall diadem and a mantle over it is seated in a four-horse cart driven by a groom; she is usually interpreted either as a heroized decedent or a goddess. A horseman (his head is missing), wearing a local dress and with a *gorytos* hanging on his left side, is communicating with the female protagonist: he is either placing an object into her hands or is taking it from her. By now, the object is unidentifiable – perhaps it was once rendered in paint. The horseman has been interpreted either as a hero or a decedent. Separating the two protagonists is a tall pillar, topped with a hanging *gorytos*.

Undoubtedly produced in a workshop of one of the nearby cities – Pantikapaion or Nymphaion – the stele stood on a kurgan located in the *chora* of the latter. Some features of the associated burial ritual led scholars to question the ethnic identity of the people who were buried in the Trëkhbratnie kurgans and who (or whose kin), logically, must have commissioned the stele.<sup>52</sup> One wonders if this quest to determine their ethnicity actually leads anywhere. The burial ritual with few non-Greek elements, as well as the subject matter of the relief, exemplify the eclectic nature of Bosporan culture, while visually

incorporating some ethnographic realities. The members of the wealthy family buried in the Trëkhbratnie kurgans were probably of mixed ethnic origin, but their cultural identity was Bosporan.

The stele's visibility – and, therefore, its role in communicating with the outside world – has been briefly commented upon.<sup>53</sup> To expand on this, it is suggested here that the original placing of the stele on the side of the kurgan's mound – closer to a road – might have been a further attempt to make sure that it would be noticed and contemplated, thus carrying forward the visual messages it contained.<sup>54</sup>

It seems that one of the stumbling blocks in interpreting the scene on the stele is an elaborate architectural construction that frames the figure of the woman. It is commonly construed either as a *heroon* or *naiskos* – a feature that calls attention to the divine or elevated status of the female figure – or as the awning of an elaborate cart.<sup>55</sup> The very typical architectural elements of this structure, including the surviving painted decoration of the pediment – two small birds flanking a large one with outspread wings – make the identification with an actual edifice much more plausible. It is proposed here that the *naiskos*-like structure on the stele should be understood as a gateway, perhaps the one between the two worlds, through which the deceased woman is passing. She is traveling in style on a cart drawn by four horses, which is undoubtedly a sign of her status and wealth even in the Bosporus, where keeping horses was a necessity and not as expensive as in Greece.<sup>56</sup>

Curiously, this idea of a portal that marks an entrance to or a boundary of the Underworld might have resurfaced in the Bosporus in the early centuries CE: a canopy-like structure with a triangular pediment appears on at least three other Bosporan stelai. In each case, only the pediment, rendered in low relief, is still visible today; the side pillars must have been painted. In two cases, the structure is shown above and slightly behind the central figure of a seated woman, who is most probably representing the decedent. One fragmented stele lacks an inscription (Fig. 7.1a),<sup>57</sup> whereas the epitaph on the other reads: “Metrophila, wife of Euanthos, farewell” (CIRB 470).<sup>58</sup> Represented here is most probably Metrophila herself, flanked by her servants. On the third stele (Fig. 7.1b),<sup>59</sup> two women are seated on chairs facing each other; a servant stands next to each chair. The inscription commemorates one Elis, daughter of Phannes (CIRB 419). It is very interesting that a triangular pediment is deliberately placed only above the seated figure on the left. Could it be a visual indication that this is the deceased (as opposed to the other figure) or that she passed away first and is now welcoming the other to the Underworld? Whatever the case may be, this architectural feature, most likely, serves as an indicator of the different status of this figure.

A portal between the two worlds was often depicted on funerary monuments as a door or a gate.<sup>60</sup> Perhaps the closest visual parallel to the three stelai

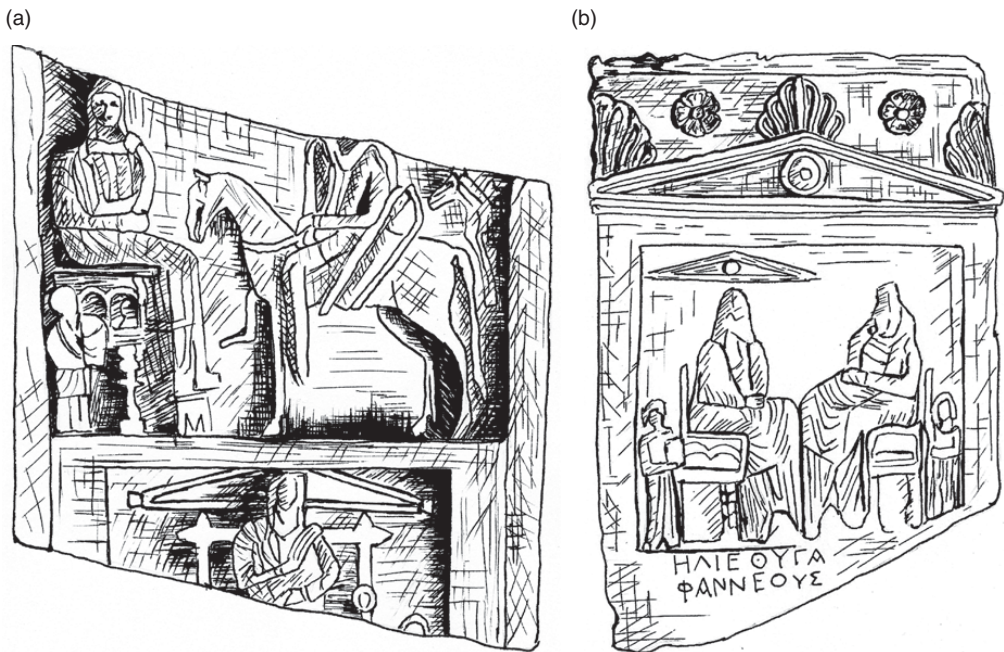


Fig. 7.1. Stelai featuring canopy-like structures with triangular pediments: *a* – Kerch State Historical and Cultural Preserve, inv. no. KL-266 (drawing by Elise Helmers); *b* – Kerch State Historical and Cultural Preserve, inv. no. KL-420 (drawing by Elise Helmers).

in question comes from a cinerary urn of Vernasia Cyclas,<sup>61</sup> dating from the middle of the first century CE. Here, a couple, joining hands in the gesture of *dextrarum iunctio*, stand under a canopy-like gateway with a triangular pediment indicating the boundary between the two worlds.<sup>62</sup>

It is proposed here that on the Bosphoran stelai of the early centuries CE triangular pediments could be understood as an indication of the gateway to the Underworld. Although this motif is often found on contemporaneous funerary monuments, in the Bosphorus it takes on a life of its own, most probably signifying the portal between the two worlds, a liminal space, or indicating a special status for the figure represented underneath. Conceivably, the presence of this motif in the area where the entrance to Hades was often localized is not surprising (see below).<sup>63</sup>

### Exploring the Notion of Ancestors on Bosphoran Grave Stelai

Throughout the Late Hellenistic and Roman periods, the Bosphoran workshops that produced funerary stelai seem to have worked with a rather conventional and, for the most part, fixed repertoire of images.<sup>64</sup> Many of them were clearly informed by Hellenic (Greek, Roman, Asia Minor) pictorial traditions.<sup>65</sup> Among the latter are figures of seated and standing women (often in an attitude of mourning), standing men, couples performing *dexiosis* (or

*dextrarum iunctio*),<sup>66</sup> scenes of funerary banquets (*cena funebris*),<sup>67</sup> and various combinations of all these motifs. Hermes, undoubtedly in his role as a *psychopompos*, makes an occasional appearance.<sup>68</sup> However, certain motifs clearly reflect Bosporan cultural and ethnographic realities.<sup>69</sup> Images of men on horseback – occasionally equipped with weapons and armor of local types – form a very popular subject.<sup>70</sup> Standing men with shields and spears are also a traditional *topos* found on funerary stelai. Another subject evidently informed by the local tradition is a male figure leaning on a low column in a mourning posture, often with a *gorytos* hanging in the background.

Even a cursory glance at the numerous Bosporan stelai compels one to consider the possibility that Bosporan artisans utilized pattern books.<sup>71</sup> In many cases it is possible to detect that some of the scenes which traditionally appear by themselves are combined together; the result is not always artistically appealing, but this was not the goal: instead, the needed content was presented and the necessary visual messages were conveyed.<sup>72</sup> Perhaps the idea of the existence and use of pattern books within the Bosporus is best substantiated by the recurrence of the same “pictorial sentences” in different media. One such example is the close iconographic correlation of some scenes on a well-known first-century-CE painted sarcophagus from Pantikapaion with those on Bosporan stelai.<sup>73</sup> The repeated scenes include a funerary banquet, a seated woman surrounded by servants, two horsemen facing each other, and a man leaning on a low column in an attitude of mourning. The possibility that pattern books circulated among the Bosporan workshops has not been addressed in scholarship, but this approach might prove helpful in analyzing the production of the stelai and in explaining why the same visual formulas appeared on Bosporan funerary stelai for several centuries with very little change.

The lack of “creativity” in the iconographic motifs found on Bosporan funerary stelai has been commented upon.<sup>74</sup> And yet, this feature of Bosporan art of the Hellenistic and Roman periods should perhaps be regarded as “not a deficiency but a strength.” After all, “the unity of a system of communication rests precisely in the fact that its formulae and syntax are familiar from constant repetition, offer as few surprises as possible, and thus become understandable ... General absence of fundamental innovation contributes decisively to the intelligibility of this language of imagery.”<sup>75</sup>

At the same time, the Bosporan pictorial language may not have been as inert as has been claimed.<sup>76</sup> Let us examine the interesting and rather peculiar development of two particular motifs on Bosporan funerary stelai. A large group of them contains representations of figures, mostly male, but occasionally female, placed on pedestals. These figures have been interpreted as allusions to contemporaneous honorary statues “connected with an ideal of political

activity of the citizen” and not concerned with “private matters,” such as, for example, mourning for the deceased.<sup>77</sup> Such an explanation can probably be accepted in some cases, particularly, when a single figure on a pedestal is represented,<sup>78</sup> but is more difficult to substantiate when a figure on the pedestal is accompanied by a seated female figure in an attitude of mourning (Pl. VIa).<sup>79</sup> Epitaphs preserved on the stelai do not necessarily help. On a stele of Masas, son of Myrmex, a male figure on a pedestal (presumably meant to represent Masas) is flanked by two figures (male and female), along with a seated female figure in an attitude of mourning, accompanied by the figure of a servant (*CIRB* 461) (Pl. VIb).<sup>80</sup> Diophatos and Phileros, sons of Timotheos, share the same pedestal placed in the center of a stele (*CIRB* 670) (Pl. VIc).<sup>81</sup> They too are flanked by two figures: on the right stands a mourning female figure and on the left a smallish male figure shakes hands with one of the figures on the pedestal.

With many more such examples, it seems that the meaning and use of pedestals in Bosporan funerary stelai was much more subtle and creative than has been suggested. In multi-figural compositions, in cases when the name and gender of the deceased mentioned in the epitaph correspond to a figure (or figures) placed on pedestals, the latter seem to indicate the special status of these figures – namely, that they have passed away. Alternatively, also in multi-figural compositions, single or multiple figures on pedestals that do not correspond to those identified by the epitaph should perhaps be understood as predeceased family members. In such compositions, the familial bonds are emphasized; in other words, the following message, comforting to both the dead and the living, might be implied: the living are mourning the dead, but the latter will not be alone in their journey – the predeceased ancestors/family members await them. This notion must have been very popular, as the motif appears quite extensively on Bosporan funerary stelai. In quite a few instances, figures of horsemen are also represented on pedestals. The pedestals are often only partially visible, overlaid by the central figures of horsemen, which presumably were meant to represent the newly deceased celebrated in the epitaph (*CIRB* 332).<sup>82</sup> On a stele that commemorates two men, Apollodoros, son of Apollonios, and Kotion, son of Kottion, two horsemen face each other in a heraldic position (*CIRB* 653).<sup>83</sup> The one on the left is represented on a pedestal, which implies a certain hierarchy of the figures. Once again, the reasons for placing this figure on a pedestal could be twofold: if it was meant to represent either Apollodoros or Kotion, then it might have indicated that one of them died before the other. On the other hand, a horseman on a pedestal could also serve as a visual reference to one of the ancestors/predeceased family members.

In Hellenistic and Roman funerary art, a popular way to visually indicate the deceased was to depict them as busts.<sup>84</sup> This visual formula seemed to have



been quite ingeniously employed on at least three Bosphoran stelai – and in a very innovative way. On a stele of Memnon, son of Ameinias, the deceased himself is depicted in the upper register as a horseman, with the small figure of a servant in front of the horse (Fig. 7.2).<sup>85</sup> In the lower register, a man stands next to a woman seated in an armchair, with the small figure of a servant placed by her side. If we are to follow the epitaph, the man and the woman should be identified as Seueros, son of Sokrates, from Tios, and his wife Melitine, who were responsible for erecting this stele commemorating their fosterling (Memnon) (*CIRB* 705). The most striking feature of this stele is a miniature bust on the chest of Melitine. Too large to be a pendent, it is highly probable that this is indeed a representation of the deceased Memnon, whose

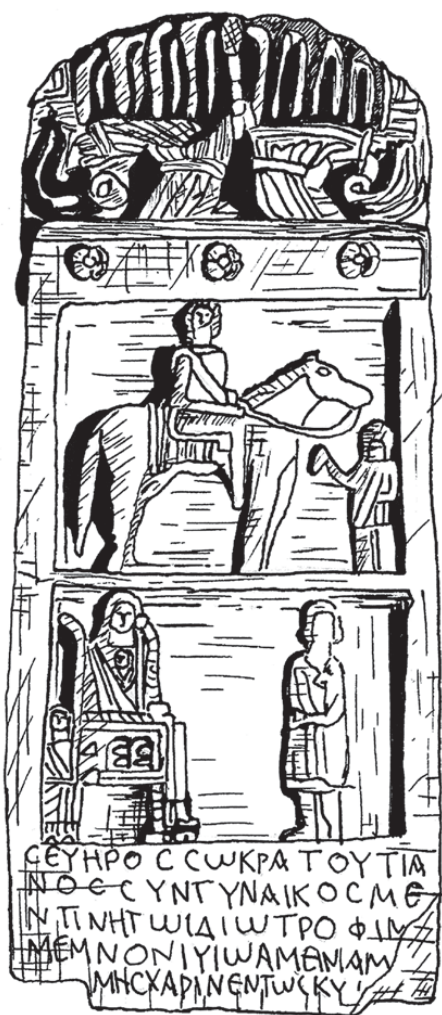


Fig. 7.2. Stele, State Hermitage, St. Petersburg, inv. no. 1830.1 (drawing by Elise Helmers).

memory will be kept close to the heart (both metaphorically and literally) of his inconsolable adoptive mother.

Two other stelai follow the same visual concept: in the center of the grave marker made for Gokon, son of Papias, a mature horseman is depicted – presumably, Gokon himself (*CIRB* 1012). Behind and to his left is a smaller figure of a horseman, which could be an allusion to a predeceased family member. Placed in the lap of Gokon are two miniature busts (*Fig. 7.3a*).<sup>86</sup> A very similar representation comes from a fragmentary stele with no preserved inscription. In the upper register, the main protagonist – a bearded horseman – is facing a seated woman. In his lap he is holding a small bust (*Fig. 7.3b*).<sup>87</sup> Although diminutive in size, these busts do not need to be necessarily understood as depictions of children, as has been suggested.<sup>88</sup> On the other hand, their placement in the lap of the horsemen implies a certain level of intimacy between the horsemen and those who are represented in the form of busts. Whether or not these are meant to represent children or other family members (for example, parents, in Gokon's case), two notions seem to be visually implied: in both instances, they predeceased the individuals depicted as horsemen and they share particularly close ties with them.

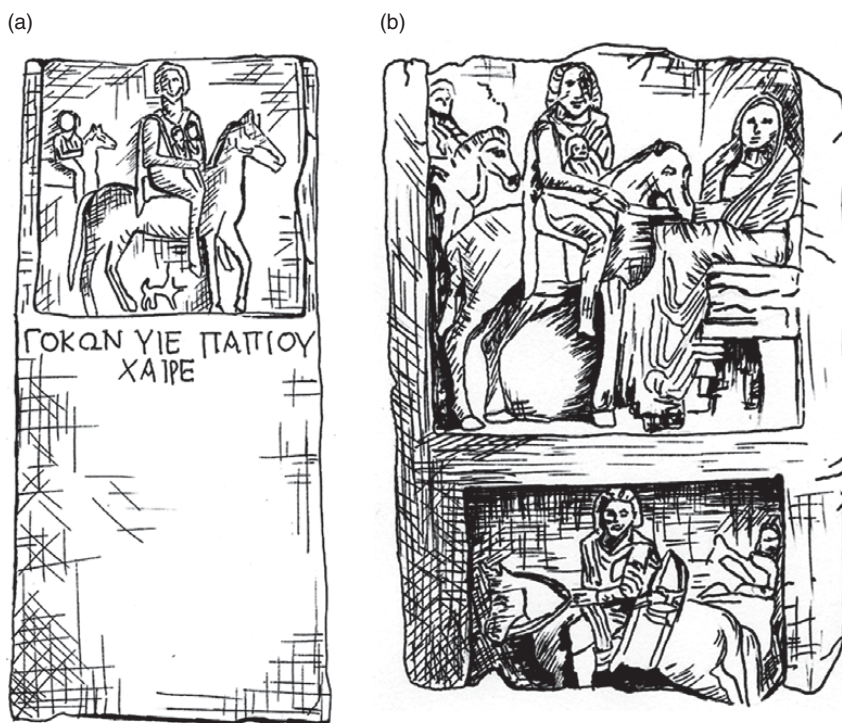


Fig. 7.3. Stelai with small busts: *a* – Temriük History Museum, inv. no. KM 4770/79 (drawing by Elise Helmers); *b* – Moscow State Historical Museum, inv. no. 5694/8 (drawing by Elise Helmers).

These visual formulas were certainly informed by the Greco-Roman pictorial tradition. However, in the Bosphorus they underwent creative transformation and became part of a new pictorial language, which undoubtedly reflected Bosphoran cultural and ethnographic realities and beliefs.

### **Bosphoran Half-Figures**

Among the funerary monuments produced in the Bosphoran Kingdom, a considerable and rather heterogeneous group known in Soviet and post-Soviet scholarly literature as “Sindian” half-figures stands out. Commonly accepted as grave markers,<sup>89</sup> these limestone figures are rendered either in relief (stelai) or in the round (free-standing statues) and exhibit a certain variety in dress, gestures, and the objects they occasionally hold. Faint traces of polychromy found on several statues indicate that they were once painted.<sup>90</sup> Both men and women are depicted standing in a frontal position, at times next to a low pillar. Men are usually portrayed either in military or civilian dress. The latter is represented by a conventional himation worn over a chiton (Pl. VII).<sup>91</sup> The military attire comprises trousers, a short chiton-like garment with long sleeves, an occasional vestment, sometimes identified as a cuirass, and a short cloak worn over the shoulders. The head is topped by a high hood-like cap with long flaps that are wrapped around the head and tied at the back, with the ends hanging down. Weapons held by such figures (or attached to their belts) consist of bow, arrows, sword, and *gorytos* (Pl. VIII).<sup>92</sup> Women’s outfits are rather conventional: a long-sleeved garment with numerous vertical folds is covered by a long mantle, draped over the head and shoulders (Fig. 7.4).

Despite some typological variations, the monuments in question possess one very important common feature: the figures have no feet as they are cut off approximately at the mid-thigh level or above the knees. It is proposed here that this unifying characteristic is of the utmost importance for our understanding of the figures’ function and meaning and that this iconographic concept was developed locally and reflects a set of particular Bosphoran beliefs.

Although such half-figures were already known to scholars in the nineteenth century, it was not until the 1960s that they were systematized and studied by Nikolaï Sokol’skiĭ.<sup>93</sup> His interest in the subject was sparked by an unexpected discovery: in 1963, in the course of the excavation of a small fort near Akhtanizovskii Bay in the Taman Peninsula, it transpired that the foundation of one of the fort’s towers was almost entirely constructed from such sculptures.<sup>94</sup>

As most of the Bosphoran half-figures come from secondary contexts, they lack secure dates. While their dating based on stylistic analysis remains rather





Fig. 7.4. Stele from Pantikapaion. Kerch State Historical and Cultural Preserve, inv. no. 77 (after Davydova 2004, 123–4, no. 68).

questionable,<sup>95</sup> other attempts to determine the period when these statues were produced proved to be more successful. Armor and weapons depicted on some of the half-figures were compared with the actual archaeological specimens, and a temporal window from the late fourth to the second centuries BCE has been suggested.<sup>96</sup> The fort near Akhtanizovskii Bay, which ceased to function sometime in the early first century BCE, as well as two sculptures of this kind reused in a tomb from the middle of the second century BCE near Phanagoreia, provide a *terminus ante quem* for such half-figures.<sup>97</sup>

Certain non-Greek features of the statues, as well as certain articles of clothing and weapons, prompted scholars to postulate that they depicted members of the indigenous tribes or representatives of the ethnically mixed population of the Bosporan Kingdom.<sup>98</sup> However, it was Sokol'skii who, after his discovery of the Akhtanizovskii Bay statues, suggested that they might represent the Sindoi, an indigenous tribe that was commonly localized in the Taman Peninsula, where the majority of statues had been found.<sup>99</sup> Sokol'skii's hypothesis was very well received: to this day, these half-figures are referred to as “Sindian sculptures.” Over the years, more and more objects, including full-size statues and reliefs, were added to this category, turning it into an even more diverse group.<sup>100</sup>

With the lack of serious arguments, attempts to identify a specific ethnic connection for the half-figures seem rather ineffective. It is very plausible that weapons and elements of clothing associated both with the Greek and non-Greek groups exemplify the eclectic nature of the Bosporan Kingdom, especially after the middle of the fourth century BCE, when its territorial growth reached its peak and the neighboring regions with the indigenous population became part of the polity.

Let us now concentrate on the main iconographic feature of these grave markers – why were they so consistently rendered as half-figures? Why was this visual concept so popular in the areas of the Taman and Kerch peninsulas and why did this tradition continue well into the first century CE, as recent finds attest?<sup>101</sup> Topographical features of a surrounding landscape often played a crucial role in the religious and mystical beliefs of the ancients. For example, before establishing a sanctuary or building a temple, the Greeks often looked for signs – usually conspicuous landmarks of some kind – that indicated the inherent sacredness of the locale. Although the two shores of the Cimmerian Bosphorus – the Asian and the European sides – presented rather different natural environments in antiquity, as they still do today, there is one particular natural phenomenon commonly found on both sides of the strait: mud volcanoes.<sup>102</sup> The mystical beauty of the mud volcanoes and the surrounding terrain were likely to have mesmerized the Greeks from the time of their first acquaintance with the area. Large bubbling puddles and irregular knobby cones of different sizes oozing dark viscous mud, often accompanied by steam, odorous vapors, and noises – all these features were probably understood as signs of proximity to the entrance to the Hades.<sup>103</sup> Bubbles, ripples, and strange, almost anthropomorphic shapes that appear on the surface of the mud puddles make one think of the existence of a different world underneath – or, perhaps, of a restless soul trying to communicate with the living (Pl. IX). The areas around the mud volcanoes covered with dry, cracked mud often appear to be firm enough to walk on. However, one could be pulled quite suddenly into the mud up to one's thighs – not unlike the half-figures in question. Women and men, in military attire or in civilian dress, are represented in an upright position with their legs not visible – as if immobilized by the powerful forces of the Underworld. A limestone stele dated to the first century CE is a good example that there was a real intent to depict a half-submerged figure and it was not just a result of clumsy workmanship (Fig. 7.4).<sup>104</sup> It depicts a young woman – Chrysiôn, daughter of Demetrios, according to the accompanying inscription (*CIRB* 553) – placed next to a low column, with most of her legs concealed beneath the ground. This effect is underscored through the juxtaposition with a complete figure of a woman, standing nearby in a mourning posture. It is noteworthy

that in her left hand ChrySION holds a pomegranate, the ultimate symbol of the Underworld.

The notions of *kathodos* and *anodos* have long been associated with Kore-Persephone, her descent to the Underworld, and the ascent back to her mother Demeter.<sup>105</sup> A number of long busts or half-figures presumably representing Kore or other female chthonian goddesses appear in the Mediterranean from the fifth century BCE onwards.<sup>106</sup> Although they are not particularly numerous, the specimens have been found in rather diverse locations, such as Cyrene in North Africa and some islands of the Southwestern Aegean.<sup>107</sup> The majority of these demi-statues represent female characters, and the general consensus is that they all served as funerary monuments, but only rarely did they represent the deceased; rather, they have been understood as chthonian goddesses “rising to receive the dead.”<sup>108</sup> It seems, however, that the tradition of marking graves with half-figures emerged independently among the inhabitants of the Bosporan Kingdom. Because of the iconographical features of these sculptures, it is quite certain that they meant to represent the deceased – most probably, descending to the Underworld (*kathodos*). This pictorial tradition, which originated and developed in the areas where mud volcanoes were an integral and prominent part of the indigenous landscape, was inherently Bosporan. Greek beliefs and perceptions about the Underworld found confirmation (and, perhaps, an inspiration) in a local geological phenomenon, which led to the creation of an idiosyncratic visual formula that proved to be quite successful, as it remained in fashion for several centuries.

#### *When a Sign Becomes a Portrait: The Case of the “Royal” Tamgas*

Non-figural emblems, known as tamgas, present a particularly interesting feature of the Bosporan visual culture, having acquired a new iconographic role as a representation of an individual. Tamgas – the monogram-like signs, traditionally associated with the Sarmatian tribes – made their appearance in the North Pontic region already in the late first century BCE and became a common element of the Bosporan visual culture in the second and third centuries CE.<sup>109</sup> Regardless of whether or not the Bosporan rulers of the early centuries CE were actually of Sarmatian descent, a significant Sarmatian presence in the Bosphorus and the involvement of the Sarmatians in local politics already in the first century CE are well attested.<sup>110</sup> From the outset, tamgas seem to have functioned as clan or family emblems, and it is generally believed that they were predominantly used to mark clan property.<sup>111</sup> Having originated in the nomadic milieu, they were used, in particular, for branding cattle and horses.<sup>112</sup> In the Bosphorus tamgas appear in rather diverse contexts: on a variety of vessels, on coins, jewelry (including carved gems), weapons and armor (military

belt buckles, in particular), and horse harnesses.<sup>113</sup> Although they are traditionally considered signs of either family or individual ownership, tamgas have been occasionally assigned magical and apotropaic qualities.<sup>114</sup>

As a result of a significant breakthrough in tamga studies, several of them have been identified as individual signs of Bosporan rulers of the second and third centuries CE.<sup>115</sup> Consequently, these tamgas are referred to as “royal.” The identifications were based on the juxtaposition of a particular tamga and a specific name of a Bosporan ruler in some inscriptions on limestone (and, occasionally, marble) slabs. Ten commemorative or dedicatory slabs with “royal” tamgas have been found within the Bosporan Kingdom, namely, in Tanais, Hermonassa, and Phanagoreia.<sup>116</sup> Nothing is known about their original context; however, most scholars agree that they were imbedded into the walls of various public edifices.<sup>117</sup>

It appears that the function of “royal” tamgas used in inscriptions varied, so that the slabs in question may be divided into groups according to the changing visual role of the corresponding tamgas. The first group of slabs display inscriptions with a “royal” tamga placed either above the Greek text or in the middle of the slab. These are mostly inscriptions of individuals who were financially responsible for the building (or, rather, rebuilding) of different edifices. Presumably, these slabs were originally imbedded into the walls of these edifices to inform the public of who was responsible for the rebuilding. On a limestone stele from Tanais, dating to 163 CE, a tamga of Tiberius Iulius Eupator (ruled about 154–170 CE) is juxtaposed with the text that informs the reader that during the reign of the above-mentioned ruler one Tryphon restored the walls “damaged by time” (*CIRB* 1241).<sup>118</sup> In other two examples, both from Tanais and dating to 220 CE and 236 CE, respectively, the “royal” tamgas of Rheskouporis III (ruled about 210–222 CE) and Ininthimaios (ruled about 234/5–239/40 CE) are prominently placed in the upper center of the marble slabs, with the text carved around them (*CIRB* 1248; 1249).<sup>119</sup> All three inscriptions begin with the standard formulas “at the time of *basileus* Rheskouporis” and “under the reign of *basileus* Tiberius Iulius Eupator/Tiberius Iulius Ininthimaios.” In this context, the juxtaposition of the inscriptions and personal tamgas of the Bosporan rulers, placed either above the inscription or in the central location in the upper middle part of the slab, could be understood as a visual reinforcement of the written formula “under the reign of so-and-so.”

Another limestone slab (Pl. X), found at the site of Hermonassa in the Taman Peninsula, contains a large depiction of the tamga of Tiberius Iulius Sauromates (Sauromates II, ruled about 174–210 CE). Underneath the prominent tamga sign there is the following text: “Through the care of Herakas, chief interpreter of the Alanoi” (*CIRB* 1053).<sup>120</sup> The inscription is dated to 208 CE. A groove preserved on the upper edge of this slab indicates that it once was

imbedded into a wall, whereas the inscription most probably refers to Herakas' financial support of some building activity. In this case, as well as in the other cases when there was no written text or the inscription did not mention a current ruler, "royal" tamgas became visual substitutes for the set phrase "under the reign/at the time of so-and-so."<sup>121</sup>

In the third group of slabs with "royal" tamgas, their visual function was developed even further, as they have been turned into "royal portraits." Right in the center of a marble stele found in the Taman Peninsula in 1890 (Pl. XI), a large "royal" tamga of Tiberius Iulius Eupator is flanked by two symmetrical figures of Nikai, or Victories, standing in their traditional heraldic pose: one foot on a globe, a palm branch in one hand, and a wreath with a ribbon in the other.<sup>122</sup> The wreaths are raised right above the "royal" tamga, as if it were being crowned. A similar arrangement is found on a marble stele from Taman: two Victories, each with a palm branch in the left hand, holding a wreath in the right hand above two tamgas.<sup>123</sup>

The motif of Nike descending from above with a triumphant cry and placing a wreath on the head of a victor is well known in Greek iconography.<sup>124</sup> In the Hellenistic and Roman periods this pictorial notion became even more popular, and representations of Nike/Victory crowning a seated or standing figure or just the head of a ruler or a military leader can be found quite often on coins – a placement that certainly ensured that this motif was seen and easily understood by virtually everyone.<sup>125</sup> The sheer theatricality of this interaction between an honoree and the goddess of victory and success was never lost on the ancients. When in 88 BCE Mithridates VI was being honored by the Pergamenians, they employed a mechanical device that lowered a statue of Nike holding a wreath in her hand towards the king in order to place this wreath on his head (Plut. *Sulla* 11). Naturally, this visual motif and its propagandistic idea were recognized in the Bosphorus, as it often appears on local reliefs, luxury objects, and coins.<sup>126</sup>

Unfortunately, nothing is known about the original display context of these two Bosporan slabs with Victories. It has been proposed that they were imbedded into public edifices, buildings, or defensive walls.<sup>127</sup> The suggested contexts suit well the principal purpose of such slabs, i.e., to officially glorify the rulers of the Bosphorus as state and/or military leaders in a rather forward and highly visual manner.<sup>128</sup>

Having been brought into the Northern Black Sea region by the Sarmatians, the tamgas underwent a remarkable transformation in the Bosporan Kingdom. Initially used as signs of ownership, marking either personal property or that of a clan, they entered the visual culture of the Bosphorus and became well known and understood by its inhabitants. The "royal" tamgas, in particular, became signs of state authority or presence that stood for a set phrase "under the reign/at the time/under the auspices of so-and-so" (with or without an inscription

spelling out the name of the ruler) and appeared on slabs commemorating various building activities. Eventually, they came to signify a “presence” of a different kind – they developed into a recognizable “portrait” of a ruler. It seems that tamgas were not being anthropomorphized in this context, and the sign and the individual whom it represented appear to have been visually interchangeable.<sup>129</sup>

This is yet another example of an original new development within the Bosporan pictorial language. This visual innovation combined a very conventional Greco-Roman pictorial formula – figures of Nikai/Victories crowning a victor or an honoree – with representations of traditional signs of the non-Greek Sarmatians. This new official “eclectic” creation soon became part of a Bosporan visual *koine* and must have been well understood by the inhabitants of the kingdom.

## CONCLUSION

The Bosporan Kingdom was one of many “contact zones” of antiquity; what sets it apart from other contact zones is that the Greeks had to constantly interact with diverse groups of non-Greeks – local sedentary tribes, as well as with the “waves” of nomadic incomers – the Scythians and, later, the Sarmatians. It is proposed here that as a result of complex interactions from at least the middle of the fourth century BCE onwards a new cultural identity was emerging in this part of the Northern Black Sea region. Mirroring the heterogeneous population of the kingdom, the Bosporan visual culture was eclectic in nature. At the same time, its pictorial language (or languages), Hellenic in its core, first and foremost supported the notion of the North Pontic region as part of the Greek – and, later, Roman – cultural *oikoumene*.

Without discussing the stylistic and aesthetic characteristics of Bosporan monuments, this chapter has examined several groups of them from the point of view of their iconographic development. While the idea of “style” remains a very important art-historical tool, it is a tool that in certain circumstances does not need to (and should not) be used. While analyzing the monuments produced in a multi-ethnic society, stylistic considerations might not be practical to operate with. We are often guilty of imposing modern concepts of “aesthetics” upon ancient monuments.<sup>130</sup> Objects that served as the basis for our case studies – several groups of grave markers and commemorative stelai – all originated in the spheres of social, cultural, and perhaps religious life of the Bosporan population that, in the words of Jeremy Tanner, “did not attribute primacy to the aesthetic.”<sup>131</sup> A system of visual metaphors could have had a precedent over the aesthetics. The stylistic considerations were secondary, at best – as long as necessary visual messages were conveyed.

What are then the characteristic features of Bosporan art and its pictorial language? It is fundamentally diverse and multi-faceted; it reflects the ethnographic realities of the region; and it is engaged more with the communicative aspects of images, whereas considerations of stylistic and aesthetic nature seem to be of less importance. Bosporan art – undeniably a sub-variant of a Hellenic provincial art – was based on the Greco-Roman pictorial tradition and remained well informed about its iconographic developments. By employing Greco-Roman forms and incorporating the ethnographic realities, the Bosporan workshops introduced new visual concepts aimed first and foremost “at direct communication and immediate comprehensibility.”<sup>132</sup>



## LOCAL ARCHITECTURAL STYLES IN THE NORTHERN BLACK SEA REGION (WITH A PARTICULAR FOCUS ON THE IONIC ORDER)

Alla V. Buřskikh

In the Northern Black Sea region, ancient architectural styles evolved in the context of the historical development of those *poleis* where they emerged and remained in use for almost a thousand years. The available data, which contains a great number of architectural fragments collected during more than a hundred years of excavations of the ancient Greek cities in the Northern Black Sea region, enables scholars to draw clear parallels between local architectural trends and the main developments in ancient Mediterranean architecture. Moreover, the current state of research in this field allows us to identify particular features that have influenced the overall formation of the North Pontic architectural style over an extended period of time, differentiating it from the architectural style of Mediterranean centers. These specific features are central to our modern understanding of the appearance of ancient architectural structures in the Olbian *polis* in the Northwestern Black Sea region, Chersonesos in Western Tauris, and the Bosporan Kingdom in the northeastern part of Pontic coast.

Many of the ancient Greek cities that came into existence in the Northern Black Sea region during the first half of the sixth century BCE have been excavated, and many of the sites share the same stratigraphical problem, namely, that the earliest strata are seriously damaged. The bad state of preservation of the early architectural remains makes it impossible to link the architectural fragments discovered to the excavated building foundations. In order to establish the correlation between these fragments and particular building



complexes, one needs to mark on the site plan the points where the fragments were found and the distribution area of these finds. The same applies to the remains of monumental structures of the Classical period in the Northern Black Sea region. In general, the foundations of buildings dating prior to the Hellenistic period cannot be linked to any of the inner or outer decoration pieces discovered separately. For this reason, one methodological principle that can be applied to the study of North Pontic architecture is stylistic analysis of architectural parts executed in a particular architectural order. The same formal typological criteria can be used for the analysis of all architectural fragments, from bases to entablature, producing the most objective evaluation of the entire assemblage.

All early architectural pieces from the Northern Black Sea region belong to the Ionic order. The absolute majority of them are made out of local limestone, and the rare marble details, brought from the Mediterranean (mostly, from Ionia, but also from the Aegean islands) are associated exclusively with altars and votive monuments. In terms of their stylistic features, they all belong to the architectural school of Asia Minor, and this fact fits the general scenario of cultural development of the early North Pontic *apoikiai*. Therefore, architectural structures in the Ionic order are the best source of information for the study of the general stylistic trends in the development of monumental architecture – and, above all, cult architecture – of the entire Northern Black Sea region during the early period. The analysis of the architectural fragments in question allows us to draw conclusions about the formation of the local North Pontic architectural school, considering the prevalence of the locally produced pieces over imported ones. The assemblage of pre-Roman architectural pieces executed in the Ionic order from the excavations of the settlements on the Northern Black Sea coast currently comprises over 500 items. The examples used in this chapter to illustrate the main trends in the development of Ionic architecture in the region are the most typical ones. They mostly include column capitals and, sometimes, column bases and parts of entablature.

Stone structures built in a particular architectural order appeared in the Northern Black Sea region simultaneously in the two main centers – Olbia in the northwest and Pantikapaion in the northeast – no later than during the third quarter of the sixth century BCE. Two architectural fragments dating to this period also come from Borysthene (the settlement on the island of Berezan'), adding to our understanding of the architectural developments in the Northwestern Black Sea region. All these architectural pieces were part of two types of cult structures – altars and temples. Such structures could only have been built in *temenoi*, for which special plots of land were designated in the urban infrastructure right at the time of the foundation of the city. Therefore, the planning and construction of these *temenoi* in Olbia, Borysthene, and

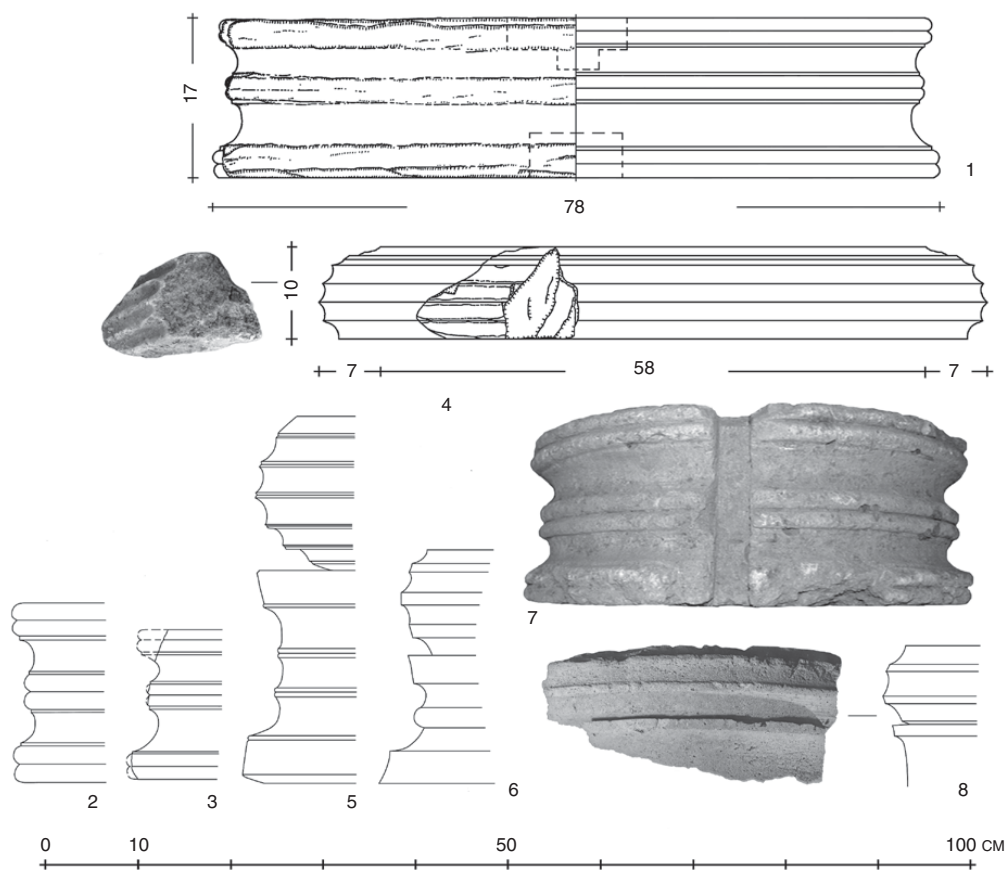


Fig. 8.1. Column bases from Olbia (2, 7, 8), Pantikapaion (1, 3, 4, 5), and Nymphaion (6) (after Buiskikh 2009, cat. nos. 1–2; Buiskikh 2010, Taf. 2; 119.1–4).

Pantikapaion provide us with new arguments for the discussion of the spatial development of these *apoikiai* during the early period of their existence.<sup>1</sup>

#### LATE ARCHAIC OLBIA

For Olbia, most representative is the assemblage of architectural fragments from the Western *Temenos*, where the foundation of the temple of Apollo *Ietros* (IETPOON) was found, along with several altars within the area of the temple and outside it.<sup>2</sup> To this temple *in antis* correspond two column bases of the portico – *spirai* of the Ephesian type (Fig. 8.1.2, 7), fragments of horizontal and raking parts of the entablature – *geisa* and *simai* (Fig. 8.2.1–2), and the upper part of a pediment's *tympa-num* with a frontal *acroterion* (Fig. 8.3). All of them are made out of local stone: the *simai* and the *acroterion*, out of denser light-gray limestone, and the bases and the *geisa*, out of porous yellow shell stone. The bases and the facades of the *geisa* are painted red, and the *acroterion* is

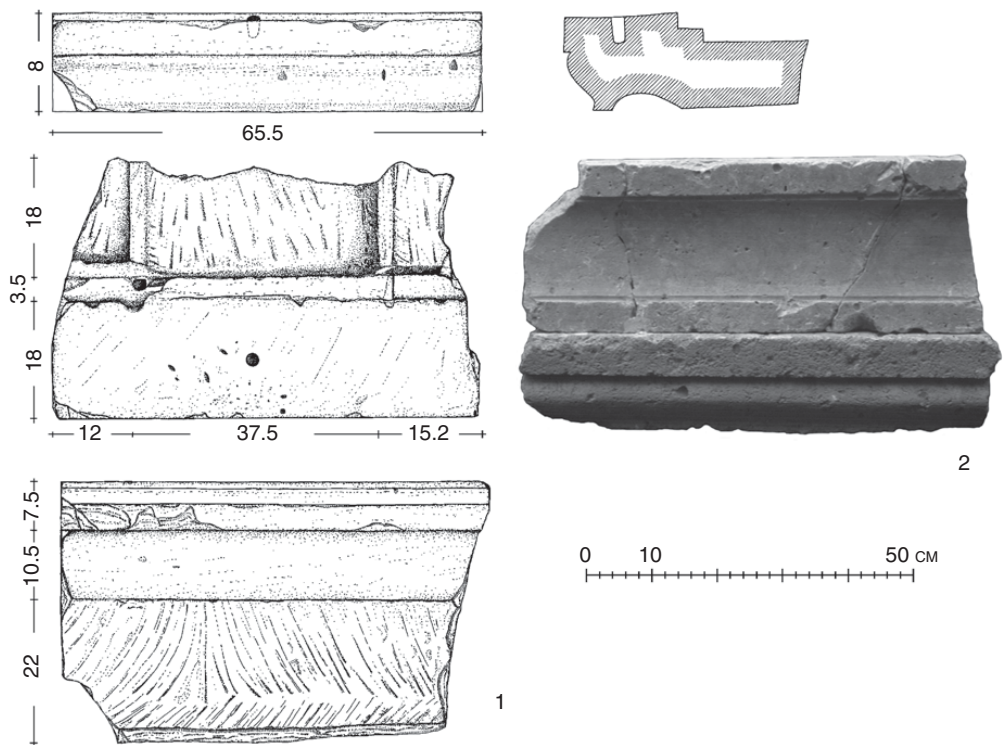


Fig. 8.2. *Geisa* from Olbia (after Bujskich 2010, Taf. 55.1; 143.3).

decorated in polychrome style. The closest parallels to such architectural forms are known in cult structures dating from the end of the 540s to the beginning of the 530s BCE in southern Ionia (Miletos and the monuments from its closest surroundings – the Didymaion and the altar of Poseidon on Cape Monodendri) and central Ionia (Ephesos), as well as from the island of Chios. The fragments from Olbia also demonstrate new variations in the rendering of architectural details and entablature. They include, for example, raking *geisa* with attached stone *simai* (rather than those cut in one piece with the *geison*) and some structural and stylistic idiosyncrasies of the frontal *acroterion*.<sup>3</sup>

Two limestone volutes, each with one scroll only, are also associated with the cult structures of the Western *Temenos*. The functional purpose of these pieces is determined by their structure, with the *echinus* absent, and by their general proportions. They decorated the tops of rectangular altars (Fig. 8.4.1–2).<sup>4</sup> The stylistic characteristics of these fragments, such as flat and convex volute channels, as well as certain features in the outline of the bolsters and a partially preserved corner palmette on one of them, have analogies among contemporaneous architectural details from Miletos that were identical to those from Olbia in terms of their structure. This allows us to date the Olbian volutes to the last third of the sixth century BCE.<sup>5</sup> The

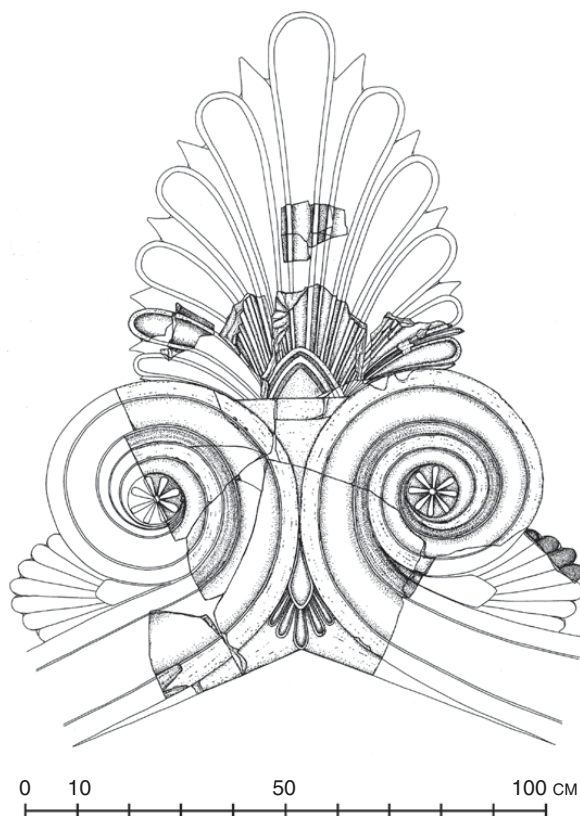


Fig. 8.3. Reconstruction of a frontal ridge *acroterion* from Olbia (after Bujskich 2010, Taf. 19).

Western *Temenos* also yielded some architectural fragments that had been manufactured right at the site, during the period of the construction of the area. They include an unfinished *acroterion*, with volute outlines marked by drilled holes (Fig. 8.5.1), and a palmette with eleven fronds and no base, intended for the repair of a damaged detail (Fig. 8.5.2). In general, unfinished fragments are quite rare, which makes the Olbian specimens rather valuable, since they not only confirm the local manufacturing of such items, but also help reconstruct the stages of the process.

In addition, a considerable number of Late Archaic architectural details were found in Olbia in mixed cultural layers dating to later periods – first of all, in the territory of the Roman citadel of the second to third century CE. Cut stones from the entire area of the early settlement had been reused for the construction of the Roman fortress. In particular, many fragments from altar entablatures were found, including a block cut out of dense light-gray limestone, which formed an extension of the channel of a corner volute (Fig. 8.6). The width of the channel (23.5 cm) indicates that the volute itself and the whole altar must have been of considerable

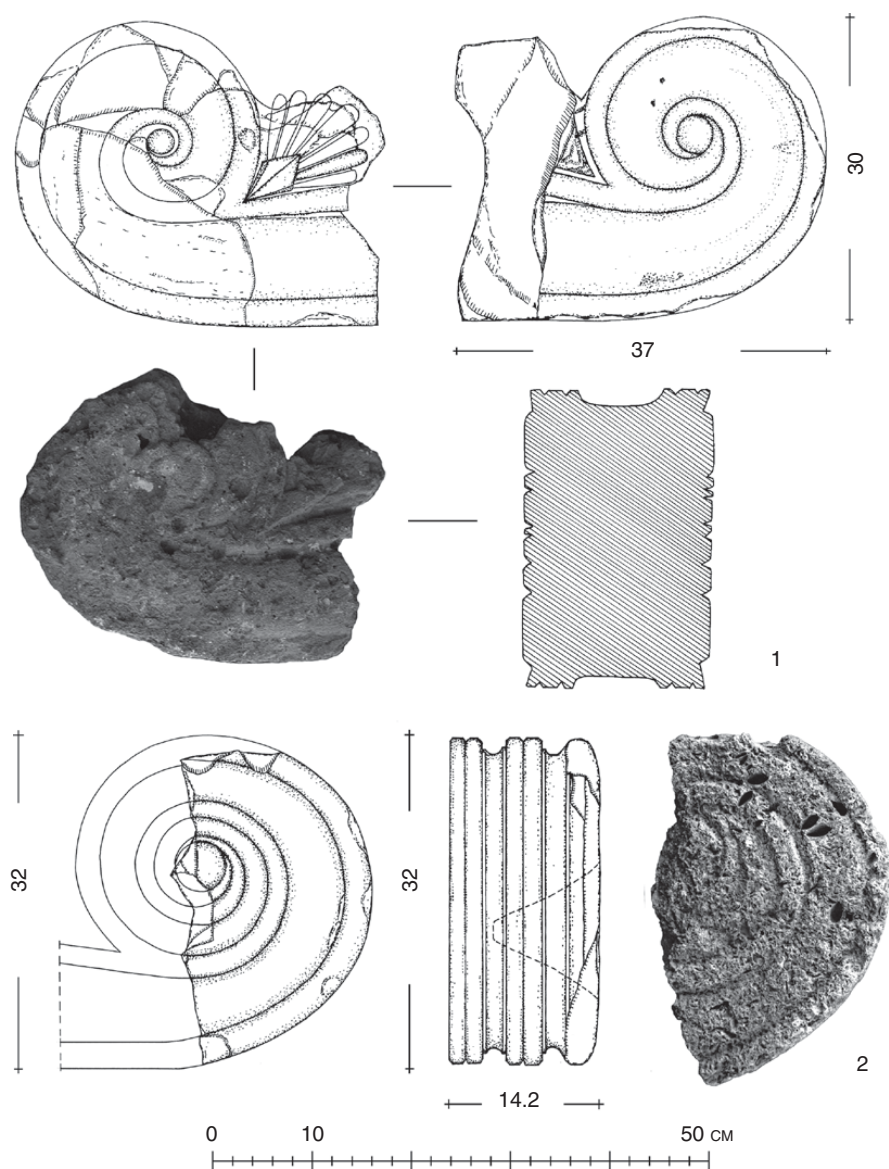


Fig. 8.4. Altar volutes from Olbia (after Bujskich 2010, Taf. 16; 125.1, 5).

size. Only the altar of Poseidon on Cape Monodendri has a crowning with a volute channel of a comparable size (23.8 cm).<sup>6</sup> A series of *geison* fragments with Ionian (Fig. 8.7.1–3) and Lesbian *cymatia* (Fig. 8.7.7), cut out of porous yellow shell stone, is also very interesting. The stylistic features of the facade relief, such as the rounded shape of the slightly rectangular *cymatia* with low-relief dart-shaped dividing elements in its bottom part, suggest that these architectural fragments date to the Late Archaic period. Similar *geisa* were found in Histria, the closest-to-Olbia Milesian



colony in the Northwestern Black Sea region.<sup>7</sup> In addition, a fragment of an altar entablature made out of individual blocks and with an Ionian *cymatium* was discovered during the excavations of Borysthenes on the island of Berezan' (Fig. 8.7.4–5). A fragment of a *cymatium* identical to this one in size and structure comes from Olbia (Fig. 8.7.6).<sup>8</sup> The closest analogies to these details are known from contemporaneous Ionic architecture, such as the decoration of the altar of Poseidon on Cape Monodendri and round altars from Miletos.<sup>9</sup> These fragments confirm, once again, that altars in Olbia and Borysthenes had the same shape and decoration of the entablature that were common for altars in Ionia.<sup>10</sup>

A small fragment of an *anta* capital with an asymmetrical composition – the main facade with three rows of relief decoration and three volutes on the lateral (symmetrical) faces – is also a part of the decoration of a monumental rectangular altar with an *anta* crowning of the side-walls (Fig. 8.8). This detail finds close analogies in terms of style and composition in *anta* capitals of the Didymaion of the end of the sixth to the beginning of the fifth centuries BCE.<sup>11</sup> The detail is cut out of the same light-colored limestone as the entablature of the temple of Apollo *Ietros*, mentioned above.

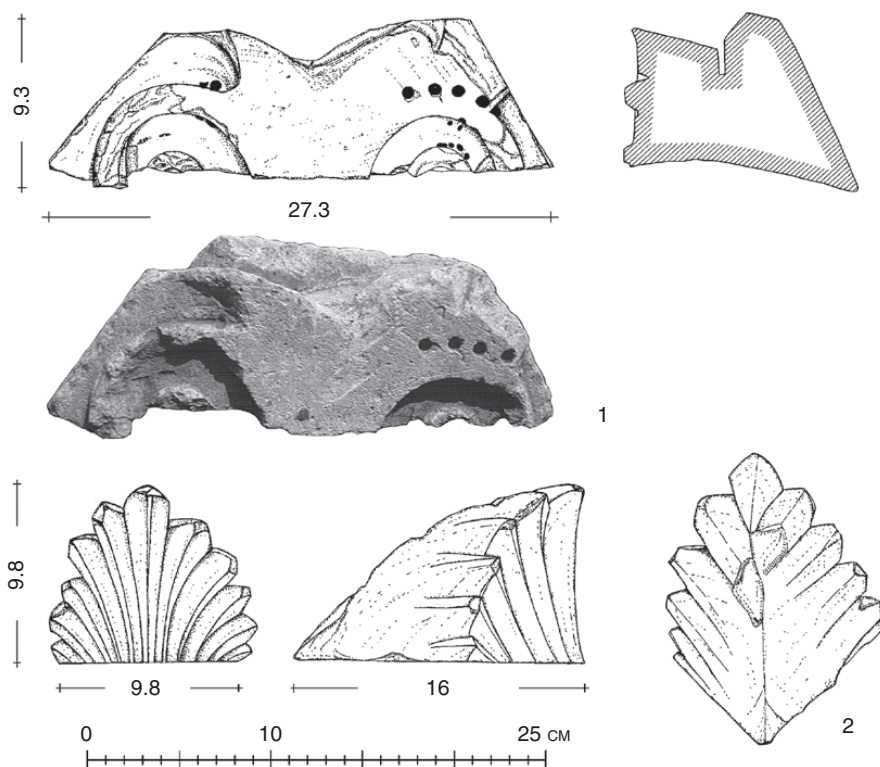


Fig. 8.5. Fragments of altar decorations from Olbia (after Bujskich 2010, Taf. 18.2, 3; 126.6).

The stylistic idiosyncrasies of the capital, such as the somewhat flattened volute channels and rounded *ovae* in the bead-and-reel ornament, suggest a date of the last third of the sixth century BCE.<sup>12</sup> This fragment of an *anta* capital is probably the earliest example of such type in the North Pontic region. Until now, such architectural details have been found only in Histria, but there they date to a later period, i.e., the early decades of the fifth century BCE.<sup>13</sup>

In addition to architectural details made out of limestone, some imported marble fragments were also discovered in Olbia. They include, first of all, an altar corner volute (Fig. 8.9), which is surprisingly close in style and size to the so-called small corner *acroterion* from Miletos.<sup>14</sup> Therefore, a Milesian origin of the marble volute from Olbia and a dating to the period between 520 and 510 BCE seem very reasonable.<sup>15</sup> *Geisa* of the Chian type with double seven-fronded palmettes, enclosed within an ovoid-shaped contour at the bottom and separated by lotus flowers, also belong to altar decorations (Fig. 8.10.1–2). The rendering of these decorative elements suggests a date of the end of the sixth century BCE for both *geisa*.<sup>16</sup> No local replicas of such details have been discovered in Olbia, but some have been found elsewhere in the Northern Black Sea region, i.e., in Histria<sup>17</sup> and Pantikapaion.<sup>18</sup> It is still not clear, however, whether such details were imported to Olbia directly from Chios or indirectly via the Ionian centers.

Two points are particularly important in the study of the development of monumental architecture in the Ionic order in Late Archaic Olbia. On

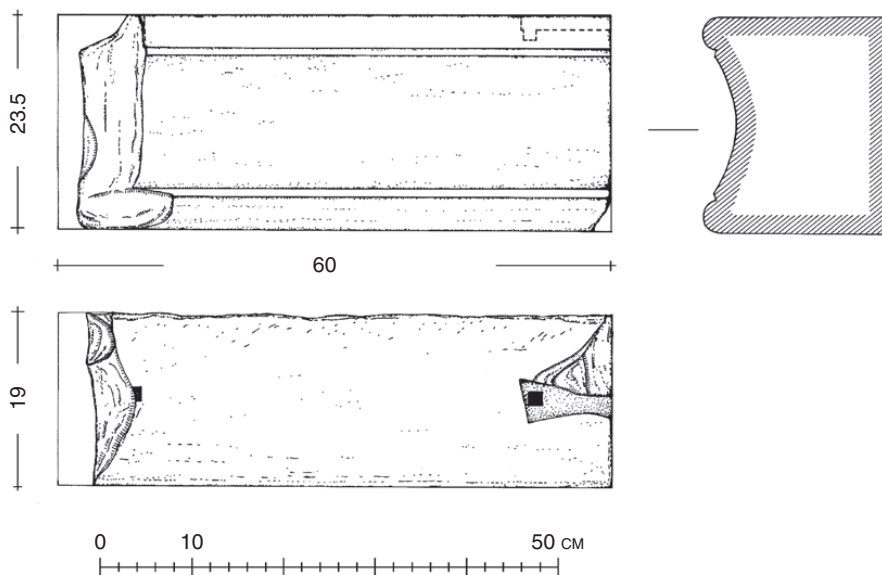


Fig. 8.6. Fragment of an altar entablature from Olbia (after Bujskich 2010, Taf. 18.1).

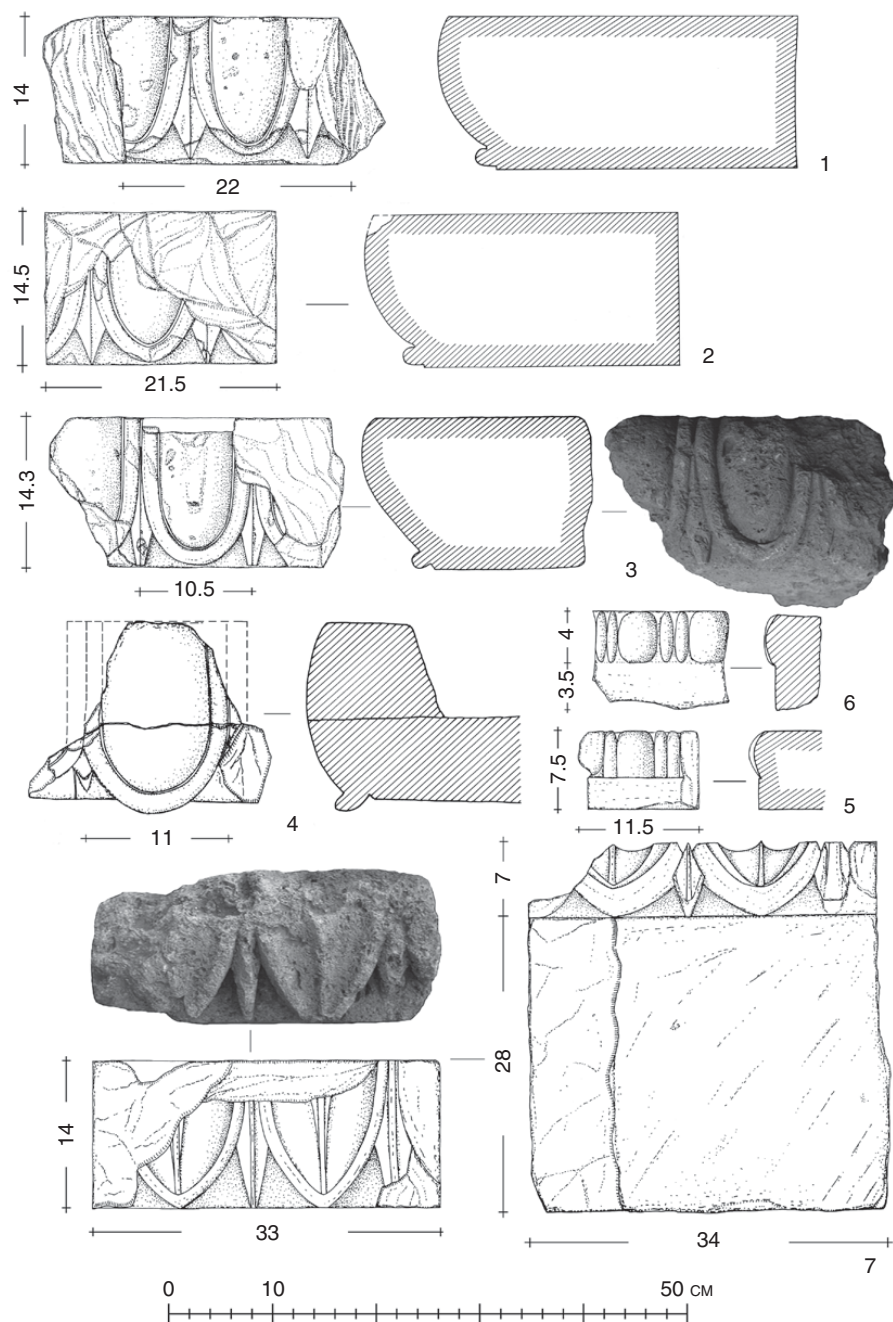


Fig. 8.7. Fragments of altar entablatures from Olbia (1–3, 5, 7) and Borysthene (4, 6) (after Bujskich 2010, Taf. 50. 1–2; 51. 1–2, 4–6; 141. 2).

the one hand, there are architectural fragments made out of local stone that exactly copy the Ionic shapes from the monumental architecture of, first of all, southern Ionia, including Miletos and its surroundings, as well as central Ionia (Ephesos) and/or the island of Chios. On the other hand, there



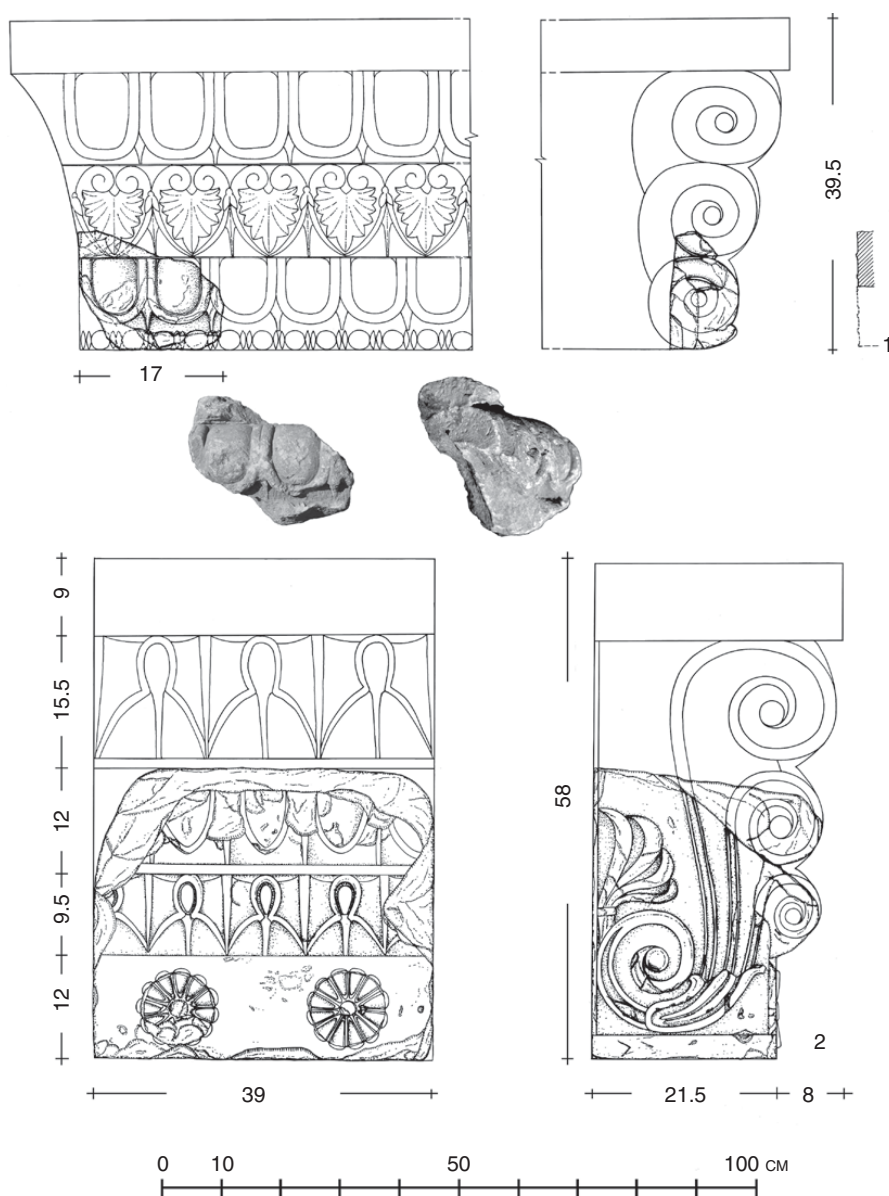


Fig. 8.8. *Anta* capitals from Olbia (after Bujskich 2010, Taf. 40; 134.5, 6).

is a contemporaneous series of locally manufactured pieces that demonstrate variations in the rendering of Ionic shapes unknown to metropolitan architecture. They testify to the rapid adaptation to local stone, to the practice of the preliminary selection of stone for the manufacturing of various details of the outer decoration, and, possibly, to the necessary deviations from metropolitan shapes occurring in the process of copying. It is conceivable that the latter prompted the creative adaptation of the borrowed Ionic shapes. The presence of locally manufactured details,

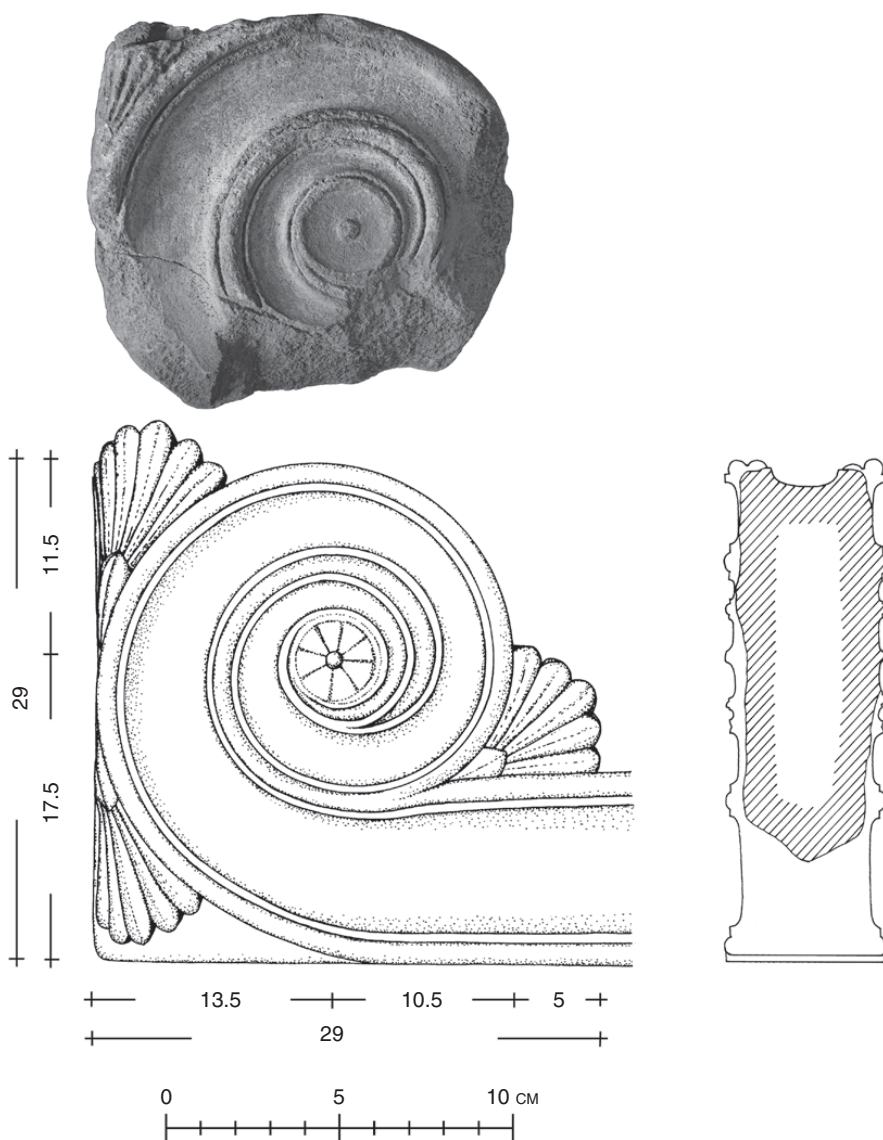


Fig. 8.9. Altar corner volute from Olbia (after Bujskich 2010, Taf. 17; 126.3).

along with unfinished ones, allows us to make some conclusions about the emergence and further development of the local tradition of rendering Ionic shapes. In addition, the first mudbrick-and-stone houses built above ground appeared in Borysthenes and Olbia around the same time, i.e., at the end of the third to the beginning of the fourth quarter of the sixth century BCE, gradually replacing early primitive dwellings dug into the terrigenous clay.<sup>19</sup> Therefore, the emergence and dynamic development of cult architecture and residential architecture in the Olbian *polis* were synchronous and interconnected processes.

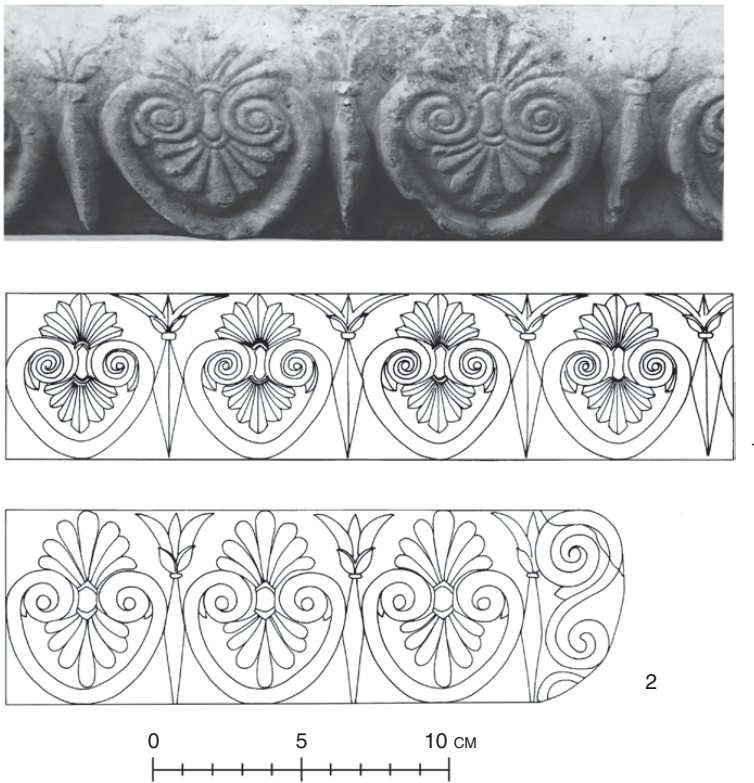


Fig. 8.10. Decoration patterns of altar entablatures from Olbia (after Bujskich 2010, Taf. 52.1, 2; 141.4; Photo archive of the Institute for the History of Material Culture of the Russian Academy of Sciences, no. 5224).

#### EARLY PANTIKAPAION

The analysis of the building activity in Pantikapaion supports our reconstruction of the main stages of Olbia's architectural development. In Pantikapaion, the earliest architectural pieces executed in the Ionic order belong to the same categories of monumental structures as in Olbia, i.e., altars and temples. First of all, there is a limestone volute with a convex and flat channel and a central eye (Fig. 8.11). In terms of style, this volute is synchronous with its Olbian analogues.<sup>20</sup> Its structural features (such as a single relief facade and a hole on the bottom surface, used for fastening) also confirm that it was a part of the decoration of a rectangular altar. Presently, this volute is the only known architectural fragment of such type from Pantikapaion and, in general, from the territory of the Bosphoran Kingdom.

A series of large limestone details – undoubtedly from a temple – also comes from Pantikapaion. They include bases of the Samian type, represented by separately cut *tori* and *spirai* (Fig. 8.1.5). There has been a prolonged discussion concerning the dates of these bases. The director of the excavations, Vladimir

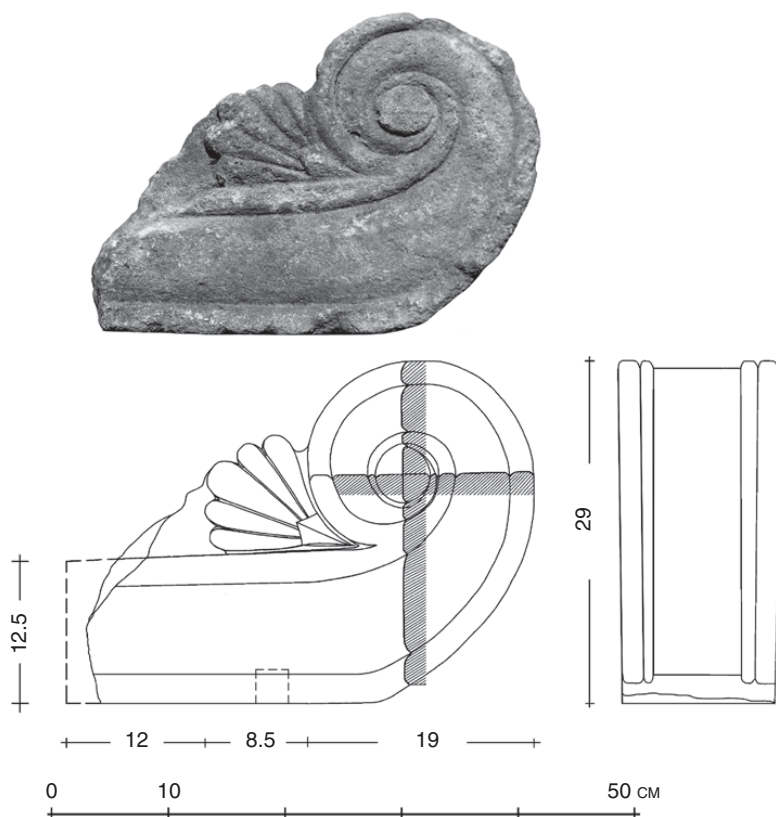


Fig. 8.11. One-sided angle volute of an altar from Pantikapaion (after Bujskich 2010, Taf. 15; 124.3–6).

Blavatskiĭ, dated them to the period from the second half of the sixth to the beginning of the fifth centuries BCE (before 480 BCE).<sup>21</sup> Later, the date was changed to the first half or the middle of the fifth century BCE.<sup>22</sup> However, the proportions of these architectural pieces, compared to those of the bases of the Samian type from the Mediterranean region, allowed scholars to date them to 538–522 BCE.<sup>23</sup> I myself subscribe to this date, which is also supported by the analysis of the stylistic features of the fragments in question.<sup>24</sup> Despite the recent renewed attempts to change this date – and, consequently, the date of the construction of the temple in Pantikapaion – back to 510/500–485 BCE<sup>25</sup> – I still consider the date suggested by Burkhardt Wesenberg more reasonable. In addition, the majority of scholars support Blavatskiĭ's idea that such architectural details could only have belonged to a temple of the *peripteral* type. However, this hypothesis cannot be proven either right or wrong since the foundation of this structure has not been found.

It appears that the beginning of the mass construction of architectural structures in the Ionic order in Pantikapaion follows the same scenario that already has been reconstructed on the basis of the material from the Northwestern Black Sea

region, i.e., Olbia and Histria. However, Ionic column capitals that could be dated to the end of the sixth or even within the fifth century BCE have not been found in Pantikapaion so far. We have only very small fragments that most likely were part of such architectural pieces.<sup>26</sup> Nevertheless, they testify to the construction in Pantikapaion of large buildings in the architectural style of the Asia Minor school.

The situation with the import of marble details into the Bosphoran territories is also rather similar. These imports include fragments of a column base of the Ephesian type (Fig. 8.1.1, 3). Its size indicates that it was a part of a large structure, and the absence of other architectural pieces in the Ionic order in the assemblage of early marble fragments from Pantikapaion prompted us to identify it as a part of a votive column rather than as a part of the outer decoration of a portico.<sup>27</sup> The presence of this fragment indirectly confirms the existence of a *temenos* or an *agora* in Pantikapaion in the last quarter of the sixth century BCE, where the votive column must have been erected. Another fragment is a *torus* from a two-partite column base of the same type (Fig. 8.1.4).<sup>28</sup> A half oval is dissected by five horizontal flutes, with concave *scotias* and fillets that are pointed in cross-section. *Tōri* similar to this one in profile are known from the Massalian Treasury in Delphi, where they have been dated to the last quarter of the sixth century BCE.<sup>29</sup> Synchronous limestone replicas – *tori* with horizontal flutes that are, however, flattened in cross-section – are known from Histria.<sup>30</sup> It is also possible that the two fragments from Pantikapaion were parts of the same base. In any case, they testify to the fact that the demand for the building of various cult structures in Pantikapaion, which rapidly increased in the last quarter of the sixth century BCE, could not have been satisfied by the local manufacture of architectural details alone.

#### THE CLASSICAL PERIOD

During the Early Classical period, a new – Attic – architectural building tradition appeared in the region. However, its interaction with the “old” tradition, i.e., that of Asia Minor, took different forms in the Northwestern Black Sea and in the northeastern part of the North Pontic region.

##### *Olbia*

In Olbia, the Attic architectural style almost entirely replaced the Asia Minor building tradition. The Asiatic style in Ionic architecture is represented in Olbia by a single example – a limestone Ionic capital of a pilaster (an *anta*?) with a tripartite structure of the facade. A fragment of this capital with two registers is preserved – the middle register with an Ionic *cymatium* and the lower register with a Lesbian *cymatium* (Fig. 8.8.2). Lateral faces are formed by three volutes, projecting above each other, with their channels “growing out” of the shoots of an acanthus. The gorgerin is decorated on the facade with two twelve-petal

rosettes. In style, the main decorative elements of the capital are close to the standards of the Classical period. Thus, in the Ionian *cymatium*, the dart-shaped dividing elements go below the line of the *ovae*, resembling in shape the Late Archaic and Early Classical *cymatia* of the *anta* capitals from Didyma. The leaf in the Lesbian *cymatium* is of a concave shape, and its midrib is straight in its entire length. These are stylistic features typical for the decoration of monuments of the end of the sixth and the entire fifth centuries BCE in several large regions. The “Ionic” character of the outline of the rosette is also in agreement with this date – such rosettes were used as elements of *anta* decoration from the Late Archaic period onwards.<sup>31</sup> The most important features that can be used for the dating of the Olbian capital are, however, displayed on its lateral face – the outline of the shoot of the acanthus and the shape of the half palmette. The contours of the details of the vegetative decorative motifs are similar to those of the *anta* capitals from the temple of Zeus in Labraunda, which is dated to the second quarter of the fourth century BCE.<sup>32</sup> Therefore, it would be reasonable to date the fragment from Olbia to the first half or the middle of the fourth century BCE. The assumption that the capital was part of an altar is beyond doubt because of the structure of its lateral faces.<sup>33</sup>

All architectural fragments from Olbia executed in the Attic style are made out of local limestone; no imported marble details from the time prior to the Early Hellenistic period have been found. The limestone pieces include, first of all, a segment of the upper part of a base with a fluted *torus* (Fig. 8.1.8), the reconstructed diameter of which measures 80 cm. This fragment represents a transitional stage between the bases of the temple of Nike on the Athenian Acropolis (or those of the temple on the river Ilissos) and the Propylaia.<sup>34</sup> Based on the dates of the building of the Propylaia (437/6–433/2 BCE) and the end of the construction of the temple of Nike (the middle of the 420s BCE), we have to conclude that the official Athenian architectural forms were copied and broadly used in Olbia. This fragment is one of the early examples of bases of the Attic type in the North Pontic region. Most likely, it is not a coincidence that it was found in the territory of the Eastern *Tēmenos*, which by the middle of the fifth century BCE must have functioned as Olbia’s main cult area. This means that its construction, in contrast to the construction of the earlier Western *Tēmenos*, already followed the stylistic tradition of the Attic architectural school.

In addition to the bases, a number of fragmented column capitals have been found in Olbia. All of them were parts of small – most likely, public – buildings and have direct analogies among the monuments in Attica and the adjoining regions of mainland Greece. They include a fragment of a capital made out of dense light-gray limestone, of which only the right volute is preserved (Fig. 8.12.1–2). The channel of the volute continues for two and two-thirds of a turn and is flat and concave in cross-section, with a flat fillet. The eye of



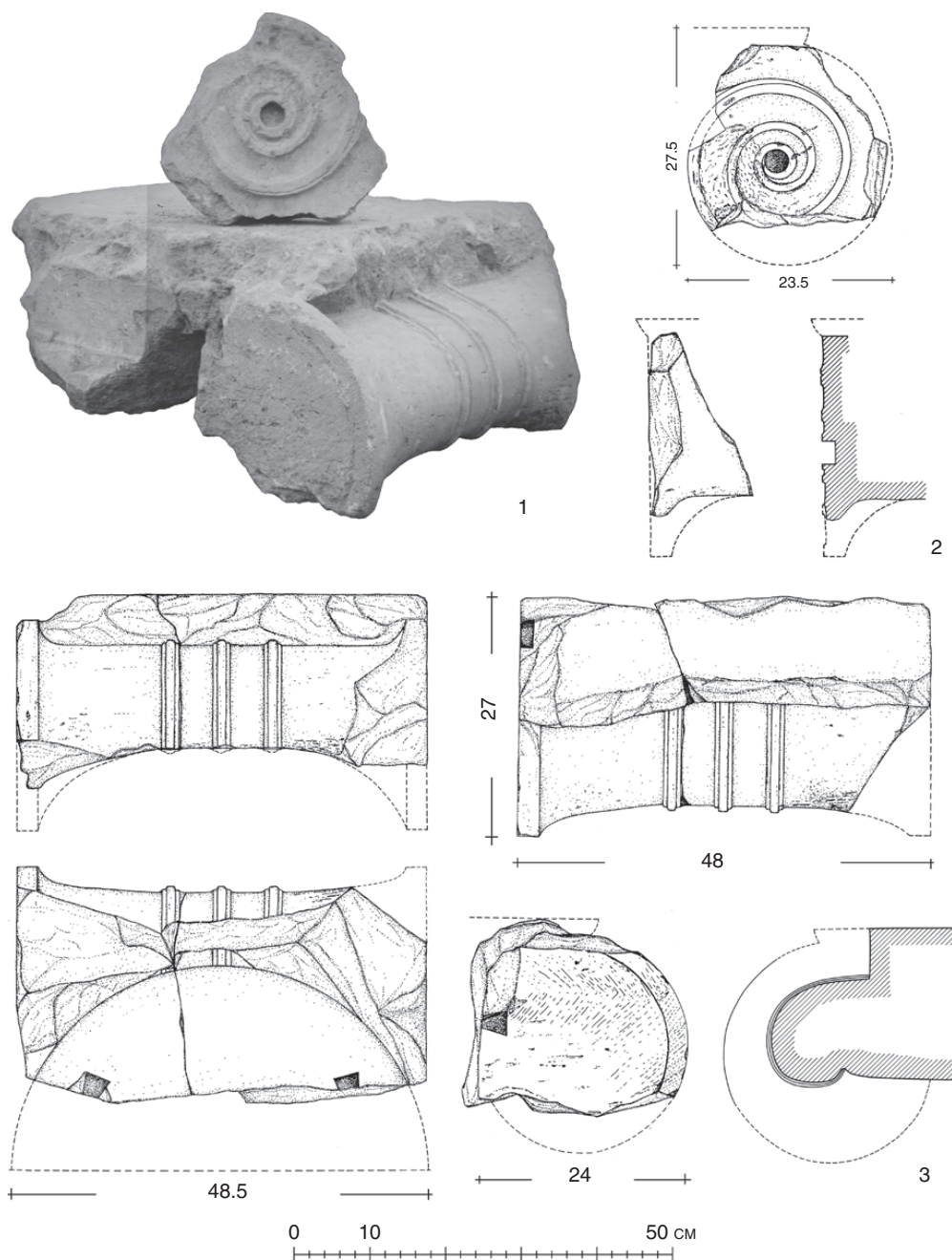


Fig. 8.12. Column capitals from Olbia (after Bujskich 2010, Taf. 22; 127.2–5).

the volute has a depression for an inlaid rosette that probably would have been made out of nonferrous metal. In terms of style, the volute is similar to those of capitals from Athens and Delphi, the former dated by Lucy Shoe to the Late Archaic period, and the latter, by Manolis Korrés, to the Early Classical

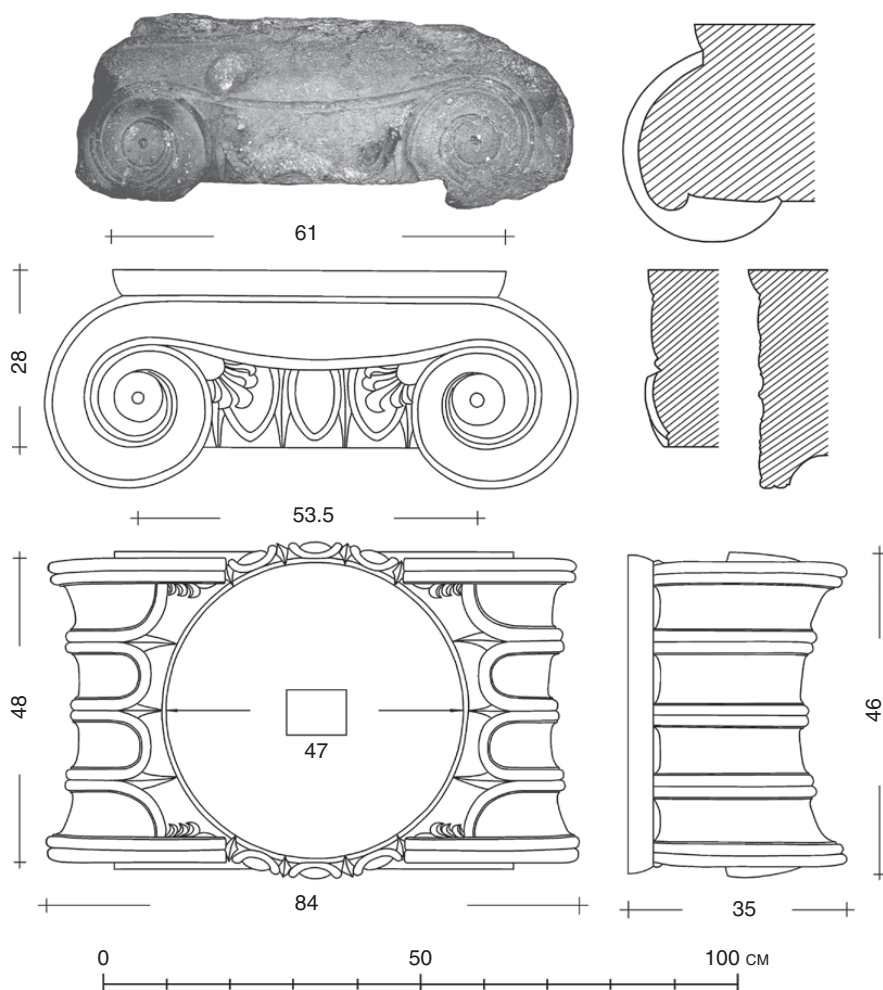


Fig. 8.13. Column capital from Hermonassa (after Buiškikh 2011, figs. 1–2).

period.<sup>35</sup> If this proposed early date is correct also for the fragment from Olbia (it is only a small fragment, however, and therefore there is some room for doubt), then we can assume that it indicates the point in time when the traditions of the Attic architectural school entered Olbian architecture and, in general, the architecture of the North Pontic colonies.

The second capital from Olbia is also represented by a fragment. The detail was already broken at the time of its manufacture, as the traces of repair show, and, as a result, was left unfinished (Fig. 8.12.1, 3). Therefore, our conclusions about the stylistic features of the capital can be based only on its bolster. It has the shape of a narrow elongated cylinder, transected in the middle by three fillets. It is noteworthy that capitals absolutely identical to this one in size and style (and, most likely, material) come from Histria. One of them is dated to



the transitional phase between the Late Archaic and the Early Classical periods (about 480–475 BCE), and the second, to the second half of the fifth century BCE.<sup>36</sup> Thus, we cannot exclude the possibility that all these capitals were cut by the same craftsman or a group of craftsmen, who traveled from *polis* to *polis*. Similar capitals from Athens with three fillets in the middle of the bolster date from the beginning to the middle of the third quarter of the fifth century BCE.<sup>37</sup> Therefore, the earliest date for the Olbian fragment can also be moved to the middle or the third quarter of the fifth century BCE.

### *The Bosphorus*

In contrast to Olbia, the development of the Ionic architectural order in the Bosphorus took a different direction starting from the first half of the fifth century BCE. Until the Early Hellenistic period, it followed the Asia Minor version of the Ionic architectural style, traditional for this region. However, this conclusion has been based only on column capitals dated to the fourth century BCE, since no fragments of this kind from the fifth century BCE are presently known.

The Asia Minor version of the Ionic order is represented by fragments from Pantikapaion, Nymphaion, and Hermonassa. The largest of them is a column capital from Hermonassa, which, most likely, belonged to a temple. It displayed symmetrical compositions on both facades, typical for column capitals (Fig. 8.13). Each of the volutes has two turns, and the center of the volute is an “Omphalosschale” with a convex eye in the middle. The fillet “sags” over the center of the *echinus* on the facade and is flat and convex in cross-section, as are also the volute channels, outlined by convex double fillets. The *echinus* on each facade is decorated with three *ovae*, and the two side *ovae* are partly covered by five-fronded corner palmettes. The capital is rectangular in plan; the bolster is slightly concave, with three double fillets in the middle outlining concave channels. The corners of the lower top surface of the capital are decorated with four-fronded half palmettes. Stylistically, the capital belongs to the Ephesian school of the Ionic order.

The proportions, the composition of the structure of the capital (first of all, the presence of the *ovae* only on the facades), and the detailed stylistic analysis allowed us to date it to the Late Classical period – possibly, to the reign of Leukon I (389/8–349/8 BCE).<sup>38</sup> The traditional adherence to the style of the Ephesian architectural school, with its convex volute channels on the facades, is characteristic of the architecture of Asia Minor not only for the Late Archaic, but also for the entire Classical period. The relevant monuments also demonstrate that the transition from convex to concave volute channels lasted for almost the entire fourth century BCE, with both types of channels often coexisting on different facades of the same piece.<sup>39</sup>

Another important – and in many senses unique – monument of Bosphoran architecture is represented by the assemblage of architectural fragments from the *propylaia* in Nymphaion, dedicated to Dionysos. According to the inscription on the architrave, the *propylaia* was built during the reign of Leukon I,<sup>40</sup> which provides us with a *terminus ante quem* for its construction date. Numerous architectural details from this complex are preserved, including examples of almost all outer decoration parts of the Ionic order, among which column bases and capitals demonstrate the main regional stylistic features most clearly. They present the non-typical combination of Ephesian and Samian versions of the Ionic order, unknown in the monuments of the Mediterranean metropoleis.

A base of the Samian type consists of a *torus* and a *spira*, cut in one piece (Fig. 8.1.6).<sup>41</sup> The *torus* is transected by three horizontal fillets, rectangular in cross-section, and its diameter exceeds the diameter of the top surface of the *spira*. In profile, the top and the bottom moldings of the *spira* are scanting towards the middle of the *scotia*, decorated with a large half-oval molding. Moldings that were rectangular in cross-section started to replace fillets on bases of the Samian type at the end of the sixth century BCE.<sup>42</sup> In the second half of the fifth century BCE, *tori* with such moldings became standard.<sup>43</sup> The base from the *propylaia* in Nymphaion was made in accordance with the stylistic trends of the Ionic architectural order of the second half of the fifth century BCE, inspired by the influence of the Attic school. This means that the base manufactured in Nymphaion replicated a base of the Samian type, the original shape of which was borrowed not from Asia Minor, but from Attica.

A column capital from the *propylaia* in Nymphaion also demonstrates an interesting combination of two stylistic traditions – Attic and Asia Minor (Ephesian), with the latter prevailing (Fig. 8.14).<sup>44</sup> The stylistic features characteristic of the Ephesian school of architecture include the convex volute channel, outlined by a fillet which is half oval in cross-section, and, especially, three double fillets in the shape of half ovals transecting the bolster. The volutes had convex eyes on one of the facades of the capital and depressions intended for inlaid rosettes that probably would have been made out of nonferrous metal, on the other. Each *echinus* was decorated with a design of four *ovae* in relief with full-length darts in between. The side *ovae* were partially covered by palmettes with four fronds of curvilinear shape. The influence of the Attic architectural tradition is visible in the painted Ionic *cymatium* on the *abacus* and in the fact that the profile parts are painted red. All stylistic features of the capital, including the shape of the *ovae* and the fronds of the corner palmettes, do not allow us to date this piece earlier than the transition from the fifth to fourth century BCE. In addition, the discovery of a dedicatory inscription helped to date the capital more precisely to the first half of the fourth century BCE.<sup>45</sup>

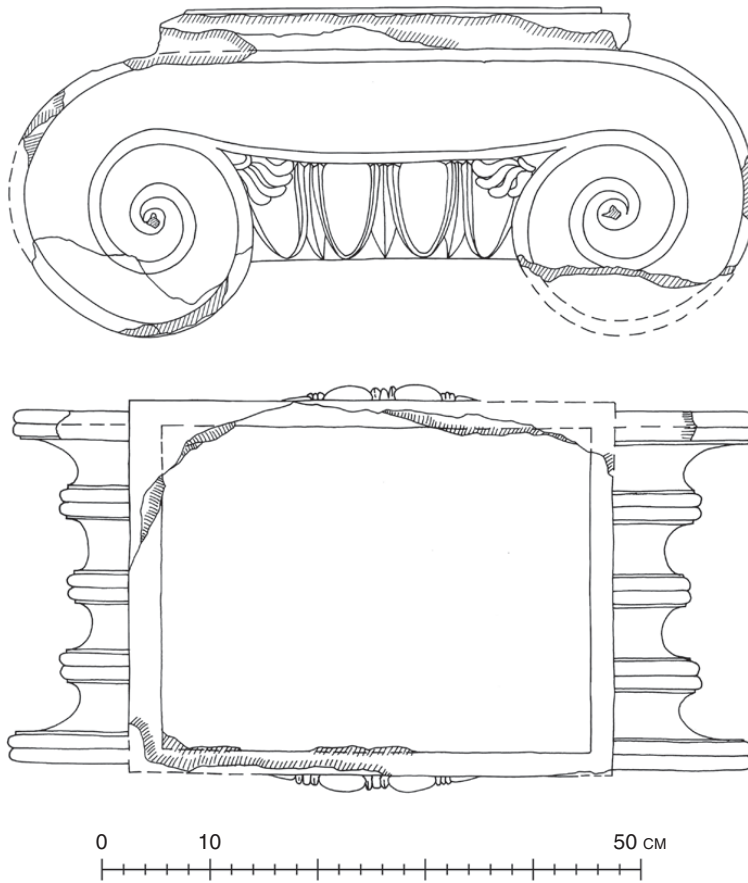


Fig. 8.14. Column capital from Nymphaion (after Sokolova 2000–1, figs. 2, 3; also see Bujskich 2010, Taf. 20.1).

A capital from Pantikapaion is smaller in size, but stylistically close to the capitals from Hermonassa and Nymphaion (Fig. 8.15).<sup>46</sup> A combination of the Attic and Asia Minor traditions is even more clearly expressed in this piece. This capital is already almost square in plan and has symmetrical compositions on its facades. The length of each facade is 70 cm; the volute channel is flat and concave, with two full and three-quarters of a turn and a flat eye. In contrast to the capital from Nymphaion, the corner palmettes are not executed in relief – instead, the fronds are painted. The two-partite *abacus* consists of a covering plate and a brightly decorated Ionian *cymatium*. Each *echinus* has three *ovae*, the volute channel is straight above the *echinus* and curving only at the turn of the volute. The bolster, transected by four double fillets, indicates that this piece belongs to the Ephesian school of the Ionic architectural order. At the bottom, the fillets terminate in an outlined ovoid-shaped pattern with darts, and at the *echinus*, in a row of *ovae* in relief. The stylistic features characteristic of the Attic school are visible in the presence

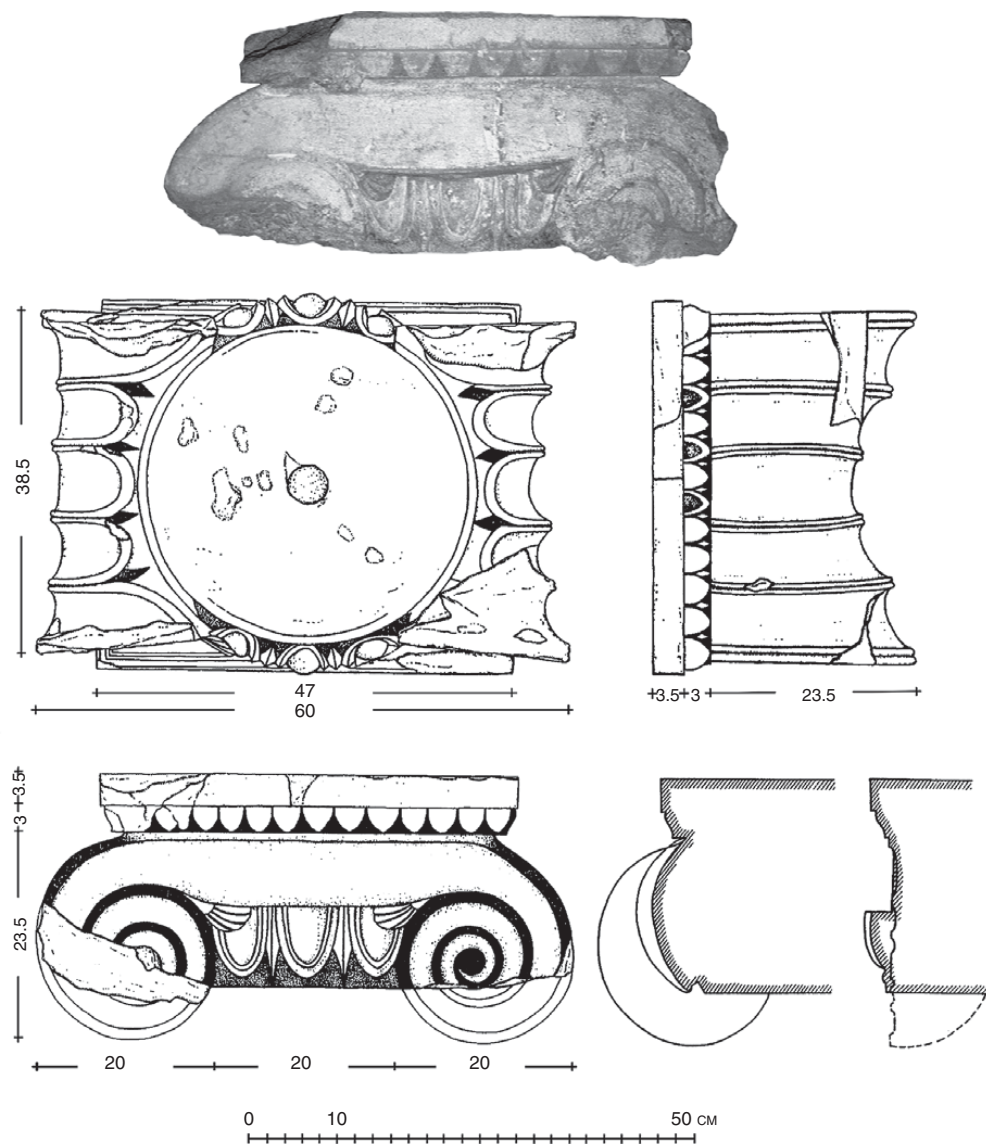


Fig. 8.15. Column capital from Pantikapaion (after Bujskich 2010, Taf. 21; Farbtaf. 1.1).

of the two paint colors (red and blue) and the smooth surfaces of the profiles that were to be painted.

The Ionian *cymatium* on the *abacus* had thirteen *ovae* on each face, with blue and unpainted *ovae* alternating. On the lateral faces, the background between the *ovae* was painted red, with blue and unpainted *ovae* alternating. There were six blue *ovae* in total on each lateral face, with the outlines of the *ovae* and the darts between them left unpainted. On the facades, the background of the *echinus* was painted blue, and the eyes of the volutes with the fillets outlining

them were painted red, as were the surfaces around the *ovae* and the darts, the depressions between the double fillets on the bolsters, and the darts at the bottoms of the fillets. The lines between the fronds of the corner palmettes were also emphasized by red paint. The stylistic features, such as the shape of the *ovae* on the facades, the profile of the volutes, and the straight line of the central volute channel, as well as morphological characteristics, such as the two-partite *abacus*, suggest that the capital from Pantikapaion dates to the second half of the fourth century BCE – possibly, as late as the beginning of the Early Hellenistic period.

These column capitals, found in various Bosphoran cities on both sides of the Cimmerian Bosphorus, demonstrate that the monumental architecture of Asia Minor continuously influenced the public architecture of the Bosphorus not only during the Late Archaic, but also throughout the entire Classical period. The latter was the period of Persian rule in Asia Minor, and, therefore, the processes that determined the style of Bosphoran political architecture were different from those of the Late Archaic period. The exact rendering of the stylistic features in the outer decoration of public buildings in the Bosphorus demonstrates the direct imitation of the outer decoration of public structures erected by the Achaemenids in the “old” Ionian cities.<sup>47</sup> They preserved the old traditions in the rendering of the architectural order forms, which were already viewed as archaizing in the fifth and fourth centuries BCE. This observation once again confirms the well-known thesis about the role of ancient public buildings as official symbols of state politics and manifestations of power.

Apart from architectural fragments executed in a style combining Attic and Asia Minor traditions, pieces in purely Attic style are also known from the Bosphorus. They appeared in Pantikapaion in the first half of the fifth century BCE. The earliest column capital of such type is a large piece with four painted faces and moldings with smooth surfaces, dated by Vladimir Tolstikov to the 480s–460s BCE (Fig. 8.16).<sup>48</sup> Each of the facades is 91 cm long; the volute channels are concave, each with two and a half turns. The capital has a two-partite *echinus* with smooth-surfaced moldings that were to be painted, as were also the corner palmettes. The smooth surface of the concave bolster was decorated with two painted fillets. A painted capital found at the Tower of Winds in Athens presents a close analogy to this piece, albeit of a later date.<sup>49</sup> Presently, the capital from Pantikapaion is the earliest architectural piece executed in the Attic style of the Ionic order known from the Bosphorus.

The Late Classical period in the development of the Attic style of the Ionic architectural order in Pantikapaion is further represented by a large column capital (Fig. 8.17). The fragment is broken along the facade, and the preserved width of the bolster measures 17 cm, at the most. The preserved part suggests that the bolsters had smooth surfaces, each with one or several fillets. The volute channel “sags” above the *echinus*, outlined by a fillet at the bottom, which joined the

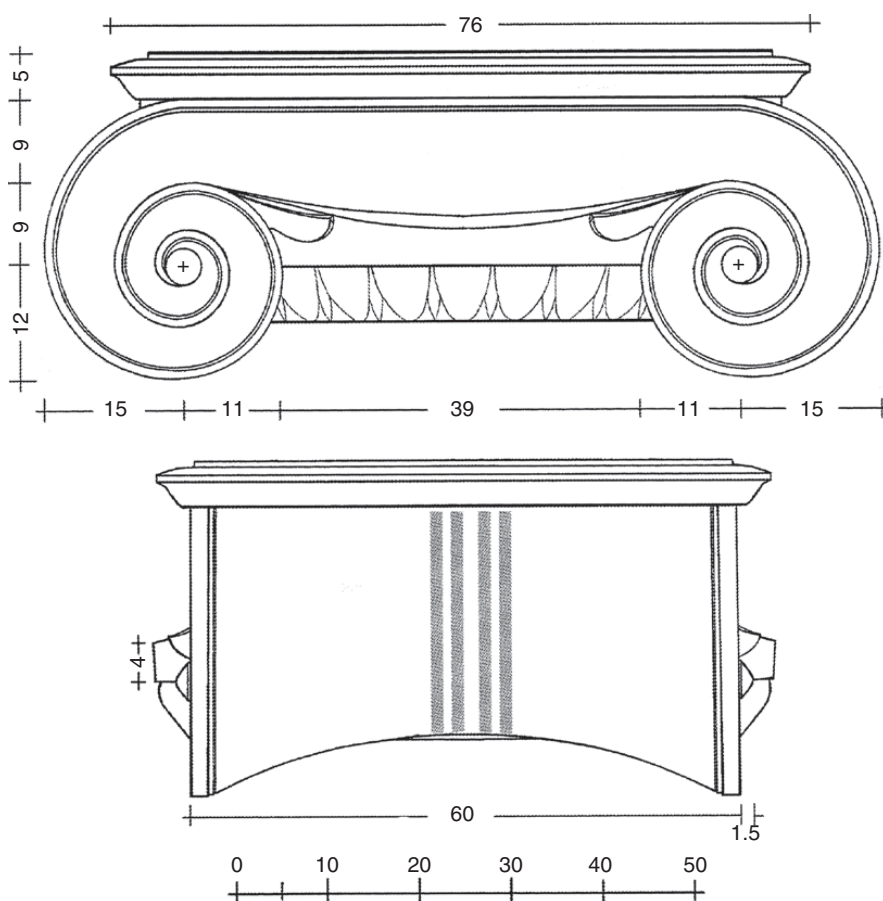


Fig. 8.16. Column capital from Pantikapaion (after Tolstikov 2010, fig. 15).

volute fillet above the five-fronded corner palmettes. The volute channel has three turns, with a flat fillet. The outer radius of the volute measures 15.5 cm; the central eye is flat. The *echinus* has five *ovae* on the facade, of which three are cut in full and the two side ones only partially. Corner palmettes cover the side *ovae* and partially cover the two *ovae* next to the side ones. The shape of the *ovae* is close to triangular, with carinated darts in between.<sup>50</sup> It is crucial to determine the place of this capital in the evolutionary line of architectural pieces executed in the Ionic order because it has been dated to the first half or the middle of the fifth century BCE.<sup>51</sup> This dating is obviously erroneous, since none of the elements of the structure or the decoration of the capital are typical for the fifth century BCE. This fragment can be securely dated no earlier than the middle or the second half of the fourth century BCE. The rendering of the long facade is similar to that of a capital from Athens dated to the fourth century BCE.<sup>52</sup>

The last piece in this series of column capitals from monumental buildings of the Late Classical to the Early Hellenistic period from Pantikapaion

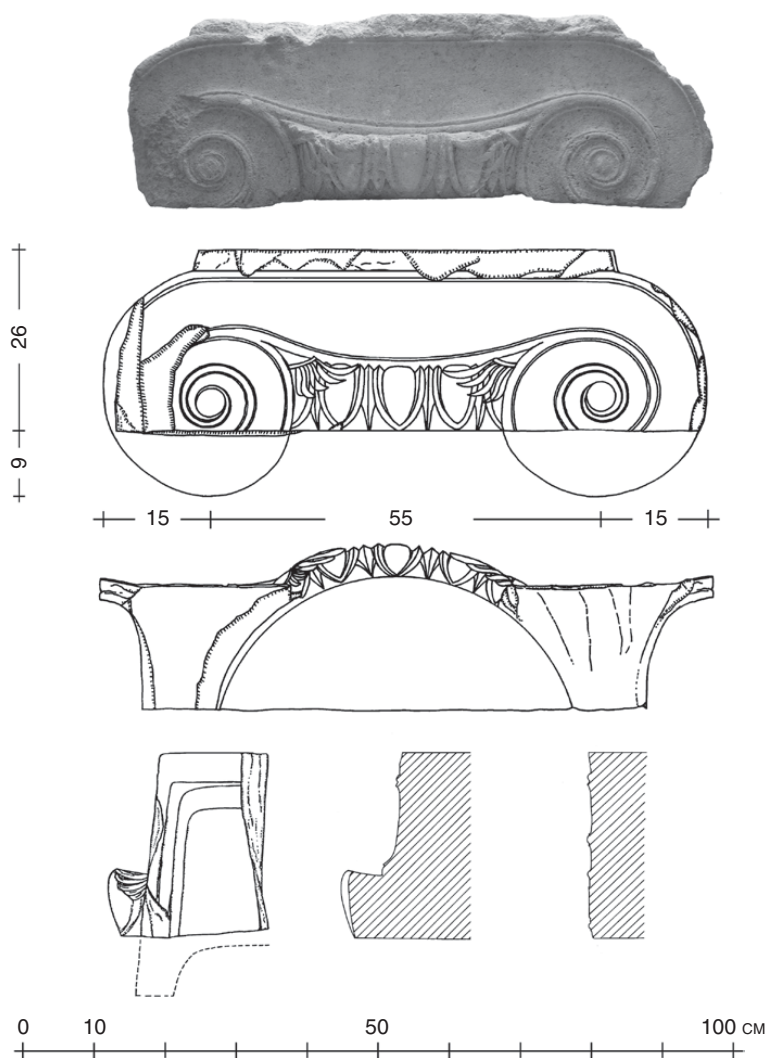


Fig. 8.17. Column capital from Pantikapaion (after Bujskich 2010, Taf. 24.1; 128.1).

is a fragment of an angle capital (Fig. 8.18). This fragment is a part of the largest known Ionic capital among the architectural remains from the entire Northern Black Sea region. The bad state of preservation does not allow us to draw any conclusions concerning either the full composition or the details of the face decorations, but the outer radius of the volute, measuring 17 cm, indicates the large size of the capital (and of the entire portico). The protruding corner between the volutes is filled by a relief composition of acanthus leaves and a nine-fronded palmette, the rendering of which is characteristic of the second half of the fourth century BCE.<sup>53</sup>

Thus, column capitals of the Attic type in the territory of the Bosphorus have so far been found only in Pantikapaion. These finds indicate that, as in the





Fig. 8.18. Fragment of an angle capital from Pantikapaion (after Bujskich 2010, Taf. 128.4–5).

Northwestern Black Sea region, structures built in this style already started to appear in Pantikapaion in the first half of the fifth century BCE. However, the Attic style did not become as popular in the Bosphorus as in the centers of the Northwestern Black Sea. Nevertheless, it is clear that the Attic architectural tradition was known in the Bosphorus for the entire Classical period and coexisted there with the Asia Minor tradition.

### *Chersonesos*

While the Ionic order was widely employed in Olbia and the Bosphorus, in Chersonesos the first architectural pieces executed in this order appeared only at the end of the second quarter of the fourth century BCE.<sup>54</sup> All of them were imported, made out of marble, and belonged to smaller structures – most likely, altars or funerary monuments from the city necropolis. They include, in particular, a base of an *anta* decorated with molded patterns of bead-and-reel, Lesbian *cymatium*, and guilloche on one side (Fig. 8.19). The date for this piece can be suggested based on the high quality of the execution of the decoration – the convex leaves of the Lesbian *cymatium*, the beads in the bead-and-reel pattern, and the guilloche, as well as the precision of the composition of all the decorative elements in relation to the vertical axis. Such decorative elements were characteristic of the time preceding the Early Hellenistic period; close analogies are known among the bases from the temple of Athena *Alea* in Tegea and the *Tholos* in Epidauros.<sup>55</sup> Therefore, we can suggest that the base from Chersonesos was of Peloponnesian origin (or inspired by Peloponnesian works). This piece is not the only base of the Peloponnesian type found in Chersonesos. In addition, there are limestone replicas used in the reconstruction of the Early Hellenistic temple in the territory of the Northeastern *Temenos*.<sup>56</sup>

### THE HELLENISTIC PERIOD

The Hellenistic period brought new trends in the development of Ionic architecture throughout the entire region. On the one hand, new features appeared





Fig. 8.19. Base of an *anta* from Chersonesos (after Bujskich 2010, Taf. 121.1).

in almost all of the components of the inner and outer decoration. On the other hand, the Ionic order not only became popular in the construction of public buildings, but also started to be widely used in residential complexes – in inner-courtyard porticoes and interior decorations. The most substantial assemblage of architectural pieces in the Ionic order dating to the Hellenistic period comes from Chersonesos. The most representative in terms of style is a large series of column capitals, which can be divided into two equally large groups. The first group includes the capitals manufactured in accordance with the stylistic standards of the Asia Minor architectural school. However, in contrast to the Classical period, the Chersonesian stone cutters who followed the Asia Minor tradition used the examples that became popular in the architecture of the Ionian centers after their conquest by Alexander of Macedon. The second group of capitals from Chersonesos comprises architectural pieces that have no moldings, but show traces of polychrome painted decoration. These features are reminiscent of the Attic school.

The capitals from large public buildings executed in the Asia Minor style are represented by architectural pieces with relief decorations fully covering all the faces (Figs. 8.20; 8.21.1–2). Each capital had an *abacus*, decorated with an Ionian *cymatium* along the perimeter. The facades had a vegetative ornament, with a flower in the center of the channel and symmetrical acanthus shoots spreading from it, each with three scrolls. Despite the fact that the general composition was the same in all cases, the details of the vegetative ornament varied from piece to piece. One of the capitals had five *ovae* on the facade of the *echinus*, whereas another had three. Each volute channel had two full turns, with a flat eye in the center. All pieces were decorated with a Lesbian *cymatium* on the lateral faces under the *abacus* and with a relief ornament in the central part of the bolster; the bolster was covered with small (scale-like) leaves. The foliage decoration on the bolster was arranged in four or five – or, sometimes, nine – rows. Some capitals had smooth-surfaced bolsters with no relief decoration. The background between the leaves of the Lesbian *cymatium* under the *abacus* was painted red, which indicates that other details of the relief decoration must have been painted as well.

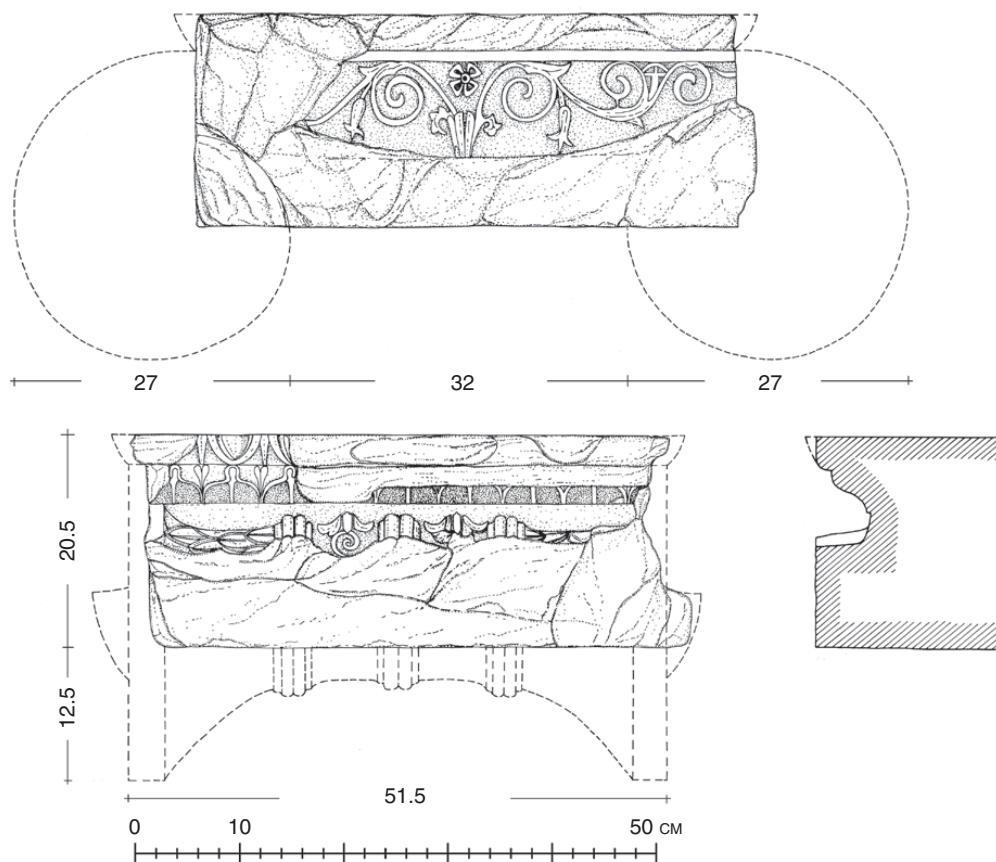


Fig. 8.20. Column capitals from Chersonesos (after Bujiskich 2010, Taf. 25.1).

A date for these capitals can be suggested on the basis of the rendering of the decorative elements. A similar composition in the decoration of the facades is known starting from about 300 BCE – the date of the earliest capitals from the temple of Artemis in Sardis.<sup>57</sup> Analogies can also be found in the capitals from the Ptolemaion on Samothrace, dated to (or right after) the middle of the third century BCE,<sup>58</sup> and the temple of Apollo *Smintheus* in Chrysa (Troas).<sup>59</sup> The earliest examples that can be used for the dating of the vegetative ornament on the bolsters are the capitals from the temple at Messa on Lesbos. They are traditionally dated to the transition from the third to fourth quarter of the fourth century BCE; however, suggested revisions of this date indicate that the capitals may have dated as late as the second quarter of the third century BCE.<sup>60</sup>

The manner of the rendering of the abundant vegetative and floral decoration is also characteristic of the first half of the third century BCE. In addition, the rendering of the *cymatia*, especially the Lesbian one, can help to determine the date. The shape of the leaves and their midribs, as well as the precision of the rhythm in the layout of the centers of the leaves and the dividing elements

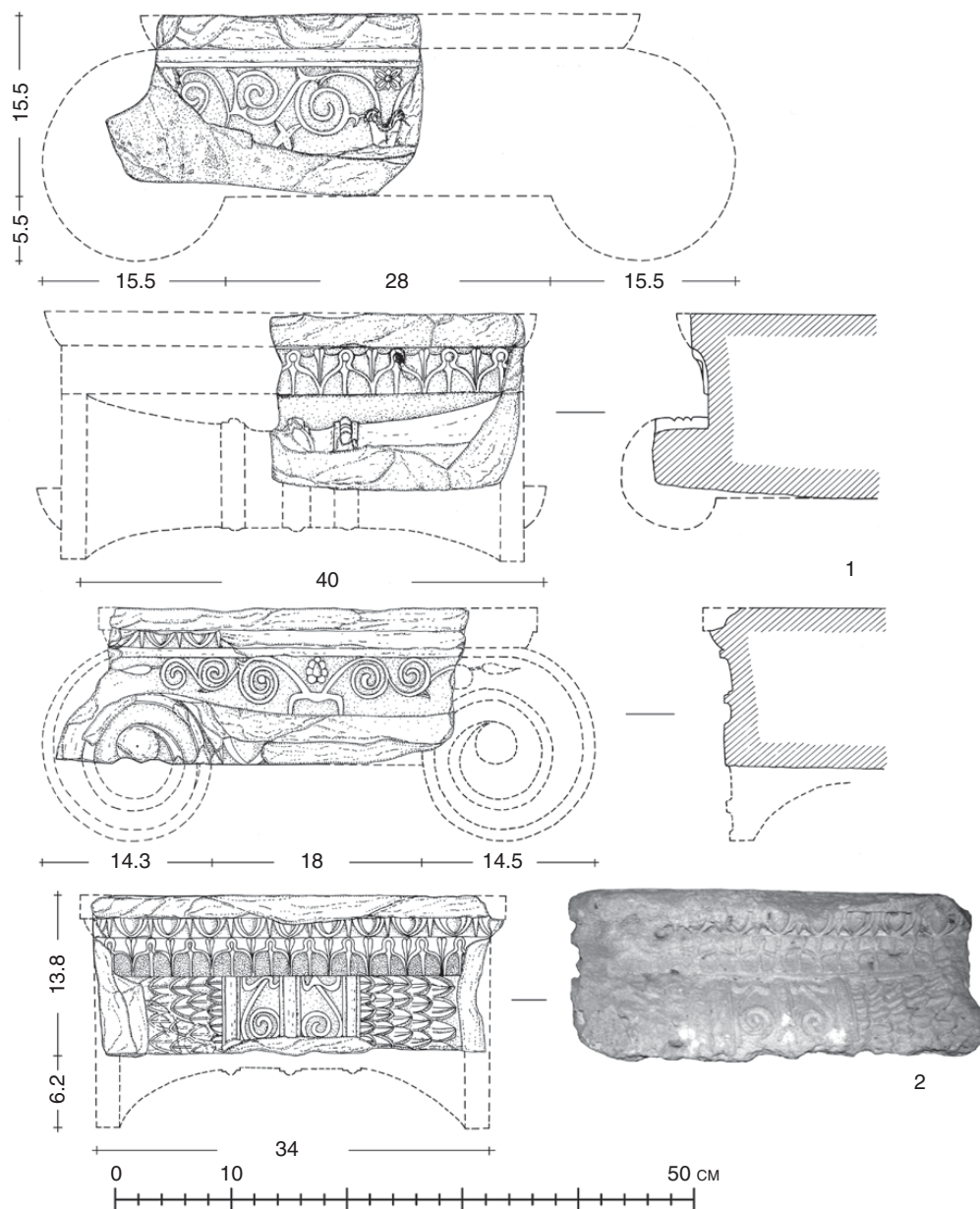


Fig. 8.21. Column capitals from Chersonesos (after Bujskich 2010, Taf. 25.2; 26.1; 128.6).

of the Ionian *cymatium* located above, indicate that it belongs to the Early Hellenistic period. In another capital, this rhythm is broken and the midribs of the leaves in the *cymatium* do not correspond to the vertical axes of the *ovae*. Therefore, the most reasonable date for the Chersonesan capitals is no later than the middle of the third century BCE. The presence of red paint does not contradict the decorative scheme of that period: it was well known

and broadly used to emphasize decorative elements – as, for example, in the “younger” Didymaion.<sup>61</sup>

On typological grounds, a few other capitals can be added to the same group. Their date can be determined on the basis of their stylistic characteristics. One of the capitals had a four-petal rosette in the center of the volute channel, an *echinus* with three *ovae* on the facade, a Lesbian *cymatium* under the *abacus*, and three rows of leaves in relief decorating the central part of the bolster (Fig. 8.22.1). The facade of this capital is decorated in the Asia Minor style, and the decoration of the bolster combines the Attic and Asia Minor traditions.<sup>62</sup> This type of decoration is known for the period from the beginning of the third quarter of the fourth century BCE (the Mausoleum of Halicarnassus and the temple of Athena *Polias* in Priene)<sup>63</sup> to the second quarter of the third century BCE (the Ptolemaion in Olympia).<sup>64</sup> Another capital that belongs to the group of architectural pieces in the Asia Minor tradition can be dated to the Late Hellenistic period based on its decorative style (Fig. 8.22.2). It has a straight volute channel, typical for the facade, and an *echinus* with three *ovae*, of which the first and the last are partially covered by large five-fronded palmettes. The bolster has a smooth surface; the central fillet is replaced by a double row of beads. These stylistic features do not allow us to date the piece earlier than the middle or the second half of the second century BCE, since that was the period by which the channel on the facade had finally become straight and rows of beads had appeared in the center of the bolster.<sup>65</sup>

There are also some smaller architectural pieces that belong to the group of capitals of the Asia Minor type from Chersonesos. Two of them (Fig. 8.23.1) must have been manufactured by the same stone carver: their facades are rendered in the same way, with a narrow channel, and the *echinus* of each piece has three *ovae* on the facade, with the first and the last *ovae* covered by disproportionately large palmettes without hearts. The bolsters have a carved ornament in the shape of two rows of large leaves; the central part of the bolster is decorated with two rows of bead-and-reel pattern, with a row of leaves in between. In addition, there is also a very small capital of a similar type, which was part of the interior decoration of a room or an inner courtyard, since it has only one facade and a flat back (Fig. 8.24.1). The facade is not preserved, but the broken-off surfaces suggest that it must have had the same composition as the capitals described above. The lateral faces were decorated with one row of large leaves, symmetrically spreading out from the center of the face. These architectural pieces can be dated to the Late Hellenistic period, not before the second half or the end of the second century BCE. In addition to the capitals, the assemblage of architectural pieces from Chersonesos has a large number of other parts of the exterior and interior decoration in the Ionic order, including pieces of the entablature, such as friezes and *geisa*, as well as door jambs.<sup>66</sup>

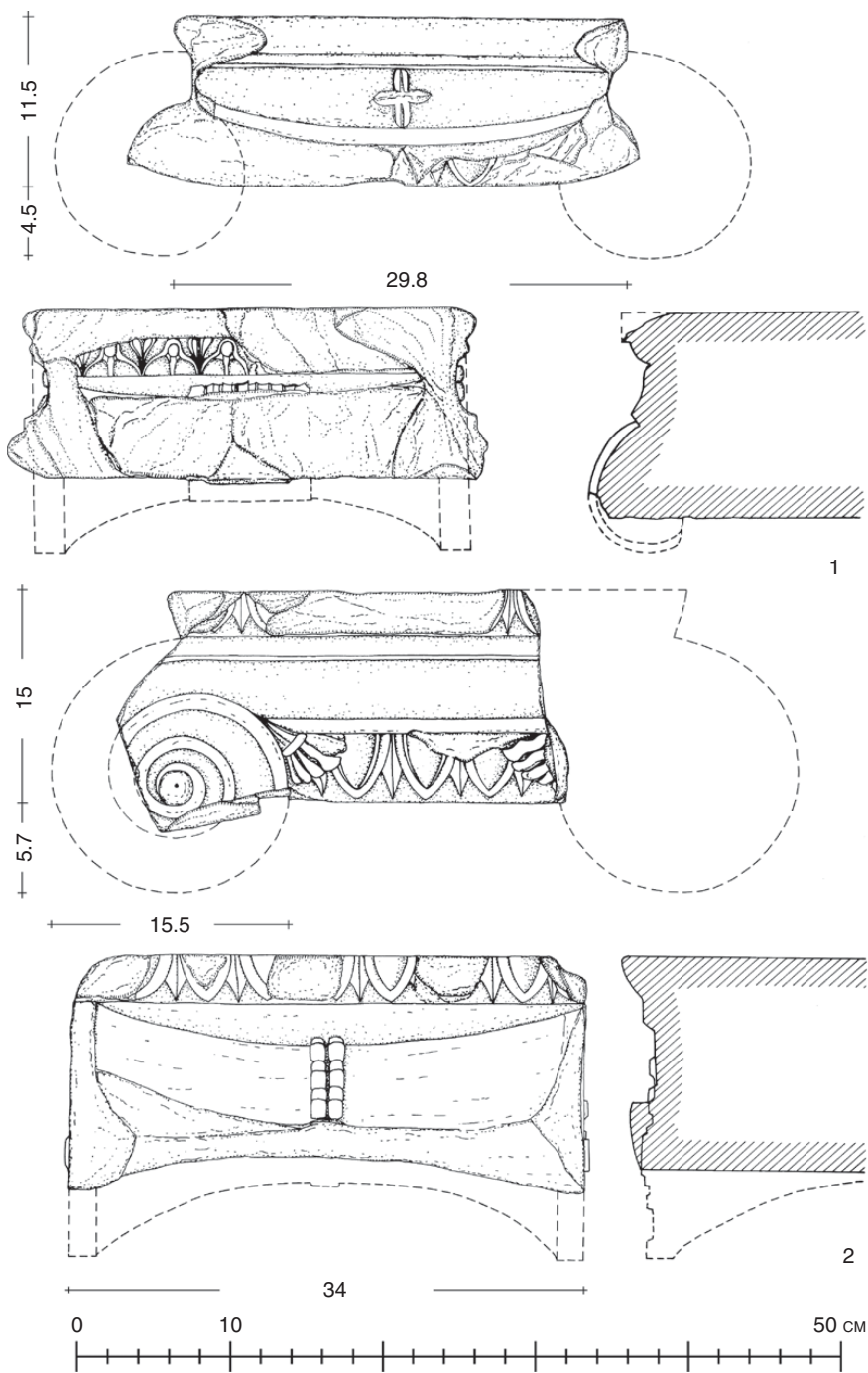


Fig. 8.22. Column capitals from Chersonesos (after Bujkich 2010, Taf. 26.2; 27.2).



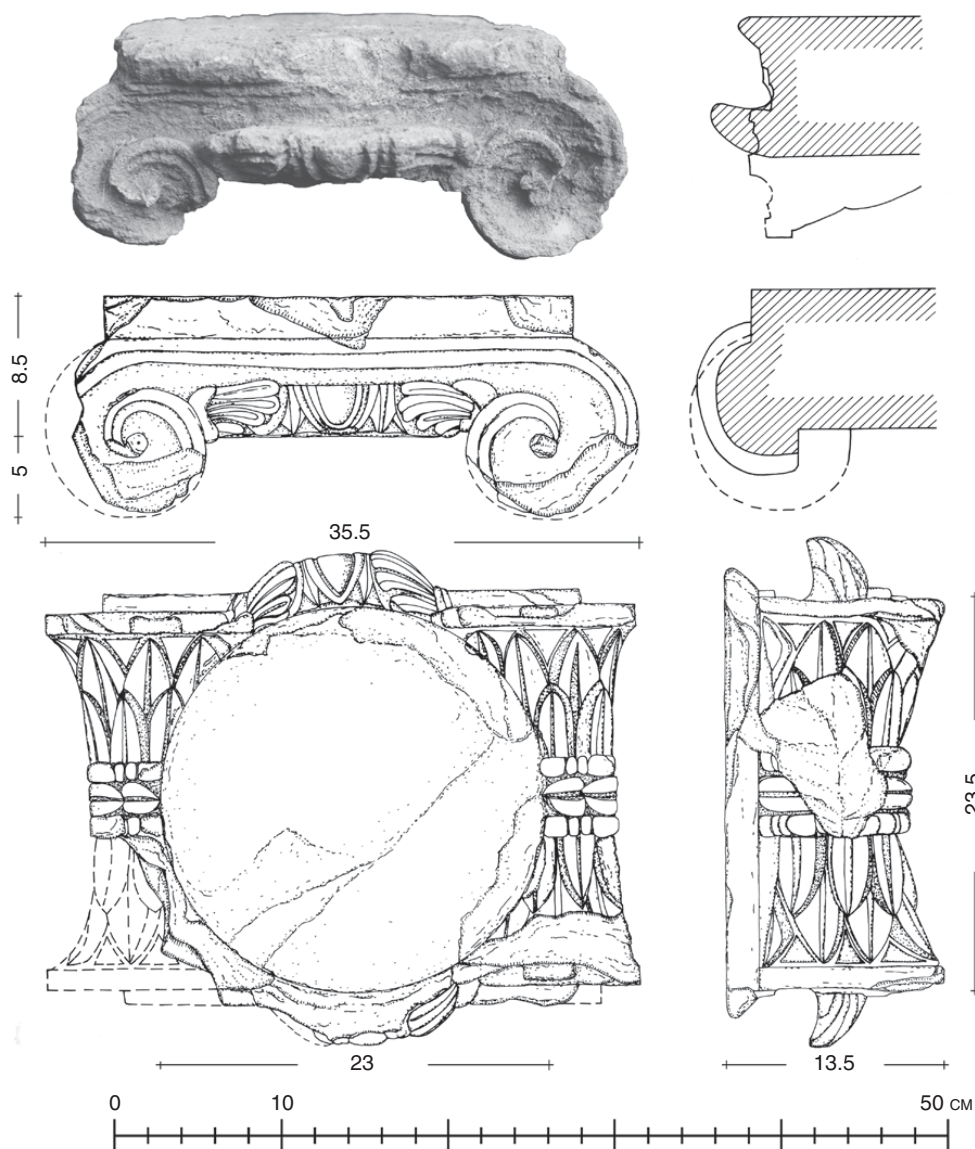


Fig. 8.23. Column capitals from Chersonesos (after Bujskich 2010, Taf. 28.3; 130.2).

While decorative elements characteristic of the Asia Minor school of the Ionic order were widely used in the architecture of Chersonesos during the Hellenistic period, they were rarely employed in the contemporaneous architecture of the Bosphorus. However, the assemblage from Pantikapaion includes a large door console (Fig. 8.25), which is a rare example of monumental architecture. This console testifies to the construction of a new temple in Pantikapaion built in accordance with the stylistic standards of the Asia Minor

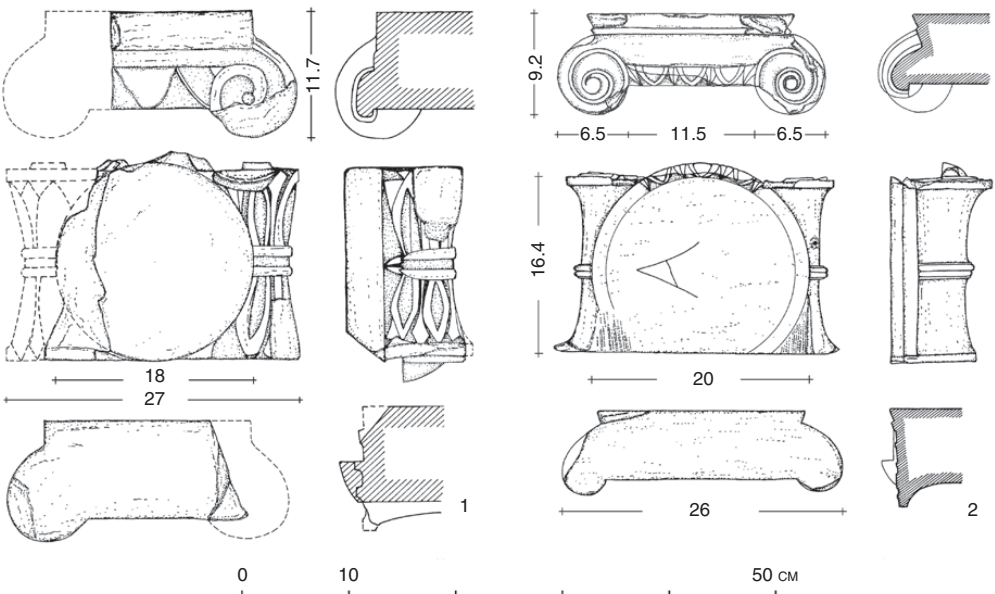


Fig. 8.24. Small column capitals from Chersonesos (after Bujskich 2010, Taf. 30.1; 31.1).

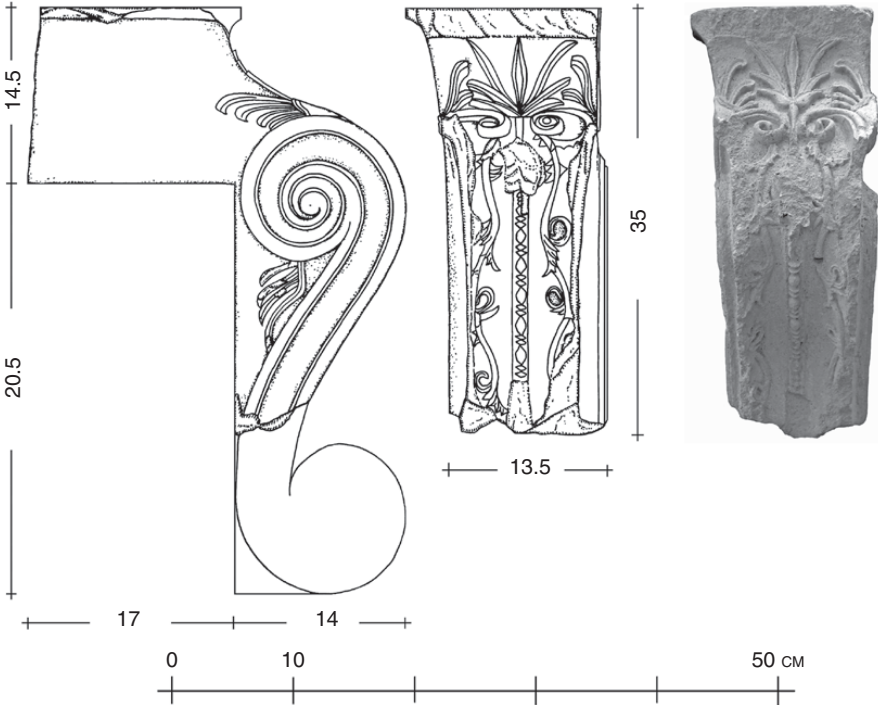


Fig. 8.25. Door console from Pantikapaion (after Buiskikh 2009, cat. no. 62; Bujskich 2010, Taf. 147.6).

architectural school of the Hellenistic period. The console had carefully executed relief decorations on three faces. The closest analogies to its overall decorative scheme come from the building complex of the “younger” Didymaion from the beginning of the third century BCE.<sup>67</sup>

The Attic style of the Ionic order entered a new stage of architectural development during the Hellenistic period in the Northern Black Sea region. Interestingly enough, not many large architectural pieces from public buildings of this period are known, while most fragments come from residential complexes – from inner porticoes and interior decorations. The most representative assemblage of such pieces comes from Chersonesos, as was also the case with architectural decorations executed in the Asia Minor style. An angle capital with an elongated bolster of cylindrical shape, decorated with four fillets in the center, might have been a part of a small public (?) building, a temple, or a portico (Fig. 8.26). Such rendering is reminiscent of the standards of the Classical period and suggests a date within the second half of the fourth century BCE.

A series of smaller capitals from columns whose upper parts have a diameter measuring 17–20 cm may have also been used in the porticoes of inner courtyards of residential complexes (Fig. 8.24.2). The *echinus* of each capital has three relief *ovae* on the facade, and in some cases the *echini* are decorated along their entire circumference, which is an imitation of the style of the Classical period. Some pieces have a smooth-surfaced *echinus*, with disproportionally large corner palmettes in relief, such as, for example, in one of the angle capitals (Fig. 8.27).

The Attic version of the Ionic order was also popular in the residential architecture of the Bosporan centers during the Hellenistic period. An idiosyncratic canonical type of the capital structure developed, in particular, in Pantikapaion and remained characteristic only of this center (Fig. 8.28). It was used in the decoration of the peristyle courtyards of representative buildings that were erected on the acropolis and probably combined residential and public functions. Such capitals had volute channels with two full turns, convex double fillets, and facades with three *ovae*, the first and the last of which were partly covered by three-petal corner palmettes. Smooth-surfaced bolsters were decorated with two convex fillets in the center.<sup>68</sup> Most likely, as in the Classical period, this type of capital became predominant in residential buildings of the Bosporan cities on both sides of the strait during the Hellenistic period. Another capital similar to these in terms of the rendering of its moldings comes from Phanagoreia.<sup>69</sup>

The Hellenistic capitals of the Attic type from Chersonesos also have a specific structural feature – they have only one relief-decorated facade. This means that such architectural pieces were used in interior decoration and had to be placed against a wall. Some capitals of this type are miniature in size, with



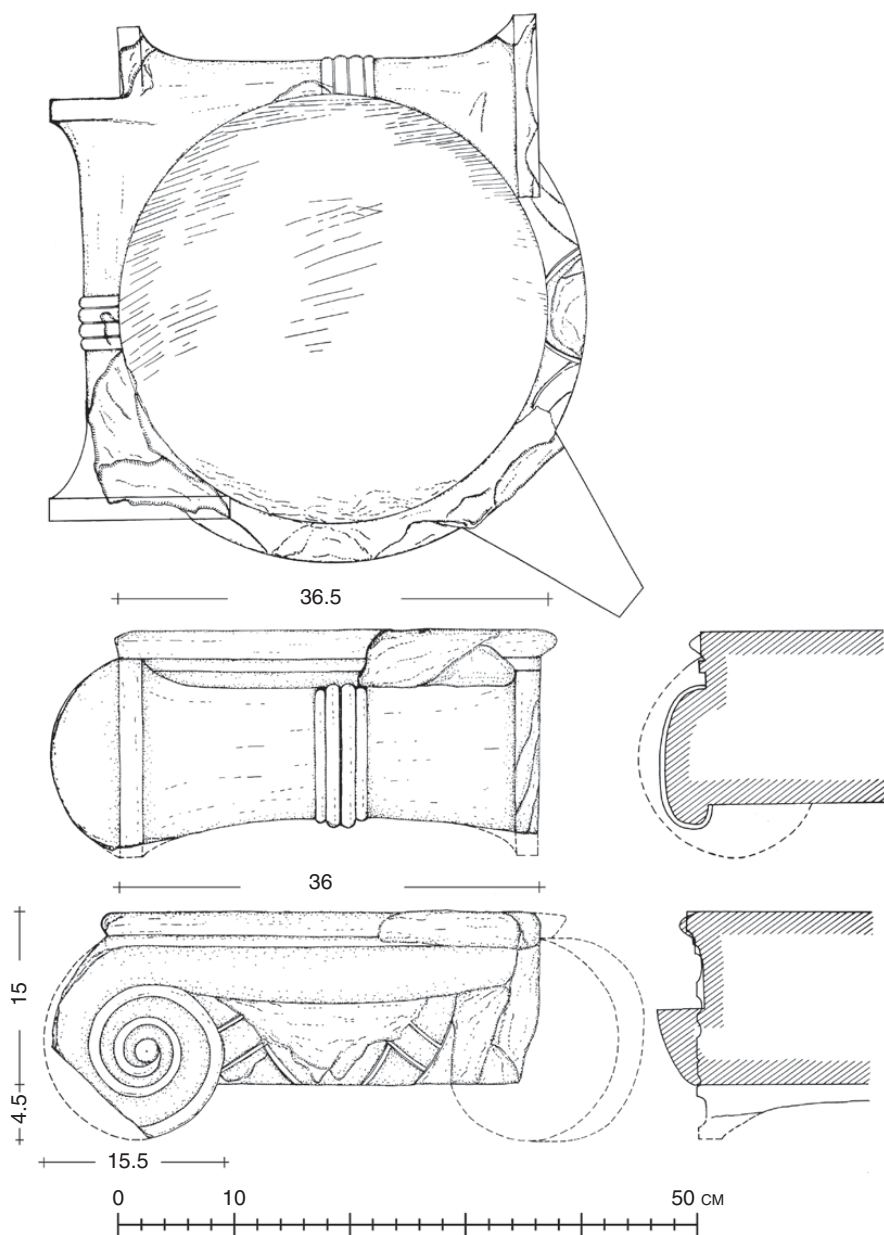


Fig. 8.26. Angle capital from Chersonesos (after Bujskich 2010, Taf. 27.1).

the diameter of the upper part of the column measuring 10–11 cm (Fig. 8.29). Two capitals of similar structure and function have also been found in Olbia (Fig. 8.30.1–2). Judging by the manner of the carving of the facade decoration and by the overall structure, both Olbian capitals must have been manufactured by the same workman. The hypothesis that such capitals must have been used in the interior decoration of residential complexes is based, apart from

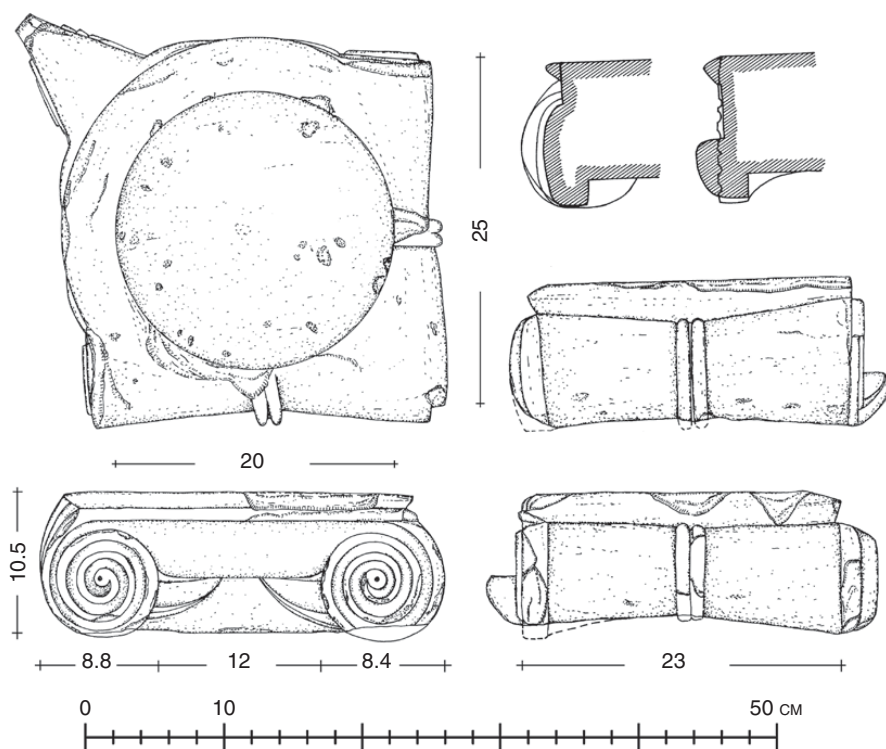


Fig. 8.27. Angle capital from Chersonesos (after Bujskich 2010, Taf. 29).

some characteristic structural features, on the fact that hardly any architectural fragments of interior decoration made out of plaster-like materials have been found in Olbia and Chersonesos.<sup>70</sup> At the same time, polychrome plaster that had been used to cover the capitals intended for the interior decoration of reception rooms in residential buildings has been found in abundance in both centers. On the contrary, no such miniature architectural pieces made out of stone are known from Pantikapaion, whereas architectural parts made out of plaster and used for the interior decoration of reception rooms became very popular there during the Hellenistic period.<sup>71</sup>

All known miniature capitals of the Attic type are made out of local stone. The proposed dating of these pieces to the Hellenistic period – more specifically, from the third to second century BCE – is supported not only by their stylistic features, but also by the archaeological context: an entire series of capitals was discovered in the destruction layers of the Late Hellenistic residential complexes. Another feature, characteristic of both the Asia Minor and the Attic styles and particularly noticeable in the Chersonesan assemblage, should be mentioned before we conclude this discussion – namely, the manner of the rendering of the volutes. Not all capitals of the Hellenistic period have their volutes carved in accordance with the standards of Mediterranean monuments.

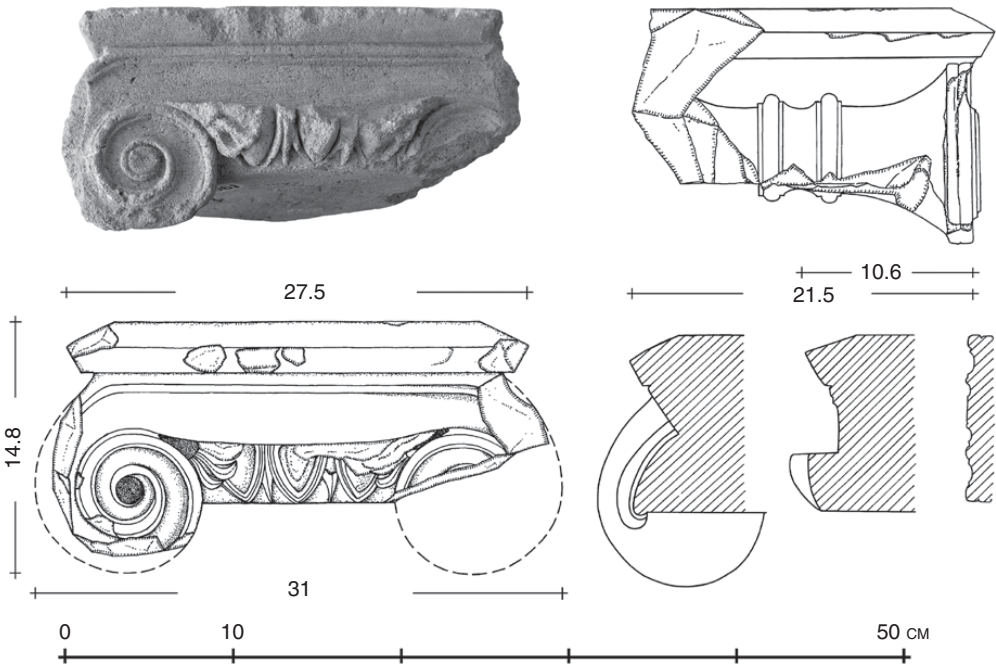


Fig. 8.28. Column capital from Pantikapaion (after Buiskikh 2009, cat. no. 37; Bujskich 2010, Taf. 132.2–3).

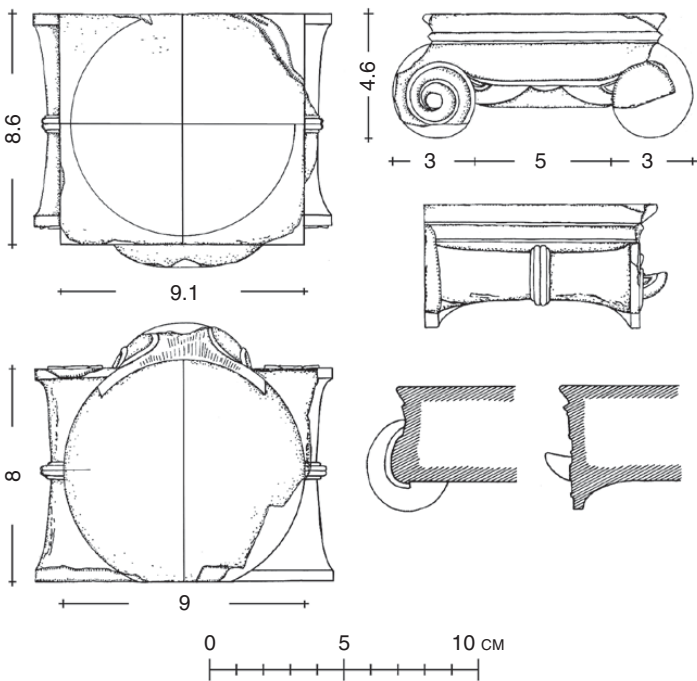


Fig. 8.29. Miniature column capital from Chersonesos (after Bujskich 2010, Taf. 33.1).

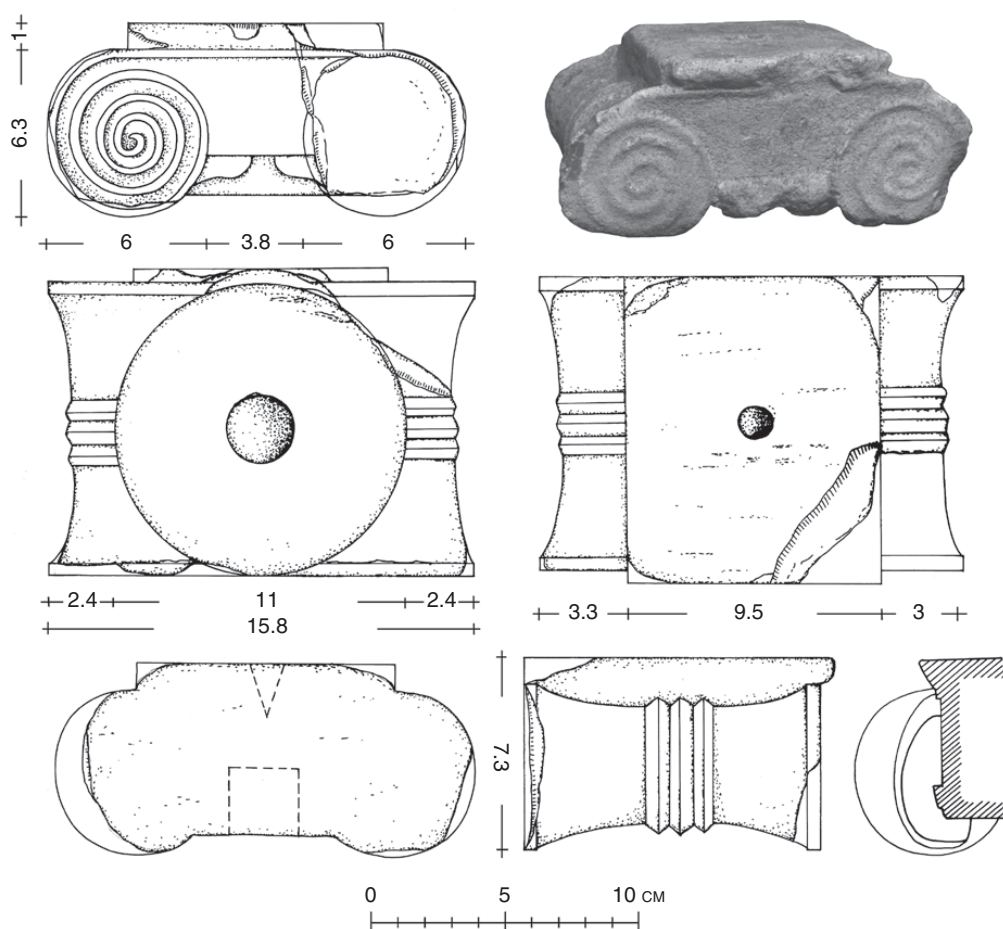


Fig. 8.30. Small column capital from Olbia (after Buijskikh 2010, Taf. 32.2; 131.3).

While the volutes of the capitals found in Chersonesos were already outlined by means of a compass (a mark left by a metal needle can often be seen in the center of the eye), the divergence from the standards lay in the width of the channel, which was practically the same in all three turns of the volute. This feature can be seen in many capitals, regardless of their size. It seems that this simplified volute type was simultaneously adopted by several North Pontic centers and later became popular as a local version.

#### CONCLUSION

This overview of architectural pieces executed in Ionic order – primarily, column bases and capitals, as the most typical fragments that characterize the evolution of Ionic architecture throughout the entire period in question – has given us an opportunity to establish certain trends in the development of the

style as a whole in the North Pontic region. It is clear that different components of the Ionic order typical for different periods were better represented in different regional centers of the Northern Black Sea. And the available data is sufficient to help us determine the main directions in the development of the Ionic order for different historical periods. For Olbia, the most typical pieces are associated with the Late Archaic and Early Classical periods, while for the Bosphorus, with the Classical period, and for Chersonesos, with the Hellenistic period.

Despite the fact that they are not all equally well preserved, architectural fragments executed in the Ionic order, in their entire assemblage, provide the missing links in the long history of the evolving art and architecture of the pre-Roman period for each individual center of the Northern Black Sea region. In addition, the comprehensive study of this assemblage has allowed us to focus on those stylistic trends of Mediterranean architecture that at different periods influenced the formation of the architectural styles in the North Pontic colonies. It is clear that during the Late Archaic period the Ionic architectural tradition – associated, first of all, with southern Ionia (Miletos and Samos) and central Ionia (Ephesos and Chios) – prompted the emergence and further development of the architectural orders in the Northern Black Sea region. The Ionian influence in architecture was, no doubt, a part of the broader cultural process that determined the history of the North Pontic *apoikiai* from the moment of the initial colonization of the region onwards. This process, in general, underlies the transportation of the architectural tradition from Ionia to the North Pontic colonies and its preservation and further development in the Northern Black Sea region. The Ionian influence is also visible there throughout the entire period during which the Ionic order was used.

During the Classical period, this influence was determined by the standards represented by the public buildings of the Achaemenid Empire that were constructed in the Ionian territories and, to a great extent, preserved Late Archaic traditions, and during the Hellenistic period, by the monumental buildings that were constructed everywhere after the conquest of Ionia by Alexander of Macedon. With such a strong influence from Asia Minor, the Attic tradition appeared later, only in the first half of the fifth century BCE, when contacts with Athens expanded from the economic to the political sphere. Both architectural traditions existed in the Black Sea region separately, and the Attic influence was stronger in the architecture of the Northwestern Black Sea, while the Asia Minor tradition prevailed in the northeast. The analysis of the stylistic idiosyncrasies in the rendering of the Ionic architectural order in Olbia is supported by the data on the architectural development in Histria.

Finally, the study of architectural pieces executed in the Ionic order found in various centers of the North Pontic region has allowed us to distinguish those features that can be viewed as specific characteristics that differentiate

monumental and private constructions in one part of the region from those in another part. Together, they form the regional – North Pontic – architectural school, characterized by local variations in the rendering of the forms of architectural orders in the three main state formations of the Northern Black Sea – Olbia, Chersonesos, and the Bosporus.

## PART V

### THE SARMATIANS





## THE SARMATIANS IN THE NORTHERN BLACK SEA REGION (ON THE BASIS OF ARCHAEOLOGICAL MATERIAL)

Valentina I. Mordvintseva

### INTRODUCTION

The notion of the Sarmatians has always been associated with the Northern Black Sea region, which historians of antiquity and archaeologists usually describe as the coast of the Black Sea and the Azov Sea from the mouth of the Danube in the west to Gelendzhik Bay in the east, where Greek colonies were founded in antiquity.<sup>1</sup> These coastal territories with the centers of Classical civilization adjoined the lands inhabited by barbarians, bordered in the north by the mythological Riphean Mountains and the Arctic Ocean,<sup>2</sup> about which ancient authors did not have much information (Plut. *Thes.* 1.1). Ancient maps and itineraries contain the names of the rivers, settlements, and other places which were noted by the Greeks in the course of their commercial or political interactions with the local population, and show how far the Greeks went into the barbarian territories (Fig. 9.1).<sup>3</sup> Marked on a map, these points indicate which areas must have been more or less familiar to Greeks and which ones remained a *terra incognita*.

It is not a coincidence that scholars of antiquity recognize this part of the Pontus Euxinus as a special sub-region of the Greek world. The northeastern periphery of the Mediterranean and the Black Sea region, with its well-developed network of seaborne communications, formed, at the same time, the western extremity of the Eurasian steppe zone, transected by land-routes. This was a place where the Greeks – farmers, seafarers, and merchants – encountered

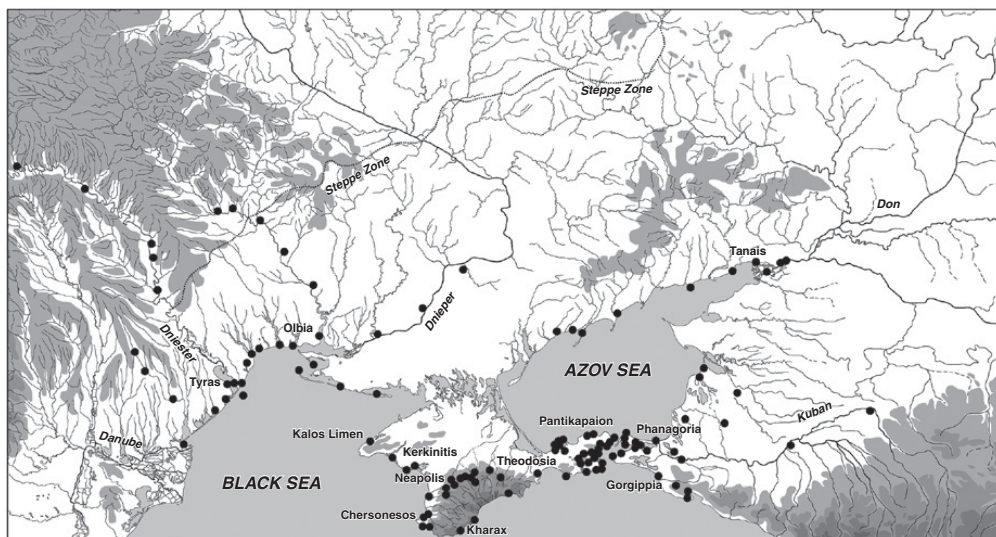


Fig. 9.1. Geographical points in Eastern Europe according to Claudius Ptolemy (after Zubarev 2005).

a completely different type of culture: the inhabitants of the steppes, animal-rearing nomads, warrior riders. Therefore, the cultural idiosyncrasy of this region can be explained by the fact that societies with different types of mentality met here and reached a state of symbiotic coexistence through contacts and mutual adaptations.<sup>4</sup>

Ancient Greeks and Romans imagined the entire Black Sea coast as a whole, as a distant periphery of the *oikoumene*.<sup>5</sup> It is unlikely that the Greeks viewed their Northern Black Sea colonies as a separate entity within the Black Sea region. The specifics of the North Pontic region were determined, most likely, not by its Greek settlements, but by their barbarian neighbors, whom the Greco-Roman narrative tradition addressed, at different periods, as Scythians or Sarmatians, referring to the territory they inhabited as Scythia or Sarmatia, respectively.

Ancient Ionian authors, in particular, called this part of the *oikoumene* Scythia. Herodotus described it as a territory with the following boundaries: the mouth of the Ister in the west, the mountains of the Crimea in the south, Lake Maeotis and the river Tanais in the east, and the land inhabited by the mythical tribes of the “Agathyrsi,” “Neuri,” “Androphagi,” and “Melanchleni” in the north (Hdt. 4.99–101). But in the Roman tradition almost the same region was called Sarmatia. On the map of Agrippa (the end of the first century BCE), which we know from Pliny the Elder, Sarmatia and Scythia Taurica were shown occupying the land between the Dnieper and the Volga, as well as the North Caucasus.<sup>6</sup> Pomponius Mela in the middle of the first century CE described Sarmatia as a large country located between the Vistula and the Ister (Mela 3.33) and placed various tribes, among whom he first named the

Scythians, in the territory west of the river Tanais (Mela 2.1–2). Claudius Ptolemy in the second century CE divided Sarmatia into the European and Asiatic parts. He determined some of the boundaries of European Sarmatia as follows: in the west – the Vistula and the Sarmatian Mountains; in the east – the seashore of Lake Maeotis and the river Tanais; in the south – the territories of the Iazyges (who had migrated there), Dacia, and the seashore of the Pontus; and in the north – the Venedicus Bay of the Sarmatian Ocean and a part of some unknown land (Ptol. 3.5.1–18). He placed Asiatic Sarmatia between European Sarmatia in the west, Scythia and a part of the Caspian Sea in the east, the polities of the Caucasus in the south, and some unknown land in the north (Ptol. 5.9.1–15). The fluctuating western and eastern boundaries of Sarmatia in the Greco-Roman narrative tradition may reflect the dynamics of the ethno-political situation in the region during different periods.

The toponym “Sarmatia” is an *ethnochoronym*, i.e., it designates a large historical area, adjacent to the coasts of the Black Sea and the Azov Sea, which was called so – by foreigners – after one of the peoples who inhabited it. Such names evolve over a long period, in a situation of relative political stability, and are usually preserved afterwards in a written form.<sup>7</sup> It is important that the name “Sarmatia” emerged as an *exochoronym*, i.e., it was generated in an environment that was ethnically different from and foreign to the inhabitants of the region in question and where a well-developed literary tradition existed and the first geographical maps of the world were compiled. After this *choronym* had appeared on Roman maps, which were used primarily for political propaganda and didactic purposes,<sup>8</sup> Greeks and Romans started to associate it with a particular territory. The maps created in the Roman Empire, in contrast with the descriptive itineraries featured in *periploi* and *periegesis*, probably began to structure the worldviews of the constituents of the empire and to shape their reality.<sup>9</sup> As in colonial practices of modern times, ancient maps too presented the divisions between the areas of habitation of different peoples, “by delimiting territorially where, for political purposes, they ended.”<sup>10</sup>

The usage of the name “Sarmatia” for Eastern Europe may go back to Marcus Vipsanius Agrippa (the end of the first century BCE).<sup>11</sup> A passage from Antigonus of Carystus (*Histor. Mirab.* 152 [167] Keller), probably based on a report by Callimachus about a stinking lake in Sarmatia mentioned by Heraclides, suggests that the ethnotoponym “Sarmatia” originated as early as the fourth century BCE.<sup>12</sup> The authors of the first century CE used this term broadly, although the name “Scythia” for the same region was never really out of use either. Most likely, by the first century BCE, i.e., before the toponym “Sarmatia” was fixed on the graphical map of the world, it had already been accepted by the oral tradition, as was often the case in antiquity.<sup>13</sup>

Naturally, the question arises about the reasons behind the replacement of one *choronym* (“Scythia”) by another (“Sarmatia”). It is likely that a new

group of people appeared in the region in question, or an already existing group became more powerful, and the name of this people became an eponym for the entire territory inhabited by the barbarians north of the Black Sea coast. The fact that both names are *exo*-ethnotoponyms indicates that these developments must have been important from the perspective of an outside viewer.

The ethnonym “Sarmatians,” which became eponymous for the Northern Black Sea region, did not necessarily designate an *ethnos* in the modern meaning of this word. Since the name “Sarmatia” evolved in the context of a narrative tradition of a foreign culture, the outside viewer may have chosen as an eponym for this region only the most active part of its barbarian population, with whom Greeks and Romans interacted. Most likely, the ethnonym “Sarmatians” designated an elite group whose members took part in international politics, perceived themselves as an entity, and generated group traits and symbols in their strife to gain as many supporters as possible.<sup>14</sup> It is interesting that when Michael Rostovtzev identified “Sarmatian” monuments in the foothills of the Ural Mountains, he understood under the Sarmatians the “ruling class of the population,”<sup>15</sup> although he expressed this opinion only in a cursory way, without giving any detailed explanation. This conclusion is indirectly supported by literary and epigraphic evidence from the period before the toponym “Sarmatia” became widespread, i.e., from the fourth to second century BCE. Unfortunately, there are not many such sources, as we shall see.<sup>16</sup>

A passage from Polybius mentions Gatalus the Sarmatian from Europe, along with representatives from Chersonesos, among those who witnessed a treaty signed by Asian rulers in 180/179 BCE (Polyb. 25.2). It is likely that in this case the European Sarmatians, represented by their leader, acted as guarantors for the peace treaty. According to Sergei Tokhtas'ev, this may be an indication of the political control that the Sarmatians had over European territories, while their place of localization may still have been in the area around the river Tanais and Lake Maeotis.<sup>17</sup> Rostovtzev dated to the same time the events described in the legend about the Sarmatian queen Amage, related by Polyaeus, who had probably used some Chersonesian source.<sup>18</sup> According to the legend, the queen defended Chersonesos, which was under Sarmatian protectorate, from the Scythians, who attacked it (Polyaen. 8.56).

Olbia's decree in honor of Protogenes (*IOSPE* 1<sup>2</sup> 32), dated to the last two decades of the third century BCE,<sup>19</sup> describes in detail the dangerous situation of the city under attack. The document does not name the Sarmatians directly, but some scholars interpret the ethnonyms “Saii” and “Saudaratae” as the names of Sarmatian tribes.<sup>20</sup> According to the decree, the barbarian king Saitaphernes received tributes from Olbia on a regular basis and might have attacked the city if the amount of a tribute did not satisfy him.

Тіриш G. Vinogradov restored the word Σαρματᾶν in a Chersonesan decree (*IOSPE* 1<sup>2</sup> 343) on the basis of the preserved last five letters and fragments of some of the preceding letters that are visible on a squeeze.<sup>21</sup> Another possible mention of the Sarmatians comes from the Chersonesan decree of the time of Diophantos (*IOSPE* 1<sup>2</sup> 353), which reports an attack by the Scythians and the “Sa...” on the city of Kalos Limen.

All these sources testify, to a certain extent, to the existence of a “protectorate” over Greek *poleis* – first of all, Chersonesos and Olbia – assumed by the political entities that held control over the steppe. The effective means by which these nomadic groups exercised pressure on the settled population of the Northern Black Sea region were, on the one hand, organized attacks on this population, and, on the other hand, protection of the latter from exactly such dangers. The narrative tradition of Iranian-speaking nomads (the Ossetic Nartian epos), preserved only in the mountainous areas of the North Caucasus, supports this conclusion by mentioning the attacks and lootings of the coastal Black Sea cities by the Narts.<sup>22</sup> Examples of such relations between settled agricultural communities and nomadic peoples are well known in world history.<sup>23</sup>

Thus, the replacement of the name “Scythia,” used for a specific historical area, by the *choronym* “Sarmatia” indicates, most likely, some changes in the choice of the political partners of the Greek cities in this area that occurred around the end of the third to the beginning of the second centuries BCE. However, it does not necessarily mean that the “Sarmatian” tribes moved to the Northern Black Sea steppe and stayed there during this period.<sup>24</sup> Moreover, the territory in question may have been populated by a variety of ethnic groups.<sup>25</sup>

#### ARCHAEOLOGICAL MATERIAL

As we have seen, both literary and epigraphic sources present the events in the Northern Black Sea region only from the point of view of the Greek cities located in the coastal zone, which means that the information provided by these sources is fragmentary, based on stereotypes, and one-sided. More complete and objective information can probably be deduced from the archaeological data. But the interpretation of archaeological material involves at least two problems: first of all, how to distinguish “Greek” from “barbarian” sites; and, secondly, how to distinguish “Sarmatian” monuments from the monuments of other “barbarians.” The association of any archaeological monument specifically with the Sarmatians is possible only to a limited extent and will always remain questionable. One of the reasons for this is the fact that ancient authors did not use the ethnonym “Sarmatians” strictly in a general geographical sense – for them, it also had

other meanings, and often, more than one at a time. These meanings can be tentatively described as follows:

- 1 *positive ethnic*, i.e., used either as a specific *ethnikon*, in reference to a particular people, such as, for example, the *Sauromatae*, or as a collective *ethnikon*, in reference to a group of related tribes (Strabo 11.6.2; Tac. *Hist.* 3.5; Ptol. *Geogr.* 5.9.16);
- 2 *negative ethnic* – used, for example, in reference to non-Germanic peoples (Tac. *Germ.* 46);
- 3 *common professional* – used, for example, in reference to nomad riders or warrior riders who are not necessarily nomads (Strabo 7.3.2; 7.3.17; 11.3.3; Tac. *Ann.* 6.33; 12.29; *Hist.* 1.79; 3.5; Amm. Marc. 16.10.20; 26.4.5; 29.6.8).

Therefore, when we attempt to evaluate archaeological material from these same points of view, we are confronted with methodological issues that are difficult to resolve.

Any community, regardless whether its constituents see themselves as a unity or not, can be reflected in their material culture through some common elements. But the material culture of past societies is represented only by fragmentary archaeological remains, because of its partial disappearance and/or evolution. Therefore, it is very difficult to correlate the material remains of a past culture with a particular type of a society. This refers less to communities of such economic and cultural types that are closely connected with a particular landscape and other natural resources (such as climate and mineral deposits). The ethnic attribution of particular archaeological material is most problematic, because *ethnos* is just one of many possible forms of self-identification of various groups of people, and the essence of ethnic differences lies in the mental, rather than the material realm.

Therefore, if we were to understand a particular ethnic entity by “the Sarmatians,” it would be extremely difficult to distinguish it by means of archaeology from other contemporaneous ethnic groups in the population of the Northern Black Sea region. Moreover, there are no detailed ethnographic descriptions of the “Sarmatian ethnos” that would allow one to correlate any particular material remains specifically with the Sarmatians, rather than with any other people of the same language group or belonging to a culture of the same economic type and sharing the same territory.

Despite the absence of detailed historical sources and the limitations that archaeological material imposes on the reconstruction of ethnicity, it was actually the ethnic model that was originally used – and continues to be used – for the identification of the archaeological monuments of the Sarmatians.<sup>26</sup> Based on stereotypes that evolved from the interpretation of the narrative tradition, scholars have advanced theories about the areas of habitation of Sarmatian tribes, the main ethno-political stages in their history, and even specific traits of

their material culture.<sup>27</sup> And this is how the main directions in scholarly research were determined: a search for material traces of the conquest of Scythia by the Sarmatians; the identification of individual waves of migration from the east and the correlation between each wave and a new Sarmatian *ethnos* (which was consequently reflected in the chronology and periodization of the “Sarmatian archaeological culture”); and the recognition of specific features in the material cultures of other barbarians and the populations of the Greek cities on the Northern Black Sea coast that would testify to their “sarmatization.” The main flaw in this ethnic model was the practice of viewing any innovation registered in the material culture of various parts of the North Pontic region during the Sarmatian period as evidence of the physical presence of the representatives of a particular *ethnos* there, while the potential role of any other factors (social, political, economic, or religious) in these cultural changes was not taken into consideration. Such an approach makes the conclusions very predictable and uses archaeological material for purely illustrative purposes, rather than as a source of more objective information.

The economic and cultural model is more suitable for the interpretation of the changes that took place in the Northern Black Sea region during the Sarmatian period.<sup>28</sup> From the archaeological point of view, the Sarmatians were, first of all, nomads.<sup>29</sup> The economy of nomadic culture did not undergo many transformations over time, since the natural conditions did not change to any great extent, and neither did the composition of the flock (with horse and sheep as its main components) nor the tools. In accordance with the nomadic life style, archaeological traces of the presence of the nomads can be found in the form of their seasonal (winter) sites and burial complexes. Therefore, the prevailing type of monuments associated with the nomadic style of life are kurgans, with only a few settlements (where cultural layers are barely represented) or no settlements at all.<sup>30</sup> The identification of these nomadic monuments should enable us to determine the boundaries of the area where a particular culture existed and to follow the dynamics of the expansion of this culture.

To accomplish this task in relation to Sarmatia, we shall briefly turn to the archaeological finds of the Sarmatian period (from the third century BCE to the middle of the third century CE) from two parts of the Eastern European steppe – the Lower Volga region (which is considered the “primeval motherland” of the Sarmatians, according to the traditional point of view) and the Northern Black Sea region (which is traditionally known as the territory of the “Sarmatian expansion”).

### *The Lower Volga Region*

Most scholars consider the steppes of the Lower Volga region the “motherland” of the Sarmatians, while the archaeological material recovered there is being



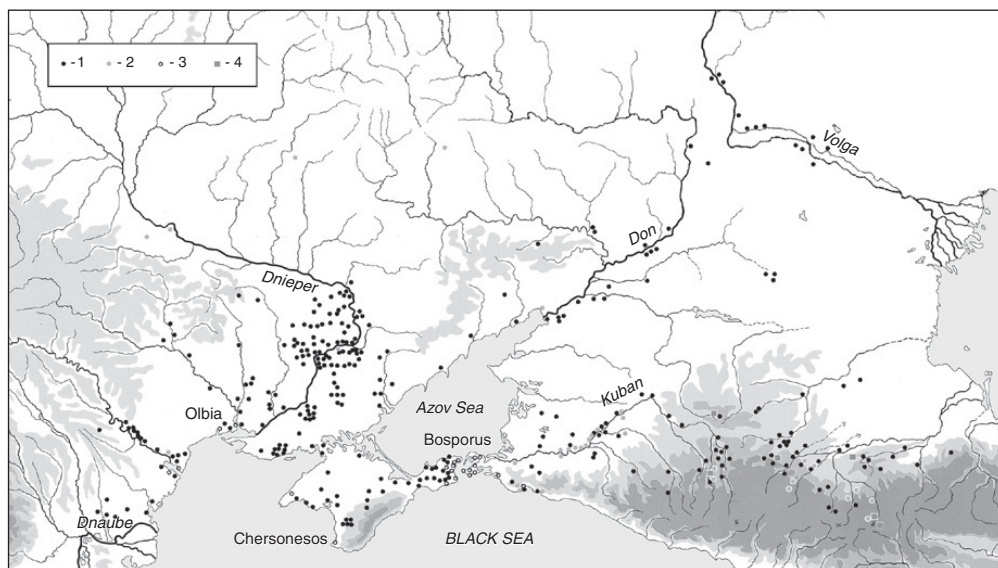


Fig. 9.2. Map of the archaeological monuments in Eastern Europe (the fourth century BCE): 1 – kurgans; 2 – settlements and burial sites with inhumation graves; 3 – Greek cities and necropoleis; 4 – “ritual deposits.”

used as a standard against which the finds from other regions are compared.<sup>31</sup> Many years of large-scale excavations undertaken from the 1950s through the 1990s by the Archaeological Institute under the auspices of the Academy of Sciences of the USSR and by the Leningrad branch of this Institute, as well as by local organizations, such the Volgograd State Pedagogical Institute and the Volgograd State University, revealed an enormous amount of material, most of which has been published.<sup>32</sup> The main archaeological monuments in this region for the period from the fourth century BCE to the fourth century CE are kurgan burials (Figs. 9.2–9.4). For the second to first century BCE, artifacts buried in mounds and not accompanied by human remains have also been found (the so-called ritual deposits) (Fig. 9.3). Since all of the material comes from sites that belong to the same category of monuments, a more or less objective comparison between the finds is possible. This comparison and the established changes in burial rites have allowed scholars to identify three stages in the “development of the culture”: Early Sarmatian, or “Prokhorovka” (from the fourth and third centuries BCE to the first century BCE, with the period of “high development” lasting from the middle or the second half of the second century BCE to the first century BCE); Middle Sarmatian (from the first to the middle of the second centuries CE); and Late Sarmatian (from the second half of the second to the fourth centuries CE).<sup>33</sup>

Only a small number of burials date to the fourth and third centuries BCE. Burials from this period are difficult to date since they do not contain many



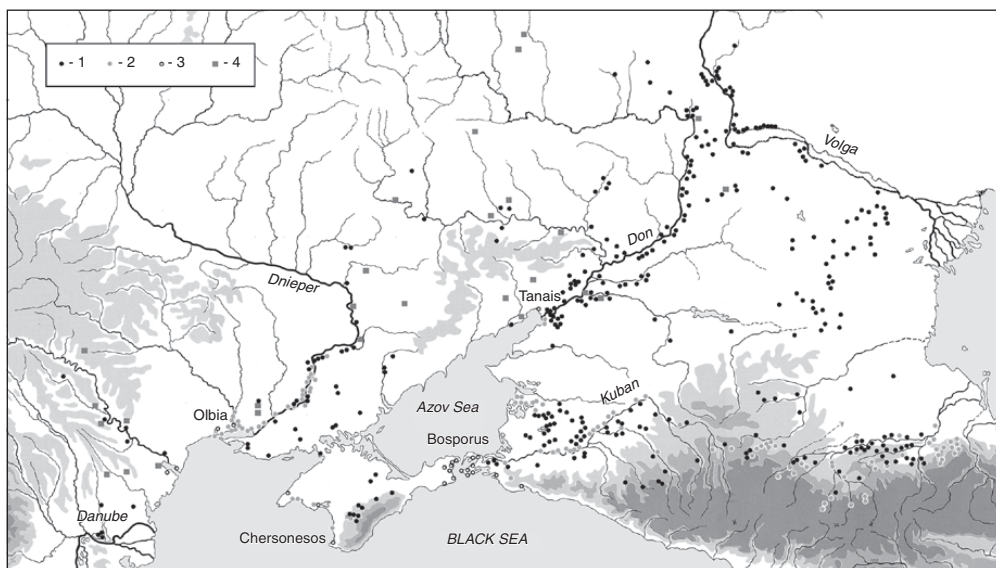


Fig. 9.3. Map of the archaeological monuments in Eastern Europe (the third to first century BCE): 1 – kur-gans; 2 – settlements and burial sites with inhumation graves; 3 – Greek cities and necropoleis; 4 – “ritual deposits.”

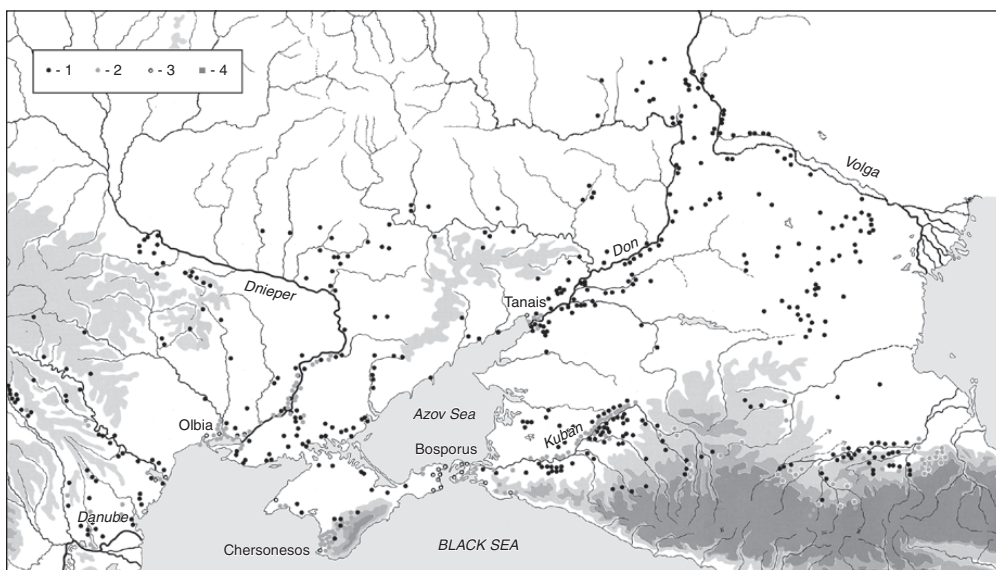


Fig. 9.4. Map of the archaeological monuments in Eastern Europe (the first to third century CE): 1 – kur-gans; 2 – settlements and burial sites with inhumation graves; 3 – Greek cities and necropoleis; 4 – “ritual deposits.”

grave goods. Valerii Klepikov, who proposed a relative chronology of the burials, singled out a group of complexes dating to the third century BCE.<sup>34</sup> Around the middle of the second century BCE, the number of kurgan burials increased considerably, and most of them were continuously used until the third century CE. The types of graves included narrow rectangular pits, pits with shelves, niche-graves, and catacomb-graves. At one and the same burial site, and even in one and the same kurgan, various types of graves could be found. Usually, the graves were dug into the kurgan mounds of the earlier periods. The bodies lay on their back, in a stretched-out position, with the head to the south, although the orientation could vary considerably, especially in kurgans where graves formed a circle (Fig. 9.5.1). The standard set of grave goods consisted of a ram's leg and a handmade vessel. Handmade incense burners and bronze mirrors (often fragmented) are found less often, but in both female and male graves. The latter also often include weaponry (sword, dagger, arrows), buckles, and whetstones. Female burials contain jewelry (necklaces, earrings, temple pendants), loomweights, and toiletry spoons. However, some female burials with weaponry and male burials with necklaces and loomweights have also been found. The numerous children's burials of this period contain either a standard set of grave goods or nothing at all.

Social stratification is barely noticeable in the mortuary rites associated with burials of the third to the first half of the second centuries BCE. Male burials differ from each other in terms of the quantity and variety of weaponry, and female burials, in terms of the quantity and variety of jewelry. No ostentatious burials dating to this period have been found.

The situation changed in the middle or the second half of the second century BCE. Some complexes of that time differ considerably from the rest of the burials in terms of the contents and quality of the grave goods. Elite female burials reveal various pieces of gold jewelry, including bracelets with zoomorphic terminals, precious bowls, and, in one case, a mirror with a handle that has a gold overlay decorated with zoomorphic and anthropomorphic images. The majority of imported items, which can be viewed as indicators of status, point towards connections with the Kuban region, while some other artifacts must have originated in the Hellenistic Near East (in particular, in Seleucid Iran). Some children's burials dating to this period can also be interpreted as elite burial complexes: they yielded gold bracelets and temple pendants. The presence of such children's burials with items that can be associated with the social status of the deceased indicates that status was probably inherited in this society.<sup>35</sup>

During this period, new categories of finds appeared in the elite male burials: clothes embroidered with gold thread and decorated with gold appliqués, swords in gold-decorated sheaths (Fig. 9.6), wooden bowls with gold overlays,

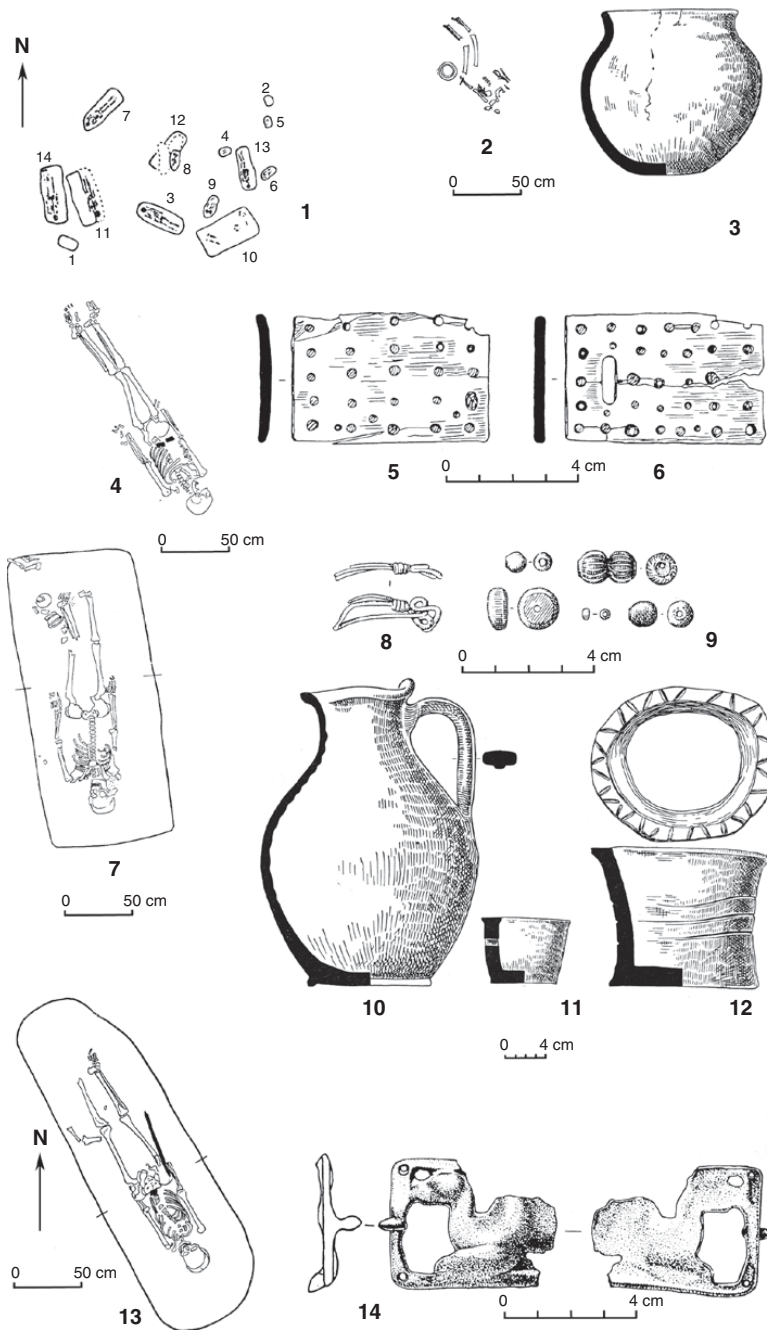


Fig. 9.5. The Lower Volga region, kurgan burials (the second to first century BCE). The kurgan burial complex of Verkhnee Pogromnoe: 1 – the plan of the graves in kurgan 1; 2 – the plan of grave 1 in kurgan 1; 3 – a handmade pot from the burial; 4 – the plan of grave 13; 5–6 – belt plates made out of horn from burial 13; 7 – the plan of burial 14; 8–12 – finds from burial 14; 13 – grave 4 from kurgan 4; 14 – a bronze belt plate from grave 4 in kurgan 4 (after Shilov 1975, 41, fig. 31; 42, fig. 32.1, 4, 12; 43, fig. 33.1, 3, 4, 6; 47, fig. 36.1–3; 51, fig. 39.10; 57, fig. 43.3).

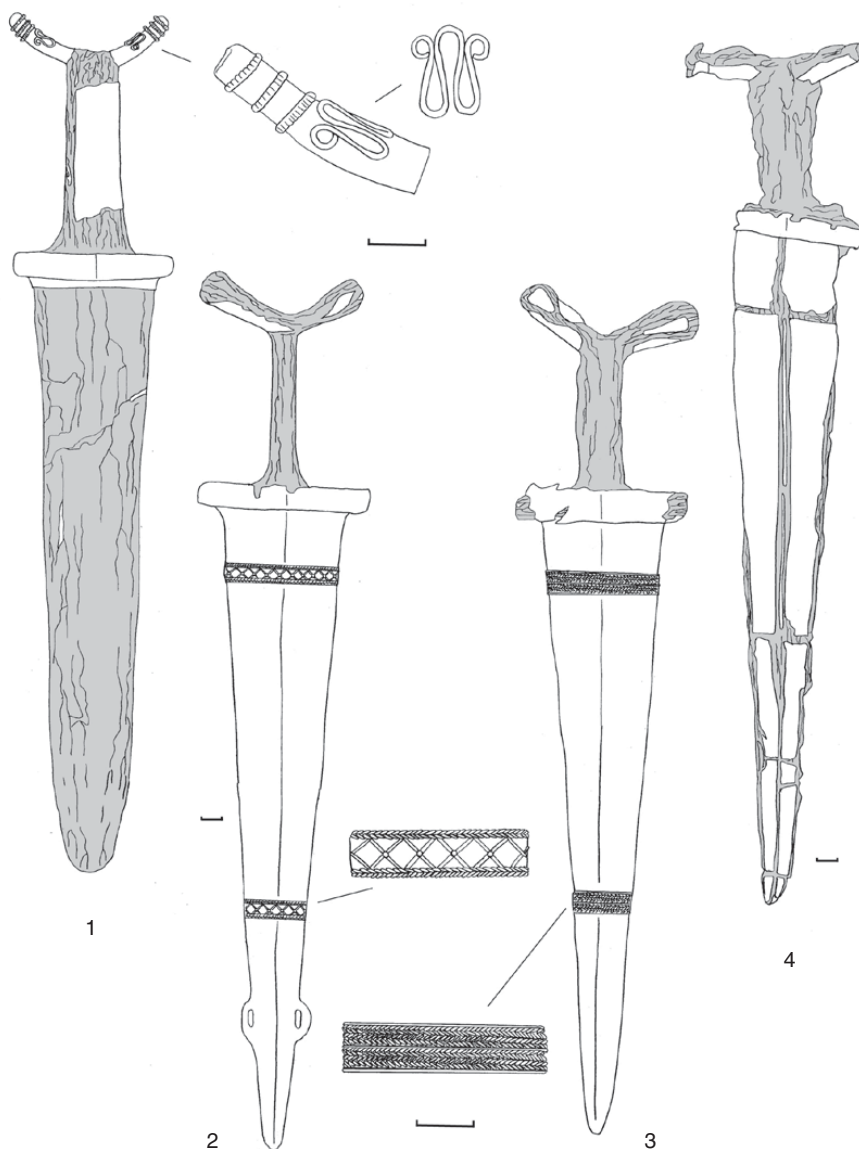


Fig. 9.6. The Lower Volga region. Prestige objects from male elite burials (the second to first century BCE) – ceremonial swords in scabbards with gold overlays: 1 – Zhutovo, kurgan 27, grave 4; 2 – Verkhnee Pogromnoe, kurgan 6, grave 7; 3 – Belokamenka, kurgan 7, grave 3; 4 – Baranovka-I, kurgan 10, grave 9 (after Mordvințeva and Khabarova 2006, fig. 8, cat. nos. 20, 25, 61, 77).

carved ritual objects (so-called ritual batons) (Fig. 9.7),<sup>36</sup> belt sets, and harness decorations. Most representative are the finds of belt plaques of various shapes, made out of various materials (gold, silver, bronze, gagate) (Fig. 9.5.5, 6, 14). Similar plaques have been found in burial complexes in Eurasian steppes from the Ural region to Mongolia and China.<sup>37</sup> Until the second century BCE, the population of the Lower Volga region must have had a different tradition



Fig. 9.7. The Lower Volga region. Prestige objects from male elite burials (the second century BCE to the first century CE) – ritual “staffs”: 1 – Zhutovo, kurgan 27, grave 4; 2 – Koroli, kurgan 4, grave 1; 3 – Pisarevka-II, kurgan 6, grave 2; 4 – Oktiabr’skii-V, kurgan 1, grave 1; 5 – Baranovka-I, kurgan 4, grave 1 (after Mordvintseva and Khabarova 2006, fig. 10, cat. nos. 77, 134, 214; fig. 11, cat. nos. 18, 181).

of wearing belts, when laces with truncated cones were used instead of belt plaques and buckles.<sup>38</sup>

Kurgans with “ritual deposits” not accompanied by human remains have been found only in the area between the Volga and the Don and on the left

bank of the Volga (Zhutovo, kurgan 27;<sup>39</sup> Kachalinskā<sup>40</sup>) (Figs. 9.8–9.9). These “deposits” include, most importantly, harness decorations and details (which have never been discovered in any of the male burials in this area, but are characteristic of the male burials in the southern part of the Lower Volga region) and fragmented precious vessels (Fig. 9.9.29).

Burial 1 in the funerary complex of Kosika, dating to the second half of the first century BCE, stands out among the elite male burials in the region.<sup>41</sup> It was constructed outside the kurgan, in a natural hill (a so-called Baer knoll), and contained a large number of items indicating the high status of the deceased. Some of them must have originated in the Kuban region: a silver spoon with the terminal of the handle made in the shape of the head of a predator, gold cuff-bracelets, small *phalera* appliqués, and a case for a razor blade. A series of imported silver vessels also come from the same complex, including a Hellenistic half-spherical bowl decorated with a gilded engraved ornament, an Italic bucket, a vessel with a lid and handles in the shape of wild boars, and a pyxis decorated with an engraved design. Judging by the design, the bowl, most likely, comes from Hellenistic Iran.<sup>42</sup> The engraved images on the vessel with zoomorphic handles (Fig. 9.10) and those on the pyxis also indicate an Iranian origin,<sup>43</sup> and a pair of saddle *phalerae* was probably manufactured there as well.<sup>44</sup> A sword sheath with two semicircular protrusions on each side is similar to those found in the Altai region.<sup>45</sup> The belt buckles are traditionally compared with the items from the Siberian Collection of Peter the Great (now in the Hermitage),<sup>46</sup> although their precise place of origin cannot be established with any certainty.<sup>47</sup> Spoon-shaped pendants have been found in belt sets throughout the territory of the Eurasian steppe, including the Western Baikal area<sup>48</sup> and the Khakassko–Minusinsk basin (the Tatar–Tashtyk stage of the second to first century BCE).<sup>49</sup> The most interesting find in this grave is gold trefoil leaves from a funerary wreath.<sup>50</sup> Wreaths played an important role in the funerary practices of Greeks and Romans,<sup>51</sup> and gold wreaths have been found in Greek and Roman burials starting from the Classical period and until the end of the Roman period, including the necropoleis of Greek cities on the Northern Black Sea coast. No remains of funerary wreaths have been found outside the barbarian territory of the Bosphorus, in the burial complexes of the Lower Volga and the Kuban regions, or in the North Caucasus. The burial complex of Kosika is the only known case in the entire barbarian territory from the Kuban to the Volga where this item, typical for the Greek funerary ritual, has been discovered.

The female and male elite burial complexes of this period point towards different directions in terms of connections with other regions. In female burials, items of social prestige prevail that indicate the existence of contacts with the Kuban region and Hellenistic Iran. Male burials contain objects that reflect



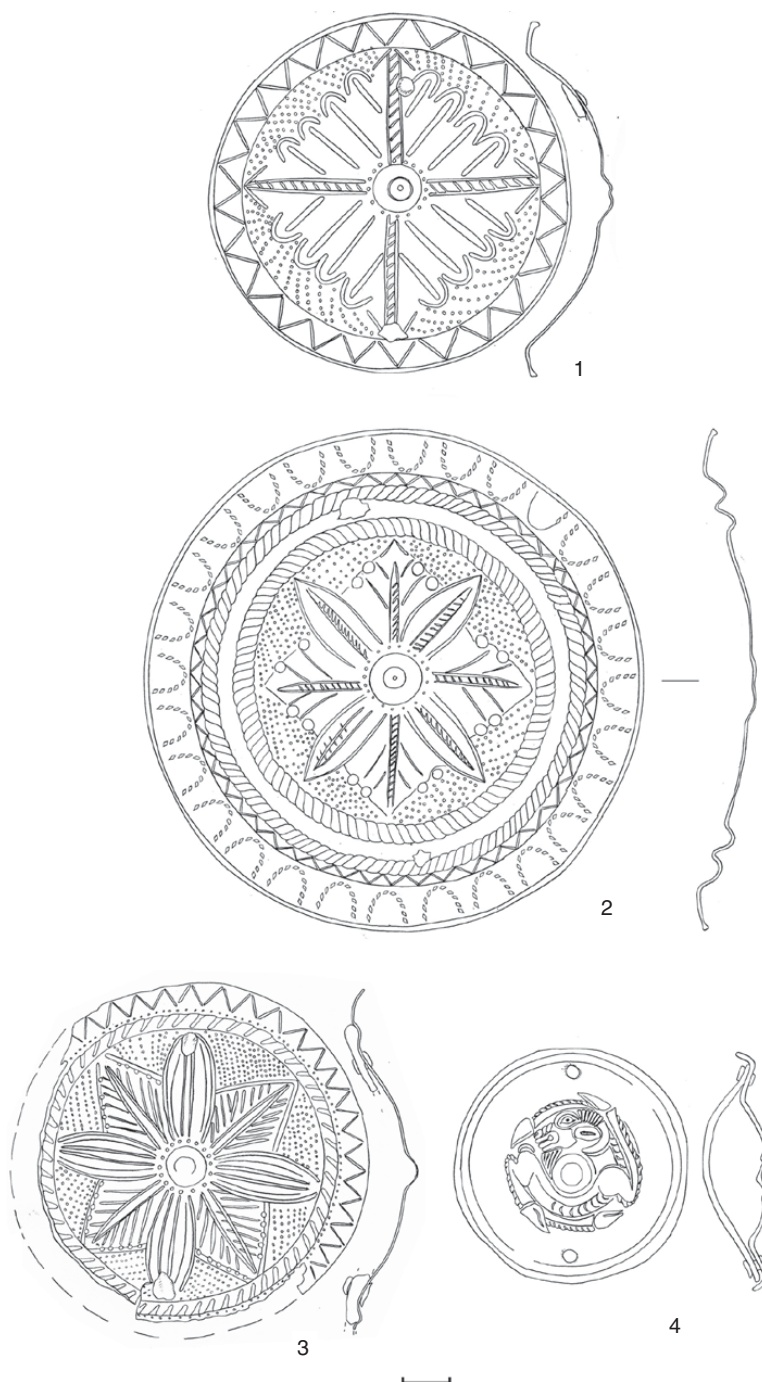


Fig. 9.8. The Lower Volga region. Finds from the “ritual deposit” in kurgan 27 of the burial complex Zhutovo (the first century BCE) (after Mordvinseva and Khabarova 2006, fig. 9, cat. nos. 69–72).

connections with the cultures of the Altai region and the Minusinsk basin, as well as the Kuban region and Hellenistic Iran.

The period from the first century CE to the middle of the second century CE brought certain changes in the mortuary rites. Kurgan burials are the only archaeological monuments dating to this period. The types of the graves remained the same, but individual graves under small separate mounds gradually replaced the pits dug into the kurgan mounds of the earlier periods (Fig. 9.11). The number of children's burials decreased abruptly. The standard set of grave goods basically did not change, but wheel-made vessels prevail among the pottery discovered in the burials, usually represented by a bowl and a jug.

The content of the grave goods in the elite burial complexes changed during this period. Now, they mostly included the objects manufactured in the Northern Black Sea region, but often made after Near Eastern originals. A large part of the imports from distant places in the burials of the highest-elite members consists of Roman bronze and silver vessels, dating to the same period as the burials. The specific finds in the elite burials of this region are bowls with zoomorphic handles (Fig. 9.12).

In the second half of the second to the fourth centuries CE, a certain standardization of the funerary rites took place (Fig. 9.13). Burials were constructed in kurgans, under individual mounds. Niche-graves and narrow rectangular pits were the predominant grave types. The bodies were placed with the head to the north. Many skulls show traces of inflicted deformation. The standard set of grave goods, however, remained the same as before and included clay vessels, bones from the front leg of a sheep, and a knife. The percentage of handmade vessels grew. The number of elite burials decreased considerably during this period, and among them, there were no outstanding burials that demonstrated social connections with distant places.

This overview of the archaeological monuments of the Lower Volga region allows us to make some important conclusions, presented below. Throughout the Sarmatian period, standard burials in this region contained a ram's leg and pottery, both hand- and wheel-made. Ordinary male burials were characterized by the presence of weaponry, while female burials included jewelry (temple pendants, necklaces), loomweights, and mirrors.

The comparative analysis of the assemblages of grave goods from the elite burial complexes dating to different periods indicates changes in the directions of social and political contacts, starting from about the middle of the first century BCE. Until that period, the barbarian elites of the Lower Volga region mostly had connections with the Kuban region (the southwestern direction) and the cultures of the Eurasian steppe zone (the eastern direction). In the second half of the first century BCE, ostentatious burials with especially rich and diverse sets of grave goods (the burial complex of Kosika) appeared in the



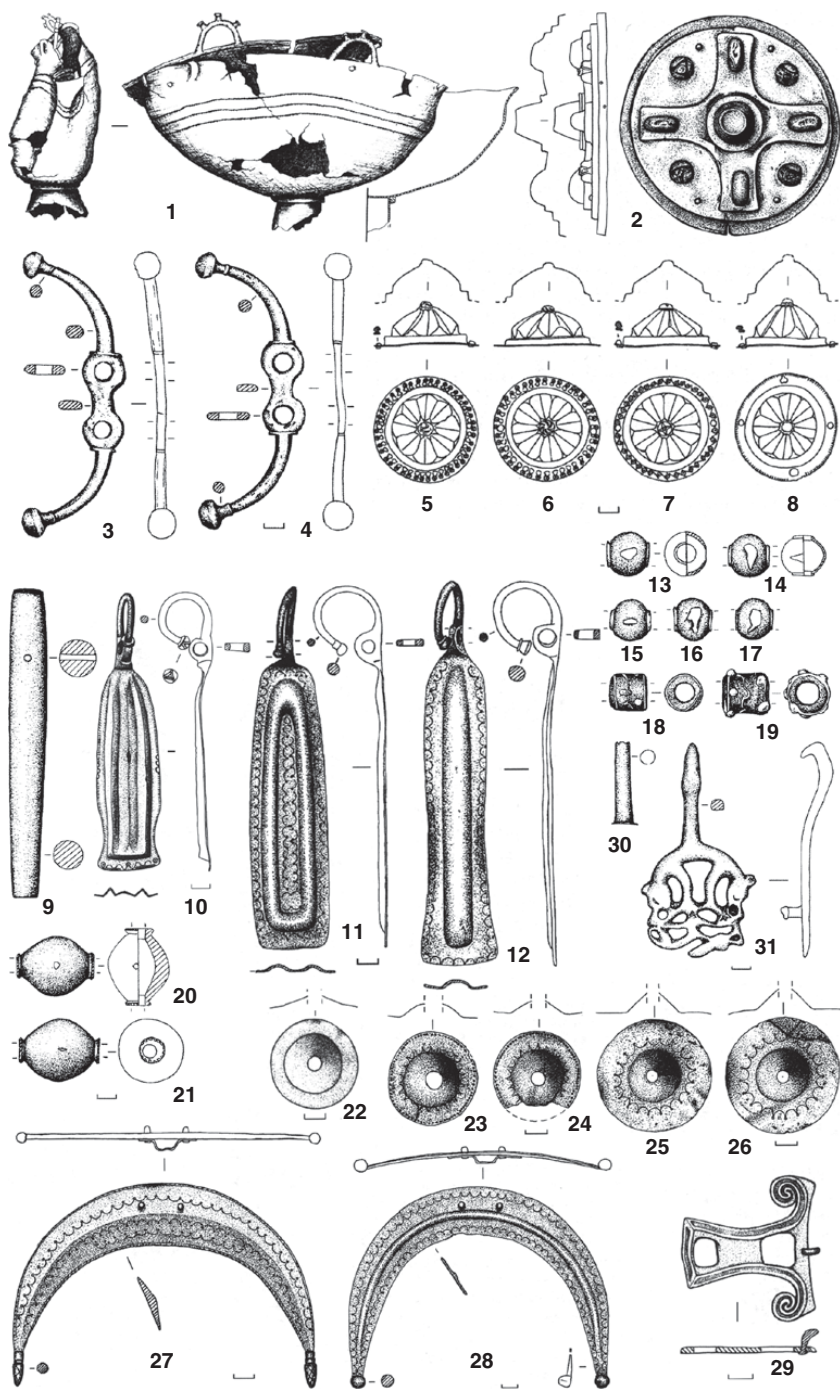


Fig. 9.9. The Lower Volga region. Finds from the “ritual deposit” at the modern village of Kachalinskaja (the second century BCE): 1 – bronze cauldron; 2, 5–8 – silver *phaleræ* from horse harnesses; 3–4 – iron bits; 9 – a whetstone; 10 – a silver bridle frontlet from a horse harness; 11–12 – bronze frontlets from horse harnesses; 13–17, 20–21 – bronze beads from horse harnesses; 18–19 – glass beads; 22 – a silver truncated cone used in a horse harness; 23–26 – bronze truncated cones used in horse harnesses; 27–28 – bronze chest collars from horse harnesses; 29 – an attachment from a silver drinking cup; 30 – a small bronze tube; 31 – a bronze quiver hook (after Sergatskov 2009, fig. 1.2; fig. 2.1–4, 6; fig. 3.1–2; fig. 4.1–3; fig. 5.1–3; fig. 6.1–5).

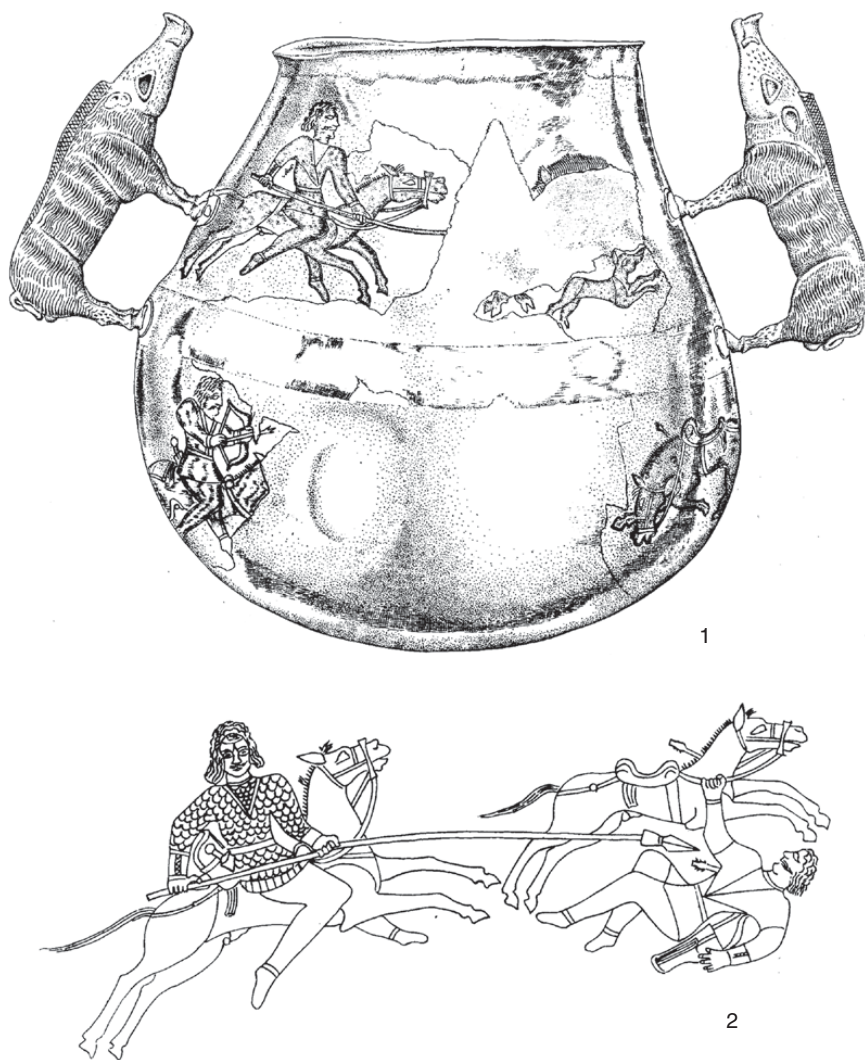


Fig. 9.10. The Lower Volga region. Kosika, burial 1. Vessel with zoomorphic handles (after Mordvintseva and Treister 2007, vol. III, 96, fig. 10).

Lower Volga region for the first time; the most representative complexes date to the first century CE (kurgan burials of Zhutovo, Oktiabr'skii, Baranovka, Berdiia, and others). The fact that imports of Italic and provincial Roman origin are present in these burials in large quantities, along with wheel-made ceramics and jewelry from the North Pontic region, indicates that the direction of contacts of the political elite in the Lower Volga region changed in favor of Greek and Roman centers. The discovery of a Chinese lacquer object in one of the graves of the Oktiabr'skii burial complex, in the area where an overland drag-route between the Volga and the Don was probably located in antiquity,<sup>52</sup> indicates that local tribes may have acted as intermediaries in the

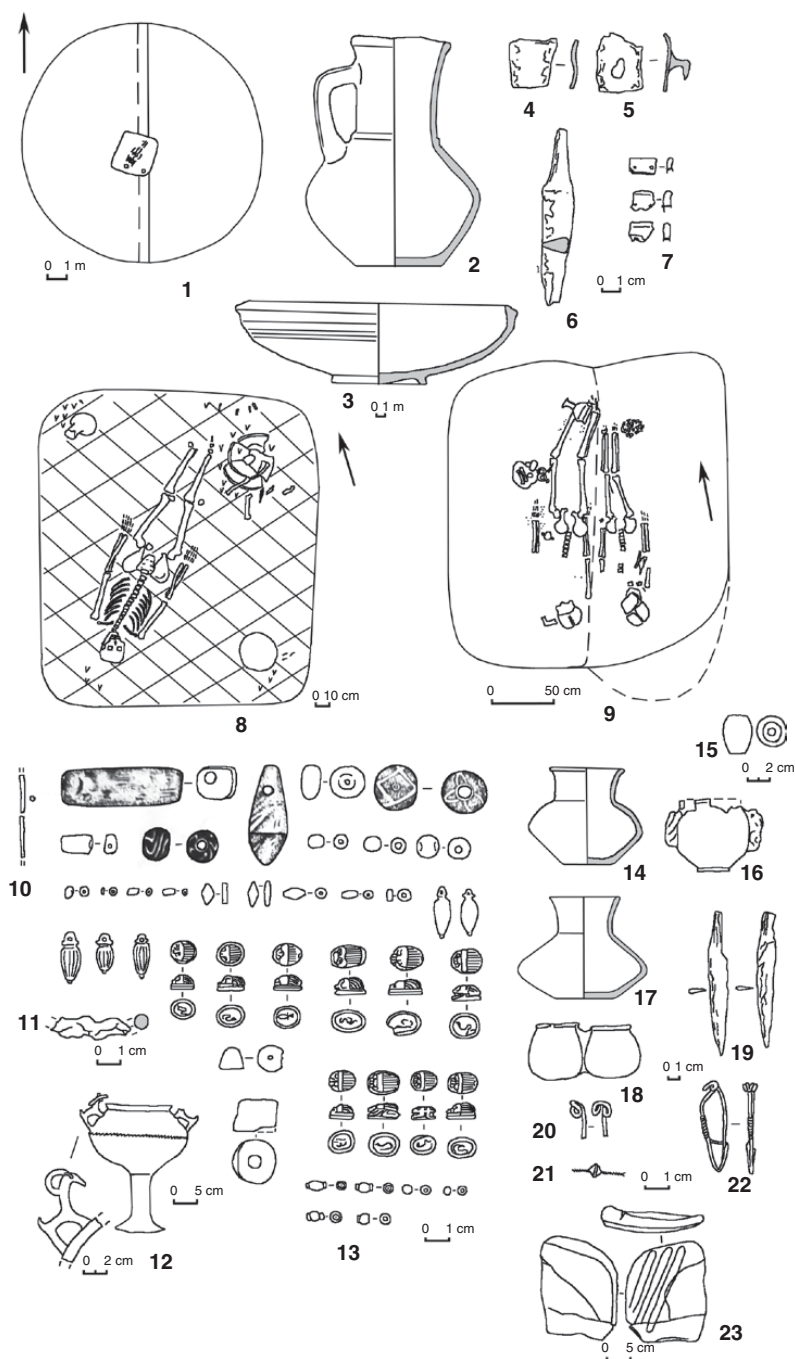


Fig. 9.11. The Lower Volga region. Kurgan burials (the first to the first half of the second centuries CE): 1–8 – Avilovskii-II, kurgan 10; 9–23 – Berdiia, kurgan 8, grave 4 (after Sergatskov 2000, fig. 94.8–10; fig. 95.1–7; fig. 96.1–26; fig. 101.1–7).

trans-Eurasian trade between the steppe zone and the Mediterranean region. The emergence of these ostentatious burials points towards the changes that occurred within the political elite, the centralization of power, and the struggle over the spheres of influence and the access to the luxuries that come with a civilized way of life.<sup>53</sup> The disappearance of burials with especially rich assemblages of grave goods, starting from the second half of the second century CE, may be associated with the disintegration of the elites, which was probably prompted by the loss of interest of ancient Greek and Roman centers in this territory, as well as by the increasing number of conflicts between those centers and the beginning of the downfall of the Roman Empire, which led to the inability of the latter to control the situation on its frontiers.

### *Monuments of the Northern Black Sea Region*

Now let us turn to the monuments of the North Pontic region, i.e., the territory that featured in the classical narrative tradition as Sarmatia – the steppe between the Dnieper and the Don, adjacent to the northern coasts of the Black Sea and the Azov Sea. In this region, the monuments of the Sarmatian period include settlements, kurgan burials and inhumation graves, and “ritual deposits” (Figs. 9.2–9.4). These monuments are all very diverse, and this may be the reason why there is still no single unified chronology that would take into account all of their categories without creating any contradictions. The periodization that is usually used for this territory has been developed on the basis of the material remains left behind by the nomads from the Volga and Ural regions,<sup>54</sup> and, therefore, does not accurately represent the real situation.

### **Settlements**

During the period in question, two main types of settlements existed in the territory that was adjacent to the northern coasts of the Black Sea and the Azov Sea: the so-called Late Scythian settlements<sup>55</sup> and the rural settlements of Olbia’s *chora*.<sup>56</sup> At the end of the Sarmatian period (the second to the early third centuries CE), another type of settlements – the unfortified sites of the Cherniakhov Culture – appeared in the western part of the region.<sup>57</sup>

### *“LATE SCYTHIAN” SETTLEMENTS*

By “Late Scythian Culture” we generally understand the remains of the material culture of the Scythians who migrated from the steppes of the Lower Dnieper area to the Crimea, as a result of a hypothetical Sarmatian conquest.<sup>58</sup> In addition, the term “Late Scythian” is used in reference to the North Pontic monuments in the Lower Dnieper area that could not have been left behind by nomads, such as settlements and inhumation graves. And since it is the nomads of the Lower Volga region whose material remains are considered to be the

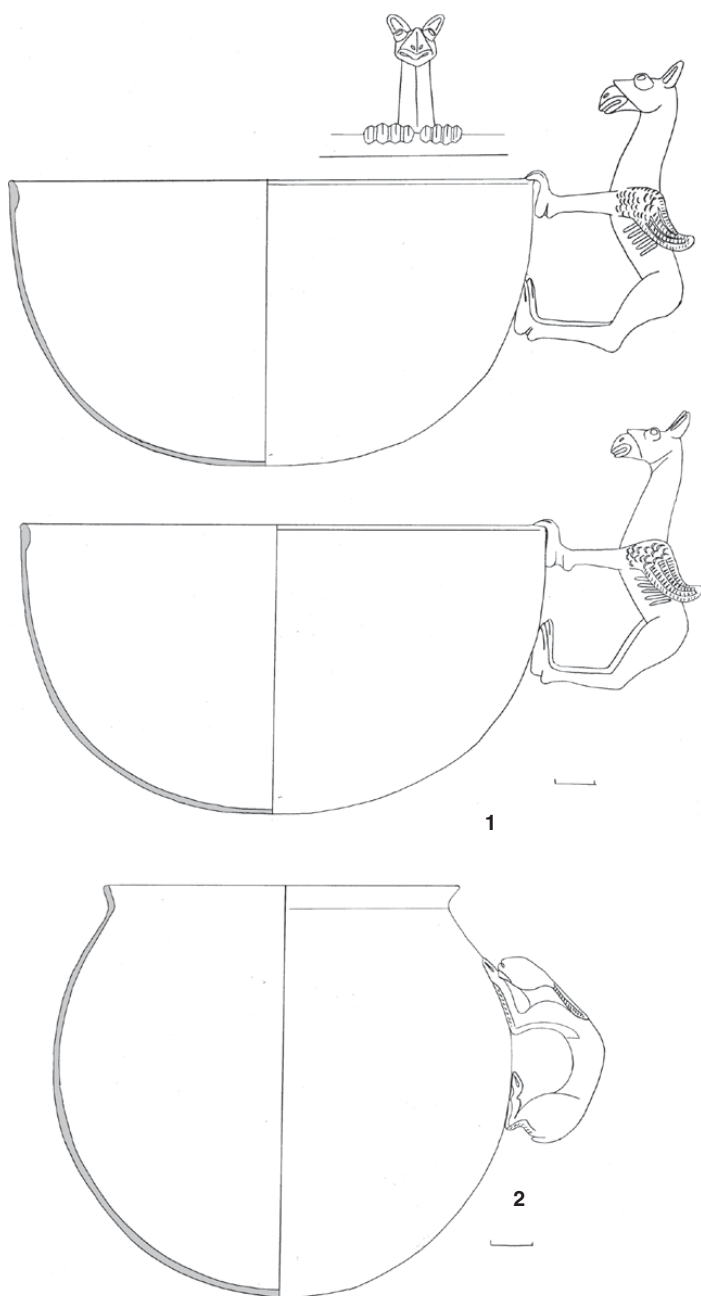


Fig. 9.12. The LowerVolga region. Prestige objects from male elite burials (the first century CE) – bowls with zoomorphic handles: 1 – Berdiia, kurgan 3; 2 – Oktiabr'skii-V, kurgan 1, grave 1 (after Mordvintseva and Khabarova 2006, fig. 18, cat. nos. 27, 163).

standard for Sarmatian culture, it is assumed that the settlements of the Lower Dnieper area could not have belonged to the Sarmatians.

The “Late Scythian” settlements are located in the northern part of the Lower Dnieper area. By the time of the emergence of these settlements, earlier “Scythian” settlements had already ceased to exist. The term “Scythian,” in this context, refers, in general, to the material remains of the archaeological culture that was present on the northern coast of the Black Sea from about the seventh to fourth century BCE.<sup>59</sup>

The settlements of this earlier “Scythian” group were located on the left bank of the Dnieper – along the banks of the river Konka and its tributaries – and on the right bank of the Dnieper – along the banks of the river Pidpil’naia and its tributaries; the best-known of them is the settlement of Kamenskoe.<sup>60</sup> These settlements were founded in the early fourth century BCE and existed until the end of the first or the beginning of the second quarter of the third century BCE, at the latest.<sup>61</sup> Life in the “Scythian” settlements of the Dnieper area stopped rather abruptly and practically simultaneously – most likely, as a result of some kind of a catastrophe.

New settlements were established, in general, throughout the same territory, but at new sites, with no clearly identifiable cultural layers of the “Scythian” period.<sup>62</sup> The “Late Scythian” settlements were located mostly on the right bank of the Dnieper, along its tributaries and arms, and on its left bank – along the river Konka (Fig. 9.3). It is generally considered that the “Late Scythian” settlements appeared in the third to the second century BCE.<sup>63</sup> According to Sergeĭ Polin, until the end of the second to the beginning of the first centuries BCE, they remained unfortified, and defense structures were built later.<sup>64</sup> Valeriia Bylkova, on the contrary, dates the construction of the fortifications to the time of the foundation of these new settlements.<sup>65</sup> Based on the dating of the cultural layers, the “Late Scythian” settlements did not emerge before the second half of the second century BCE and existed until the first to second century CE.<sup>66</sup>

Finds associated with iron-production and iron-working connect the early (“Scythian”) group of the settlements in the Lower Dnieper area to the settlements of the later (“Late Scythian”) group. The differences between the settlements of these two groups are visible in their spatial organization, as well as in the specifics of their fortification constructions and residential and domestic structures. “Scythian” settlements were mostly located on capes and were surrounded by earthen ramparts and moats. The larger part of the territory within the fortification walls remained free of structures. No system can be detected in the planning of the residential and auxiliary constructions.<sup>67</sup> The “Late Scythian” settlements usually had natural protection from three sides, such as a deep ravine or a cliff, and were defended from the fourth side by a deep moat (Fig. 9.14). The second line of defense included stone walls and



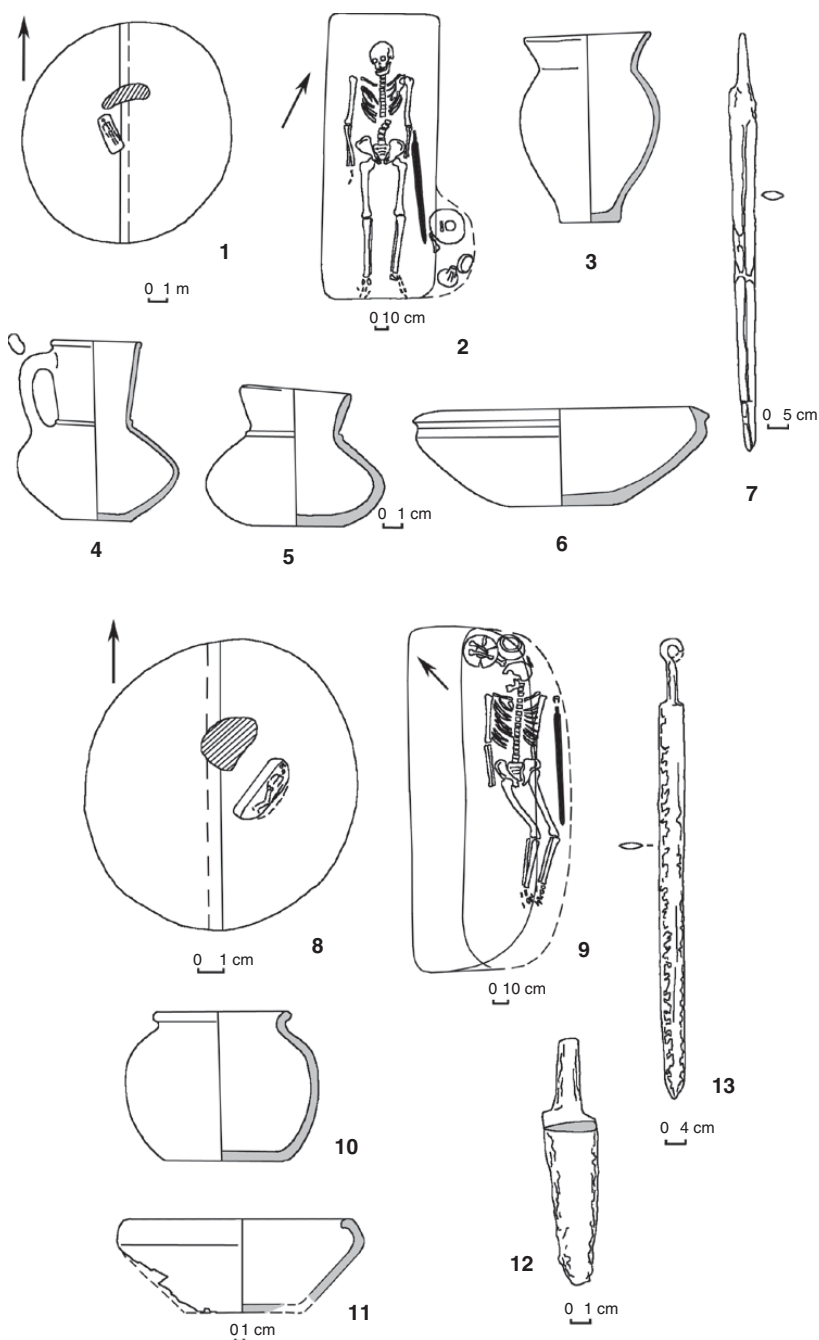


Fig. 9.13. The Lower Volga region. Kurgan burials (the second half of the second to the first half of the third centuries CE): 1–7 – Avilovskii-II, kurgan 17; 8–13 – Avilovskii-II, kurgan 14 (after Sergatskov 2000, fig. 106.1–6; fig. 108.1–7).

towers.<sup>68</sup> It has been suggested that the planning of the “Late Scythian” settlements bears traces of Greek and Roman influence (i.e., a regular plan of the settlement and certain types of structures, such as, for example, a “megaron”).<sup>69</sup>

A comparative analysis of the early and late settlements in the Lower Dnieper area reveals that there was no continuity between their populations. At the same time, one of the main directions in the economic life of both groups of these settlements was iron-production and iron-working, based on the recovery and processing of the locally available marsh ore.<sup>70</sup>

### OLBIA'S RURAL SETTLEMENTS

The settlements of Olbia's *chora* were located in the lower reaches of the Dnieper, Bug, and Berezan' limans and in the area of the Middle and Lower Inhulets.<sup>71</sup> The early settlements were founded along the shores of the limans soon after the Greek colonies had been established on the Northern Black Sea coast, i.e., in the sixth to the fifth century BCE. Archaeologists have offered different scenarios for the development of the settlements of Olbia's *chora*, but agree that they existed until the middle of the third century CE.<sup>72</sup>

The settlements from various chronological periods show elements of regular city planning.<sup>73</sup> Two types of residential structures have been discovered – houses built above ground (with one or several rooms) and dwellings dug into the ground (semi-subterranean pit-houses) – as well as semi-subterranean structures and pits used for household needs. Ash hills are the most frequently found cult structures: they were made out of ash with layers of burnt crushed stones and clay and contained idiosyncratic “clay loaves,” anthropomorphic statuettes, terracotta fragments, and graffiti, in addition to the usual objects found in cultural layers, such as ceramic fragments and bones.<sup>74</sup>

The settlements that appeared in the area in the first century BCE were fortified;<sup>75</sup> the defense structures consisted of walls, both faces of which were made with stones; after their destruction in the middle of the second century CE, these walls were replaced by ramparts with palisades constructed of wooden stakes and earth.<sup>76</sup> These settlements seem to have been arranged around Olbia in a particular order, which suggests the existence of a planned defense system.<sup>77</sup>

The emergence of new settlements in the first century BCE in this area may be associated with the arrival of a new population. None of the settlements revealed any traces of fire and destruction accompanied by massive death among their inhabitants.<sup>78</sup> In the middle of the third century CE, when most of the buildings in Olbia were destroyed by fire,<sup>79</sup> the majority of the settlements and fortified sites in Olbia's *chora* were abandoned and ceased to exist.<sup>80</sup>

The settlements of the Cherniakhov Culture emerged in the western part of the region in the second century CE, when some of the “Late Scythian” settlements in the Lower Dnieper area ceased to exist, and continued to function



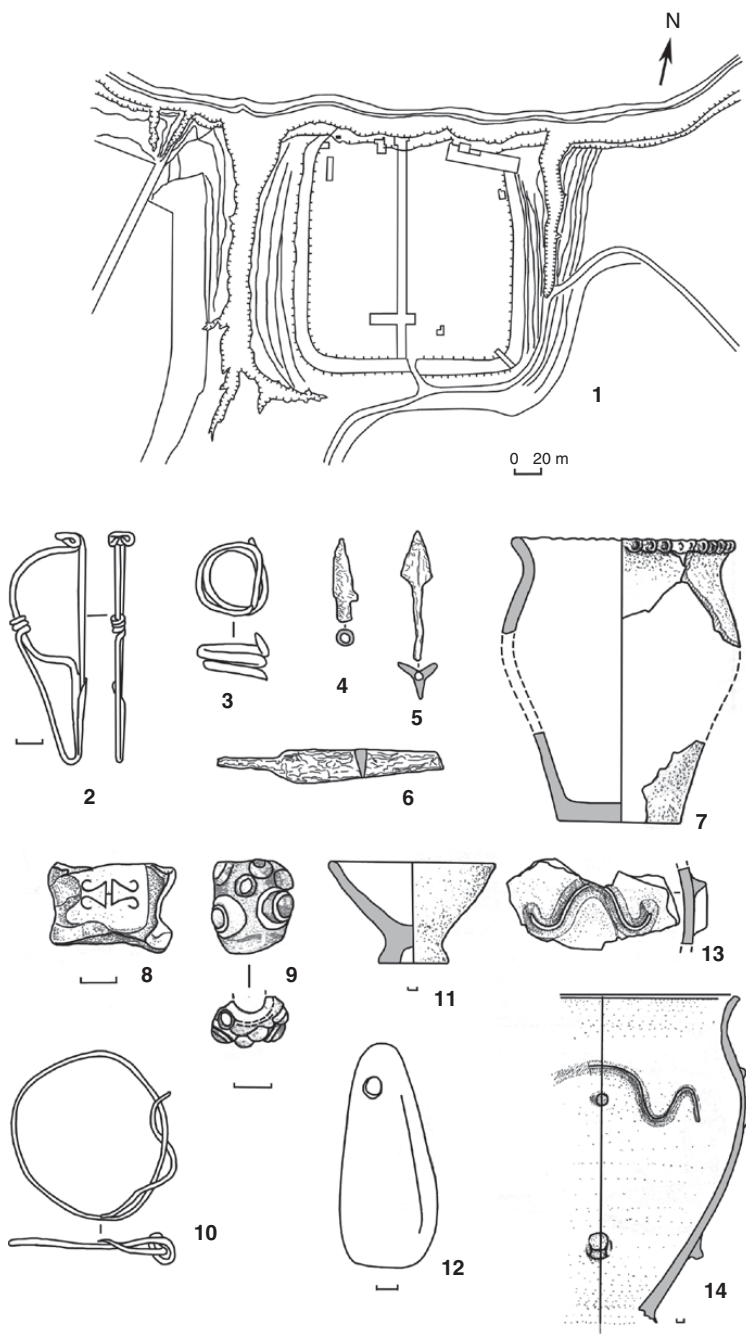


Fig. 9.14. Settlements of the “Late Scythian Culture” in the Lower Dnieper area (the first century BCE to the first century CE): 1 – a schematic plan of the settlement of Lîubimovka; 2–14 – some typical finds from the “Late Scythian” settlements of the Lower Dnieper area (2 – a fibula; 3 – a temple pendant; 4–5 – arrowheads; 6 – a knife; 7, 11, 13, 14 – handmade vessels; 8 – an astragal with an incised tamga sign; 9 – a glass bead; 10 – a bracelet; 12 – a fishnet weight) (after Bylkova 2007, 186, fig. 33; 239, fig. 86.3, 8, 11; 240, fig. 87.2; 242, fig. 89.1, 3, 4, 12, 13, 14, 16, 22).

until the fourth or fifth centuries CE. They were usually situated in the fluvial plains of rivers and on the slopes of ravines,<sup>81</sup> had no fortifications, and consisted of regular rows of residential structures – houses built above ground and subterranean dwellings.

### *Burial Monuments and “Ritual Deposits”*

The funerary complexes of the Sarmatian period in this region are not as numerous as those of the earlier – Scythian – period. If we compare the distribution of the monuments of the fourth century BCE (Fig. 9.2) with that of the complexes from the third to the first half of the first centuries BCE (Fig. 9.3), the decrease in their numbers is obvious. Moreover, there are only very few finds that date to the third century BCE – they are very hard to identify because of the general lack of dating material.<sup>82</sup> No large burial-grounds with kurgans or inhumation graves are known for the period from the second century BCE to the first half of the first century BCE. Closed complexes of a non-residential character from this period are represented by individual burials in kurgans and so-called ritual deposits. Starting from the second half of the first century CE, “ritual deposits” disappear in the Lower Dnieper and Lower Dniester areas, as well as in the territory adjacent to the Northern Azov Sea. Instead, kurgan burial complexes and burial sites with inhumation graves appear (in addition to the individual burials in kurgans and in the territories of settlements), but cease to exist in the first half of the second century CE. Starting from the second century CE, the number of burial-grounds in the Northern Black Sea region decreases, so that the monuments of the second to fourth century CE mostly concentrate along the boundaries of the region – in the Lower Danube and the Azov Sea areas.<sup>83</sup> No large burial sites in the Lower Dnieper area are known for this period.

### **BURIAL-GROUNDS WITH INHUMATION GRAVES**

Burial-grounds with inhumation graves are located along the meander of the Dnieper. Usually, they are associated with the sedentary or semi-nomadic population (the “Late Scythian Culture”), in contrast to the kurgan burials of the nomads. Three burial sites with inhumation graves have been excavated on the right bank of the Lower Dnieper: next to the modern villages of Zolotaïa Balka<sup>84</sup> and Nikolaevka<sup>85</sup> and at the farmstead of Krasnyĭ Maïak in the province of Kherson.<sup>86</sup> They date from the turn of the millennium to the second century CE. Most of the burials at the site of Zolotaïa Balka are in catacombs, but some are in narrow rectangular pits (Fig. 9.15). The standard objects found in the graves, regardless of the gender and age of the deceased, are fibulae, necklaces (placed on the chest, arms, and legs of the deceased), knives, and stones under the body and next to it. There are also individual finds of pottery, both

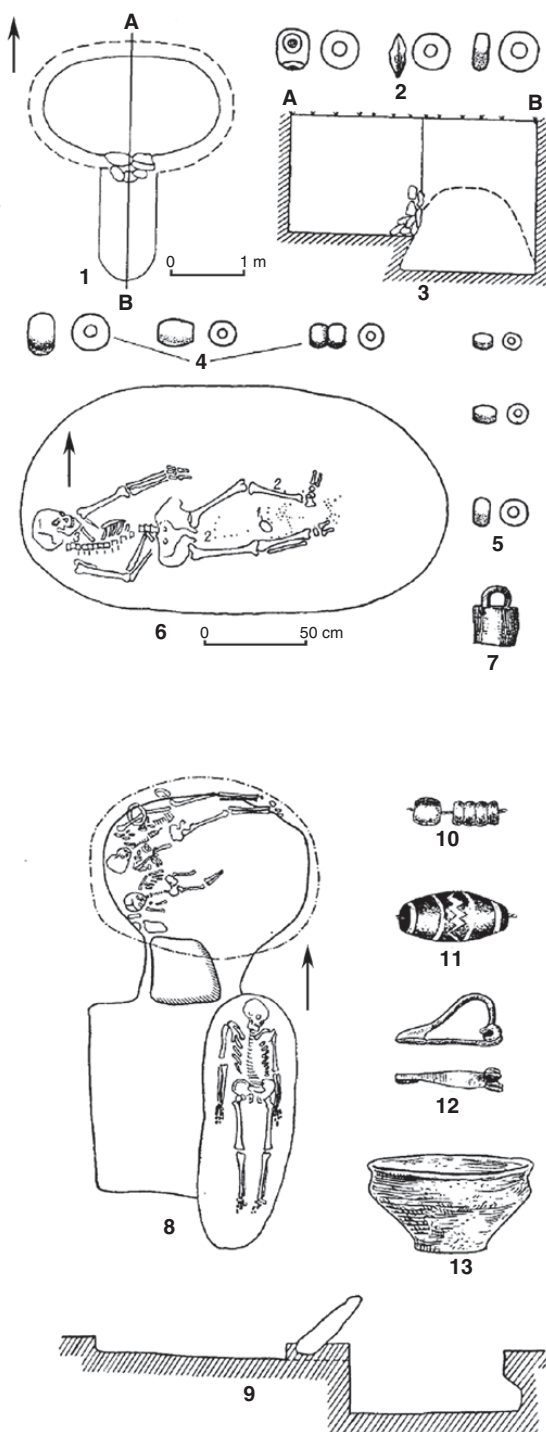


Fig. 9.15. The Northern Black Sea region. The burial-ground with inhumation graves associated with the settlement of Zolotaia Balka (the first century BCE to the first century CE): 1–7 – finds from grave 46; 8–13 – finds from grave 29 (after Viaz'mitina 1972, 43, fig. 14.1–7; 34, fig. 13.1–6).

hand- and wheel-made, and animal bones. In rare cases, male burials contain weaponry (swords, spears, and arrows), buckles, whetstones, and flints. Female burials include loomweights, mirrors, temple pendants, and rouge. Children's burials usually have a standard set of grave goods.

In addition to these excavated burial-grounds, individual graves dug into the cultural layer have been found in the territories of the settlements in the Lower Dnieper area. Especially interesting is a complex excavated on the ground of the settlement of Kamenskoe. There, eye-covers and lip-covers made out of gold foil were placed on the face of the deceased. The burial also contained gold beads, a Megarian bowl, a handmade bowl, and several glass beads. The complex has been dated to the second century BCE,<sup>87</sup> and, in terms of the accompanying grave goods, it is comparable only to the burials of the so-called mausoleum in Scythian Neapolis in the Crimea, where members of the barbarian elite were buried. The grave of an adolescent, with a fragmented amphora placed across his legs, was discovered in the territory of the "Late Scythian" settlement of Zolotaâ Balka, under building no. 45. In addition, a male burial without grave goods was found at the southern wall surrounding this settlement. In both cases, the body was placed with the head to the east.<sup>88</sup> Two other burials of the first century CE were found on the site of an ancient moat at a settlement located near the modern village of Gavrilovka.<sup>89</sup>

### KURGAN BURIALS

Most of the archaeological material obtained in the course of the large-scale excavations in the territory of Ukraine and the Rostov province in the 1950s to 1970s was discussed in a book by Konstantin Smirnov,<sup>90</sup> published posthumously, as well as in works by Viktor Kostenko,<sup>91</sup> Aleksandr Simonenko,<sup>92</sup> and Vladimir Maksimenko.<sup>93</sup> Kurgan burial-grounds are traditionally associated with Sarmatian culture.<sup>94</sup> There is also another view – namely, that only members of the social elite were buried in kurgans.<sup>95</sup> Most kurgan burial-grounds are located in the Northern Azov Sea area – around the river Severskiî Donets and along the river Molochnaâ. On the right bank of the Dnieper, a kurgan burial-ground has been discovered at the modern village of Ust'-Kamenka.<sup>96</sup> In the course of modern construction works in the territory of Ukraine, individual kurgan burials have been found in the area between the rivers Samara and Orel', in the Northern Azov Sea area, and in the area between the Dniester and the Danube.<sup>97</sup>

Kurgan burials of the third to first century BCE are, in general, represented by individual secondary burials in kurgans and do not form kurgan burial-grounds (in total, about fifty such complexes have been found) (Fig. 9.16.1–10). The main type of grave is a narrow rectangular pit. All of them usually contain one clay vessel (hand- or wheel-made), a knife, and a fibula, but no animal bones. It is difficult to comment on the specifics of the accompanying grave

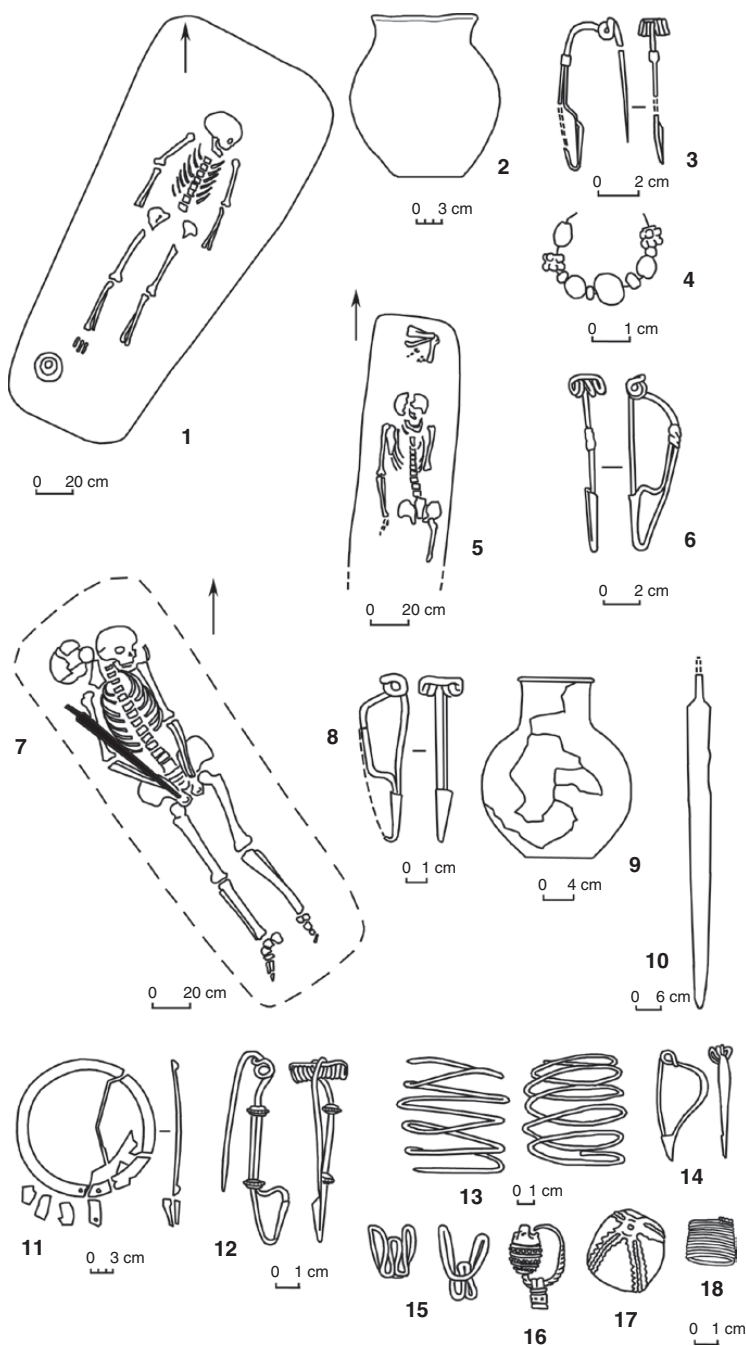


Fig. 9.16. The Lower Dnieper area. Individual burials in kurgans (the second to first century BCE): 1-4 – Gromovka, kurgan 2, grave 2; 5-6 – Vasil'evka, kurgan 1, grave 4; 7-10 – Brylevka, kurgan 16, grave 1; 11-18 – Solontsy, stray finds (after Simonenko 1993b, 11, fig. 2.1, 2; 26, fig. 4.1; 27, fig. 5.1-8).

goods characteristic of female and male burials, because in most cases information about the gender of the deceased is not available. It is possible that burials with weaponry (swords, spears, and arrows), flints, and whetstones belonged to male deceased, and those with necklaces, loomweights, and mirror fragments, to female ones.

The elite burial complexes of this period include female burials at the modern village of Sokolovo (Chervona Mogila, group II, kurgan no. 1),<sup>98</sup> at the modern village of Vasil'evka in the Starobeshevskii district of the Donetsk province,<sup>99</sup> and a random find in a ploughed dune at the modern village of Solontsy<sup>100</sup> (Fig. 9.16.11–18). The complexes date to the second half of the second century BCE. The accompanying grave goods included, in addition to the standard set of objects, spindle-shaped unguentaria, gold imitations of Greek jewelry (earrings decorated with lion heads and pendants with images of Greek deities), brooches with double-needle clasps, and fibulae of the Middle La Tène scheme.

In the first century BCE, new kurgan burial-grounds, such as Akkermen' and Novo-Filippovka, appeared in the Northern Azov Sea area, in the fluvial plain of the river Molochnaia.<sup>101</sup> They remained in use until the second century CE. There, niche-graves, pit-graves with shelves, and square pit-graves have been found, in addition to narrow rectangular pit-graves. The early burials on these sites contained standard sets of grave goods – the front leg of a sheep, a knife, and a hand- or wheel-made vessel. Male burials yielded weaponry (sword and arrows), while bodies in the female burials had necklaces placed on the chest.

The largest burial complexes of the first to second century CE have been found on the burial-grounds of Kalantaevskii and Ust'-Kamenskii in the Lower Dnieper area.<sup>102</sup> On the kurgan burial-ground near the ancient settlement of Belozerskoe, Georgii Skadovskii excavated fifty-two kurgans, with graves from the turn of the millennium and the early centuries CE dug into them.<sup>103</sup> Some burials have been found near the modern city of Krivoi Rog; others, in the area around Nikopol.<sup>104</sup>

The burials of the Ust'-Kamenskii complex date from the first to the beginning of the second centuries CE. They include niche-graves, square grave-pits, and narrow rectangular grave-pits (Fig. 9.17). The standard set of grave goods, regardless of the gender and age of the deceased, consisted of hand- and wheel-made pottery (usually, a bowl and a narrow-neck vessel), the front leg of a sheep, a knife, and fibulae. In some male and female burials, whetstones and cut chalk pieces were found. Male burials usually included weaponry (sword, dagger, and arrows), buckles, truncated cones used as terminals for laces, and flints. In some cases, parts of horse harnesses were found. Female burials contained necklaces placed on the chest and arms and across the waist and legs of the deceased, loomweights, needles, handmade incense burners, and mirrors. Children's burials usually contained a standard set of grave goods or no accompanying objects at all.

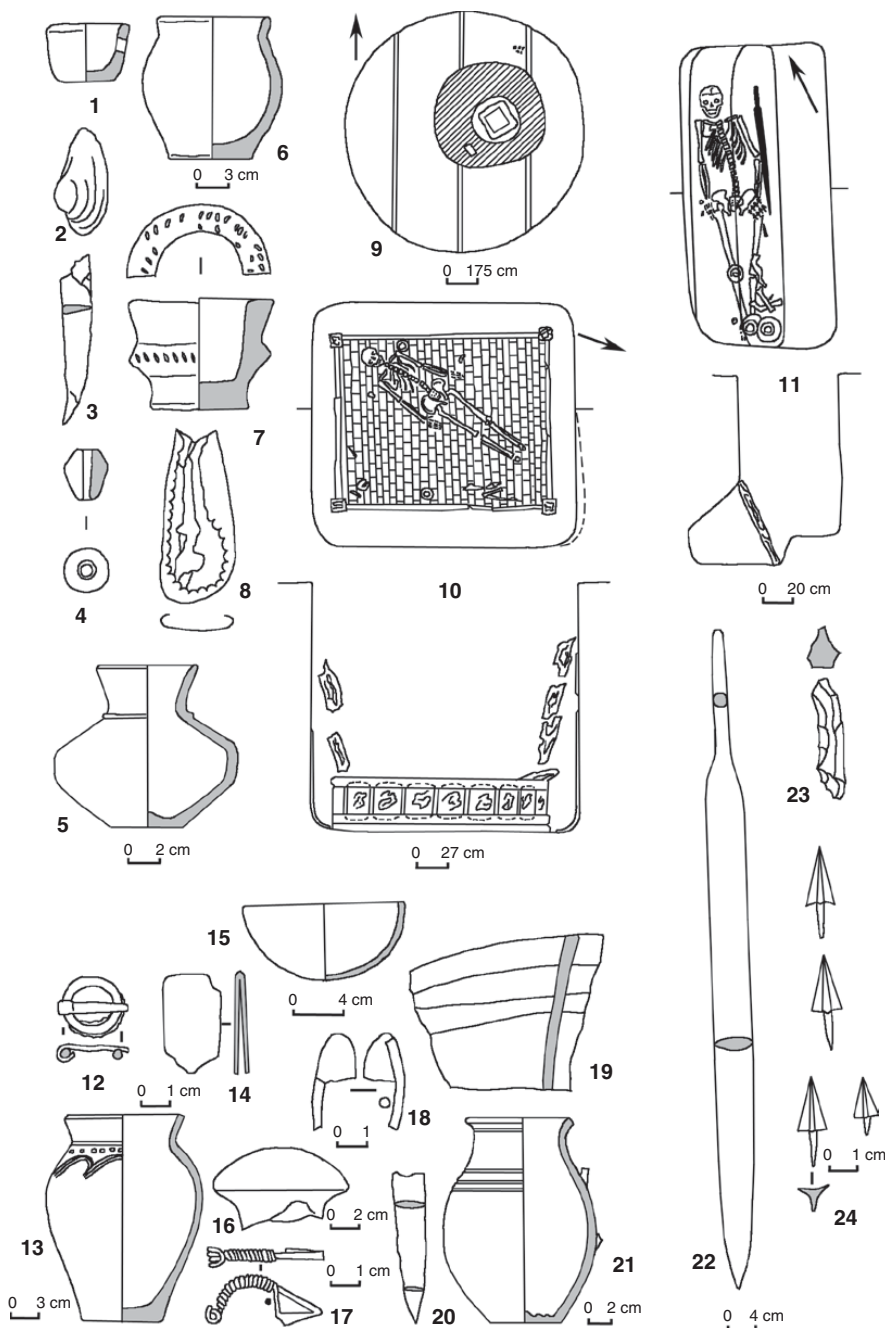


Fig. 9.17. The Northern Black Sea region. Kurgan burials from the burial-ground of Ust'-Kamenka (the first century BCE to the first century CE): 1-10 – kurgan 22, grave 2 (1 – an incense burner; 2 – a shell; 3 – a knife; 4 – a loomweight; 5-6 – handmade pots; 7 – an incense burner; 8 – a leather bag); 11-24 – kurgan 37, grave 1 (12 – a buckle; 13 – a handmade pot; 14 – a belt terminal; 15 – a wooden bowl; 16 – an amphora fragment; 17 – a fibula; 18 – a belt clasp; 19 – a fragment of a vessel; 20 – a knife; 21 – a jug; 22 – an iron sword; 23 – a whetstone; 24 – iron arrowheads) (after Kostenko 1993, fig. 5.2; fig. 5a.1-9; fig. 12).



The ostentatious kurgan burials in this region date to the first century CE. They include female burials in Sokolova Mogila (near Olbia)<sup>105</sup> and Chugunokrepinka (in the Northern Azov Sea area)<sup>106</sup> and male burials in Zaporozhskii Kurgan<sup>107</sup> and Tsvetna (on the right bank of the Dnieper).<sup>108</sup> The female burials contained jewelry of Mediterranean origin and luxury items imported from distant places – silk, a lacquer object, a Chinese mirror, fans, perfume bottles from the Near East, and Italic and provincial Roman bronze and silver vessels (Figs. 9.18–9.19). The destroyed male burial in Zaporozhskii Kurgan included belt plaques and parts of a horse harness (Fig. 9.20), the shape and style of which imitated those of the objects that have been found throughout the territory from Siberia to China.<sup>109</sup> The kurgan in Tsvetna, excavated by villagers, revealed a silver bowl, a precious belt set and other pieces of jewelry, a cast bronze cauldron with animal bones, a large Greek amphora, fragments of an iron coat of mail, arrowheads, and gold leaves from a funerary wreath – an element of Greek mortuary rites.

There are not many burials from the second half of the second to the third centuries CE – no more than twenty complexes – and most of them have been found at the burial-ground of Brylevka (Fig. 9.21).<sup>110</sup> The burials in this complex are different from other kurgan burials: the main type of grave is the niche-grave, they contain weaponry, and the bodies of the deceased are oriented to the north. Burial complexes found on other sites usually do not form burial-grounds; they have bodies of the deceased turned in eastern direction and contain the standard set of grave goods – mostly, handmade pottery and necklaces.

### “RITUAL DEPOSITS”

A special type of archaeological monuments discovered in the territory of the Northern Black Sea region are “deposits” – objects buried in kurgan mounds and natural hills that are not accompanied by any human remains (Figs. 9.22–9.29). They date from the third to first century BCE. Most items found in these “deposits” were broken, but they included rare objects, such as silver *phalerae* with artful decorations that were parts of horse harnesses. Aleksandr Spitsyn was the first to call these finds “deposits.” He published the most complete description of all “deposits” from the southern territory of the Russian Empire known at that time.<sup>111</sup>

Originally, no one noticed that this group of archaeological monuments was special. Spitsyn did not associate the burial of these objects with any particular ritual. Most of these complexes were discovered by chance, and the artifacts were bought by the Imperial Archaeological Commission for the main museums in Russia (the Hermitage in St. Petersburg and the Historical Museum in Moscow) or by private collectors. Rostovtzev, who was very interested in *phalerae* found in South Russia, referred to these complexes simply as the



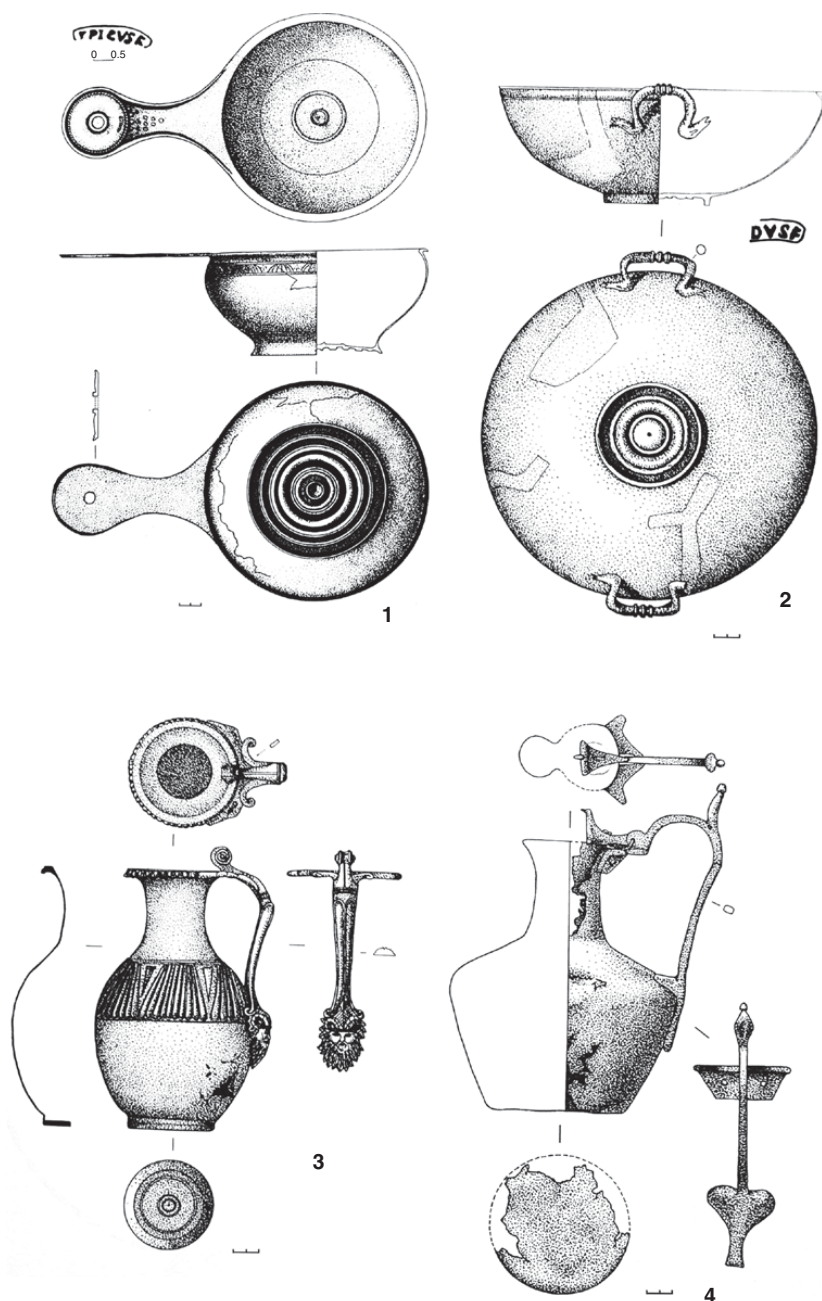


Fig. 9.18. The Northern Black Sea region. Chuguno-Krepinka. Prestige objects from elite burials (the first half of the second century CE) – imported bronze vessels (after Simonenko 2008, Taf. 58–61).

“finds” and did not pay much attention to their context.<sup>112</sup> Nandor Fettich was the first to emphasize the context in which *phalerae* were discovered in Dacian “deposits.” He pointed out that some categories of objects (silver torques, fibulae, and other jewelry) were rarely present in Dacian burials, but were usually

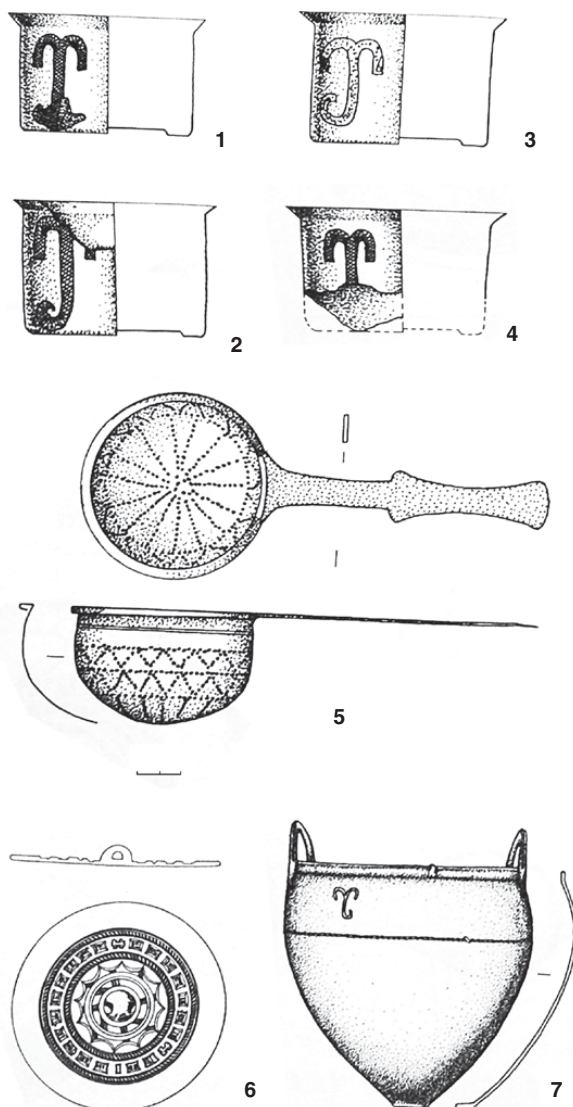


Fig. 9.19. The Northern Black Sea region. Chuguno-Krepinka. Insignia from elite burials (the first half of the second century CE): 1–4 – silver drinking cups; 5 – a bronze strainer; 6 – a Chinese mirror; 7 – a cast bronze cauldron (after Simonenko 2008, Taf. 62.1–6, 8).

found in a different type of complexes: “they were not placed together with the body as grave goods ... but were probably ‘destroyed’ after the death of their owner, and in that broken condition, they were then preserved among family treasures.”<sup>113</sup>

At first, this hypothesis did not find any supporters among Russian scholars, who still maintained that *phalerae* “undoubtedly” came from destroyed rich burials, the grave goods from which were not entirely preserved.<sup>114</sup> Soon, however, more and more “deposits” with *phalerae* were found and studied by

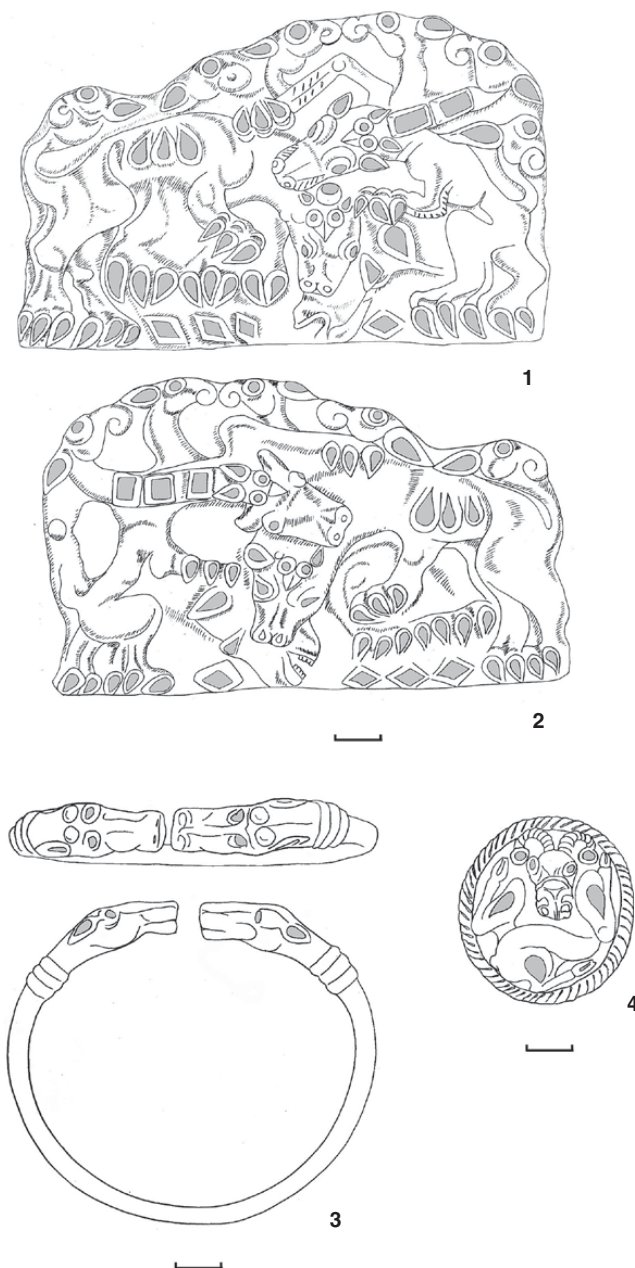


Fig. 9.20. The Northern Black Sea region. Prestige objects from elite burials. Objects made in the “Gold-Turquoise Animal Style” from the Zaporozhskii kurgan (the first century CE): 1–2 – belt plates; 3 – a bracelet; 4 – a *phalera* from horse harness (after Mordvintseva 2003, 154, fig. 39).

archaeologists,<sup>115</sup> who interpreted them as a special group of monuments – “ritual deposits.”<sup>116</sup> The first summary analysis of such “deposits” was undertaken by Simonenko.<sup>117</sup> In their contents, he correctly identified three main categories of objects: decorations and functional parts of horse harnesses, such

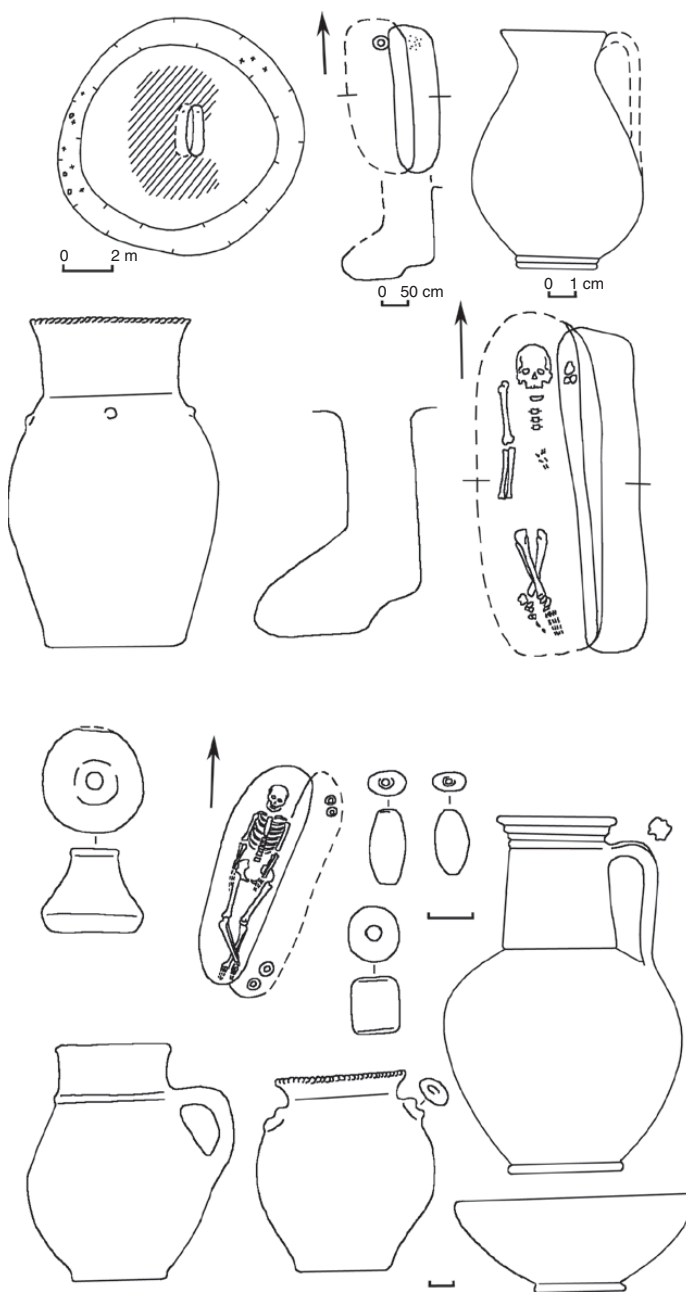
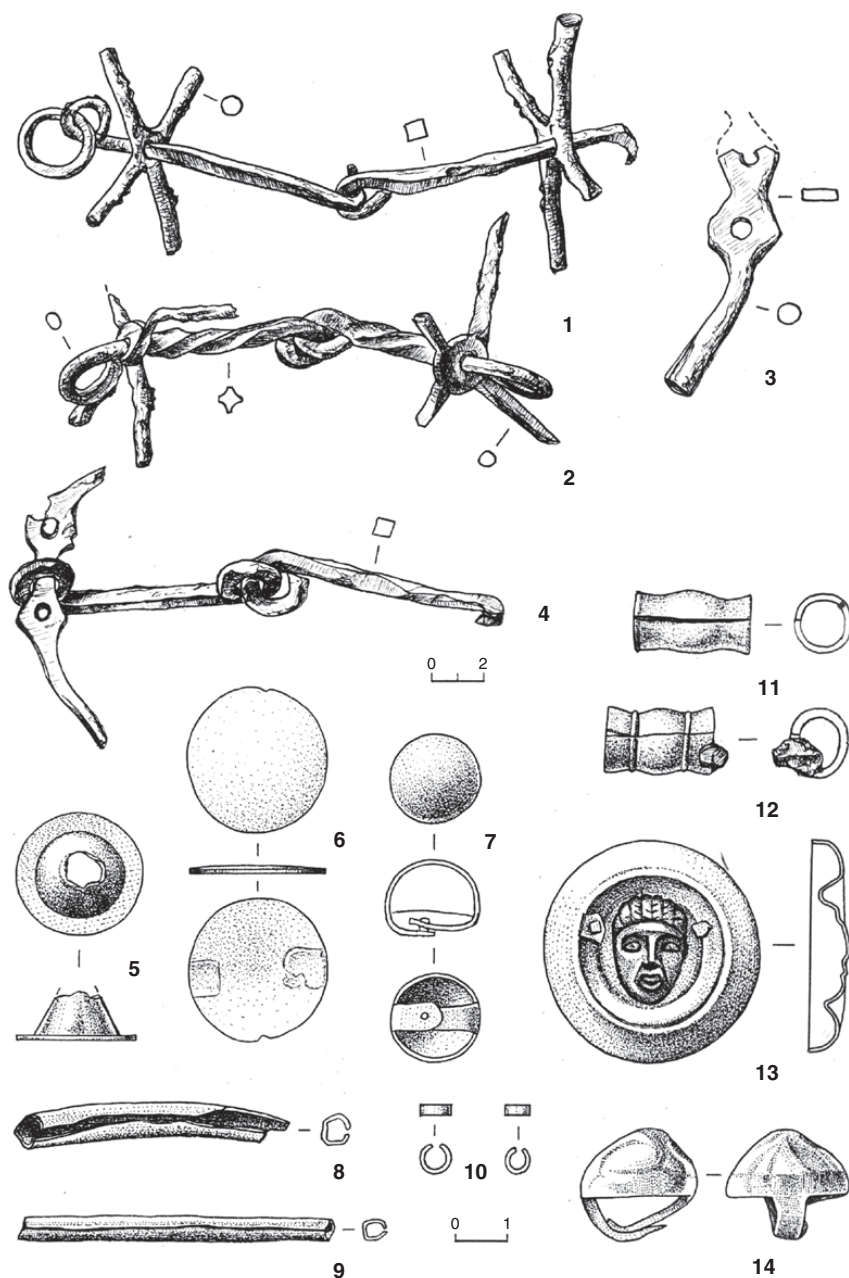


Fig. 9.21. The Northern Black Sea region. Burial complexes of the kurgan burial-ground of Brylevka (the second to the first half of the third centuries CE) (after Simonenko 1993b, 95, fig. 23.2; 97, fig. 24.2).

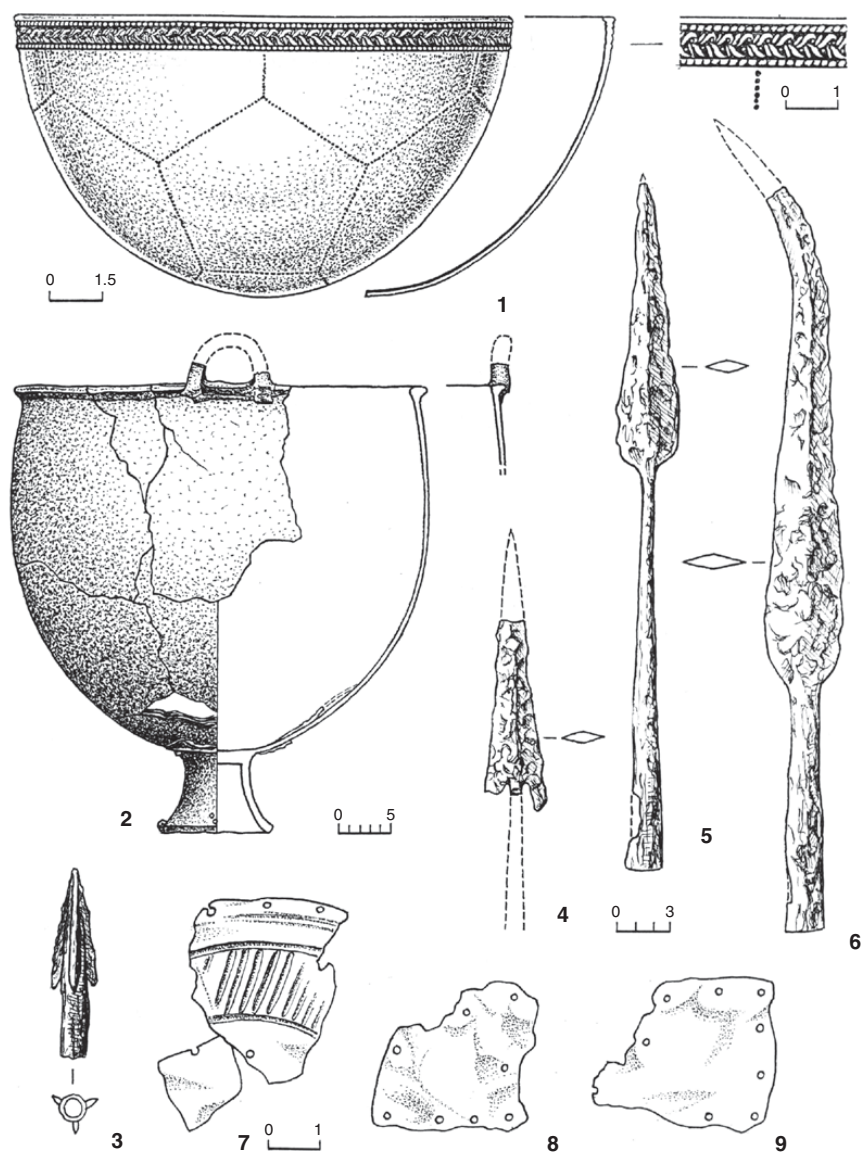
as *phalerae*, bridles, and bridle cheek-pieces (*psalia*); armor (weaponry and helmets); and luxury objects (metal and glass vessels and jewelry). He also called attention to the fact that no human remains were found in any of these cases. According to Simonenko, these finds were also similar to each other in terms



Figs. 9.22–9.24. The Northern Black Sea region. The “ritual deposit” at Velikoploskoe (the second half of the third to the beginning of the second centuries BCE) (after Dzis-Raiko and Sunichuk 1984, 150, fig. 1; 155, fig. 2; Mordvinceva and Redina 2013a, 388, Abb. 1; 389, Abb. 2; 391, Abb. 3).

of their topography: they were discovered mostly in kurgan mounds and natural hills. As a result, Simonenko interpreted the “deposits” as funerary monuments associated with a warrior cult.<sup>118</sup> He argued that these complexes could

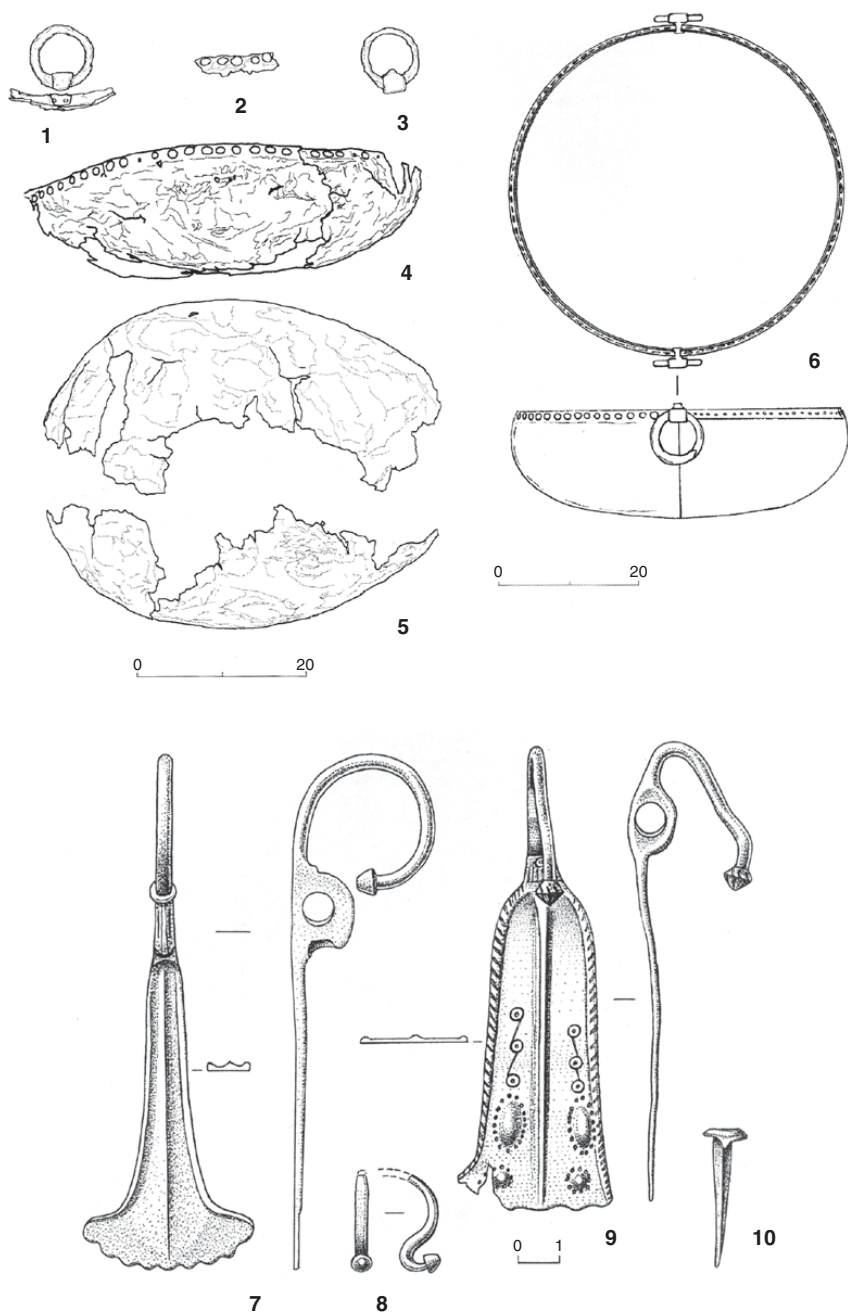




Figs. 9.22–9.24 (Continued)

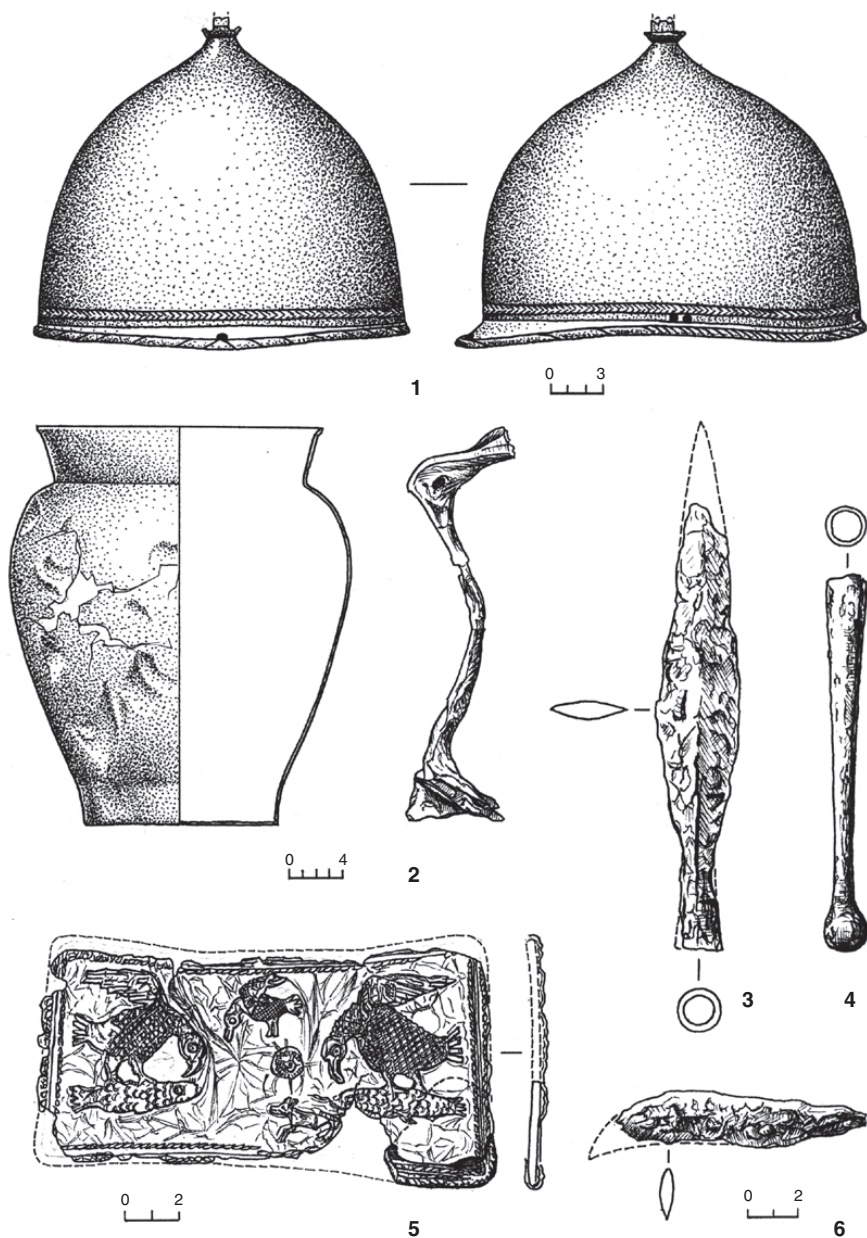
not have been just grave goods because they often included several sets of bridles and *psalia*, while even the elite burials of this period and the following period did not contain more than one bridle set.<sup>119</sup> However, as we shall see below, there is not enough evidence to support these conclusions.

On the one hand, an unusually high number of objects of the same functional character is one of the possible features characteristic of elite burials, emphasizing the special status of the deceased.<sup>120</sup> On the other hand, there are no male elite burials of the third to first century BCE in the territory of the Northern Black Sea region, with the exception of the burial found in the



Figs. 9.22–9.24 (Continued)

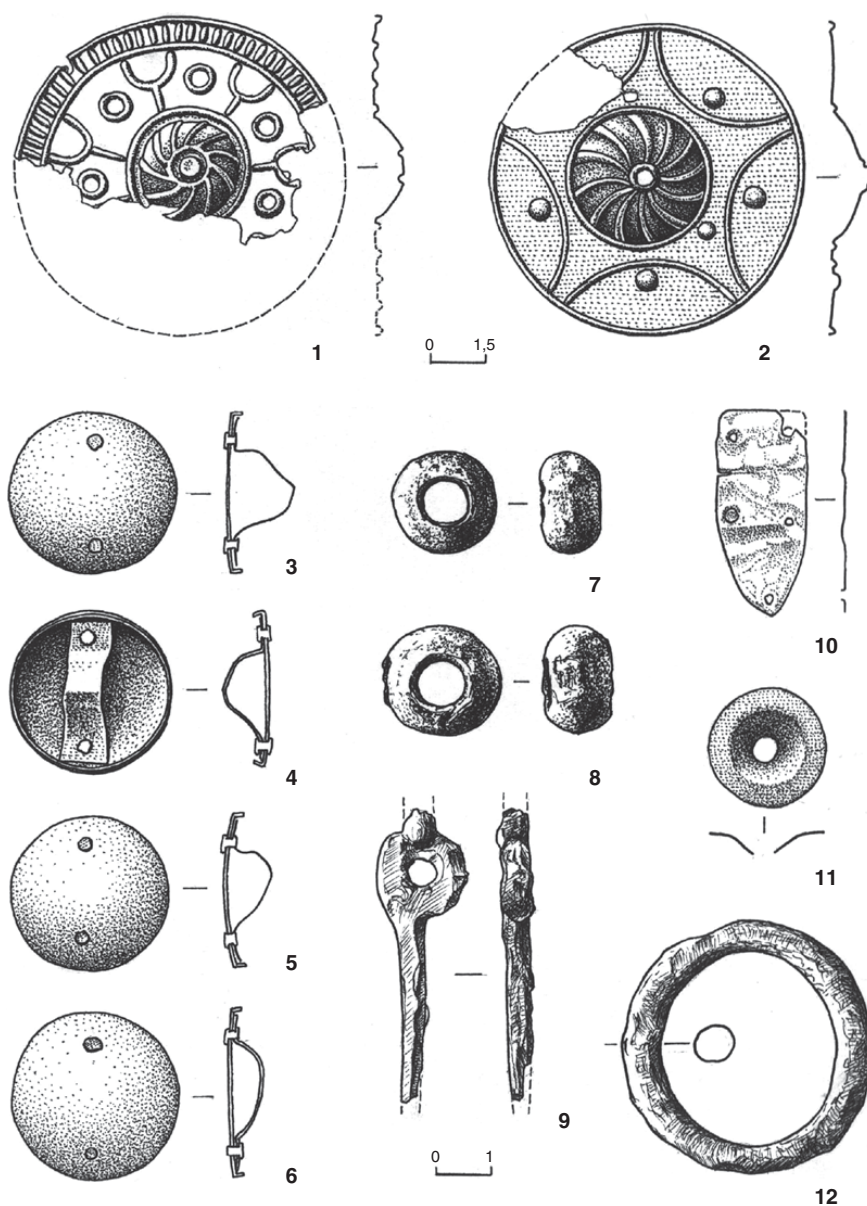
cultural layer of the settlement of Kamenskoe. In general, not many burial complexes of this period are known at all – only a few dozens of them have been excavated.<sup>121</sup> This fact prompted some scholars to assume that the territory in question was not populated (despite the existence of several settlements



Figs. 9.25–9.27. The Northern Black Sea region. The “ritual deposit” at Veselâia Dolina (the second century BCE) (after Mordvinceva and Redina 2013b, 394, Abb. 1; 395, Abb. 2; 396, Abb. 3).

in the Lower Dnieper area). Ţurii Zaitsev, for example, suggested that “votive deposits” might have marked the main communication routes through the unpopulated territory and probably are the remains of some ritual ceremonies that took place during caravan journeys.<sup>122</sup> This conclusion also appears not to be well supported. Caravans usually followed particular routes, and if, indeed,

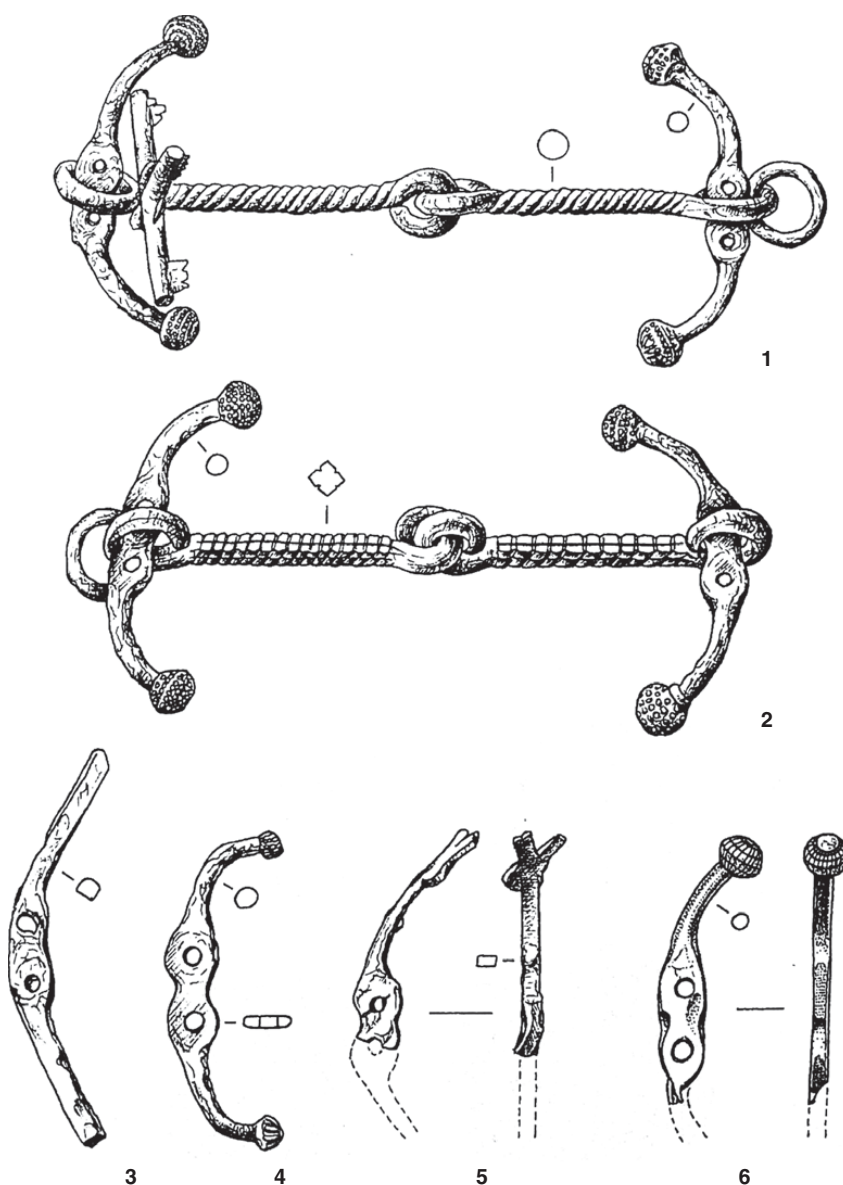




Figs. 9.25–9.27 (Continued)

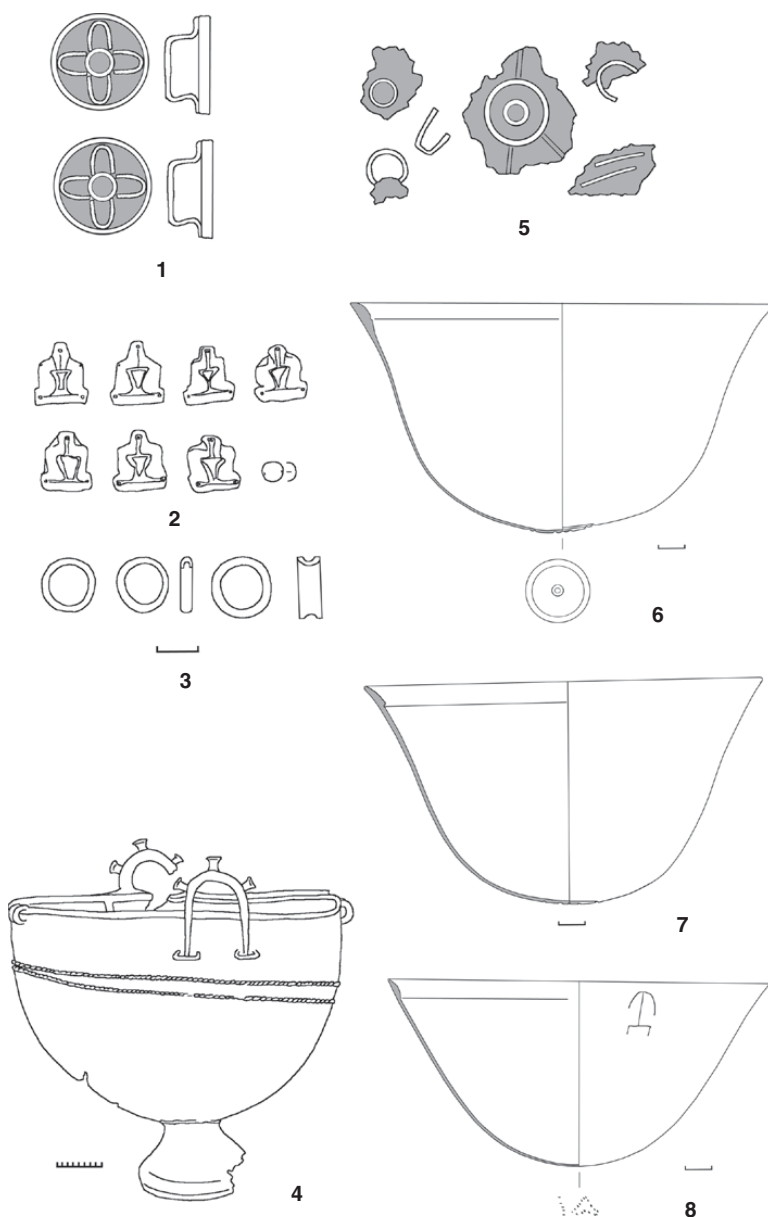
the “deposits” marked such routes, this would be visible on a map showing the distribution of the “deposits.” In reality, such a map shows that the “deposits” have been found everywhere throughout the territory of the Northern Black Sea region.<sup>123</sup>

The circumstances under which these archaeological monuments have been discovered (i.e., their location and the state of the objects – broken or intact), as well as the contents of the “deposits,” are very important for their



Figs. 9.25–9.27 (Continued)

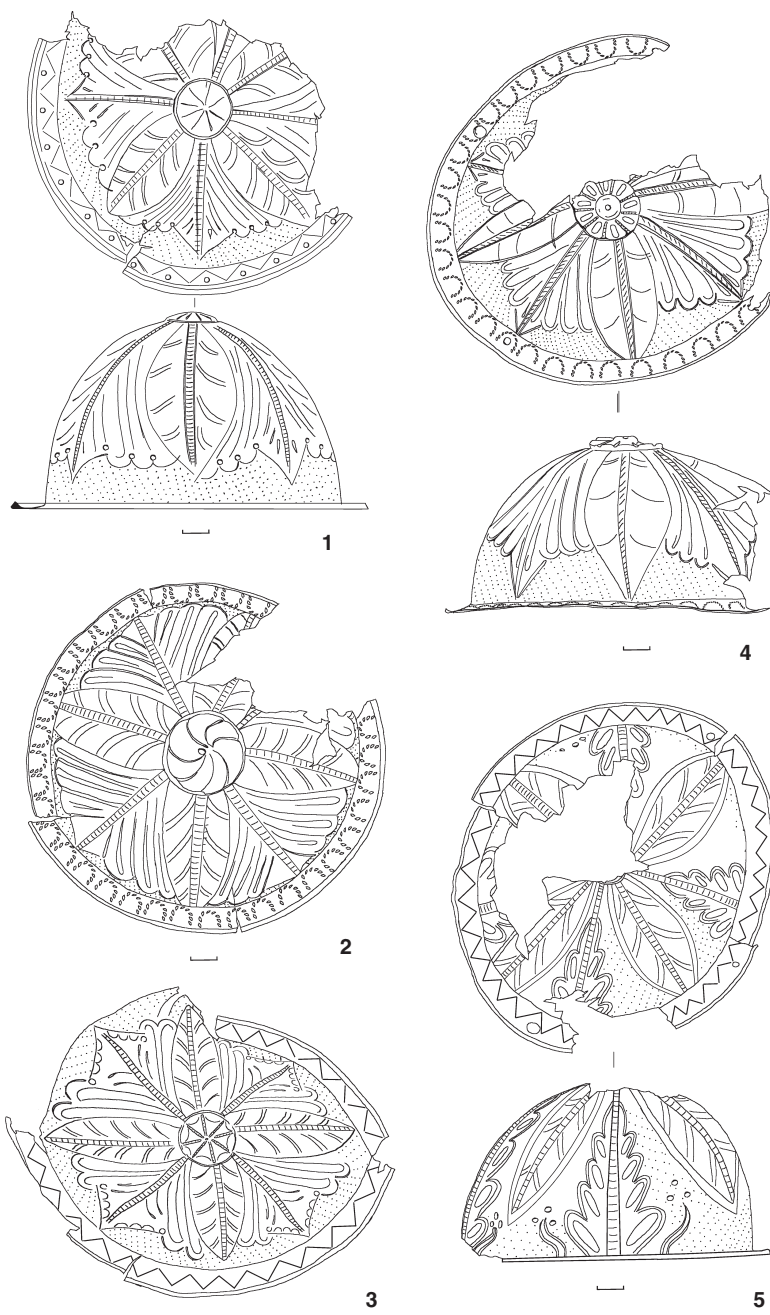
interpretation.<sup>124</sup> All complexes of this type were found far away from settlements, near burial sites or even in kurgan mounds, and most items discovered in them were broken. It follows then that the objects were buried on purpose, with no intention that they should be used in the future. Therefore, it is clear that these “deposits” were of a sacred character: they may have been votive



Figs. 9.28–9.29. The Northern Black Sea region. The “ritual deposit” at Bulakhovka (the first century BCE) (after Mordvinceva 2013, 402, Abb. 1; 403, Abb. 2; 405, Abb. 3).

offerings to some supernatural forces or a dedication to a deceased for the afterlife. Similar votive offering of the Celts to their gods were described by Caesar (*Gall.* 6.17) and Tacitus (*Ann.* 13.57). Sacred “deposits” as part of mortuary rites are also mentioned in ancient Germanic sagas.<sup>125</sup>

In order to determine to what type of “ritual deposits” the North Pontic complexes belong, one has to analyze their contents. Most such finds consist



Figs. 9.28–9.29 (Continued)

of parts of horse harnesses and their decorative elements, silver drinking cups, amphora fragments, weaponry, protective armor, and, sometimes, jewelry. In some cases, the objects are put into a container – a bronze vessel or a helmet. Therefore, the burying of these items must have been a one-time action,

associated with some particular event. In some areas adjacent to the Northern Black Sea region, where the tradition of burying such “deposits” spread (the Lower Don area, the territory between the Volga and the Don, and the Kuban region), the contents of the complexes in question are similar to the grave goods of elite burials where warrior horsemen were buried. The event with which the burying of a sacred “deposit” was most likely associated was the death of a member of the elite. The presence of several sets of harnesses does not contradict this conclusion, but, on the contrary, supports it.

Thus, “ritual deposits” discovered in the Northern Black Sea region were, most likely, buried intentionally and should be associated with some funerary ritual. The fact that only a very small number of burials dating from the third to first century BCE is known may indicate that mortuary rites that were common in this region did not leave behind any remains of the deceased that could be detected archaeologically (such as burials in water or in the open air). The rites, the contents of the “ritual deposits,” and the types of objects found in them demonstrate the similarities between the culture of the peoples who populated the Northern Black Sea region in the Late Hellenistic period and the La Tène cultures that dwelled in the territories of modern Bulgaria, Romania, and Hungary. For the latter, the tradition of burying “ritual deposits” containing precious *phalerae* from horse harnesses, silver bowls, and other objects, was also typical. It is clear that these regions of Eastern Europe, including the Lower Dnieper area, were all part of the same system of social and political networks.

### *Conclusions*

The analysis of the North Pontic monuments offered above leads us to the following conclusions. The archaeological situation in the Northern Black Sea region differs from that in the Lower Volga region in many aspects. In the former, mortuary rites that existed from the third to first century BCE can be traced in the archaeological material only to a very small extent. The very few burials dating to this period that have been found and studied are completely different from the complexes located in the steppe zone east of the Don. They have no animal products and almost no weaponry, but contain fibulae of the Middle La Tène scheme. The presence in this region of the settlements that appeared no later than the second century BCE confirms that this territory was populated and that the population was not nomadic. The contents of the funerary goods found in the so-called ritual deposits indicate that this region was part of social and political network that also included the cultures of the La Tène type, which existed in the territory of modern Romania, Bulgaria, and Hungary. The burial discovered in the cultural layer of the settlement of Kamenskoe points toward the existence of contacts with

the Crimean population. No traces of the relations with the nomadic cultures that were located east and southeast of the Don have been found. Therefore, if we understand by the “Sarmatians” the nomads who left behind the kurgan burial-grounds that were characteristic of the Lower Volga region, then there is no archaeological evidence that a population of the same economic and cultural type inhabited the Northern Black Sea region prior to the first century BCE.

Monuments that are similar to those of the Lower Volga region, in terms of mortuary rites (kurgan burial-grounds and the types of graves) and the standard contents of grave goods (a ram’s leg, a knife, and a vessel), appeared in the North Pontic region in the first century BCE, at the earliest (complexes in the Northern Azov Sea area and the Ust’-Kamenskii burial-ground in the Lower Dnieper area). They coexisted with inhumation graves of the burial-grounds that belonged to the settlements of the Lower Dnieper area and were characterized by different mortuary rites; in some cases, these burial-grounds with inhumation graves and kurgans were located close to each other. The presence of insignia associated with a nomadic mentality became typical for elite male burials (bracelets with zoomorphic terminals, belt plaques, and details of horse harnesses executed in animal style). All ostentatious burials in the Northern Black Sea region of the first century CE, as with comparable complexes in the Lower Volga region, contained luxury items imported both from the East and from the West, which indicates that the polities located between the two great empires of antiquity – Rome and China – all became part of the same system of social and political relations.

During the next period (the second to third century CE), various burial rites still coexisted, probably practiced by societies of different economic and cultural types. The absence of ostentatious burials during this period, as in the case of the Lower Volga region, might be associated with the general weakening of Rome’s control over the territory in question, which stopped the influx of luxury items in this direction. During this period, the formation of the Cherniakhov Culture was taking place in the western part of the region, while the complexes in the eastern part (the Northern Azov Sea area) looked similar to the monuments of the Lower Don area (settlements and burial-grounds in the Don delta), which flourished at that time.

Therefore, we can conclude that after the “Scythian” monuments (which, in general, must have been left behind by a nomadic culture) suddenly disappeared in the North Pontic region, a settled population appeared there, similar to the cultures of the La Tène type of the Northwestern and Western Black Sea regions. The nomads came to this land, most likely, only in the first century BCE, and occupied the same territories that were inhabited by the settled population. The situation remained more or less unchanged until the end of the Sarmatian period.



### The Question of the Sarmatian Conquest of Scythia

Let us now turn to one of the key-questions in the history of the Northern Black Sea region, i.e., the problem of the Sarmatian conquest of Scythia. The first-century-BCE report by Diodorus Siculus of the “Sauromatae,” who “ravaged a large part of Scythia, and destroying utterly all whom they subdued ... turned most of the land into a desert” (Diod. 2.43.6–7),<sup>126</sup> is usually viewed as evidence in support of the theory that the Sarmatians conquered Scythia around the very end of the fourth or during the first few decades of the third century BCE.<sup>127</sup> It has been assumed that this conquest must have left traces in the material culture of the people who populated the Northern Black Sea region during that period.

Rostovtzev interpreted the finds of particular objects in some of the burial complexes of the fourth to third century BCE in the Middle Dnieper area and the Kuban region, in which he saw a considerable Iranian influence, as evidence of a Sarmatian presence in the territory of the “Herodotean Scythia.”<sup>128</sup> He associated the spread of round appliquéés from horse harnesses – *phalerae* (which, according to him, were totally uncharacteristic of the Scythian horse harness) – with the arrival of new peoples from the East in the North Pontic region. For Rostovtzev, the presence of these objects was clear evidence of the presence of a new Iranian culture.<sup>129</sup> He also viewed the polychromy – the combination of silver with partial gilding on the *phalerae* and the decoration of the jewelry (first of all, brooches) with inlays of precious stones and multicolored glass – as new features in the applied arts, indicating the presence of a new culture. Rostovtzev associated this new culture with the Sakae.<sup>130</sup> According to him, already in the second century BCE, “the Sarmatians appeared in South Russia in compact masses, one tribe after another, and occupied the steppes of South Russia first, from the Ural region to the Dnieper, and later to the Danube. Their advance is marked by the almost complete disappearance of Scythian graves, and the gradual spread of new forms of burial similar to, but in no way identical with the Scythian ones.”<sup>131</sup> Great Scythia fell, and the Scythians were driven into the Crimea and Dobrudja.<sup>132</sup> The methodology employed by Rostovtzev in his historical reconstruction was based on the identification of the ethnicity of the people who left behind the archaeological complexes in question by using specific key-features of their material culture – certain categories of objects (such as *phalerae*, belt hooks, and brooches) or the decorative style of individual items (such as polychromy and animal style). The choice of these particular categories and features was determined by his ideas about how the historical process was reflected in material culture. In order to prove the eastern origins of these chosen categories and styles, Rostovtzev used the method of analogy, i.e., he looked for similarities between one or more features in different objects. However, he did not analyze the entire corpus of material, basing his conclusions only on individual finds.

During the Soviet period, large-scale excavations yielded massive amounts of archaeological material, and Sarmatian culture was recognized, based on studies of the monuments from the Lower Volga region and the foothills of the South Ural Mountains. As a result, the search for archaeological proof for the Sarmatian conquest of Scythia took a new direction: scholars started to look for complexes in the Northern Black Sea region that would be similar to those found in the “motherland” of the Sarmatians, i.e., in the Lower Volga region and the foothills of the Ural Mountains.

According to a hypothesis advanced by Smirnov, burials corresponding to the “standard” Sarmatian complexes should have appeared in the North Pontic region in the third century BCE. The migration of Sarmatian tribes from the Lower Volga region and the foothills of the Ural Mountains to the Lower Dnieper area was associated with the Roxolanae.<sup>133</sup> However, in the 1950s, not many burials were yet known in the territory west of the Don that would date to the period of the supposed arrival in this area of the migrants from the Lower Volga region and the foothills of the Ural Mountains. And even the burials discovered demonstrated clear differences from the culture of the latter. Smirnov considered this situation “the weakest spot of Soviet Sarmatology,”<sup>134</sup> assuming that the Northern Black Sea region just had not been studied enough, which prevented scholars from being able to “trace the first migration of the Sarmatians.”<sup>135</sup> However, the absence of archaeological evidence for the Sarmatian migration did not at all influence the general interpretational model.

Most burials that have common features with the complexes from the Lower Volga region date to the period after the first century BCE, as shown by an analysis published by Maïia Abramova in a special volume devoted to the early Sarmatian monuments in Ukraine.<sup>136</sup> She, however, dated a group of “deposits” to the third century BCE, i.e., to the period of the supposed conquest of Scythia by the Sarmatians, referring to them as ostentatious burials, following Smirnov’s interpretation.<sup>137</sup> She viewed these rich “burials”/“deposits,” along with individual finds of poor graves, as evidence in support of the “information provided by ancient authors about the mass migration of the Sarmatian tribes, which started at that time,”<sup>138</sup> despite their dissimilarity to the complexes of the Lower Volga region.

Smirnov also maintained that the “deposits” were unequivocal evidence of the Sarmatian migration from the Lower Volga region to the Dnieper area and discussed this idea in detail in his book *Sarmaty i utverzhdenie ikh politicheskogo gosподstva v Skifii* (“The Sarmatians and the Establishment of Their Political Dominance in Scythia”), published posthumously.<sup>139</sup> For him, these complexes were one of the indicators of the Sarmatian advancement from east to west. To illustrate this process, he dated the most easterly complexes to the earlier period (the third century BCE), and the westerly, to the later



period (the second to first century BCE),<sup>140</sup> although there were no grounds for such dating.

While studying the contents of the “deposits,” he encountered some categories of objects that were not at all characteristic of the Early Sarmatian culture of the Volga region and the foothills of the Ural Mountains, namely, Celtic helmets, fibulae of the Middle La Tène scheme, and horse *phalerae* of a particular kind.<sup>141</sup> Rostovtzev identified the latter as a significant feature of the “first Sarmatian wave,” but they played no important role in Smirnov’s reasoning. These objects were so foreign to the historical “motherland” of the Sarmatians that the complexes where they had been found were not included in the corpus of the monuments of the Sarmatian culture at all.<sup>142</sup> Smirnov noted that they did not have any analogies in the “motherland” of the Sarmatians, but left unexplained the presence of these items in almost every “deposit” that he discussed, mentioning only their possible places of origin – “the North Pontic production centers and even the distant centers in Central Asia.”<sup>143</sup>

The final conclusion of the book repeats the point of view presented by Smirnov in his other works. He argues that in the fourth to third century BCE, mighty tribal unions that had formed in the Volga region and in the foothills of the South Ural Mountains “became so strong that they were able to conquer large territories and migrate to the North Caucasus and politically weak Scythia.”<sup>144</sup> Smirnov explained the radical differences between the material remains left behind by the population of the Northern Black Sea region and those of the “standard” archaeological culture of the “motherland” by suggesting that the Early Sarmatians “may have somewhat changed their culture when they migrated from one area to another, as we often observe in nomadic cultures, when they start losing their ties with their motherland.”<sup>145</sup>

The absence in the North Pontic region of burial complexes similar to those in the Volga and the Ural regions dated to the period of the supposed conquest of the former by the Sarmatians, as well as the abrupt disappearance of Scythian kurgans starting from the early third century BCE, followed by the almost complete disappearance of their archaeological monuments (both burials and settlements), prompted scholars to look at the problem of Scythia’s conquest by the Sarmatians from a new perspective. Thus, Polin maintains that the Sarmatians did not come to the Northern Black Sea region before the second half of the second century BCE and explains the disappearance of Scythian culture by the aridization of the steppe, which led to its abrupt depopulation in the third century BCE.<sup>146</sup> After an analysis of the complexes in the Northern Black Sea region that had been dated to the period from the fourth to third century BCE and just to the third century BCE, Polin came to the conclusion that the former should be dated rather to the end of the fourth century BCE, and the latter, to the second century BCE.<sup>147</sup> The third century BCE, therefore, does not feature in this chronological reconstruction at all. A similar situation,

according to Polin, can be observed also in the neighboring territories – the Kuban region, the Don area, and the territory between the Volga and the Don<sup>148</sup> – as well as in the more distant regions – Central Kazakhstan, the area of Southern Lake Balkhash, and Tuva.<sup>149</sup>

This concept has been criticized by both archaeologists and historians.<sup>150</sup> On the one hand, the chronological analysis undertaken by Polin appears to be not completely flawless – some complexes can be definitely dated to the third century BCE.<sup>151</sup> On the other hand, the archaeological monuments of the Lower Dnieper area, dated from the second to first century BCE, also form a rather small group and differ from the monuments of the Volga and Kuban regions and the Don area. Thus, there are no monuments in the steppe zone between the Danube and the Don that would be comparable to the monuments spread throughout the territory of the Sarmatian “motherland” – the Volga region and the foothills of the Ural Mountains – and date to the period when the Sarmatians should have reached the Danube, according to the historical model that is based on literary sources.

The overview of literary sources and archaeological evidence from the Northern Black Sea and the Lower Volga regions offered above allows one to view this problem from a different perspective. Since the idiosyncrasy of the North Pontic region in the eyes of Greeks and Romans lay in its nomadic population, idealized by some authors and described in horrifying detail by others, then the general terms “Sarmatians” and “Sarmatia” may have been used in reference to several different groups of the population, including those belonging to different economic and cultural types. As mentioned above, the name of the historical region of Scythia may have been replaced by the *choronym* “Sarmatia” as a result of the appearance of new political partners of Greek cities sometime around the late third to the early second centuries BCE, who did not necessarily have to live in the North Pontic steppes. It would have been enough for these new leaders to have control over this territory, populated by other peoples.

In this connection, other evidence concerning the developments in the Northern Black Sea region in the third to second century BCE should be taken into account. Thus, the decree in honor of Protogenes, discussed above, mentions the “Galatians” and the “Skiri,” who threatened Olbia.<sup>152</sup> This report is in agreement with the information that we have about the expansion of the Celts during the third century BCE – first into Macedonia and Thrace, and then into Greece and Asia Minor.<sup>153</sup> Their advance farther east, most likely, resulted in the destruction of Olbia’s *chora* and caused the economic crisis of the city, since the *polis* lost the main part of its agricultural territory, which formed the basis of its economy.<sup>154</sup> Strabo mentions the tribes of the “Getae,” “Tyregetans,” and “Bastarnians,” as well as the “Bastarnians mixed with the Thracians,” all living in the territory between

the Danube and the Don (Strabo 7.1.1; 7.3.2), which can serve as indirect evidence of an invasion from the west, accompanied by changes in the ethnic composition of the population. The archaeological material left behind by the population of the Northern Black Sea region of the third to first century BCE also points towards a western direction in its social and political contacts.

In the following period (from the first century BCE onwards), the distribution of the archaeological monuments of the nomads in the steppe zone of the Northern Black Sea region may have been connected with the political developments in this region, prompted by the expansion of the Roman Empire and the actions of the Pontic king Mithridates VI Eupator. In his struggle against Rome, the latter turned for support to the barbarian leaders, who were the neighbors of the Bosporan Kingdom. It is possible that diplomatic gifts, dynastic marriages, and other political means of influence contributed to the consolidation of the barbarian population, and especially its nomadic element, in the eastern part of the Northern Black Sea region, which resulted in the emergence of new centers of power and led to the appearance of ostentatious burials, accompanied by especially rich grave goods, in the entire territory adjacent to the northern and northeastern coasts of the Black Sea and the Azov Sea. These changes probably caused a shift in the balance of the political powers in the region, and the nomadic world turned to the centers of Greco-Roman civilization.

In general, we may assume that during the Sarmatian period the neighboring “centers of civilization” exercised considerable structural influence over the culture of the peoples who inhabited the steppe zone of European and partly of Asiatic Sarmatia (i.e., the territories adjacent to the northern coasts of the Black Sea and the Azov Sea). The mere existence of these centers and the political and economic developments that took place there were one of the factors that, to a great extent, determined the changes observed in the material culture of the peoples who populated the “barbarian” territories.

## NOTES

### INTRODUCTION

- 1 The sites of Histria, Kallatis, and Tomis are located in the region to which today we refer as the Western Black Sea.
- 2 Brashinskiĭ 1970, 134–6; Vinogradov 1997b, 5.
- 3 Vinogradov 1997b, 6.
- 4 Davies 2001, 27.
- 5 Davies 2001, 27–8.
- 6 Mitchell 2002, 42.
- 7 Mitchell 2002, 47.
- 8 Mitchell 2002, 38 (with reference to Hdt. 4.8), 52 (with reference to App. *Mith.*); also see Dan 2014, 8.
- 9 Mitchell 2002, 39, nn. 20–1 (with references to Mela 1.14 and Ath. 8.351).
- 10 Mitchell 2002; Dan 2007–9.
- 11 Mitchell 2002, 39, with references to Dittenberger 1907, 8–9 and Chantraine 1956, 109.
- 12 Cojocaru 2009c, 52; also see the chapter by Angelos Chaniotis in this volume. Cojocaru suggests that the reference to Orontas' father as σύνπαντος τοῦ Ποντικοῦ πρατιστεύσαντος ἔθνεος may be connected with the honorary title υἱὸς τοῦ Πόντου featured in later inscriptions from the Western Black Sea region (such as ISM II 52).
- 13 Trans. E. S. Shuckburgh, London and New York, 1889; repr. Bloomington, 1962.
- 14 Ivantchik 1999b; Ivantchik 2001b; Gavriilyuk 2007.
- 15 Gavriilyuk 2007, 135–6.

### CHAPTER 1

- ★ This chapter was written with financial support from the Russian Science Foundation (project 15–18–30047).
- 1 Vanschoonwinkel 2006, 53–4, 63–70, 75–6, 94–7, with further references.
  - 2 Hiller 1991, 207–15.
  - 3 Ivantchik 2005, 106–7.
  - 4 Özgüç 1978, 66, pl. D, 83–4.
  - 5 Edzard 1993.
  - 6 Özgüç 1978, 66.
  - 7 Pace Vanschoonwinkel 2006, 77.
  - 8 For a list of such finds, see Vanschoonwinkel 2006, 44–5, and *passim*.
  - 9 Carpenter 1948, 1–10.
  - 10 Labaree 1957, 29–33; Graham 1958, 26–31.
  - 11 On this subject, see, especially, Bidder 1889.
  - 12 He, however, also expressed an opposite opinion (1.1.10).
  - 13 Gisinger 1924, 534–5; Carpenter 1956, 156–83; Moulinier 1953, *passim*, map 1; Bunbury 1959, vol. 1, 38–9; Thomas and Stubbings 1962, 284; and others.
  - 14 Trans. H. C. Hamilton and W. Falconer, London, 1903.

- 15 Tolstoï 1908; Tolstoï 1918; Diehl 1927, 633–43; Diehl 1953; Hommel 1980; also see Hedreen 1991, 313–30; Hupe 2006. For archaeological data, see Okhotnikov and Ostroverkhov 1993.
- 16 For these beliefs, see Rohde 1921, vol. I, 86–110, vol. II, 369–72; Kroll 1953; Nilsson 1955, vol. I, 324–9; Burkert 1985; cf. Sourvinou-Inwood 1995, 17–56.
- 17 For a detailed discussion of these counterarguments, see Ivantchik 2005, 69–71.
- 18 For the Isles of the Blessed and Elysium being one and the same, see Rohde 1921, vol. II, 369–70, n. 2; Burkert 1960/61, 208–13; Roloff 1970, 93–101.
- 19 For the arguments, see Ivantchik 2005, 70–3.
- 20 Okhotnikov and Ostroverkhov 1993, 28–9.
- 21 Okhotnikov and Ostroverkhov 1993, 24–5; for a possible reconstruction of the temple, see Rusaeva 2003.
- 22 Rusaeva 1979, 127–35; Okhotnikov and Ostroverkhov 1993, 54–61.
- 23 Bujskich 2006a, 111–53; S. B. Bujskikh 2007, 201–12, with the historiography and references to earlier literature.
- 24 Ivantchik 2005, 73–4.
- 25 Vinogradov 1971, 74–100; for further references, see *SEG* XXVI (1979) 205, no. 845; Dubois 1996, 50–5, no. 23.
- 26 Ivantchik 2005, 74–5.
- 27 See also the fragment from an epic poem that probably belonged to the Cycle, mentioning the transfer of Achilles' body to the Isles of the Blessed in the Ocean without mentioning Leuke: *P.Oxy* 2510 (Lobel 1964, 7–10). This fragment is usually considered a part of the *Little Iliad*, although with a question mark (fr. 32 Bernabé; cf. Bravo 2001, 49–83).
- 28 For details, see Severyns 1953; Severyns 1963.
- 29 Lesky 1967, 762–4, with further literature; Huxley 1969, 144; also see Dihle 1970, 9–44; Andersen 1982, 7–34.
- 30 Severyns 1928, 322–4; cf. Kullman 1992, 298–9.
- 31 Ivantchik 2005, 76–7; for a different interpretation, see Sourvinou-Inwood 1995, 104.
- 32 For the importance of the introduction of new hero cults in the colonization process, see Antonaccio 1999, 109–21.
- 33 For the cult of Achilles in other parts of the Greek world and its connection with sports competitions, see Mavrogiannis 1994, 291–347. The part of this work that concerns the cult of Achilles in Olbia (313–22) is, however, rather superficial and not entirely correct.
- 34 See, for example, Hom. *Od.* 4.563–9; Hesiod *Op.* 171; and Pindar's texts mentioned above.
- 35 For the localization of the land of the Laestrygonians and the nearby spring of Artakia (Hom. *Od.* 10.107) in the proximity of Kyzikos, see Ivantchik 2005, 59–62.
- 36 Radermacher 1915, 17; Mühlestein 1979, 147–8; Hölscher 1988, 145–6.
- 37 Schwartz 1924, 52, 267–8. Even if the Planktai in the time of Homer had not been identified yet with the Kyaneae of the Thracian Bosphorus, their later localization at the entrance to the Black Sea, starting at least with Herodotus (4.85), clearly testifies to its identification with the Ocean. See also Ivantchik 2005, 60–1, with references to the texts that provide the identity of the Planktai and the Symplegades.
- 38 For a detailed discussion of this passage, see Ivantchik 2005, 53–66.
- 39 Wilamowitz-Moellendorff 1906, 171–2.
- 40 Lesky 1966, 40–3.
- 41 Wackernagel 1897, 7.
- 42 For this fragment and a reconstruction of its context, see Lesky 1966, 27–31; Dräger 1996, 30–45; cf. Allen 1993, 88–93.
- 43 Kirchhoff 1879, 287–9; Wilamowitz-Moellendorff 1884, 165–7; Wilamowitz-Moellendorff 1916, 361–3, 490–92; Meuli 1921.
- 44 Wilamowitz-Moellendorff 1884, 167. Apart from Σίνωπος, another person who may be connected with the known toponymy of the South Pontus is Ὀρμένιος. This name could be linked to that of the settlement of Ἀρμένη or Ἀρμήνη located near Sinope. Cf. Ἀρμενος,

- an eponym of the Thessalian city of Ὀρμένιον/Ἀρμένιον (Hom. *Il.* 2.734; Strabo 11.4.8; 11.14.12); also see Hirschfeld 1896; Meyer 1939.
- 45 Seeliger 1884, 532; Kubitschek 1933, 292.
- 46 West 2002; cf. Will 1955, 124–9.
- 47 Melikishvili 1959, 181–3; Melikishvili 1960, 278–82; Melikishvili 1962, 320–6; Salvini 2008, 419–31.
- 48 Also, for the mythological connections of Aeetes and Medea with Corinth, see Schol. Pind. *Ol.* 13.75; Schol. Eur. *Med.* 9; Tzetz. Schol. Lyc. 174; Paus. 2.3; and others; cf. Escher-Bürkli 1894, 943; Gruppe 1906, vol. 1, 128–33, 557; Will 1955, 81–129.
- 49 Ivantchik 2005, 85–98.
- 50 Blavatskii 1954, 13.
- 51 Lampros 1873, 8–10; Graham 1983, 26–8; Leschhorn 1984, 98–105, 339–43 (about the cult of *oikists*), 109–15, 360–3 (the role of Apollo), with further literature; Malkin 1987, 189–266; also see Ivantchik 2005, 142–8.
- 52 For the analysis of this tradition, see Ivantchik 2005, 142–3.
- 53 For this myth, see Kerényi 1963; Duchemin 1974; Pisi 1990; West 1994.
- 54 Trans. A. T. Murray in the Loeb edition, 1919.
- 55 For the images, see *LIMC* VII, s.v. “Prometheus,” 531–53, especially, 539–42, nos. 54, 67–71.
- 56 *LIMC* VII 542, no. 72.
- 57 See, for example, Miller 1887, 128–9; Klinger 1903, 100–1; Grakov 1950, 7–18; Grantovskii 1960; Tolstoï 1966, 232–48; Raevskii 1977, 19–80; and others. Cf. Ivantchik 1999b, 141–92; Ivantchik 2001b, 207–20. A similar story about the origins of the Celts (Diod. 5.24; Parth. 30; *Etym. Magn.*, s.v. Κελτοί) is clearly a late literary creation modeled on the legend related by Herodotus (see Lightfoot 1999, 533; pace Podosinov 2014).
- 58 Cf. Ballabriga 1986, 103–46.
- 59 One of the most conspicuous examples of such pseudo-historical pieces is the Greek tradition concerning the pharaoh Sesostriis and his war against the Scythians (see Ivantchik 1999a; Ivantchik 2005, 190–220).
- 60 Kopylov and Larenok 1994; Kopylov and Larenok 1998, 107–114; Kopylov 1999, 1–11.
- 61 Koshelenko and Kuznetsov 1992, 18–19; Zavoikin and Garbuzov 2010, 184–219; Zhuravlev and Schlotzhauer 2011, 252–93.
- 62 Nikolai Sudarev, personal communication.
- 63 Vladimir Tolstikov, personal communication.
- 64 In antiquity, the Strait of Kerch looked different: the Black Sea and Azov Sea were connected by a strait that had two arms, separated from one another by one large and two small islands; the modern Strait of Kerch is located at the site of the ancient western arm (Zhuravlev and Schlotzhauer 2011, 254–60). I refer to them as two arms of the same strait rather than two straits because this is how the Greeks must have viewed them: none of the ancient sources mention two straits, but always talk about one Cimmerian Bosphorus.
- 65 Its mention by Hecataeus is doubtful (*FGrHist* 1 F 197 = Amm. Marc. 22.8.13).
- 66 Boisacq 1916, 128; Frisk 1960, 254; Chantraine 1968, 187; and others.
- 67 *Etym. Magn.*, s.v. Βόσπορος.
- 68 For the analysis of various explanations of the toponym in question and the arguments in support of its Thracian origin, see Tokhtas’ev 1999a.
- 69 For these toponyms, see Tokhtas’ev 1984, 142–8.
- 70 For a detailed discussion of the problem of archaeological identification of the Cimmerians, see Ivantchik 2001a.
- 71 For more details about these traditions, see Geffcken 1892, 30; Rohde 1901, 91–2; Corssen 1913, 438; Tokhtas’ev 1999b, 13–16; Ogden 2001, 61–74; Ivantchik 2005, 127–34 (all with further literature).
- 72 For more about this passage, see Ivantchik 2005, 53–66, with further literature.
- 73 Shnūkov et al. 1986; Nikonov 2002.

- 74 It is interesting that these places evoked similar associations in the minds of the Cossacks, who were moved here at the end of the eighteenth century, mostly from the Zaporizhia region. Peter Simon Pallas, who visited Taman in 1794, wrote that the Cossacks living there called Kuku-Oba, the largest mud volcano in the area, “Pekla,” which means “Hell,” and considered it to be hell’s chimney (Pallas 1803, 279). He also provides a detailed description (based on his own experience and the words of other witnesses) of a most violent volcanic eruption, which took place in the same year (1794), and of its aftermath (ibid. 279–89).
- 75 Gerš 1898, 153–6; Tunkina 1993, 12–13, 18–21; for further literature, see the commentaries to inscriptions *CIRB* 1014 and *CIRB* 1015.
- 76 Marchenko 1962; Marchenko 1963, 95.
- 77 Zavoikin 2006, with references to earlier publications.
- 78 The most recent publication of this inscription, based on the study of the original stone, is Tokhtas’ev 1994, with a discussion of the form of the name.
- 79 Marchenko 1960, 101; Marchenko 1962, 121; Marchenko 1963, 86; Marchenko 1977, 122.
- 80 Tokhtas’ev 1983, 115–17. For a different opinion, according to which the story related by Strabo is a version of a local colonial myth, see Koshelenko 1999. The hypothesis advanced by Sergeĭ Tokhtas’ev seems to provide a better explanation of Strabo’s text (in particular, the obvious sexual connotation of the myth), although Strabo’s account does not allow us to identify its source, so that any explanation, in this case, will remain hypothetical. In any case, the two interpretations are not incompatible: the mime suggested by Tokhtas’ev certainly could have (and even must have) employed and parodied elements of the local temple legend – for example, Heracles’ participation in the story. However, the comparison of Strabo’s myth with the myth of Heracles as the progenitor of the Scythians, which is linked to the area of Olbia and is known in several versions (for the most detailed one, see Hdt. 4.8–10), looks artificial, as Tokhtas’ev noted.
- 81 Gruppe 1906, 1525.
- 82 Koshelenko maintains that the sanctuary of Aphrodite *Apatouros* on the Taman Peninsula was the only one and places it “in the *chora* of Phanagoreia” (1999, 148–9). However, Strabo’s text contradicts this assumption: the Apaturum, together with Hermonassa, is situated on the right of those sailing into the Corocondamitis, i.e., in Sindike, whereas Phanagoreia was located on the left, on an island separated from Sindike by the river Hypanis (modern Kuban). Moreover, epigraphical material confirms that sanctuaries where either “Aphrodite *Ouranía*, the Mistress of the Apaturum” or Aphrodite *Apatouros* were venerated existed also beyond the Apaturum, in the main Bosporan cities (Pantikapaion, Phanagoreia, and Tanais). These were probably some kind of “branches” of the main sanctuary at the Apaturum.
- 83 Mette 1936, 88, 92–3.
- 84 Rohde 1921, 213, n. 1.
- 85 Cf. Ivantchik 1988, 14–15; Zavoikin 2006, 70, n. 46.
- 86 See also Ramin 1979, 69.
- 87 For more about this text, see Ivantchik 2005, 18–52.
- 88 For Herodotus renouncing the speculative view of the world (and the concept of the Ocean, connected with it) and embracing the worldview that was based on empirical data, see Romm 1989, 99–102; Romm 1992, 32–41, with further references.
- 89 Kopeikina 1972, 156.
- 90 Vakhtina 1998, 122–39; Vakhtina 2000, 209–17.
- 91 About this terror and the association of the Ocean with chaos, see Romm 1992, 15–26.

## CHAPTER 2

- 1 Purcell 2005, 121.
- 2 See, for example, Robinson and Wilson 2011; Keay 2012.
- 3 Horden and Purcell 2000, 393; also see Karmon 1985.



- 4 The depths of the coastal waters in this area are relatively low – 25–60 m (Bruĭako and Karpov 1992, 87; Nazarov 2003, 18, 111). For a general geographical description of the Northwestern Black Sea area, see Okhotnikov and Ostroverkhov 1991, 19.
- 5 For this new – earlier – date of the foundation of Olbia, see Buĭskikh 2013a, 28.
- 6 Kozlovskaya 2008.
- 7 See, for example, Casson 1971, 361–2; Rickman 1986; Blitzer 1990, 701; Kingsley 2001, 85.
- 8 Vinogradov 1981, 15; Kryzhitsky 1987, 146; Vinogradov 1989, 65–6; Kryžickiy 2006, 102. The importance of the two main local rivers – the Borysthenes and the Hypanis – for the Olbian *polis* is reflected in the existence of the cults of the personified eponymous deities (Rusiĭaeva 1979, 23–4; Rusiĭaeva 1992, 136–8; Buĭs’kykh 2004, 5).
- 9 Bujskikh 2006b, 124. “Liman” is a local word and comes from the Greek λιμὴν, which means harbor. In the Northwestern Black Sea area it stands for estuary. Such estuaries were formed by the inundation of the mouths of the rivers, caused by marine transgression. Presently these limans may or may not be connected to the sea, and therefore not all of them can be referred to as estuaries in geological terms. The Dnieper-Bug and the Berezan’ limans, mentioned in the first part of this chapter, are of the so-called open type, i.e., they are connected to the sea, whereas some other limans discussed further in the chapter are of the closed type, i.e., completely separated from the sea (Zagorovskii 1929, 38). A more elaborate typology and a detailed description of particular limans in the Northern Black Sea region, including their geo-chemical characteristics, can be found in Garkusha and Gozhik 1984 and Moroz 1990. Also see the chapter by Ilya Buynevich in this volume.
- 10 Buĭskikh 1991, 112, with the references to Shishkin 1982, 241 and Uvarov 1851, 139, respectively.
- 11 Kryzhiĭskii, Buĭskikh, and Otreshko 1990, 72.
- 12 Kryzhiĭskii, Buĭskikh, and Otreshko 1990, 70; Shapovalov 1990, 151; Shapovalov 1991, 10; Shapovalov 1994, 149.
- 13 Kryzhiĭskii, Buĭskikh, and Otreshko 1990, 42; Bujskikh 2006a, 111, with further references.
- 14 Rusiĭaeva 2006b, 102.
- 15 Kryzhiĭskii, Buĭskikh, and Otreshko 1990, 41, with further references. By the end of the first third of the fifth century BCE, the majority of rural settlements in the area had ceased to exist (Kryzhiĭskii, Buĭskikh, and Otreshko 1990, 42–3; Bujskikh 2006a, 113; Bujskikh 2006b, 122).
- 16 Horden and Purcell 2000, 392.
- 17 S. B. Buĭskikh 2006, 51.
- 18 Kryzhiĭskii, Buĭskikh, and Otreshko 1990, 72; Bujskikh 2006b, 125.
- 19 This assumption is supported, to a certain extent, by the graffito ΟΛΒΙΟΠΟΛΙΤΙ[ΚΟΝ] featured on a wall fragment from a fourth-century-BCE gray burnished vessel of an open shape discovered during the excavation of the site. This ethnicon, probably meant to confirm that the vessel was produced by the community of the Olbiopolitai and/or was made in accordance with the standards of the Olbian *polis*, indicates that the vessel was intended for the trade with the non-Greek neighbors of the *polis* (S. B. Buĭskikh 2006, 49–51).
- 20 Horden and Purcell 2000, 393.
- 21 Kryzhiĭskii, Buĭskikh, and Otreshko 1990, 69, 76; Bujskikh 2006b, 129.
- 22 Buĭskikh 1997, 101–2; Rusiĭaeva 2000, 82.
- 23 Redina et al. 1999, 19–20; Chochorowski et al. 2001; Papuĭsi-Vladyka and Redina 2002; Papuci-Wladyka 2004; Papuci-Wladyka and Kokorzhitskaia 2004; Papuci-Wladyka and Redina 2005; Redina et al. 2008.
- 24 Chochorowski et al. 2001, 149; Papuci-Wladyka and Kokorzhitskaia 2004, 316–24; Redina et al. 2008, 149.
- 25 Redina et al. 1999, 23; Papuĭsi-Vladyka and Redina 2002, 56–7.
- 26 Symonovich 1954; Symonovich 1964, 145–6.
- 27 Symonovich 1950, 14; Symonovich 1954, 149. I am extremely grateful to Alexander Kariĭka, Junior Researcher at the Department of Ancient Studies and Head of the Academic

Archives of the Archaeological Institute of the National Ukrainian Academy of Sciences, for his assistance with archival research.

- 28 Agbunov 1984, 137.
- 29 King 2011, 24.
- 30 King 2011, 25.
- 31 Okhotnikov 1989; Buřkikh 1999, 85, with further references; Rēdina 2002. For comparison, there were over 100 sites in the Lower Bug area dating from the first half of the sixth to the first third of the fifth century BCE (Kryzhitskiĭ, Buřkikh, and Otreshko 1990, 10–41) and over 150 sites dating from the end of the fifth to the middle of the third century BCE (Kryzhitskiĭ, Buřkikh, and Otreshko 1990, 44–76).
- 32 Shteĭnvand 1930; Shteĭnvand 1931; Selinov 1939; Selinov 1940; Siniřsyn 1947; Siniřsyn 1957; Diamant 1975, 118; Diamant 1976, 205. The dates for the settlement are based on numismatic and ceramic finds (Diamant 1984, 84).
- 33 Selinov 1940, 16, 22, 24, 26, 29, 49.
- 34 Selinov 1940, 15–16, 61.
- 35 Selinov 1940, 57.
- 36 Diamant 1975; Diamant 1976; Krasnozhon 1997; Dobrořubskiĭ and Krasnozhon 1998; Dobrořubskiĭ 2001; Dobrořubskiĭ and Krasnozhon 2002; Dobrořubskiĭ, Gubar', and Krasnozhon 2002, 31–128; Dobrořubskiĭ and Krasnozhon 2005; Dobrořubskiĭ and Krasnozhon 2006.
- 37 Kacharava and Kvirkvelia 1991, 60; Rēdina 2002, 73.
- 38 Diamant 1974; Diamant 1975, 119; “Raskopki Zhevakhovskogo poseleniā na poberezh'e Odesskogo zaliva,” *AO 1976 goda* (1977), 289–90; Diamant and Kuz'menko 1978; Okhotnikov 1989, 100; Rēdina 2002, 73–4.
- 39 Buřkikh 1997, 101.
- 40 This passage from fon-Shtern's publication (1904, 60–1) is quoted by both Selinov (1939, 5; 1940, 11) and Siniřsyn (1947, 51).
- 41 Selinov 1939, 29–31 (with the reference to Zagorovs'kiĭ 1930, 7–8); Selinov 1940, 6. The “Genoese” anchor, discovered in 1910, is also described in Okhotnikov and Ostroverkhov 1991, 20.
- 42 Zagorovskii 1929, 43–4, fig. 1. All these conclusions are presently confirmed by geological data (see Buynevich in this volume).
- 43 Selinov 1939, 29–30; Selinov 1940, 59.
- 44 Hanina 1970; Ostroverkhov 1981, 88; Bouzek 1994, 43; Archibald 2002, 55.
- 45 Selinov 1939, 31; Selinov 1940, 61.
- 46 Buřkikh 1997, 101.
- 47 Diamant 1978, 249; Otreshko 1979, 87; Rēdina 2002, 76–7.
- 48 Ed. and trans. A. Liddle, Bristol, 2003. There seems to be a misprint in this edition of Liddle's translation: while the Greek text (20.3) defines the distance between the “harbor of the Istrians” and the “harbor of the Isiakoi” as 50 stades (ἀπὸ δὲ Ὀδησσοῦ ἔχεται Ἰστριανῶν λιμὴν. στάδιοι εἰς αὐτὸν πεντήκοντα καὶ διακόσιοι. ἐνθὲνδε ἔχεται Ἰσιακῶν λιμὴν. στάδιοι εἰς αὐτὸν πεντήκοντα), the English translation gives 150 stades instead.
- 49 For further information and references, see Diamant 1975, 118; Otreshko 1993, 102; Redina 2006, 185. Ancient Odessos, also mentioned by the anonymous *Periplus Ponti Euxini* (13v20 Diller = *FGrHist* 2037 F 90), Claudius Ptolemy (as Ὀρδησσός, 3.5.29), and Pliny (as *portus Ordesos*, *HN* 4.31), has been identified with a number of sites as well, including the ancient settlement of Koshary, discussed above (Symonovich 1954; Symonovich 1964, 153; Agbunov 1981, 132–3; Agbunov 1984, 137; Redina 2006, 185–6, with further references).
- 50 Agbunov 1981, 136–8.
- 51 For a detailed list of bibliographic references, see Kacharava and Kvirkvelia 1991, 59–61.
- 52 Otreshko 1993, 102; Buřkikh 1999, 87; Redina 2006, 186.
- 53 Apart from the Northwestern Black Sea region, there is evidence for the presence of the cult of Achilles in Chersonesos and in the Bosphorus. The fact that it existed in these places

from the fifth century BCE onwards, at the latest, is considered to be an indication of political and cultural contacts between the cities on the northern coast of the Black Sea. The cult of Achilles remained a North Pontic idiosyncrasy for a long time: until the Roman Imperial period, there were no traces of it in the Western, the Eastern, or the Southern Black Sea regions (Tokhtasev 2010, 103–4, 108, with further references).

- 54 Bujskich 2006a, 152. Also, see n. 15 above.
- 55 Bujskich 2006a.
- 56 Nazarov 1987, 629; Nazarov 2003, 53, 55; Bujskich 2006a, 120, 134, n. 197.
- 57 Buiskikh 1988, 259; Bujskich 2006a, 142, n. 248.
- 58 Bujskich 2006a, 136.
- 59 Nazarov 1994, 97; Rusiāeva and Diatropov 1993, 107; Zolotarëv 2001, 58; Zolotarëv 2002, 35–7.
- 60 Buiskikh 1987, 313; Buiskikh 2001, 522–3; Bujskich 2006a, 138–9, Taf. 29.2, 33.1, 34.17.
- 61 For the list of these sources, see Kacharava and Kvirkvelia 1991, 38–9; Tunkina 2002, 452; Rusiāeva 2006b, 100; Tunkina 2006, 90.
- 62 Shcheglov 1972, 132; Rusiāeva 1979, 137–8; Kacharava and Kvirkvelia 1991, 39; Tunkina 2002, 453–70; Rusiāeva 2006b, 99, 108–9; Tunkina 2006, 90–108, all with references to the original publication of the excavation results from 1824; Okhotnikov and Ostroverkhov 1991, 22.
- 63 Nazarov 1985; Nazarov and Voronov 2002, 43; Nazarov 2003, 72–4.
- 64 Rusiāeva 2006b, 99, 101.
- 65 Shcheglov 1972, 132; Rusiāeva 2006b, 108–9, 132, both with references to Tolstoi 1918, 56–9.
- 66 Rusiāeva 2006b, 123.
- 67 ἔχουσιν ὕψομον βλέποντα πρὸς τὴν ἡπειρον (Strabo 7.3.19).
- 68 Shcheglov 1972, 133.
- 69 Otreshko 1981, 39; Bujskich 2006a, 126–7, n. 134. In the 1970s, traces of thirteen ancient settlements (five from the Archaic period and eight from the Classical and Hellenistic periods) were discovered in the vicinity of the site, near the modern villages of Bol'shaia Chernomorka and Malaia Chernomorka (Kryzhiŭskii, Buiskikh, and Otreshko 1990, 15–17, 47–9; Bujskich 2006a, 119–20, n. 84).
- 70 Rusiāeva 1975, 180; Bujskich 2006a, 147, 150.
- 71 Rusiāeva 1979, 137; Rusiāeva 1992, 71–2, 77; Bujskich 2006a, 144, n. 259, with further references. Presently an island, located about 40 km away from Olbia, at the confluence of the Berezan' and Dnieper-Bug limans (Fig. 2.1), Berezan' is the site of the ancient settlement of Borysthenes, which was also a part of the Olbian *polis*. Eusebius' date for the foundation of Borysthenes has been calculated as 647/646 BCE (*Chron.* 95b Helm). For this date and a brief discussion of the question, see Vinogradov 1989, 33, 36–7, n. 20. The earliest ceramic material from the site dates from the middle to the beginning of the 630s BCE (Kopeikina 1982, 6–8; Kopeikina 1986, 28–9; Il'ina 2000, 201–3; Kerschner 2006, 230–3), and the earliest building remains, to the end of the seventh century BCE (Solovyov 1999, 30; Chistov 2012, 6–7). For Borysthenes/Berezan' as part of the Olbian *polis*, see Vinogradov 1976, 80–2; Buiskikh 2013a, 21–30; Buiskikh 2013b, 229–33.
- 72 Okhotnikov and Ostroverkhov 1991, 23; Okhotnikov and Ostroverkhov 1993, 13, 52–9; Rusiāeva 2004a, 15–16; Okhotnikov 2006, 56, 74–5. For the references to ancient authors, see Kacharava and Kvirkvelia 1991, 151; Okhotnikov and Ostroverkhov 1993, 20–1; Zubarev 2005, 83–7; Okhotnikov 2006, 50, n. 5.
- 73 Okhotnikov and Ostroverkhov 1993, 105–6; Okhotnikov 1996, 47; Okhotnikov 2006, 76. Also see the chapter by Askold Ivantchik in this volume.
- 74 Okhotnikov and Ostroverkhov 1993, 21–5; Okhotnikov 2006, 59–60.
- 75 Kryzhiŭskii 1993, 20–1, 47; Okhotnikov and Ostroverkhov 1993, 25–7; Kryzhiŭskii and Buiskikh 1998, 76; Rusiāeva 2004b, 185–9.
- 76 Okhotnikov 1990, 54; Okhotnikov 1996, 47.
- 77 Rusiāeva 2004b, 185.

- 78 Okhotnikov 1990, 54; Rusiāeva 1990, 46; Okhotnikov and Ostroverkhov 1991, 25; Rusiāeva 1992, 48; Okhotnikov and Ostroverkhov 1993, 111–12, n. 2; Okhotnikov and Ostroverkhov 2002, 123.
- 79 Okhotnikov and Ostroverkhov 2002; Okhotnikov 2006, 54; Tereshchenko 2013a, 64.
- 80 Tereshchenko 2013a; Tereshchenko 2013b.
- 81 Okhotnikov 1990, 55; Okhotnikov and Ostroverkhov 1991, 24; Okhotnikov and Ostroverkhov 1993, 20; Okhotnikov 2001a, 38–9; Okhotnikov and Ostroverkhov 2002, 124; Tereshchenko 2013a, 64–6.
- 82 Okhotnikov 1993a, 104; Okhotnikov 1993b, 105; Okhotnikov and Ostroverkhov 1993, 49, n. 1; Okhotnikov 1996, 47; Okhotnikov and Ostroverkhov 1999, 27; Okhotnikov 2001a, 39–40, 41; Okhotnikov 2001b, 163; Okhotnikov and Ostroverkhov 2002, 124–8, 130; Okhotnikov 2006, 65–6.
- 83 Nazarov 2003, 35.
- 84 Even if there was a residential community on the island, it must have been very small, consisting of individuals primarily associated with the sanctuary and cult activities – see Okhotnikov and Ostroverkhov 1993, 106–7, with references to Arrian (22.2): ἡ δὲ νῆσος ἀνθρώπων μὲν ἐρήμη ἐστίν (ed. and trans. A. Liddle, Bristol, 2003); Ammianus Marcellinus (22.8.35): *insula Leuce sine habitatoribus ullis Achilli est dedicata. In quam si fuerint quidam forte delati, visis antiquitatis vestigiis temploque et donariis eidem heroī consecrates, vesperi repetunt naves* (ed. and trans. J. C. Rolfe in the Loeb edition, 1986); and Philostratus (*Her.* 54.6–7): τὴν Λευκὴν νῆσον, ὁπόσῃν ἔϊπον, ἀνέφηνεν Ἀχιλλεῖ μὲν καὶ Ἑλένη οἰκεῖν, ναύταις δὲ ἴστασθαι καὶ τῷ πελάγει ἐγκαθορμίζεσθαι (ed. and trans. J. K. B. Maclean and E. B. Aitken, Atlanta, 2001).
- 85 ἱερεῖα τοὺς μὲν ἐξεπίτηδες πλέοντας εἰς αὐτὴν ἐπι ταῖς ναυσὶν κομίζειν (22.1); τοὺς δὲ τινὰς ὑπὸ χειμῶνος ἐξαναγκασθέντας προσέχειν (Arr. 22.2) (ed. and trans. A. Liddle, Bristol, 2003). Cf. Moreno 2008, 667, for a similar situation at the sanctuary of Hieron, where sailors “probably combined the stop with worship at the sanctuary.”
- 86 Ū. G. Vinogradov considers both interpretations to be equally possible and dates the inscription to the period from the 330s to 320s BCE, on paleographical grounds (1989, 164–6, n. 94). Another document – a dedicatory inscription to Achilles on account of a victory over pirates (*IOSPE* 1<sup>a</sup> 672) – is also associated by many scholars with the island of Leuke (Okhotnikov and Ostroverkhov 1993, 111, with further references). This inscription, however, was found not on the island, but in the ruins of the ancient city of Scythian Neapolis in a completely different part of the Northern Black Sea region. For more detailed information about *IOSPE* 1<sup>a</sup> 672, see Vinogradov 1989, 243–4, n. 63.
- 87 Pīatysheva 1966, 59, following V. V. Latyshev, *Izslēdovanīa ob istorii i gosudarstvennom stroē goroda Ol’vii* (St. Petersburg 1887); Karyshkovskii 1983, 166; Okhotnikov 1993a, 104; Okhotnikov and Ostroverkhov 1993a, 106–13; Anokhin and Rusiāeva 1999, 351; Okhotnikov 1996, 47; Okhotnikov 1998, 41; Anokhin and Rusiāeva 1999, 351; Okhotnikov 2006, 77–80; S. B. Buiskikh 2004, 84; Rusiāeva 2006b, 98.
- 88 Rusiāeva 1975, 175; Rusiāeva 1990, 45, 47–8; Okhotnikov 1998, 41; Rusiāeva 2005, 473–4; Buiskikh 2006a, 150; Okhotnikov 2006, 76.
- 89 See Malkin 1993; Polignac 1995, 33, 36–7, 98–105; Moreno 2008, 665.
- 90 Malkin 1993, 226, 231–4. In this context, it is very important that despite the multifaceted character of the cult on Leuke and the variety of aspects in which Achilles was venerated there, he was still worshipped on the island as a hero (Rusiāeva 1975, 175–6; Rusiāeva 2005, 462–3, 470; Okhotnikov 2006, 72, 76), and this made his cult both “public and political” (Malkin 1993, 229).
- 91 S. B. Buiskikh 2004, 84; Buiskikh 2006a, 147.
- 92 Anokhin and Rusiāeva 1999, 351; Okhotnikov 2006, 78.
- 93 Kryzhiŭskii, Buiskikh, Burakov, and Otreshko 1989, 85; Kryzhiŭskii, Buiskikh, and Otreshko 1990, 42–3.

- 94 Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 44–76; Bujskich 2006b, 125, with further references.
- 95 Buiskikh 1997, 101–2; Rusiāeva 2000, 82.
- 96 Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 75–6; Buiskikh 1988; Rusiāeva 2000, 82–3.
- 97 Bujskich 2006a, 144, n. 259.
- 98 Rusiāeva 1979, 138; Okhotnikov 1998, 39; Tunkina 2002, 471; Rusiāeva 2006b, 107; Okhotnikov 2006, 78; Tunkina 2006, 89.
- 99 Rusiāeva 2006b, 107, with further references.
- 100 Rusiāeva 2006b, 101–4. The ancient sites discovered on the Kinburn Peninsula up to 1990 include the Archaic production center of Ŧagorlyk, discussed earlier in this chapter, seven sites from the Classical and Hellenistic periods (Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 45, fig. 9), and four sites from the early centuries CE (Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 78, fig. 14). Apart from Ŧagorlyk, none of these sites have been excavated; the majority of them were subject to visual examination and collection of material from the surface; at some, test trenches were laid out.
- 101 Cf. Simon 1986, 8, for the altar on Cape Poseidon that was “apparently not connected to a particular settlement site but served, probably through Milesian administration, the whole sea-faring community, sailors and fishermen.”
- 102 Greaves 2000, 42–3, with further references.
- 103 Du Plat Taylor 1965, 171; Shaw 1972, 92.
- 104 Langdon 1982, 95, with further references.
- 105 Bulatovich 1990, 56; Okhotnikov 1990, 54; Okhotnikov and Ostroverkhov 1991, 24–5; Okhotnikov 1993a, 104; Okhotnikov and Ostroverkhov 1993, 44–5; Okhotnikov 2006, 84, Taf. 17.28–9. In the latter publication, the authors point out that the stamps were badly damaged: on one, the letters CLA could be seen, whereas the other had only the letter M and the number V preserved. The restorations have been made on the basis of these preserved parts. However, other evidence indicating the presence of the aforementioned forces on the island, such as gems with the names of the legions, supports this conclusion (Okhotnikov and Ostroverkhov 1993, 115).
- 106 Okhotnikov and Ostroverkhov 1991, 24–5; Okhotnikov and Ostroverkhov 1993, 114–15; Okhotnikov 2006, 84, with further references.
- 107 Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 69, 76; Bujskich 2006b, 129.
- 108 Kryzhiŭskiĭ, Buiskikh, Burakov, and Otreshko 1989, 155; Bujskich 2006b, 131.
- 109 Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 95.
- 110 Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 96; Buiskikh 1991, 110–12; Bujskich 2006b, 131.
- 111 Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 89, 96; Bujskich 2006b, 131.
- 112 Bujskich 2006b, 134.
- 113 Rusiāeva 1992, 78; Okhotnikov 1993b, 104; Okhotnikov and Ostroverkhov 1993, 115, with reference to Rostovtsev 1918a, 184–5; Okhotnikov 1996, 52; Rusiāeva 2005, 477; Okhotnikov 2006, 85.
- 114 Rusiāeva 1979, 140; Kurbatov 1982, 92; Rusiāeva 1990, 47; Anokhin 1999, 389–90. For the dedicatory inscriptions to Achilles from the Roman period found in and around Olbia, see, in particular, Otreshko 1979; Kurbatov 1982, 92; Shelov-Kovediāev 1990, 49–50, n. 3, 58–9; Nazarov 1997, 18–19. It should also be noted that, in general, the Northwestern Black Sea area produced the largest amount of epigraphic sources associated with the cult of Achilles, in comparison to other parts of the ancient Greco-Roman world (Rusiāeva 2005, 475).
- 115 Rusiāeva 1975, 177–8; Rusiāeva 1992, 77–8, 80; Rusiāeva 2005, 466, 476, 478.
- 116 Otreshko 1979, 83; Rusiāeva 1990, 57; Bujskich 2006a, 152, n. 335.
- 117 See nn. 64 and 65 above. The assemblage of over 800 coins, discovered on the site in 1824, is comparable only to the collection of monetary finds from the sanctuary of Achilles on the island of Leuke; the coins come from the entire Black Sea region and beyond and date

mostly to the Roman imperial period (Zograf 1941, with references to the original publication of the excavation reports).

- 118 Gorbunova 1968; Gorbunova 1971–72, 49; Otreshko 1979, 82; Shelov-Kovediāev 1990, 59; Vinogradov 1994, 19, 21; Vinogradov and Kryžickij 1995, 65; Nazarov 1997, 18–19; Nazarov 2003, 44; Nazarov 2006, 173; Okhotnikov 2006, 85.
- 119 First advanced by Michael Rostovtzev (Rostovtsev 1918a, 184–5, 187), this hypothesis has been accepted by many scholars (Rusiāeva 1992, 78; Okhotnikov 1993b, 104; Okhotnikov and Ostroverkhov 1993, 115; Okhotnikov 1996, 52; Okhotnikov 1998, 44; Rusiāeva 2005, 477; Okhotnikov 2006, 85).
- 120 Rusiāeva 1975, 178–9.
- 121 Vinogradov and Kryžickij 1995, 65. For a discussion of the harbor, see Kozlovskaya 2008, 54.
- 122 For the full list of these dedicatory inscriptions, with references to the sites where and the circumstances under which they were found, see Rusiāeva 1975, 179, 181; Otreshko 1979, 81–3, 87; Rusiāeva 1979, 138–9; Rusiāeva 1992, 77, 79; Bujskich 2006a, 152, n. 335.
- 123 Vakhtina 2004, 206; Buiskikh 2013a, 31.
- 124 Kozlovskaya 2008.
- 125 Moreno 2008, 667. For the date of the decree, see Zhebelēv 1953, 297–8; Karyshkovskii 1967, 79–80; Vinogradov and Karyshkovskii 1976, 28; Vinogradov 1989, 27–8; Ivantchik 2004, 4.
- 126 Cf. Leidwanger 2013.
- 127 See, for example, Heinzelmann 2010; Arnaud 2011; Schörle 2011; Boetto 2012; Wilson, Schörle, and Rice 2012.
- 128 Horden and Purcell 2000, 438–42.
- 129 Cf. Gambin 2012, 147–8.
- 130 Cf. Polignac 1995, 103–4.
- 131 Boltenko 1930, 35.
- 132 Graham 1999, 98.
- 133 Greaves 2000, 39–40, 48, 59.
- 134 Greaves 2000, 39, 44, 55–6.
- 135 Bulatovich 1990, 57.
- 136 Zhuravlēv et al. 2009; Kelterbaum et al. 2011.
- 137 Cf. Karmon 1985, 2.

### CHAPTER 3

- 1 Yanko–Hombach et al. 2007; Buynevich et al. 2011.
- 2 Zenkovich 1960; Shilik 1975; Shuisky and Schwartz 1981; Gozhik 1984; Vykhovanets 1993; Shilik 1997; Dolukhanov and Shilik 2007; Porotov 2007.
- 3 Ievlev 1991; Dolukhanov and Shilik 2007.
- 4 Present = 2013 CE.
- 5 Zenkovich 1969; McBride, Byrnes, and Hiland 1995; Kraft et al. 2003; FitzGerald et al. 2008; Larchenkov and Kadurin 2011.
- 6 Shuisky and Schwartz 1981; Vykhovanets 1993.
- 7 Bruñako and Karpov 1992; Larchenkov and Kadurin 2011.
- 8 Blagovolin and Pobedonoscev 1973; Koral 2007.
- 9 Shuisky and Schwartz 1981; McBride, Byrnes, and Hiland 1995; Buynevich 2007.
- 10 Ievlev 1991.
- 11 Shilik 1997; Porotov 2007.
- 12 Shuisky and Schwartz 1981; Vykhovanets 1993.
- 13 Nevevsky 1970; Shilik 1975; Panin 1983; Chepalyga 1984; Yanko 1990; Shilik 1997; Kaplin and Selivanov 2004; Konikov, Likhodedova, and Pedan 2006; Koral 2007; Martin, Leorri, and McLaughlin 2007; Shuisky 2007; Yanko–Hombach et al. 2007; Lericolais et al. 2009; Brückner et al. 2010; Martin and Yanko–Hombach 2011.

- 14 Yanko-Hombach et al. 2007.
- 15 Balabanov 2009; Buynevich et al. 2011.
- 16 Geological terms and chronology are based on Martin and Yanko-Hombach 2011.
- 17 Kryzhiŭskii et al. 1989; Krapivina 1993; Porotov 2007; Karjaka 2008.
- 18 Shilik 1997; Balabanov 2007; Balabanov 2009.
- 19 Blagovolin and Shcheglov 1968.
- 20 Giosan et al. 2006; Filipova-Marinova 2007; Porotov 2007; Brückner et al. 2010; Martin and Yanko-Hombach 2011.
- 21 Aubrey and Gaines 1982; Bruĭako and Karpov 1992; Giosan et al. 2006; Buynevich 2007.
- 22 On this paleo-reconstruction, note the proposed westerly extension of the Kinburn Peninsula by more than 40 km. Such reconstructions are based largely on modern bathymetric data and assume little or no lateral movement of barriers and submerged features (sandbars).
- 23 Larchenkov and Kadurin 2011.
- 24 Voskoboïnikov, Rotar', and Konikov 1982; Gozhik, 1984; Konikov, Likhodedova, and Pedan 2006.
- 25 Buynevich et al. 2012.
- 26 Zenkovich 1969; McBride, Byrnes, and Hiland 1995; Buynevich 2007; Shuisky 2007; FitzGerald et al. 2008.
- 27 Shilik 1975; Gozhik, 1984; Bruĭako and Karpov 1992; Porotov 2007.
- 28 Aubrey and Gaines 1982; Buynevich 2007.
- 29 Mayewski et al. 2004; Martin, Leorri, and McLaughlin 2007; Shuisky 2007.
- 30 King 2004, 109.
- 31 Balabanov 1984.
- 32 Nikonov 1997.
- 33 Balabanov 2009; Buynevich et al. 2012.
- 34 Ballard et al. 2001; Bell and Fuller 2011.
- 35 Martin and Yanko-Hombach 2011.
- 36 Zenkovich 1969; Shilik 1975; Shuisky and Schwartz 1981; Bruĭako and Karpov 1992; Vykhovanets 1993; Porotov 2007; Larchenkov and Kadurin 2011.
- 37 Buynevich 2007; Porotov 2007.
- 38 The delta of the Danube, Romania: Giosan et al. 2006; Bulgarian coast: Filipova-Marinova 2007; Georgian strandplains: Balabanov 2009; Taman Peninsula, Russia: Kelterbaum et al. 2011; Bessarabian liman barriers, Ukraine: Buynevich et al. 2012.

#### CHAPTER 4

- 1 Grakov 1935; Walbank 1969, 20; Will 1977; Grace 1979; Garlan 1983, 27; Garlan 1988; Brashinskii 1984, 15; Monakhov 1999a, 5; Garlan 2000, 3–8.
- 2 In most centers, there was mass production of amphorae. Its exact volume is not known, but it has been calculated, for example, that several hundred thousand such containers must have been manufactured annually in Chersonesos, which was not even the largest production center (Monakhov 1984, 125).
- 3 Garlan 2000, 1.
- 4 Presently, we have identified ceramic containers from about fifty to sixty production centers dating from the Archaic to the Hellenistic periods. Such centers as Miletos, Samos, Corinth, Lesbos, Klazomenai, Thasos, Mende, Erythrai, Peparethos, Ikos, Knidos, Kos, Akanthos, Rhodes, Herakleia Pontike, Sinope, and Chersonesos had mass production of amphorae. About a dozen of other centers are represented by individual finds.
- 5 For the evidence from the Zenon Archive, see Salviat 1986, 155.
- 6 Grakov 1935; Grakov 1939; Grace 1949; Grace 1979.
- 7 Zeest 1951a; Zeest 1951b; Zeest 1954; Zeest 1960.
- 8 Brashinskii 1984.
- 9 In the 1980s and early 1990s, only a few classifications of amphorae from Corinth, Klazomenai, Lesbos, Knidos, Chersonesos, and Sinope came out (Koehler 1981; Clinkenbeard 1982;



- Clinkenbeard 1986; Doger 1986; Koehler and Wallace 1987; Monakhov 1989; Koehler 1992; Monakhov 1992; Monachov 1993; Monakhov 1999b; 1999c).
- 10 Empereur and Hesnard 1987.
  - 11 Sciallano and Sibella 1991.
  - 12 Scegllov 1986; Kac, Pavlencov, and Scegllov 1989; Doulgeri-Intzesiloglou and Garlan 1990; Monakhov 1990; Kantzia 1994; Garlan 1996; Monachov 1997; Monakhov 1999b; Monakhov 1999c; Monakhov 2001; Monakhov 2002b; Garlan 2006; Zavoïkin and Monakhov 2012; Monakhov and Fedoseev 2013a; Garlan 2014.
  - 13 See the chapter by Sergey Vnukov in this volume.
  - 14 Zeest 1960, 39–48.
  - 15 Brashinskii 1965; Brashinskii 1984, 128–47.
  - 16 Monakhov 1999a.
  - 17 Monakhov 1997, 202–12.
  - 18 This refers especially to amphora production in Herakleia Pontike, Sinope, and Chersonesos.
  - 19 Brashinskii 1980, 89.
  - 20 Kats and Monakhov 1977, 90–105; Hannestad, Stolba, and Ščeglov 2002, 104.
  - 21 Monakhov 1999a, 336–8.
  - 22 Eiseman 1987.
  - 23 Katzev 1970.
  - 24 Grace 1986.
  - 25 Tereshchenko 2012.
  - 26 See, for example, Grace 1965; Kazianes, Simossi, and Haniotes 1990; Carlson 2003.
  - 27 Monachov 1997, 29–59.
  - 28 Monakhov 1999a, 19.
  - 29 Alekseev, Murzin, and Rolle 1991, 130.
  - 30 For a different point of view, see Mozolevskii and Polin 2005; Bidziliā and Polin 2012; Polin 2014.
  - 31 Monakhov 1999a, 284–9.
  - 32 Strabo mentions that wine could have been kept in unpitched vessels for three generations (11.10.1).
  - 33 Salviat 1986, 178–9; Grandjean 1992, 581; Empereur 1993, 42.
  - 34 Teleaga 2008.
  - 35 Mozolevskii and Polin 2005; Bidziliā and Polin 2012; Polin 2014.
  - 36 See, for example, Polin 1991; Limberis and Marchenko 2001; Papanova 2002; Bochkovoï, Limberis, and Marchenko 2005; Limberis and Marchenko 2005; Leïpunskaïa 2006; Papanova 2006; Zavoïkin, Kuznetsova, and Monakhov 2006; Fedoseev, Ermolin, and Kulikov 2008; Fedoseev 2010; Koltukhov 2012a; Koltukhov 2012b; Zavoïkin, Kuznetsova, and Monakhov 2013; Polin 2010; Polin 2014.
  - 37 Monakhov 2003.
  - 38 Cook and Dupont 1998; Bîrzescu 2012; Sezgin 2012.
  - 39 Carlson and Lawall 2006; Dupont and Lungu 2010; Monakhov 2012; Monakhov 2013a.
  - 40 Monakhov 2014.
  - 41 Monakhov and Fedoseev 2013a; Monakhov and Fedoseev 2013b.
  - 42 Garlan 2006; Filis 2012a; Filis 2012b; Filis 2013; Monakhov 2013b; Monakhov 2013c; Garlan 2014.
  - 43 Zavoïkin 1992; Garlan 1996; Monakhov 2007; Monachov 2010; Limberis, Marchenko, and Monakhov 2011; Limberis, Marčenko, and Monachov 2013.
  - 44 See, for example, the recent monograph by Lomtadze (Lomtadze 2015).
  - 45 Skudnova 1988.
  - 46 Monakhov 2003, 44, 46–7, 49, fig. 28. The type is called thus after the site of Nadlimanskoe in the Northwestern Black Sea region, where such amphorae and amphora fragments were found.
  - 47 Clinkenbeard 1982; Clinkenbeard 1986; Cook and Dupont 1998, 156–62; Dupont 2011; Lungu 2011.
  - 48 Garlan 1999a.
  - 49 Dupont and Lungu 2010; Monakhov 2012; Monakhov 2013a.

- 50 For a long time, these amphorae were considered “pseudo-Chersonesan” (see, for example, Monakhov and Kuzneţsova 2009; Monachov and Kuznetsova 2011). For their identification as the production of Ikos, see Monakhov and Fedoseev 2013a; Monakhov and Fedoseev 2013b.
- 51 For the identification and detailed typology of Koan amphorae, see Monakhov 2014.
- 52 Filis 2012a, 69.
- 53 Monakhov 1990.
- 54 Empereur and Hesnard 1987.
- 55 Kac, Pavlencov, and Scegllov 1989.
- 56 Limberis, Marchenko, and Monakhov 2011; Limberis, Marčenko, and Monachov 2013.
- 57 Kaťs 2001; Vnukov 2003, 160–94, fig. 66; Vnukov 2011.
- 58 We should also take into consideration the practice of imitation of the shapes of amphorae from the most famous production centers (Lawall 2010).
- 59 For an attempt at such research, see Monakhov and Slonov 1992.
- 60 Garlan 2000, 1.
- 61 Canarace 1957; Gramatopol and Poenaru Bordea 1969; Grace and Savvatanou-Petropoulakou 1970; Shelov 1975; Brashinskii 1980; Balkanska 1984; Jöhrens 1986, 497–503; Börker 1998; Burow 1998; Jöhrens 1999a; Jöhrens 1999b; Jöhrens 2001, 367–469; Balkanska and Tzochet 2008; Jöhrens 2009, 205–35.
- 62 This work has never been published and exists only in the form of copies of the manuscript.
- 63 Shelov 1975; Empereur 1982; Brashinskii 1984, 148–69; Badal’ian 1986; Kaťs 1992; Fedoseev 1999; Kaťs 2007.
- 64 Bon and Bon 1957.
- 65 Kaťs 1994; Jefremow 1995.
- 66 Avram 1996; Conovici 1998.
- 67 Garlan 1999a; Garlan 2004; Garlan 2010; Garlan 2013.
- 68 Fedoseev 2012.
- 69 For the strategies of working on such catalogs and for the first results of this work, see Kaťs 1996, 77–80; Kaťs 1997.
- 70 Empereur and Garlan 1997, 172; Kaťs 2007, 387–9.
- 71 For the first attempts, see Kaťs 2007, 351–86.
- 72 Brashinskii 1976b; Empereur 1982; Brashinskii 1984, 54; Davies 2001, 28.
- 73 Brashinskii 1984, 51–4. For the necessity to correlate amphora stamps that only date to the same period, see Empereur 1982, 222–5.
- 74 Shelov 1975, 26; Kaťs 1992, 211; Kaťs 2007, 352–4 (with further references). This index is calculated by using the following formula:  $F_v^a = V_n/h_i$ , where  $F_v^a$  is the absolute density of the distribution (expressed by the annual amount of an imported product in liters),  $V_n$  is the cumulative capacity of the vessels from one production center within a specific period, and  $h_i$  is the extent of this period in years (Kuzneţsova 2013, 219, n. 1; Kuzneţsova 2014, 189).
- 75 Kaťs 1992, 223; Kaťs 2007, 354. This index is calculated by using the following formula:  $F_i^o = q_i/h_i$ , where  $F_i^o$  is the relative density of the distribution, i.e., the annual distribution of a product imported from a particular center during a specific period in relation to the entire period in question (from the middle of the sixth to the end of the fourth century BCE);  $q_i$  is the proportion of the product imported from the corresponding center during a specific period in relation to the volume of this product imported during the entire period in question; and  $h_i$  is the number of years in that specific period (Kuzneţsova 2014, 189). Both these indices have been mostly used (in combination with the coefficient of stamping) in the analysis of amphora stamps (Kaťs 2007; Kutinova 2010; Kaťs 2015), and only to a lesser extent in the analysis of unstamped amphora fragments, such as toes and rims (Kuzneţsova 2012a; Kuzneţsova 2012b; Kuzneţsova 2013; Kuzneţsova 2014).
- 76 Brashinskii 1976a; Monakhov 1980, 161–79; Monakhov 1986, 106–14; Monakhov and Slonov 1992, 97–110.
- 77 Monakhov 2003, 24.

- 78 Brashinskiĭ 1976a, 68; Wallace–Matheson and Wallace 1982, 293–320. Also see Vodolazhskaĭa 2008.
- 79 Brashinskiĭ 1976a, 62–91; Monakhov 1986, 106–15 (with a detailed historiography of the question).
- 80 Monakhov 2003, 215–29.
- 81 Among the rare exceptions is the recent monograph by Georgiĭ Lomtadze (2015).
- 82 The data from the two latter sites is still sparse and cannot be used to the full extent. We would like to express our deepest gratitude to the directors of all the expeditions who allowed us to use the materials from their excavations in the present research – Shamil’ Davudov, Alla Kraĭneva, Maxim Kovalenko, Vladimir Kuznetsov, Nikolaĭ Sudarev, and Svetlana Finogenova.
- 83 Lomtadze 2005; Abramov 2009; Abramov 2010, 9–28. Andreĭ Abramov studied the materials dating to the period from the sixth to fifth century BCE, while Lomtadze worked on the finds from a later period, i.e., from the fourth to the first third of the third century BCE. Abramov used his own typological charts and, consequently, his indices of the average capacities of the vessels were also somewhat different. Moreover, he analyzed the dynamics of the imports within narrower chronological periods. At the same time, the data provided by Lomtadze cannot be fully utilized for the study of imports at Patraeus in the fourth to the third century BCE, since there is no information about the volume of imports – neither as a whole nor from individual production centers. This does not allow one to trace the quantitative changes in imports, but only the changes in the list of the exporters.
- 84 Lomtadze and Maslennikov 2004; Lomtadze 2005; Lomtadze 2015.
- 85 Ulitin 2006.
- 86 Only a few fragments of Chian amphorae of the fifth century BCE have been found at the site.
- 87 Kuznetsova 2012b, 174; Kuznetsova 2013, 221.
- 88 Kryzhyts’kyĭ, Krapivina, and Leĭpun’ska 1994, 26; Lawall et al. 2010, 368.
- 89 Lawall 2002, 198.
- 90 Zavoĭkin and Sudarev 2006a, 101–52; Zavoĭkin and Sudarev 2006b, 263–304; Garbuzov and Zavoĭkin 2009, 141–76; Garbuzov and Zavoĭkin 2010, 105–30; Garbuzov and Zavoĭkin 2011, 194–223; Garbuzov et al. 2011, 90–173; Garbuzov and Zavoĭkin 2012, 114–50.
- 91 Cf. Garbuzov and Zavoĭkin 2010, 116.
- 92 These conclusions are based on the analysis of amphora finds (Solovyov 2006, 140; Müller 2007, 76).
- 93 Kuznetsova 2012a, 75.
- 94 Abramov 2009, Appendix 1, table 2.
- 95 Ulitin 2006, 12–13.
- 96 According to the data from Patraeus, the volume of Thasian imports started to increase from 465 BCE onwards (Abramov 2009, Appendix 1, table 2).
- 97 Abramov 2009, Appendix 1, table 2.
- 98 The presence of a rather small proportion of imports from Mende is characteristic of Phanagoreia for the entire period under discussion. Its “peak” fell within the first half of the fourth century BCE, reaching only 9.5 percent.
- 99 See, for example, Finogenova 2010, 516.
- 100 Solov’ev 2002, 50.
- 101 Solov’ev 2002, 54; Müller 2007.
- 102 Sudarev, Chevelev, and Kraĭneva 2009.
- 103 The lack of data for the other sites in this area makes any broader comparison impossible.
- 104 Garbuzov and Zavoĭkin 2009, 164–5, 168, figs. 11–12, 14.
- 105 At the settlement of Chubovo, only individual finds dating to the third century BCE have been discovered (which does not necessarily exclude the possibility of more such finds in the course of future excavations).

- 106 Lomtadze 2005, Appendix III. Unfortunately, the published information does not allow us to identify more precisely the period during which the volume of imports was at its highest.
- 107 Ulitin 2006, Appendix III.
- 108 Lomtadze 2005, Appendix III, table 13.
- 109 Lomtadze 2005, Appendix III, tables 1, 2, 4, 5; Lomtadze 2015, 38, 61.
- 110 Ulitin 2006, Appendix III, tables 2, 3.
- 111 Ulitin 2006, Appendix III, fig. 2.
- 112 Ulitin 2006, Appendix III, fig. 5.
- 113 Paromov 1998, 216–26.
- 114 Zhuravlëv et al. 2009, 123.
- 115 Lomtadze and Ulitin both came to the same conclusion (Lomtadze 2005, 119; Ulitin 2013, 37).
- 116 Kutinova 2010.
- 117 Kaṭṣ 2015.
- 118 Kaṭṣ 2007, 351–87.
- 119 Brashinskii 1984, 53–6.
- 120 Garlan 1986, 230–31; Garlan 2004, 21.
- 121 Kaṭṣ 2007, 357.
- 122 Fedoseev 2004, 256.
- 123 Kaṭṣ 2007, 357.
- 124 Kaṭṣ 2007, 358.
- 125 Brashinskii 1984, 20.
- 126 Lund 1999, 188.
- 127 Monakhov 2003, 213–14.
- 128 Kaṭṣ 1992, 205–7; Fedoseev 2004, 368.
- 129 Kuznetsova 2014, 187–94.
- 130 Kutinova 2010, 29, 30; Kaṭṣ 2015, 57, 79, figs. 8, 15.
- 131 Ulitin 2006, 17.

## CHAPTER 5

- 1 Zubar' 1994, 23, 37; Zubar' 1998, 82.
- 2 Lavrov 2003, 333–40.
- 3 See the chapter by *Sergey Monakhov and Elena Kuznetsova* in this volume for further references.
- 4 Zeest 1960; also see the chapter by *Sergey Monakhov and Elena Kuznetsova* in this volume.
- 5 See, among others, Zeest 1960, 109, 110, 117–18, tables XXVI, 61; XXVIII, 64, 65; XXXVII, 90–3; XXXVIII, 94; Kamenetskii 1963; Deopik and Karapet'iants 1970; Deopik and Krug 1972.
- 6 Shelov 1978; Šelov 1986.
- 7 See, for example, Zeest 1960, 108; Mikhlin 1974, 64–5; Vinogradov and Onaiko 1975, 88, no. 10; Puturidze 1977, 68.
- 8 Tsetskhladze 1992.
- 9 Zeest 1960, 114, table XXXIII, 78; Kamenetskii 1963, 33; Deopik and Karapet'iants 1970, 103–5; Arsen'eva and Naumenko 1992, 147, fig. 27.1.
- 10 Zeest 1960, 111–17, pls. XXX–XXXII; XXXIV, XXXVI.
- 11 Kassab Tezgör 2010.
- 12 Vnukov 2006, 18–100.
- 13 Vnukov 2006, 101–70.
- 14 Vnukov 2003; Vnukov 2004; Vnukov 2010a; Vnukov 2010b; Vnukov 2011.
- 15 Vnukov 2003, 16–27.
- 16 Golofast 2010; Kassab Tezgör 2010, 126–7; Opaït 2010, 110; Opaït 2011, 450–6; Simonenko 2011, 142–6.
- 17 Vnukov 2003, 195–200; Vnukov 2004; Moore 2011.

- 18 Moore 2011, 93.
- 19 Moore 2011, 91–2.
- 20 Vnukov 2004, 407; Moore 2011, 95, 101–9.
- 21 The *S* stands here for “light-clay” (Russian) – *svetlogliniānye*.
- 22 Vnukov 2003, 28–96; Vnukov 2004, 407–9, fig. 1.
- 23 Vnukov 2003, 96–102; Vnukov 2004, 411, fig. 4.
- 24 Gaïdukevich 1958, 34–5, fig. 21.1; Zeest 1960, pl. xxxvii, 90; Alekseeva 1997, pl. 167.1; Vnukov 2003, 128–9, fig. 50; Vnukov 2004, 411–12, fig. 5.
- 25 Vnukov 2003, 141–7, fig. 57; Vnukov 2004, 409–10, fig. 2.
- 26 Vnukov 2003, 147–56, fig. 60; Vnukov 2004, 412–13, fig. 6.
- 27 Vnukov 2003, 158–9, fig. 65.1–3; Vnukov 2004, 411.
- 28 Vnukov 2003, 102–18; Vnukov 2004, 412–15, fig. 7.1, 2.
- 29 Sazanov 1993; Vnukov 2003, 118–28; Vnukov 2004, 412–15, fig. 7.
- 30 Vnukov 2003, 198–9; Vnukov 2004, 412–13.
- 31 For an updated and very detailed classification of such amphorae, please see Vnukov 2016b, especially fig. 1.
- 32 Monakhov 2003, 154–5 (“variant” III-D), pl. 105.1–4; Vnukov 2003, 130–3, fig. 51.1–4.
- 33 Vnukov 2003, 133–41, fig. 52; Vnukov 2010a, 365–7, fig. 2.1–8.
- 34 Vnukov 2003, 156–8, fig. 64; Vnukov 2010a, 365, 363, fig. 1.8.
- 35 Kassab Tezgör 2010, 125–7, pl. 15. In the classification of Kassab Tezgör, the categories of “variant,” “type,” and “group” correspond, respectively, to the categories of *sub-variant*, *variant*, and *type* in my classification (Vnukov 2003, 17–20). Here, I follow Kassab Tezgör’s nomenclature of the Sinopean amphorae of the third and fourth centuries CE.
- 36 Kassab Tezgör 2010, 127–34, pls. 16–19.
- 37 Vnukov 2006, 18–100.
- 38 Vnukov 2006, 48–57.
- 39 Vnukov 2006, 64–77.
- 40 Vnukov 2003, 160–94; Vnukov 2006, 77–85; Vnukov 2010b; Vnukov 2011. In the few publications (including also those by the author) where such vessels are mentioned they are usually referred to as “Colchian.” This term, however, does not reflect the reality of the fact that such amphorae were produced not only by Colchean craftsmen, but also by the Greeks who lived in Colchis. Therefore, in the present chapter we use the terms “Colchean” and “Colchidian” to differentiate, respectively, between the local people who inhabited the territory of ancient Colchis and the territory itself. The term “Colchidian,” in particular, refers to the amphorae that were manufactured in Colchis not only by local – Colchean – but also by Greek craftsmen.
- 41 Vnukov 2006, 77–85.
- 42 Vnukov 2006, 85–98.
- 43 Zeest 1960, pls. xxx, 73; xxxii, 76b, 77e; xxxv, 84b; xxxvi, 86.
- 44 Dyczek 2001, 199–202, fig. 116.
- 45 Moore 2011, 97, 106–7.
- 46 Vnukov 2003, 195–201; Vnukov 2004, 407, 415.
- 47 Brashinskiĭ 1980, 92–3; Deopik 1981, 242–3; Brashinskiĭ 1984, 155–6.
- 48 Vnukov 2006, 171–204.
- 49 Vnukov 2006, 193, fig. 12.
- 50 Kamenetskii 1963, 29; Kamenetskii 1974, 218.
- 51 Vnukov 1984, 60–1, table 1; Kryzhiĭskii et al. 1989, 184–5, table 3; Krapivina 1993, 125, 126, tables 1, 3, 5; Vnukov 2006, 192–5, fig. 12.
- 52 Golofast 2010.
- 53 Rikman 1972, 85; Magomedov 1987, 45, table 3; Kamenetskii 1999; Opaïţ 2004.
- 54 Vnukov 2006, 171–4.
- 55 Rădulescu 1976, 102, pl. 1, 2, 3; Opaïţ 1987; Sanie and Sanie 1992; Ursachi 1995; Dyczek 2001; Opaïţ 2004; Paraschiv 2004.

- 56 Vnukov 2008, 140, 147, fig. 6.
- 57 Vnukov 2006, 172–6.
- 58 Moshkova 1984, 197.
- 59 Zeest 1960, 32; Kamenetskii 1969, 147; Samoïlova 1978, 258; Simion 1984, 84; Opaîţ 1987, 155; Ursachi 1995, 209–10; Dyczek 2001, 215, 319, fig. 209, “types” 28 and 29; Vnukov 2006, 176–85.
- 60 For a detailed analysis of the geographical distribution of the finds, see Vnukov 2006, 171–89.
- 61 Kasparova 1987, 67.
- 62 Berzenișvili and P’ut’uriže 1975, 255, fig. 43; Xalvaši 2002, 23, fig. 16; 31, fig. 25.1, 2; pls. v, ix, x. Many amphora fragments featured in the publication by Xalvaši have erroneous dates and attributions.
- 63 Moshkova 1984, 197.
- 64 Hayes 1983, 147, 144, fig. 21.32; Panella 1986, 628; Opaîţ 2010, 110–13, figs. 3, 5–7.
- 65 Magomedov 1987, 45, tabe 3.
- 66 Magomedov 2006, 52; Didyk 2011, 140–7.
- 67 Opaîţ 2004, 31–2, pl. 19.1, 2; Paraschiv 2004, 172, “type” 3 E, 185, pl. 3.17; Magomedov 2006, 52, 59, fig. 4.
- 68 Kamenetskii 1963; Kamenetskii 1969; Deopik 1981; Vnukov 1984; Vnukov 2006, 190–205.
- 69 Golofast 2010.
- 70 Kropotkin and Kropotkin 1988, 174–5, table II.
- 71 Dyczek 1996, 33, figs. 5, 6.
- 72 Kruglikova 1975, 230–1; Monakhov 1999a, 573.
- 73 Zeest 1960, 42–3; Kadeev and Sorochan 1989, 19.
- 74 Kruglikova 1975, 230–1; Monakhov 1999a, 573.
- 75 Alekseeva 1997, pls. 89.6; 91.9–11; 93.3, 10; 104.13, 17, 18; 124.14; 156.1; 172.21; 222.4, 6; 225.9; and others.
- 76 Berzenișvili and P’ut’uriže 1975, 264, fig. 50; 267, fig. 55; Xalvaši 2000, 40, fig. 9 (bottom right); Xalvaši 2002, 11, fig. 7.10; 34, fig. 28 (left); pl. XI, 1.
- 77 Opaîţ 2004, 29–31, types E Ia, D III, FVI; pls. 18.4, 5; 20.1, 2, 5, 6; Paraschiv 2004, 175, type 8 A, 188, pl. 6.33, 34; Vnukov 2008, 141. The vessels similar to “group” Snp C after the classification of Kassab Tezgör were manufactured in several centers, including those in the Mediterranean. Their morphology is very similar and does not allow us to identify securely the center of production of individual amphorae. This results in a considerable difference in dates suggested for these amphorae – see, for example, Magomedov 2006, 53; Sharov 2007, 96–176.
- 78 Vnukov 2006, 202.
- 79 A single amphora of *variant* Sin Ic from Tomis, dated from the second half of the second century BCE to the first century BCE, is now exhibited in the museum in Constanta (inv. no. 37919). I am grateful to L. Buzoianu for providing me with the inventory number of this amphora.
- 80 Opaîţ 2004, 31, types D III and FVI; for the dates, see Kassab Tezgör 2010, 126–7; Vnukov 2010a, 368.
- 81 Opaîţ 2010, 113–14, figs. 11–14.
- 82 Buzoianu and Bărbulescu 2008, 138, pl. VIII, A80–82; LXI, A80–82.
- 83 Zeest 1960, 121, pl. XL, 103; Romanchuk, Sazanov, and Sedikova 1995, 16–19, pls. 2.1–3; 3.4–6.
- 84 Raeck, Gorys, and Gossel-Raeck 2000, 347–8, Abb. 19, 20. The authors of this article were not familiar with the publications on Colchidian amphorae and, for this reason, did not identify correctly the vessels mentioned in this reference, suggesting instead that they had been produced locally. Using very distant analogies, they dated these amphorae to a period from the third to the fourth century CE. In reality, these amphorae were transitional from *sub-variant* B<sub>1</sub> to *sub-variant* B<sub>2</sub>, dating from the late second to the first quarter of the first century BCE, i.e., to the time of Mithridates VI Eupator (Vnukov 2003, 162, fig. 66.292,

- 319, 327: 2016a, 105). The amphorae that circulated during the third to fourth century CE belonged to *sub-variants* C<sub>2</sub> and D<sub>1</sub> (Fig. 5.2.17–19).
- 85 Vnukov 2006, 203.
  - 86 Alekseeva 1997, 178; Viāzkova, Dmitriev, and Malyshev 2001, 192.
  - 87 Xalvaši 2000; Xalvaši 2002.
  - 88 Maksimova 1956, 333; Saprykin 1986, 98; Doonan 2004, 7–22; Dzagurova 2007, 18–23.
  - 89 Trans. C. L. Brownson and rev. J. Dillery in the Loeb edition, 1998.
  - 90 Moore 2011, 93, 95.
  - 91 Saprykin 1986, 99; Doonan 2004, 83, 95; Dzagurova 2007, 24.
  - 92 Saprykin 1986, 239; Dzagurova 2007, 22.
  - 93 Saprykin 1986, 54–5, 78, 91–4; Dzagurova 2007, 52, 83–5.
  - 94 Dzagurova 2007, 22–4.
  - 95 Maksimova 1956, 331–2; Doonan 2004, 95, 103.
  - 96 Brashinskiĭ 1984, 21; Vinokurov 2003, 6, 7.
  - 97 Vnukov 2006, 206–15.
  - 98 Strzheleŭskiĭ 1961, 53, 152–3; Nikolaenko 1999, 79; Vinokurov 2003, 27.
  - 99 Vnukov 2006, 215–16.
  - 100 Vnukov 2006, 234–43.
  - 101 Vnukov 2006, 241–3.
  - 102 Gaĭdukevich 1952, 133; Kadeev 1970, 12–15.
  - 103 Kruglikova 1975, 209–12.
  - 104 Kadeev 1970, 15, 19.
  - 105 Trans. A. Podossinov in *FGrHist* v, Brill Online, 2014: <http://referenceworks.brillonline.com/entries/fragmente-der-griechischen-historiker-v/anonymi-periplus-ponti-eux-ini-2037-a2037>. Accessed January 24, 2017.
  - 106 Kryzhitskiĭ et al. 1989, 200–1; Krapivina 1993, 89; Kryzhits'kyĭ and Leĭpun'ska 2004, 16–17.
  - 107 Kryzhits'kyĭ and Leĭpun'ska 2004, 15, 25.
  - 108 Ed. and trans. H. L. Jones in the Loeb edition, 1928.
  - 109 Kadeev 1970, 20–6; Saprykin 1986, 100; Kadeev and Sorochan 1989, 11; Kryzhits'kyĭ and Leĭpun'ska 2004, 18.
  - 110 Kadeev 1970, 25.
  - 111 Kovalevskaiā 1998.
  - 112 Krapivina 1993, 152.
  - 113 Magomedov 1987, 91; Kryzhitskiĭ et al. 1989, 154–5, 204–6.
  - 114 Krapivina 1993, 155–7.
  - 115 Raevskiĭ 1973; Vnukov 2006, 141–2, 225.
  - 116 Koltukhov 1999, 97; Puzdrovskiĭ 2001, 114; Zubar' et al. 2004, 167, 187, 189.
  - 117 Ed. and trans. H. L. Jones in the Loeb edition, 1928.
  - 118 M'Elderry 1909, 44–7; Levick 1999, 165–6. This number includes the legionaries, the military slaves, and other personnel attached to the two legions (over 13,000), such as personal slaves, civilian non-combatants, and other categories (Roth 1994), as well as about 11,500 auxiliaries (Levick 1999, 166–7).
  - 119 Maksimova 1956, 352; Blavatskiĭ 1964, 151; Tsvetaeva 1979, 85.
  - 120 Trans. A. J. Church and W. J. Brodribb, ed. M. Hadas, New York, 1942.
  - 121 Mitchell 1995, 124; Levick 1999, 167.
  - 122 Mitchell 1995, 124.
  - 123 Ed. and trans. A. Liddle, Bristol, 2003.
  - 124 It is not likely that Trapezous was the main base of the Pontic fleet, but military vessels probably used it for temporary harboring also in the later periods (Maksimova 1956, 317–18).
  - 125 Maksimova 1956, 314. Remains of an ancient mole were still visible there in the first half of the twentieth century (Lehmann-Hartleben 1923, 199, plan xxxv).
  - 126 Bithynia-Pontus was paying *annona* under Antoninus Pius, at the latest, as testified by an inscription on the base of a statue of a Roman official from Sinope, which mentions that



among his other duties he was also the *curator annonae* (French 2004, 72–3, no. 121). For the variety of ways in which the *annona militaris* was collected, delivered, and distributed in the African provinces during the same period, see Pujol 2008.

127 Cumont 1925; for a different interpretation, see Arnaud 1989.

128 Trans. J. J. Buchanan and H. T. Davis, San Antonio, 1967.

129 Vnukov 2016a, 96–7.

130 Trans. J. J. Buchanan and H. T. Davis, San Antonio, 1967.

## CHAPTER 6

- 1 See, for example, Ehrhardt 1983.
- 2 See, for example, Vinogradov 1997b; Bresson, Ivantchik, and Ferrary 2007; Müller 2010. For a certain homogeneity with regard to popular local cults, see Dana 2007.
- 3 For the presence of amphorae of Pontic cities (especially Sinope, Herakleia, and Chersonesos) see Conovici 1998; Garland 1999b; Monakhov 1999a; Jöhrens 2004; as well as, for example, SEG LIV 684, 704; IV 810, 818, 843, 851, 860, 879, 883; LVI 882, 928; LVII 742–3; LVIII 746, 761, 773, 788; LIX 855. For the circulation of amphorae in the Imperial period, see the chapter by Sergei Vnukov in this volume. For foreigners, see Cojocaru 2004; Cojocaru 2009b; for mobility and its contribution to Pontic unity, see Dana 2012.
- 4 Attested in Chersonesos: IOSPE I<sup>2</sup> 343, 347, 349, 351. On *dioikesis*, see Schuler 2005. Cf. *epimeletas tan koinan pothodon* (supervisor of the public revenues) in Chersonesos: IOSPE I<sup>2</sup> 359.
- 5 Attested in Chersonesos (from the third century BCE to the second century CE): IOSPE I<sup>2</sup> 342, 343, 347, 351, 359. *Nomophylakes* are widely attested in Hellenistic cities.
- 6 Attested in Olbia: IOSPE I<sup>2</sup> 685. See also Ivantchik and Krapivina 2007; Ivantchik 2012.
- 7 For example, SEG XLVII 1168; there were different boards of treasurers (e.g., *tamiai ton hieron*: IOSPE I<sup>2</sup> 352, Chersonesos).
- 8 Chersonesos: IOSPE I<sup>2</sup> 418, 424; Olbia: IOSPE I<sup>2</sup> 186; Gorgippeia: CIRB 1140; Pantikapaion: CIRB 90, 103, 823; Tanais: CIRB 1277–80, 1287. On the *gymnasion* and its institutions in the cities of the North Pontic region, see Kennell 2006, 33–4, 38, 57, 90–1, 121.
- 9 *Basileus*: IOSPE I<sup>2</sup> 352, 404; *proaisymneon*: IOSPE I<sup>2</sup> 352. Both offices were taken over from the metropolis of Chersonesos, Herakleia, and ultimately from Megara.
- 10 Cf. Quass 1993, who also jointly studies the political and social institutions of the Greek cities (“the regime of the notables”) in both periods.
- 11 For historical surveys, see Levi 1985 and Vinogradov 1989 (Olbia); Saprykin 1997, 170–305 (Chersonesos); Fornasier and Böttger 2002 (the Bosporan Kingdom); Grammenos and Petropoulos 2003; Grammenos and Petropoulos 2007.
- 12 IOSPE I<sup>2</sup> 32, 39, 40, 352; SEG XLV 985.
- 13 *Proxenia* and related privileges: Cojocaru 2009a, 363. Grant of citizenship: IOSPE I<sup>2</sup> 27 (Olbia); IOSPE I<sup>2</sup> 356 (Chersonesos, from the first century BCE to the first century CE). Public funerals: e.g., IOSPE I<sup>2</sup> 34, 39, 45, 46, 51, 52, 59, 61 (Olbia, Imperial period); cf. Schörner 2007, 90–2, 223–7; Fröhlich 2013, 234–5. On honors in the inscriptions of Chersonesos, Olbia, and Tyras, see Skrzhinskaiā 2003.
- 14 For the *gymnasion* and the *ephebeia*, see Kennell 2006, 33–4 (Olbia), 38 (Chersonesos), 57 (Gorgippeia), 90–1 (Pantikapaion), 121 (Tanais). For education, cultural life, and agonistic festivals, see Dana 2011, 23–144.
- 15 IOSPE I<sup>2</sup> 80, 85, 91, 94, 101. The honorary statue of Neokles, governor of Gorgippeia, also shows a *streptos*; see Heinen 2008, 205, fig. 7; this can be attributed to Iranian practices; cf. Bowersock and Jones 2006, 125–6. Cf. the dedication of belts: IOSPE I<sup>2</sup> 83 (*zoster*), 106–7 (*zone*).
- 16 Cojocaru 2009a, 365 (e.g., IOSPE I<sup>2</sup> 357 and 358).
- 17 On this phenomenon, see Chaniotis 1999.
- 18 For example, in Tyras and Chersonesos we find small boards of *archontes* (four or five executive magistrates), one of whom serves as “first *archon*.” Tyras: IOSPE I<sup>2</sup> 2; Chersonesos:

- IOSPE* I<sup>2</sup> 34, 471. In Olbia, a board of six *strategoí* is attested (*IOSPE* I<sup>2</sup> 80, 82, 83, 84/85, 97–119, 686).
- 19 See more recently Zuiderhoek 2008, 429–31. Still very useful is Touloumakos 1967; for Boeotia, see Müller 2005; for the transformation of the council, see Hamon 2005.
  - 20 Gauthier 1993 gives a good overview. See also the bibliography in nn. 21–3 below; for further bibliography, see Mann 2012, 12, n. 3.
  - 21 Grieb 2008; Carlsson 2010. See the methodological remarks of Mann 2012.
  - 22 Veyne 1976, 110–18, 201–9 (“régime des notables”); Quass 1993 (“Honoratiorenschicht”); Chaniotis 2005a, 29–41; Dmitriev 2005, 140–88; Hamon 2005; Müller 2005; Hamon 2007; Brélaz 2013, 69–72; see also the various contributions in Mann and Scholz 2012.
  - 23 Gauthier 1985 is a seminal study on benefactors; see also Quass 1993 for both the Hellenistic and the Imperial periods.
  - 24 For example, Arist. *Ath. Pol.* 47.1; *IG* V.1.1390, lines 45–7.
  - 25 Zuiderhoek 2008.
  - 26 Quass 1993, 51–6; on *euschemones*, see Lewis 1993, 106–7.
  - 27 See, for example, Chaniotis 2004, 385.
  - 28 Olbia: *IOSPE* I<sup>2</sup> 31 + *SEG* xxxii 794; Chersonesos: *IOSPE* I<sup>2</sup> 34 + *SEG* xxxvii 670; *IOSPE* I<sup>2</sup> 355. For the earlier periods, see Domingo Gygax 2016.
  - 29 *IOSPE* I<sup>2</sup> 401. Recent discussions of the oath: Dössel 2003, 179–96; V. F. Stolba 2005b.
  - 30 Olbia: *IOSPE* I<sup>2</sup> 325 (raid against Leuke, third century BCE), 34 (reference to wars, first century BCE); on the destruction of Olbia by the Getae in the middle of the first century BCE, see Dio Chrys. 36.4. Chersonesos: *IOSPE* I<sup>2</sup> 343 = *SEG* xlvii 1168 (attack of Sarmatians, about 250 BCE); 352 (war of Diophantos against the Scythians, about 110–109 BCE); 355 (war in the first century BCE); 369 (war of Sauromates); 401 (citizen-oath implying fears of attack and treason, early third century BCE); 402 (treaty between Chersonesos and Pharnakes I of Pontus, 179 or 155 BCE). On the date of the treaty with Pharnakes, see Højte 2005 (155 BCE). For the devastation of the territory of Chersonesos around 270 BCE, see V. F. Stolba 2005a, 166–7 (with bibliography). For Diophantos, see Saprykin 1997, 258–83; for the controversial chronology of conflicts between Chersonesos and the Bosporan Kingdom (under Sauromates I, II, or IV), see Kantor 2013, 78–9 (with earlier bibliography). Pantikapaion: *CIRB* 136 = *SEG* iii 612 (death of a man in a battle against barbarians, first century CE).
  - 31 I cannot discuss here the development of the status of the North Pontic cities and the history of their relations with the Bosporan Kingdom, the kingdom of Pontus, and Rome. On the relations between Hellenistic Chersonesos and Rome, see Heinen 2005a; on the complex situation of Chersonesos in the second century CE – outside the boundaries of the empire, but subject to taxation (*IOSPE* I<sup>2</sup> 404) and dependent on support for its defence – see Haensch 2005; Makarov 2007; Haensch 2009. On the relations between the Bosporan kings and Rome, see Heinen 2006, 28–58; Saprykin 2007. See also Ferrary 2007.
  - 32 For the payment of tribute to kings and rulers of barbaric tribes, see, for example, *IOSPE* I<sup>2</sup> 30 and 32 (Olbia, third century BCE). For the payment of taxes to Rome, see the directly attested tax on prostitution in Chersonesos (late second to early third century CE): *IOSPE* I<sup>2</sup> 404; *SEG* liii 766.
  - 33 *IOSPE* I<sup>2</sup> 32, line 11: ἀπαιτοῦντος τὰ δῶρα τῆς παρόδου; lines 34–5: ἐπὶ τὴν τῶν δώρων κομιδὴν; lines 42–4: πολλοὶ μὲν σκηπτοῦχοι ἐθεραπεύθησαν εὐκαίρως, οὐκ ὀλίγα δὲ δῶρα παρεσκευάσθη τῷ βασιλεῖ λυσιτελεῶ[ς]; lines 83–4: παραγενομένου ἐπὶ θεραπείαν.
  - 34 Ἐπὶ τῆς βασιλείας: *CIRB* 36, 58, 628, 1051, 1134, 1237; ἐπὶ τῶν λόγων: *CIRB* 36; ἐπὶ τῆς πινακίδος: *CIRB* 36, 584; ἐπὶ τῆς αὐλῆς: *CIRB* 49, 78, 897, 1055; ἐπὶ τῶν ἱερῶν: *CIRB* 976, 1045, 1129; ἐπὶ τοῦ ἱππῶνος: *CIRB* 942; ἐπὶ τῆς νήσου: *CIRB* 40, 697, 982, 1000; ἐπὶ τῆς Θεοδοσίας: *CIRB* 36, 64, 1130; ἐπὶ τῆς Γοργιππίας: *CIRB* 1119, 1134; ἐπὶ τῶν Ἀσπουργιανῶν: *CIRB* 36, 1246, 1248; ἐπὶ τῶν εὐνούχων: *CIRB* 301; ἐπὶ τοῦ προσδοικοῦ ἐπιστολογραφίου: *CIRB* 519.

- 35 *Archairetike ekklesia*: *IOSPE* I<sup>2</sup> 34 (Olbia, first century BCE). Voting: *SEG* LX 614 (Chersonesos, early third century BCE); *IOSPE* I<sup>2</sup> 355 (Late Hellenistic); Olbia: *SEG* XXXIV 758 (third century BCE); *IOSPE* I<sup>2</sup> 39 (second century CE).
- 36 List of eponymous magistrates: *IOSPE* I<sup>2</sup> 201. See the prosopographical studies by Nikolaev (2008; Nikolaev 2012a). Although neither the chronology of the aforementioned list nor some of the identifications of family members proposed by Nikolaev are certain, the occupation of public functions by members of a few families cannot be disputed. For criticism on Nikolaev's studies, see A. Avram, *Bulletin Épigraphique* (2010) no. 460; *SEG* LVIII 763 (G. Kantor). In Chersonesos, a good example for the Imperial period is offered by *IOSPE* I<sup>2</sup> 359: the councillors of the "first row" who sealed the decree have names that suggest family relations, although they cannot be determined with certainty: T. Flavius Ariston, son of Flavius Ariston and grandson of Agepolis; T. Flavius Agepolis, son of Flavius Ariston; T. Flavius Pythodotos, son of Flavius Agepolis; Zethos, son of Ariston.
- 37 Olbia: *IOSPE* I<sup>2</sup> 40, 43, 44, 52, 79 (first to third century CE). References to the ancestors (e.g., *IOSPE* I<sup>2</sup> 47) serve the same purpose, that is, emphasizing a family's rank. Similar expressions appear elsewhere as early as the early first century BCE (*IGR* IV 293) and continue to be used in the Imperial period (e.g., *MAMA* VIII 492). Public service as *axioma* in other areas: *IG* X.2.1.16; *IG* XII.7.397, 399, 407; *I.Iasos* 94 (εὐγένεια καὶ αξίωμα); *I.Stratonikeia* 15.
- 38 For these expressions in Olbia (first to second century CE), see *IOSPE* I<sup>2</sup> 40, 43, 44, 52, 79.
- 39 *IOSPE* I<sup>2</sup> 440: [A]ὔρ(ήλιος) Ἐρμοκράτης Μύρωνος, φύσει δὲ Τειμοθέου, ἐφιλοτειμησάμην τὰ ἐκ τῆς ἐξόδου τῆς ἀγορανομίας δηνάρια τρισχέλια εἰς τὸν ναὸν τῆς Ἀφροδείτης. Also see *SEG* LXII 519. On *summa honoraria*, see Quass 1993, 328–34.
- 40 For example, *IOSPE* I<sup>2</sup> 39, 40, 42, 43, 51, 54, 79, 420, 423 (second century CE).
- 41 On the importance of honorific statues: Ma 2013. On the significance of the ritual of crowning: Chaniotis 2005b, 52–5; Chaniotis 2007, 54–9.
- 42 Other examples of iteration: *IOSPE* I<sup>2</sup> 42, 132 (*archontes*, second time), 43 (*archon*, three times), 83 (*strategoi*), 139 (priest); *I.Olbia* 52, 88 (*archontes*), 87 (*strategoi*), 90 (*archon*); *SEG* XLIII 505, 507 (*archon*); XLIX 1028 A (*agoranomoi*); 1028 B (*archon* for the second time, priest for the fourth time).
- 43 Columns: *IOSPE* I<sup>2</sup> 441–8. Fortifications: *IOSPE* I<sup>2</sup> 438–9. For fortifications paid by individuals, see also the decree for Protogenes in Olbia.
- 44 *IOSPE* I<sup>2</sup> 39, 44, 54 (Olbia, second or third century CE).
- 45 Chersonesos (from the third century BCE to the second century CE): *IOSPE* I<sup>2</sup> 340, 344, 348–9, 351–2, 354–60, 362, 364–5 (*SEG* LII 737), 374–7, 400, 697–8; *NÉPKh* II 112, 118, 121; *SEG* XLV 985; XLVI 928; XLVIII 999. Olbia (from the third century BCE to the second century CE): *IOSPE* I<sup>2</sup> 25–7, 29, 33–4, 38a, 39, 52; *I.Olbia* 26, 28, 30, 32; *SEG* XXXI 710; XXXII 794; XXXIV 758, 759; XXXIX 702 (from the third century BCE to the second century CE). Pantikapaion: *CIRB* 432 (first century CE). Tyras: *SEG* XLVII 1196 (early third century CE). Cf. Phanagorea: *SEG* XLI 625 (87 BCE). Amastris: *CIRB* 54.
- 46 Chersonesos: *IOSPE* I<sup>2</sup> 357, 362, 364 (first to second century CE). Tanais: *SEG* XLV 1023 (second century CE).
- 47 *IOSPE* I<sup>2</sup> 359 and *SEG* LXV 985 (Chersonesos, second century CE); see also *SEG* LII 748 (Tyras, early third century CE).
- 48 The *boule* is the addressee of letters of kings and Roman officials: *IOSPE* I<sup>2</sup> 704 (Chersonesos, first century BCE); *NÉPKh* II 14 (Chersonesos, second century CE); *SEG* XXXVI 699 (Gorgippeia, late second century CE); *IOSPE* I<sup>2</sup> 4 (Tyras, 201 CE). Generally, on the council in the Hellenistic and Imperial *poleis*, see Quass 1993, 382–94; Hamon 2005.
- 49 Olbia, *eisegesis* by citizens: *SEG* XXXIV 758 (third century BCE); *IOSPE* I<sup>2</sup> 40 (Imperial period); by *synhedroi*: *IOSPE* I<sup>2</sup> 43, 44, 47 (Imperial period); by the *protos archon*: *IOSPE* I<sup>2</sup> 42 (third century CE). The restored formulation in *IOSPE* I<sup>2</sup> 425 (Chersonesos, second to third century CE) seems to imply that the suggestion was initiated by a *prohedros* (πρόεδρος μὲν

- εἰσηγη]σάμενον ἐνδόξως [καὶ δημηγ]ορήσαντα). Gauthier 2005 presents examples of decrees initiated by citizens, but they are not from the Black Sea region and they are not the rule.
- 50 Antiphon, son of Anaximenes, in Olbia (second century CE), who suggested an action in one year (*IOSPE* 1<sup>2</sup> 40: εἰσηγησαμένου Ἀντιφώντος Ἀναξιμένους, οἱ ἄρχοντες εἶπαν), served as *archon*, and moved a decree in another (*I. Olbia* 42: [Α]ντιφών Ἀναξιμένους ἄρχων εἶπεν). Anthesterios of Olbia, who is praised for making good suggestions (*SEG* xxxiv 758, line 32, third century BCE), was an elected official. Kallisthenes, son of Dadas, in Chersonesos, who suggested an action (*IOSPE* 1<sup>2</sup> 42) and was praised for his suggestions (*IOSPE* 1<sup>2</sup> 425, second to third century CE), was a *prohedros*; he also served as *archon* (*IOSPE* 1<sup>2</sup> 174) and *strategos* (*IOSPE* 1<sup>2</sup> 43); Agasikles, son of Ktesias, who suggested the construction of a guardhouse, occupied numerous offices (*IOSPE* 1<sup>2</sup> 418). Cf. the results of the study for Boeotia in Müller 2005.
- 51 Olbia: *IOSPE* 1<sup>2</sup> 26 and 32 (*archontes* and *hoi hepta*), 33, 35, and 40 (*archontes*). Chersonesos (usually the *prohedroi*): *IOSPE* 1<sup>2</sup> 342–3, 351, 357, 362, 364.
- 52 For example, Herakleides, proposer of *IOSPE* 1<sup>2</sup> 343 and 344, served as supervisor of public finances (*epi tes dioikeseos*: *IOSPE* 1<sup>2</sup> 343; Chersonesos, about 250–200 BCE).
- 53 For example, *IG* xii.3.325, lines 32–5 (Thera, 149 CE): πολλάκις τε περὶ τῆ[ς] κατασκευῆς αὐτῆς καὶ ἐπισκευῆς πανδημεὶ καταβοήσεις ἐγένοντο. On political acclamations, see, most recently, Kuhn 2012; cf. Quass 1993, 415–18. On the assembly in the Hellenistic and Imperial poleis, see Quass 1993, 355–82, 394–425.
- 54 Zuiderhoek 2008, 422.
- 55 *IOSPE* 1<sup>2</sup> 32. For a discussion of emotional language in this decree, see Chaniotis 2012, 114–19; Chaniotis 2013. On the date of the decree, see, more recently, Nikolaiṭen 2012b.
- 56 Plut. *Phokion* 9: κληθεὶς πολλάκις, οὐκ ἐπαύοντο κεκραγότες καὶ καταβοῶντες.
- 57 Chariton, *Chaireas and Kallirhoe* 1.1.11–12. Discussed by van Nijf 2013, 380–1.
- 58 Fernoux 2005; Zuiderhoek 2008, 418–26.
- 59 Zuiderhoek 2008, 425–6.
- 60 Ἐκκλησίας γενομένης/συνθηροισμένης πανδήμου: *IOSPE* 1<sup>2</sup> 40, 42–4, 46–7; *SEG* xxx 968 = xxxiv 766 (late second or early third century CE).
- 61 Attendance at banquets (δειπνίζειν πανδημεὶ): *IG* vii 1680; 2712, line 79; 4148; *SEG* xxxv 744; *I.Priene* 113, line 61; *TAM* ii 508; *I.Aph2007* 12.1104; 12.29 ii.15; 15.261; *IGR* iii 796; *I.Perge* 58; cf. *IG* iv 597 (πάντας ἐλευθέρους); *IG* v.2.268 (τοὺς δ' ἄνθρώπους). Sacrifice (θύειν πανδημεὶ): *I.Pergamon* 246, lines 39–40. Offering of olive oil for athletic activities in the *gymnasion* (ἀλείφειν πανδημεὶ): *IG* x.2.1.215; x.2.2.368; *SEG* xlii 559, 581–2; *I.Beroia* 114; *IGBulg* iv 1917; *IscrCos* EV 87; *I.Stratonikeia* 202, 205, 345; *I.Ilion* 121, 123. Cf. γυμνασιαρχεῖν πανδημεὶ: *IG* x.2.1.196. Attendance of funerals: *IG* v.1.1427; *IG* xii.7.53, 239, 395; *SEG* xxviii 953, lines 39–40: πενθήσαι μὲν πανδημεὶ πάντας. Cf. *IG* vi 1485. Celebrations (πανηγυρίς/ὑποδοχὴ πάνδημος): *I.Histria* 54; *TAM* ii 539. Distribution of gifts (διαδόματα πάνδημα): *I.Beroia* 117.
- 62 *I.Iasos* 612, lines 35–6: ὁ δῆμος τὸ ψήφισμα [ἐπι]κυρώσας [τὸ προάγον ἐπήνισεν αὐτὸ]ν πανδημεὶ; *SEG* xlii 947 (about 60 CE): μαρτυρούμενος πανδήμῳ φωνῇ; *IG* xii.3.325, lines 32–5: πολλάκις τε περὶ τῆ[ς] κατασκευῆς αὐτῆς καὶ ἐπισκευῆς πανδημεὶ καταβοήσεις ἐγένοντο. Cf. *IG* vii 2712, line 83; *IG* xii.6.1219.
- 63 *I.Bouhon* 29: [ἡ βο]υλή καὶ ἡ πάνδη[μος ἐκκλησία]; *MAMA* vi List 146, 106: ἀγομένης πανδήμου ἐκκλησίας. Cf. the expression σύμπαν πλῆθος in inscriptions from Asia Minor: Fernoux 2005, 28–31.
- 64 *IOSPE* 1<sup>2</sup> 359: [μετοχ]άν τε πάντων τῶν ἐν τῇ πόλει, ὧν καὶ τοῖς ἐνφύ[τοις τ]ῶν ἀστῶ<ν> μέτεστιν; *IOSPE* 1<sup>2</sup> 362: μετοχ<ά>ν τε πάντων ὧ[ν]περ μέτεστι καὶ τοῖς Χερσονα[<σ>]εῖταις κάπο γένους [πολεῖταις]; *SEG* xlv 985 A 26: τοῖς ἀρχᾶθεν Χερσον[α]σιταῖν. Cf. Jajlenko 1999, 218.
- 65 *Stichoi*: *IOSPE* 1<sup>2</sup> 359–61; *SEG* xlv 985. For a discussion of this text, see also Sventsiṣkaia 1996; Vinogradov 1996.

- 66 *IOSPE* I<sup>2</sup> 401 (third century BCE), 402 (second century BCE), 355 (first century BCE); *SEG* XLV 986 (late second century CE).
- 67 See above, n. 41.
- 68 Chaniotis 2009a, 186–97.
- 69 For example, Olbia: *IOSPE* I<sup>2</sup> 34 (Hellenistic), 39, 40, 53 (second century CE).
- 70 For example, *IOSPE* I<sup>2</sup> 32, 39, 40, 352; *SEG* XLV 985.
- 71 *IOSPE* I<sup>2</sup> 32; see above, n. 55.
- 72 Cf. Arist. *Poet.* 1455a23; Polyb. 2.56.8; 11.5.1; 22.8.11.
- 73 See Chaniotis 2013 on *IOSPE* I<sup>2</sup> 352.
- 74 Jones 1999; Chaniotis 2006, 224–6.
- 75 Strubbe 2001, 36–8; Canali De Rossi 2007; ; van Nijf 2013, 383–7.
- 76 *IOSPE* I<sup>2</sup> 34; see also *SEG* III 586; XXXVII 670.
- 77 *IOSPE* I<sup>2</sup> 39, 51, and 52 (second century CE). See also *IOSPE* I<sup>2</sup> 45, 46, 59, and 61.
- 78 Chaniotis 2009a.
- 79 It is also used in the context of the equal treatment of non-citizens in festivals; see Hamon 2012, who exploits Hellenistic inscriptions from Asia Minor.
- 80 A selection of discussions of identity and the means of its expression in the Greek world: Boegehold and Scafuro 1994; Lindner 1994; Hall 1997; Figueira 1999; Veyne 1999; Goldhill 2001; Stephan 2002; Jones 2004; Lafond 2005; Gorre 2007; Larson 2007; Belayche and Mimouni 2009; Chaniotis 2009b; Heinen 2009; Heller 2009; Kuhn 2009.
- 81 The bibliography on this controversial subject is extensive. Generally, I follow the view of Heinz Heinen (2006, 65, on Olbia) that the non-Greek population was politically and culturally integrated into the Greek cities, at least until the early third century CE, which is the period covered by this study. For recent onomastic studies, see Cojocaru 2004; Hupe 2005; Hupe 2007.
- 82 Recent publication include, e.g., Podossinov 1996 (aspects of ethnicity and acculturation); Braund 1996; Braund 1998 (myth and foundation legends); Hupe 2005; Hupe 2007 (onomastic material, religion); Langner 2005 (on coins and the iconographical evidence); Dana and Dana 2001–3 (local historiography); Dana 2007 (local cults); V. F. Stolba 2007 (coins).
- 83 For example, *IOSPE* I<sup>2</sup> 51: ἐ[πὶ τῇ ἀνυπερβλή]τῳ εἰς τὴν πατρίδα καλο[καγαθία]; *IOSPE* I<sup>2</sup> 52: ὥς ἔσοιτο τῇ πόλει φιλόπατρις; *SEG* LVI 933: ἀπεκατέστησεν τῇ πατρίδι. Other citizens praised with the attribute *philopatris*: *IOSPE* I<sup>2</sup> 423, 425; *SEG* XXXVIII 753; LIII 594 (second century CE). The use of the attribute *philopatris* by rulers – e.g., Kotys (*IOSPE* I<sup>2</sup> 38a), Mithridates VII (*CIRB* 1123) – has different connotations (see Funck 1992 and Ferrary 2001).
- 84 *IOSPE* I<sup>2</sup> 344. Recent discussion of this text with earlier bibliography: Dana and Dana 2001–3, 99–102.
- 85 For example, *CIRB* 142 (Pantikapaion, first century CE): ἐν Σιρακοῖς ἔθνησκον ... τελευτὴν ἀθλίην ἐσχηκότα ἐν ἄλλοφύλοις.
- 86 *CIRB* 134: ἔχω δὲ πατρίδας νῦν δύο τὴν μὲν πάλαι ἐν ἧ τέθραμμαι τὴν δὲ νῦν ἐν ἧ μένω.
- 87 Funck 1992; Heinen 2006, 28–58; Heinen 2008.
- 88 See above, n. 84.
- 89 Useful discussion of various aspects of the relations between Greek and non-Greek populations: Gallotta 2005; Heinen 2005b; Langner 2005; Hupe 2007; Braund 2007; Ivantchik 2007.
- 90 Cf. *CIRB* 136: βαρβαρικῶ ἄϊματι.
- 91 Hupe 2007.
- 92 *CIRB* 1237, 1242, 1243, 1245–8, 1250, 1251a, 1256, 1258, 1260a; *SEG* XLV 1008. The assumption that this division existed as early as the second century BCE is based on the restoration of the title Ἑλληνάρχης in two Hellenistic inscriptions – *SEG* LVIII 783 and 784 (Ivantchik 2008, 96–7); these restorations are possible, but not certain.
- 93 Cavafy 1992, 193.
- 94 Jones 1978, 61–4; Hupe 2007.

## CHAPTER 7

- 1 Hölscher 2004, 7.
- 2 See the chapter by Alla V. Buiskikh in this volume.
- 3 Savostina 2012, 342–3.
- 4 Brashinskii 1963, 8.
- 5 For a detailed account of the history of exploration of Black Sea antiquities, see Tunkina 2002.
- 6 In the second half of the nineteenth through the early twentieth century, there were at least two functioning limekilns in the city of Kerch. Archaeological sites in the vicinity often served as sources for stone and marble, in particular.
- 7 The exact numbers are difficult to specify, but just to give an example, approximately 3,000 sculptures (including fragments) had been found in the Bosporean Kingdom alone up until the early 2000s (Savostina 2012, 15).
- 8 Development of classical archaeology as art history in the middle of the eighteenth century and their later parting and eventual divergence are discussed in Smith 2006. See also Tanner 1994; Corbey, Layton, and Tanner 2004.
- 9 See Kozlovskaya 2009, 726 (with bibliography).
- 10 See Smith 2006, 69.
- 11 See Posamentir 2007; Posamentir 2010; Kreuz 2012; Savostina 2012.
- 12 Hölscher 2004, 2. See also Osborne 2012.
- 13 Hölscher 2004, 3.
- 14 Although quite a significant number of monuments found in the territory of the Bosporean Kingdom were imported from elsewhere and also played their part in the creation of the visual environment, this chapter will deal exclusively with objects that were locally produced by Bosporean sculptors.
- 15 Tanner 2010, 277.
- 16 Kampen 2003, 375.
- 17 Rostovtzeff 1922, 1.
- 18 Ivanova 1953, 37.
- 19 Ivanova 1953, 37.
- 20 Koshelenko and Kuznetsov 1998; Koshelenko and Kuznetsov 2010, 419–20.
- 21 Koshelenko and Kuznetsov 2010, 418, nos. 46–8.
- 22 See, for example, Dovatur, Kallistov, and Shishova 1982; Ivanchik 2010a; Ivanchik 2010b.
- 23 At present, about 200 settlements have been identified within the territory associated with the Maeotai (Limberis and Marchenko 2010, 190). It is worth noting that the distance between the Greek *apoikiai* and the nearest known Maeotian settlement was at least 60 km (Koshelenko 2010, 357).
- 24 Goroncharovskii and Ivanchik 2010, 224, 230.
- 25 Koshelenko and Kuznetsov 2010, 418.
- 26 Scythians seem to have appeared in the Northern Black Sea region more or less simultaneously with the first Greeks, i.e., in the late seventh century BCE (Alekseev 2003, 160–1).
- 27 See, for example, Butiagin 2000.
- 28 Podosinov 2012, esp. 23–7.
- 29 Griffith 2006a, 201–2.
- 30 See, for example, Podosinov 2000.
- 31 Lomas 2004, 8–10.
- 32 Podosinov 2000, 68–9.
- 33 Podosinov 2000, 70–1.
- 34 The terms “Bosporus” (or “Bosporean land”) and “Bosporans” appear in inscriptions as early as the middle of the fourth century BCE (*CIRB* 1; 133).
- 35 See Lomas 2004, esp. 2–3.



- 36 Davydova 2000.
- 37 Korovina 1968, 100; Savostina 2012, 158, 166.
- 38 Ol'khovskii and Evdokimov 1994, 40–60, esp. 40–51; Ol'khovskii 2005, 94–130. Recently, two more fragments have been found in the vicinity of Nymphaion. Although dated by the excavators to the sixth or fifth century BCE, the fragments are too indistinct to be dated securely (Zin'ko 1999, 120, fig. 195, photos G, H).
- 39 Kampen 2003, 372.
- 40 Ridgway 1986, 8.
- 41 For a useful discussion of the term “style,” see Elsner 2003.
- 42 Savostina 2010, 513.
- 43 See Treister 1999 (with bibliography).
- 44 For recent publications and bibliography on transport and trade of marble in antiquity, see Gutiérrez García-M., Lapuente, and Rodà 2012, 528–61.
- 45 Vermeule 1977, 813.
- 46 Grach 1970, 589.
- 47 Vermeule 1977, 817.
- 48 Kerch State Historical and Cultural Preserve, Kerch, inv. no. 1267.
- 49 Bessonova and Kirilin 1977; Treister 2008, 36–8.
- 50 Lorenz and Treister 2008, 19, 38.
- 51 Main interpretations can be gleaned from: Bessonova and Kirilin 1977; Kreuz 2008; Savostina 2012, 128–40.
- 52 For an excellent analysis of all the elements of the burial ritual, see Treister 2008.
- 53 Kreuz 2008, 140.
- 54 The reaction of the intended audience is also associated with the issue of visibility and communication. A careful firsthand examination of the stele allows one to suggest the possibility that it might have been damaged on purpose: the traces on the surface seem to be consistent with a deliberate attack – for example, on the face of the female figure. It is interesting that the fragment containing the head of a horseman is missing, although this could be purely coincidental. Granted, we know neither whether the stele was damaged deliberately nor when this damage may have occurred, but if it happened in antiquity, this should also be regarded as a form of communication.
- 55 Kreuz 2008, 137, n. 35; Savostina 2012, 132–40.
- 56 Griffith 2006a, 201–2, 204, n. 87; Griffith 2006b, 343; Kreuz 2008, 136, n. 32. Images of deceased women represented as traveling in carts recur on funerary monuments from Hellenistic and Roman Greece, Asia Minor, and Southern Italy. These carts are often drawn by mules. On the lack of mules and donkeys in the North Pontic region, see Griffith 2006b, 343.
- 57 Kerch State Historical and Cultural Preserve, Kerch, inv. no. KL-266.
- 58 Kerch State Historical and Cultural Preserve, Kerch, inv. no. KL-299; *CIRB Album* 470.
- 59 Kerch State Historical and Cultural Preserve, Kerch, inv. no. KL-420.
- 60 Doors, gates, and passages often served as symbols of transformation and change in a variety of cultures (see, for example, Catedra 1991; I am grateful for this reference to Dr. Roberta Casagrande-Kim). For a useful discussion of the door motif in Roman funerary sculpture, see Davies 1978.
- 61 British Museum GR 1805.7–3.158; Boschung 1987, Taf. 33, Nr. 771a.
- 62 Casagrande-Kim 2012, 185–6. I am grateful to Dr. Casagrande-Kim for sharing with me ch.6 (“Gates to Hades”) of her unpublished dissertation and for allowing me to quote from it.
- 63 See the chapter by Askold Ivantchik in this volume.
- 64 It seems that extensive production of funerary stelai began in the Bosphorus in the third century BCE and continued into the third century CE (Marti 1941).
- 65 Kreuz 2001; Kreuz 2012; Zanker 1993.



- 66 See, for example, *CIRB Album* 127; 132; 276; 372; 992.
- 67 See, for example, *CIRB Album* 134; 144; 365; 884; 893.
- 68 See *CIRB Album* 312 and 354, where Hermes is dressed in a kaftan according to the local fashion and is represented shaking hands with a deceased.
- 69 Marti 1941.
- 70 Although this convention of representing a heroized decedent as a horseman must have come from the Greek funerary repertoire and such images were particularly popular on the gravestones of western Asia Minor (Dimitrova 2002, 221), the cultural and ethnographic realities of the Bosphorus ensured their popularity in the region. For an alternative interpretation of the iconographic and cultural source of this motif, see von Gall 2002. Nora Dimitrova (2002) also presents an enlightening discussion of the so-called Thracian Rider motif.
- 71 For a useful treatment of this subject, see, for example, Blondé and Muller 2000.
- 72 See, for example, *CIRB* 638 (a figure of a standing soldier with a shield and spears “inserted” into a scene of a funerary banquet); *CIRB* 1001 (the figure of a mourning man leaning on a pillar placed next to a scene of a funerary banquet); *CIRB* 1197 (a horseman juxtaposed with the figure of a mourning man leaning on a column).
- 73 State Hermitage, St. Petersburg, inv. no. P.1899.81 (discovered in 1900 by Karl Dumberg).
- 74 Kreuz 2001, 159.
- 75 Hölscher 2004, 126.
- 76 Kreuz 2001, 159.
- 77 Kreuz 2001, 160.
- 78 *CIRB Album* 664.
- 79 Pushkin State Museum of Fine Arts, Moscow, inv. no. F-609.
- 80 State Hermitage, St. Petersburg, inv. no. P.1842.16.
- 81 State Hermitage, St. Petersburg, inv. no. PAN.150.
- 82 *CIRB Album* 332.
- 83 *CIRB Album* 653.
- 84 See, for example, Altmann 1905, figs. 163–4; D’Ambra 1995.
- 85 State Hermitage, St. Petersburg, inv. no. 1830.1.
- 86 Temrîuk History Museum, Temrîuk, inv. no. KM 4770/79.
- 87 Moscow State Historical Museum, Moscow, inv. no. 5694/8.
- 88 Shliāev 1955, 176.
- 89 Several of them were found in association with burial structures: see, for example, Sokol’skiĭ 1965, 86.
- 90 Sokol’skiĭ 1967, 201; Grach 1970, 590; Kruglov 1998, 74, 76. The pigments were apparently applied over a thin coat of plaster that covered the statues.
- 91 Pushkin State Museum of Fine Arts, Moscow, inv. no. F-862.
- 92 Kerch State Historical and Cultural Preserve, Kerch, inv. no. KL-1092.
- 93 Sokol’skiĭ 1965; Sokol’skiĭ 1966; Sokol’skiĭ 1967; Sokol’skiĭ 1976a; Kruglov 1998, 71.
- 94 Sokol’skiĭ 1965, 86–8.
- 95 Kobylina 1962; Kreuz 2009, 202.
- 96 This study was undertaken by Valeriĭ Ol’khovskii (see Savostina 2012, 160–1).
- 97 Sokol’skiĭ 1965, 88; Sokol’skiĭ 1973; Saprykin and Maslennikov 1996, 279.
- 98 Ivanova 1961, 89; Kobylina 1962, 211.
- 99 Sokol’skiĭ 1965.
- 100 Kreuz 2009, 203.
- 101 See Davydova 2004, nos. 54, 56–64. It is worth noting that most of these were found in the Kerch Peninsula.
- 102 Lozovoĭ and Dobrovol’skaĭa 2010, 136.
- 103 Also see *Ivantchik* in this volume.
- 104 Kerch State Historical and Cultural Preserve, Kerch, inv. no. 77.

- 105 See Kruglov 1998, 73. For a general discussion of *anodos* and its iconography on Greek vases, see Bérard 1974.
- 106 Sturgeon 1975.
- 107 In Sicily and Southern Italy, terracotta busts prevailed (Kilmer 1977; Kruglov 1998, 72).
- 108 Sturgeon 1975, 231–2, 235.
- 109 The ethnonym “Sarmatians” can probably refer to several groups of nomads who are usually placed in the area along the river Tanais and around Lake Maeotis. It also seems that the Sarmatians were in contact with the Greeks in the North Pontic region as early as the late third and the early second centuries BCE (see the chapter by Valentina I. Mordvintseva in this volume).
- 110 Simonenko 1994; also see Mordvintseva in this volume.
- 111 Solomonik 1959; Drachuk 1975; Ĭatsenko 2001; Ĭatsenko 2009, 539; Gráfik 2010; Yatsenko 2010.
- 112 Landais 2010; Humphrey 2010. Currently, the majority of scholars agree that the tamgas (as well as the tradition of branding horses and cattle) were brought into the area by the nomadic Sarmatians that gradually moved east- and then southward with their herds along the Eurasian steppe-belt. However, the tradition of branding horses existed among the Greeks from as early as the Archaic period onwards (Hemingway 2004, 101–3, 176, n. 89, with literature). Therefore, images of horses and cattle branded with tamgas that appear on several Bosporan grave stelai and objects dating from the first to the second century CE could be a manifestation of two traditions – Greek and Sarmatian (nomadic) – coming together (for the images and their description, see Solomonik 1957, figs. 1–3; Solomonik 1959, 79–81, no. 35; 156, 158, no. 143).
- 113 Solomonik 1959. For a list of the most up-to-date literature on tamgas on belt-buckles, see Treister 2011.
- 114 Ol’khovskii 2001.
- 115 Solomonik 1959, 19–21; Shelov 1966; Drachuk 1975, 61–74; Ĭatsenko 2001, 45–60; Kuznetsov 2007.
- 116 See Treister 2011, 319–21.
- 117 See the comments to *CIRB* 1053; Solomonik 1959, 51; Treister 2011, 321. The reverse side of these slabs clearly was not meant to be seen, and additional grooves on the sides indicate that they were set into some sort of a surface.
- 118 *CIRB Album* 1241.
- 119 *CIRB Album* 1248; 1249.
- 120 Kerch State Historical and Cultural Preserve, Kerch, inv. no. KL–68.
- 121 Shelov 1966; also, see the comments to *CIRB* 1053.
- 122 Kerch State Historical and Cultural Preserve, Kerch, inv. no. 100. Solomonik 1959, 51–2; Shelov 1966, 271; Drachuk 1975, 68–9.
- 123 State Hermitage, St. Petersburg, inv. no. 2069/1. The upper parts of the tamgas have been erased in order to accommodate a much later inscription from the sixth century CE. Some scholars identify one of the tamgas as that of Tiberius Iulius Eupator, whereas the second one remains unidentified; a theory of a co-ruler or, perhaps, a wife has been proposed (Solomonik 1959, 52–3; Shelov 1966, 270–1, 276, n. 19; Drachuk 1975, 68–9; Treister 2011, 322).
- 124 See *LIMC* VI, s.v. *Nike*, 850–904, esp. 850–7, nos. 40, 41, 53, 194, 383, 384.
- 125 Hölscher 1967, Taf. 1.1, 3, 8; Taf. 1.6; Taf. 1.11; Taf. 2.15; Taf. 3.1. Also see *LIMC* VIII 237–69, nos. 68, 69, 73–6.
- 126 See Treister 2011, 323–6, figs. 14 and 15.
- 127 Solomonik 1959, 51; Treister 2011, 321. Treister (2011, 326) proposes associating the images of Victories crowning people and tamgas with the military success of the state.
- 128 Perhaps two other slabs with solitary tamgas should also be added to this category: a limestone slab from Tanais depicting a large tamga associated with Rhoemetalkes, rendered in relief, and

a marble one recently found in Phanagoreia, with a large tamga of Sauromates carved into the surface, have no figures of Victories next to them (Shelov 1966; Kuznetsov 2007).

- 129 It would not be surprising if the individual “royal” tamgas were even more recognizable than actual portraits of the rulers.
- 130 These issues, as well as “similarities and differences between ancient and modern practices of art appreciation,” are discussed in Tanner 2010.
- 131 Tanner 2010, 280–3.
- 132 Zanker 2010, 46.

## CHAPTER 8

- 1 The example of Olbia also demonstrates that before the temple was constructed, already in the first half of the sixth century BCE, a plot of land in the territory of the city had been designated for the *temenos*, where altars and other structures associated with the performance of cult ceremonies were erected, in addition to the temple. Apart from individual structures, numerous dedicatory graffiti and other votive objects confirm the state character of the cult of Apollo *Ietros* (Rusyaeva 1994, 80–5). For the criteria that are used to determine and evaluate monumental structures associated with “political architecture” see Hansen and Fischer-Hansen 1994, 23–89; for the criteria used to determine the location of the public center of Olbia and for the functional division of the city territory from the moment of its foundation onwards, see A. V. Buiskikh 2005, 157–8.
- 2 Rusyaeva 1994, 82–6; Rusiaeva 2006a, 32–42; for a drawing of the reconstruction of the temple, see Kryzhitsky 1997, 15–34; Kryzhitskiĭ 2006, 43–52.
- 3 For a detailed stylistic and structural analysis of each architectural piece and the reasons behind their dating, see A. V. Buiskikh 2006, 95–9; A. V. Buiskikh 2007, 13–4; A. V. Buiskikh 2010, 15–48.
- 4 For how the volutes with one scroll were attached to the lateral sides of rectangular altars, see Ohnesorg 2005, 4, Abb. 2.
- 5 Koenigs 1980, 65–6. For the reasoning behind the dating of the Olbian volutes, see A. V. Buiskikh 2010, 24–5.
- 6 Gerkan 1915, Taf. XIX; Koenigs 1980, 65, Abb. 8; Ohnesorg 2005, 4, Abb. 2.
- 7 Theodorescu 1967, 100–10 (and 113 for the date of the early decades of the fifth century BCE, in particular); Mărgineanu-Cârstoiu 2006, cat. nos. IV.1–2, pls. XIX–XXI; fragments of an entablature with an identical Ionian *cymatium* from Paros have been dated to the same period (Gruben 1982, 217–19, Abb. 14). For analogies in terms of the rendering of the Lesbian *cymatium*, see Altekamp 1991, 195 (type “C”); Courtills 1997, 510–12, A 9, fig. 9.
- 8 Buiskikh 2010, 46.
- 9 Weickert 1913, 43–5; Gerkan 1915, Taf. XII–XVI, XXIII; Koenigs 1996, 141–6, Abb. 1–3.
- 10 Aktseli 1996, 65–114; Ohnesorg 2005, 3–7.
- 11 Wiegand and Knackfuss 1941, Taf. 206, F 641, 641a; Taf. 209, F 643, 643a, 644c, 644d; Taf. 207, F 644a, 644b; Taf. 83b, Z 644; Hahland 1964, 176–202. According to Anna Brockmann, the canonic structure of the three-partite carved facade of the *anta* capitals with two rows of Ionian *cymatium* and palmettes with lotus flowers in between was finalized only by the end of the sixth century BCE (Brockmann 1968, 66–7).
- 12 A. V. Buiskikh 2010, 39–40.
- 13 Theodorescu 1967, 101–2, 113–14, figs. 20–1; Mărgineanu-Cârstoiu 1993, 52–8, Abb. 9–12.
- 14 Koenigs 1980, 67–8, cat. no. 2, Taf. 31.1–4.
- 15 Buiskikh 2010, 25.
- 16 Pharmakowsky 1906, 121–2, Abb. 7. The closest analogies come from Chios (Boardman 1959, 192–3) and Histria (Theodorescu 1967, 105–15, figs. 18–19; and 116 for the date). For the reasoning behind the dating of the architectural fragments from Oblia on the basis of stylistic analysis of the decorative elements, see the detailed account by A. V. Buiskikh 2010, 46–7.

- 17 Theodorescu 1967, 105–16, figs. 18–19; Mărgineanu-Cârstoiu 2006, cat. nos. IV.10a–b, pls. XXVI–XXVII.
- 18 Blavatskiĭ 1962, 22, fig. 13.4; Boardman 1962–63, 45, fig. 25.
- 19 Kopeĭkina 1975, 194–8. For discussion of the date of the appearance in Olbia of the earliest houses built above ground and the arguments against such an early date, see Kryzhiŭskiĭ and Ruŭiāieva 1978, 22; Kryzhiŭskiĭ 1982, 14–18, 46. For the new arguments in support of the hypothesis that the building tradition in Borysthene and Olbia started to change no later than the 530s BCE, see Chistov 2006, 70 (for Borysthene, it is actually the beginning of the third quarter of the sixth century BCE) and Kryzhiŭskiĭ and Nazarchuk 1994, 99–106, respectively.
- 20 A. V. Buiskikh 2004, 9–12. Igor' Pichikīan dated the volute from Pantikapaion to 550–530 BCE (Pichikīan 1984, 172). See also A. V. Buiskikh 2009, cat. no. 39, and A. V. Buiskikh 2010, 24.
- 21 Blavatskiĭ 1953, 174, fig. 8; Blavatskiĭ 1957, 30, fig. 16.1.
- 22 Pichikīan 1984, 158–66.
- 23 Wesenberg 1971, 125.
- 24 A. V. Buiskikh 2009, 12; A. V. Buiskikh 2010, 16–17.
- 25 Tolstikov 2010, 308. For a critique of this reconstruction, see A. V. Buiskikh 2011, 38–44.
- 26 There are small fragments of relief *echini* of the shape typical for the fifth century BCE, and all of them are associated with column capitals of large public buildings (A. V. Buiskikh 2009, cat. nos. 74–5; Tolstikov 2010, fig. 6).
- 27 A. V. Buiskikh 2009, 27, cat. no. 1; A. V. Buiskikh 2010, 15–6.
- 28 A. V. Buiskikh 2009, cat. no. 2.
- 29 Wesenberg 1971, 125.
- 30 Mărgineanu-Cârstoiu 2006, cat. no. I.A0.4, pl. II, pl. 2.
- 31 For example, *antae* with twelve-petal rosettes from the Samian Heraion (Buschor 1957, Abb. 16.2, 17). Brockmann traces the usage of rosettes on the gorgons of *anta* capitals in the Ionic order back to Attic monuments – first of all, to the Erechtheion (Brockmann 1968, 78–9).
- 32 Rumscheid 1994, 21–2, cat. no. 117.3, Taf. 66.2–4.
- 33 A. V. Buiskikh 2010, 40.
- 34 Shoe 1936, pl. LXVI, 1; Wesenberg 1981, 52–3.
- 35 Shoe 1993, 318–19, figs. 7–9; Korrés 1996, 110, Abb. 32.
- 36 Mărgineanu-Cârstoiu 1984; Mărgineanu-Cârstoiu 1990, 103–17, A<sub>III</sub>, C<sub>40</sub>; see also Mărgineanu-Cârstoiu 2006, cat. nos. VI.A.4 (475–450 BCE), VI.A.5.
- 37 Shoe 1993, 317–8, figs. 5–6; Shoe 1996, 14 A, 14 B; Alzinger 1972–5, 197, Abb. 30 a, b.
- 38 A. V. Buiskikh 2011, 34–7.
- 39 Alzinger 1972–5, 188–90.
- 40 Sokolova 1997, 143–5; Boriskovskaĭa 1999, 20, cat. no. 1; Sokolova 2001, 369–75.
- 41 Sokolova 1997, 145, figs. 2–3; Boriskovskaĭa 1999, 20, cat. no. 2.
- 42 Shoe 1936, 147, pl. LXV, 5–6; LXXI, 26; LXXII, 11; Wesenberg 1971, 119, cat. no. 18, Abb. 253.
- 43 Shoe 1969, 188, pl. 49d; Wesenberg 1971, 130.
- 44 Boriskovskaĭa 1999, 20, cat. no. 1; Sokolova 2000–1, 81, 83, figs. 2–3.
- 45 Sokolova 2001, 370.
- 46 Buiskikh 2007, 58.
- 47 For Achaemenid influence on the Northern Black Sea, in general, and on the Bosphorus, in particular, see Fedoseev 1997, 309–19.
- 48 Tolstikov 2010, 300, fig. 15.
- 49 Korrés 1996, 110, Abb. 31.
- 50 A. V. Buiskikh 2009, cat. no. 35.
- 51 Pichikīan 1984, 158–66 (esp. 165).
- 52 Shoe 1996, cat. no. 21, fig. 31.

- 53 A.V. Buiskikh 2009, cat. no. 36.
- 54 For the argument in support of the date of the emergence of Hippodamian city planning in Chersonesos in the Late Classical period and the concurrent construction of residential and public buildings, as well as the establishing of the city necropolis, see A. V. Buiskikh 2008, 66–71.
- 55 Weickert 1913, 71–3; Ganzert 1983, 149–50, Abb. 64; Seiler 1986, 80–1.
- 56 Zolotarev and Bujskikh 1995, 140–4, figs. 10–11.
- 57 Gruben 1961, 172; Bingöl 1980, 228, cat. no. 274; Rumscheid 1994, cat. no. 336.14–16, Taf. 179.2–3; 180.1–2.
- 58 Conze, Hauser, and Benndorf 1880, Taf. xxiii; Pfrommer 1986, 79, n. 8.
- 59 Weber 1966, 103–6; Rumscheid 1994, 124–32, cat. no. 31.4–5, Taf. 17.1–8; Hoepfner 1990, 30.
- 60 Krischen 1923, 89 (“frühestens in die Mitte des IV. Jahrhunderts”); Rumscheid 1994, 62–6 (for the reasoning behind the date of 340 BCE as the *terminus post quem* and the arguments against a later date), cat. no. 148.3–6, Taf. 95. For the dating to about (or soon after) 300 BCE on the basis of the specific features in the building technique, see Hoepfner 1990, 7.
- 61 Wiegand and Knackfuss 1941, Taf. 72, Z 518; Taf. 74, Z 538.
- 62 Orhan Bingöl traces the origins of the Ionic bolster of the Attic type in Asia Minor back to the Nereid Monument in Xanthos (410–400 BCE) (Bingöl 1980, 54–5).
- 63 Bingöl 1980, nos. 267–8; Rumscheid 1994, 42–5, 179–92, cat. no. 293.3–4, 13, Taf. 142–3.
- 64 Hoepfner 1971, 40–2, Taf. 10–11.
- 65 Bingöl 1980, no. 267 (Priene, the temple of Athena); no. 269 (Priene, the temple of Zeus); nos. 183–4 (Priene, the Letoon); no. 34 (Aphrodisias); no. 197 (Magnesia-on-Meander); nos. 271–2 (the North Hall, Priene).
- 66 For a comprehensive analysis of the architectural fragments of the Hellenistic period from Chersonesos, with dates and a detailed reasoning behind each date, see A. V. Buiskikh 2010, 31–8.
- 67 Wiegand and Knackfuss 1941, Taf. 73, Z 525.27–30.
- 68 Such capitals have been found in a building identified as a *basileia* of the ruling dynasty of the Spartokids (Tolstikov 2002, 48, Abb. 16).
- 69 Kobylina 1956, 27, fig. 7.
- 70 A.V. Bujskikh 2010, 114.
- 71 Finogenova 1986, 205–9.

## CHAPTER 9

- 1 Skrzhinskaia 1977, 37.
- 2 Podosinov 2002, 29.
- 3 Zubarev 2005.
- 4 Khazanov 1984, 84; Kradin and Skrynnikova 2006, 49, 59.
- 5 Podosinov 2002, 29.
- 6 Podosinov 2002, 57.
- 7 Mot'sia 2011, 10–12.
- 8 Podosinov 2002, 15.
- 9 For the influence of maps on geopolitics and human consciousness, see Anderson 2006, 170–8.
- 10 Anderson 2006, 174.
- 11 Podosinov and Skrzhinskaia 2011, 123, no. 249.
- 12 Machinskii 1971, 45–6.
- 13 Podosinov 2002, 27.
- 14 Tishkov 2003, 117.
- 15 Rostovtsev 1918b, 81.
- 16 Rostowzew 1931, 6–8; V. Stolba 1993, 56.
- 17 Tokhtas'ev 2005, 295.

- 18 Rostowzew 1931, 116–18, 123.
- 19 Vinogradov 1989, 182.
- 20 Harmatta 1970, 11–12; Smirnov 1984, 67; Simonenko and Lobaĭ 1991, 76–9; Shchukin 1994, 97; Polin and Simonenko 1997, 92–3; Vinogradov 1997a, 106; Puzdrovskii 2001, 87; Tokhtas'ev 2005, 295.
- 21 Vinogradov 1997a, 115.
- 22 See, for example, “Posledniĭ pokhod Uryzmaga” (*Uryzmag's Last Campaign*) in the cycle about Uryzmag and Shatana of the Ossetic Nartian epos (Libedinskiĭ 1978, 108–14).
- 23 Khazanov 1984, 84.
- 24 Tokhtas'ev 2005, 295.
- 25 Rostowzew 1931, 37.
- 26 Mordvintseva 2013.
- 27 Thus, Rostovtzev's search for the Sarmatian monuments east of North Pontic Scythia was based on his presumption that the Sarmatians were new Iranian tribes, connected, in terms of their origin, with Parthian Iran; therefore, he expected the presence of some specific features in their material culture, including certain styles and techniques in the applied arts (such as polychromy and animal style), fire rituals, and a particular type of armor (Rostovtzeff 1922, 121–4). Many other scholars also viewed the higher status of women in society – and the material evidence of it – as a typical Sarmatian (ethnic) trait (Grakov 1947; Skripkin 1990; Skripkin 1997). For a detailed discussion of the historiography of the question, see Mordvintseva 2013.
- 28 It is generally agreed that the Sarmatian period succeeded the Scythian period (i.e., the period of the classical Scythian culture) in the region in question. The suggested broad time frame for the former is from the third century BCE to the third century CE (Skripkin 1994).
- 29 Moshkova 1989, 164; Skripkin 1990, 3.
- 30 Buniatian 2002, 158.
- 31 For a detailed discussion of the historiography of the question, see Mordvintseva 2013.
- 32 Smirnov 1960; Shilov 1959; Shilov 1975; Maksimenko 1983; Mamontov 2000; Sergatskov 2000.
- 33 Skripkin 1990.
- 34 Klepikov 2002.
- 35 Ivanova 2000, 392.
- 36 For more information about this group of objects, see Mordvintseva and Khabarova 2006.
- 37 Broseder 2012, 350, fig. 1.
- 38 Klepikov 2002, 78–9.
- 39 Mordvintseva 1994.
- 40 Sergatskov 2009.
- 41 Dvornichenko and Fëdorov-Davydov 1993. For the date of the complex, see Treister 2005.
- 42 See, for example, Pfrommer 1987, 155–6, KTK 8–9, pls. 11–12.
- 43 Gall 1997, 174.
- 44 Mordvinceva 2001, 38; Mordvintseva 2003, 52.
- 45 Kyzlasov 1960, 109, fig. 36. 16, 18; Kubarev 1991, 76, fig. 17; Mogil'nikov 1997, 171, fig. 41.9.
- 46 Rudenko 1962.
- 47 Mordvintseva 2003, 44.
- 48 Ugol'kov and Ugol'kova 2001, pl. CIII, 1.
- 49 Kyzlasov 1960, 82, fig. 29.8.
- 50 Anisimova et al. 2005, cat. nos. 79–85.
- 51 Kurtz and Boardman 1971, 163.
- 52 Mordvintseva and Mys'kov 2005.
- 53 Quast 2009, 46–8.
- 54 Simonenko 2008, 12–16.
- 55 Pogrebova 1958.
- 56 Slavin 1954, 49–59; Kryzhitskii et al. 1980; Magomedov and Buiskikh 1980, 298.

- 57 Magomedov 2001, 133–4.
- 58 Artamonov 1948, 57; Dashevskaiā 1991; Popova 2011.
- 59 Grakov 1971; Il'inskaiā and Terenozhkin 1983.
- 60 Grakov 1954.
- 61 Bylkova 2007, 110.
- 62 Bylkova 2007, 42, 110.
- 63 Pogrebova 1958, 121–2, 235–6; Gavrilūk and Abikulova 1991, 5–8, 22.
- 64 Polin 1992, 107–8.
- 65 Bylkova 2007, 44, 114.
- 66 Bylkova 2007, 111–14.
- 67 Bylkova 2007, 41.
- 68 Dashevskaiā 1991, 143; Koltukhov 1999, 49–51, 59–63.
- 69 Kryzhiŭskiĭ 1993, 228.
- 70 Bylkova 2007, 39.
- 71 S. B. Buiskikh and Ievlev 1986, 64.
- 72 Kryzhiŭskiĭ et al. 1989, 85; Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 10–76, 97; Bylkova 2007, 28–9.
- 73 Bylkova 2007, 30–1.
- 74 Bylkova 2007, 37.
- 75 Kryzhiŭskiĭ et al. 1989, 155; Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 95; Bylkova 2007, 28.
- 76 S. B. Buiskikh 1991, 76–7.
- 77 Buiskikh and Ievlev 1986, 66; Kryzhiŭskiĭ, Buiskikh, and Otreshko 1990, 96; S. B. Buiskikh 1991, 110–12.
- 78 Bylkova 2007, 29.
- 79 Krapivina 1993, 154.
- 80 S. B. Buiskikh and Ievlev 1986, 74; S. B. Buiskikh 1991, 140.
- 81 Eliseev and Klišhentsĕv 1982, 154.
- 82 For a discussion on this matter, see Klepikov and Skripkin 1997; Vinogradov, Marchenko, and Rogov 1997; Bruĭāko 1999a; Zuev 1999.
- 83 Simonenko 1993b, 99.
- 84 Vīaz'mitina 1972.
- 85 Ebert and Schlitz 1913, 148–9; Symonovich 1967, 232–3.
- 86 Goshkevich 1913, 135–8; Vīaz'mitina 1972, 4, 7.
- 87 Pogrebova 1956.
- 88 Vīaz'mitina 1972, 8.
- 89 Brede 1960, 203.
- 90 Smirnov 1984.
- 91 Kostenko 1977; Kostenko 1978; Kostenko 1980; Kostenko 1983; Kostenko 1993.
- 92 Simonenko 1981; Simonenko 1993b.
- 93 Maksimenko 1983.
- 94 Kovpanenko 1986, 7.
- 95 Vīaz'mitina 1972, 8.
- 96 Kostenko 1993.
- 97 Kostenko 1977; Kostenko 1978; Kostenko 1980; Kostenko 1983; Kostenko 1993; Simonenko 1993b.
- 98 Smirnov 1984, 107.
- 99 Mikhlin 1975.
- 100 Bylkova 1993; Simonenko 1993b, 17–18.
- 101 Vīaz'mitina et al. 1960.
- 102 Kostenko 1993, 7.
- 103 Skadovskii 1897.
- 104 Kostenko 1993.



- 105 Kovpanenko 1986.
- 106 Simonenko 2008, 17–20, 35, 65–6, pls. 56–66.
- 107 Mantševich 1982.
- 108 *Otchët' Imperatorskoï Arkheologicheskoi Kommissii za 1896 god* (St. Petersburg 1898), 88–9, 213–16; Minns 1913, 147–8, fig. 38.
- 109 Mordvintseva 2003, 44, 52; Brosseder 2012.
- 110 Simonenko 1993b, 94–8.
- 111 Spitsyn 1909.
- 112 “Large finds of plaques have been made at Siverskaya Stanitsa in the Taman peninsula, at Taganrog, Fedulovo and Starobelsk in the region of the Don and the Donets, at Yanchevkrak in the district of Taurida: that is, between the Caucasus and the steppes of the Dnieper” (Rostovtzeff 1922, 136).
- 113 Fettich 1953, 128, n. 1: “die nicht als Grabbeigaben, sondern unter den dakischen Schatzfunden auf uns gekommen sind ... die also nicht den verstorbenen Besitzern mit ins Grab gegeben, wohl aber nach ihrem Tod ‘vernichtet’ und in diesem zusammengebogenen Zustand unter den Familienschätzen aufbewahrt waren.”
- 114 Kostenko 1978, 78–85; Smirnov 1984, 80–1, 86.
- 115 Dzis-Raiko and Sunichuk 1984; Redina and Simonenko 2002, 78–96; Zaráiskaiā, Privalov, and Shepko 2004, 130–44.
- 116 Mark Shchukin called them “strange complexes” (1994, 97).
- 117 Simonenko 1993a.
- 118 Simonenko 1993a, 89.
- 119 Simonenko 2001, 95.
- 120 Hansen 2002.
- 121 Simonenko 1993b, 7–29.
- 122 Zaitsev 2012, 71.
- 123 Zaitsev 2012, fig. 1.
- 124 Schmauder 2002, 35–6.
- 125 See *Reallexikon der Germanischen Altertumskunde*, 2nd edn., 322.
- 126 Trans. C. H. Oldfather in the Loeb edition, 1935.
- 127 Tokhtas'ev 2005, 292.
- 128 Rostovtsev 1918b, 78–80.
- 129 Rostovtzeff 1929, 41–2.
- 130 Rostovtzeff 1929, 45.
- 131 Rostovtzeff 1929, 43.
- 132 Rostovtzeff 1922, 98.
- 133 Smirnov 1948; Viaz'mitina 1954, 242.
- 134 Smirnov 1954, 209.
- 135 Smirnov 1957, 18; Smirnov 1984, 56, 69, 114.
- 136 Abramova 1961.
- 137 Smirnov 1954, 213; Abramova 1961, 93.
- 138 Abramova 1961, 94–5.
- 139 Smirnov 1984.
- 140 Smirnov 1984, 80, 110, 113.
- 141 These *phalerae* were decorated in the so-called Pontic graphic style (Mordvinceva 2001, 37, fig. 6.4), with its characteristic embossed geometric and vegetative ornaments (dots, ovals, and triangles, as well as acanthus leaves and lotus flowers) (Figs. 9.8; 9.9.2, 5–8, 11, 12, 23–28; 9.24.9; 9.29). The term “Pontic graphic style” was coined by the author (Mordvintseva 1996), and has been widely accepted and used since then; in German publications it features as “Grafischer Stil des nördlichen Schwarzmeergebiets.”
- 142 Moshkova 1963.
- 143 Smirnov 1984, 73–4, 112.

- 144 Smirnov 1984, 115.
- 145 Smirnov 1984, 77.
- 146 Abramova 1961, 100; Polin 1992, 80, 104, 117.
- 147 Polin 1992, 66, 145–6.
- 148 Polin 1992, 66–72.
- 149 Polin 1992, 104.
- 150 Vinogradov 1997a, 106–7; Bruřako 1999b.
- 151 See, for example, Klepikov 2002.
- 152 Rostowzew 1931, 39; Vinogradov 1997a, 106.
- 153 Cunliffe 1997, 80–5. In one of his later works, Barry Cunliffe also deconstructs the concept of the ethnic identity of the Celts as a creation of ancient authors and modern scholars (Cunliffe 2011). In this respect, the Celts are not so dissimilar to the Sarmatians, since in both cases it is the historiography of the question that has dominated our perception of these peoples and the archaeological material traditionally associated with them.
- 154 Ruban 1985, 43–4.

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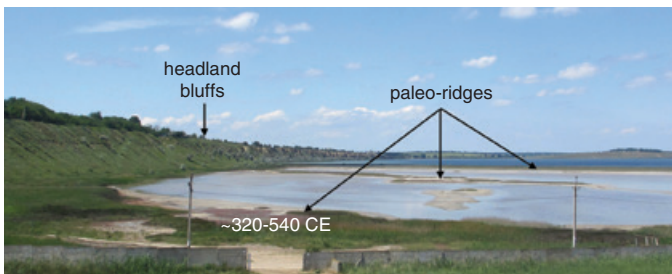


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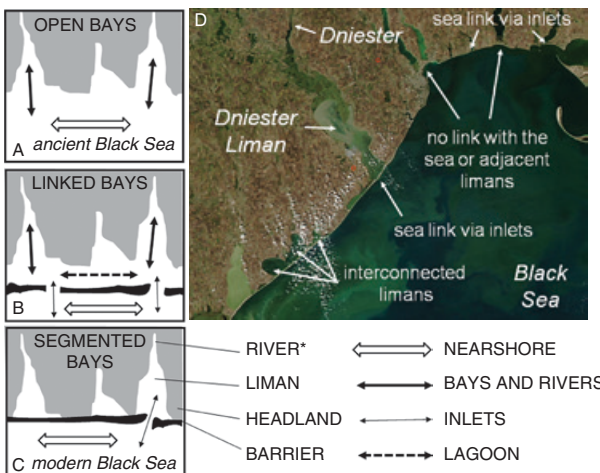
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- Xanthos, 313, 338
- Nereid Monument in, 313, 338
- Xenophon, 15, 121, 122
- Zeest, Iraida, xii, 60, 102, 104, 294, 295, 298, 299, 320, 359
- Zosimus, 134, 138



I Map of the northwestern coast of the Black Sea (drawing by David Cox).

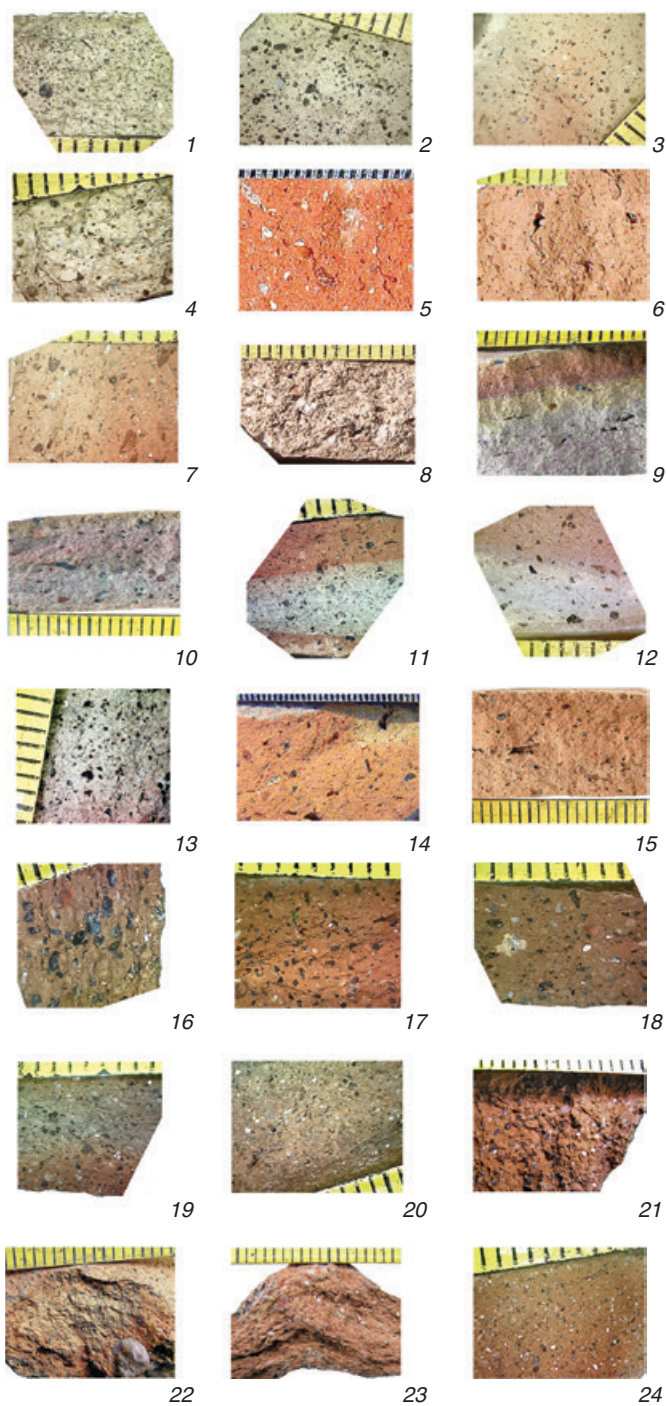


II Example of complex coastal accumulation forms: the main Budak barrier is anchored to bluffs (inter-basin headlands), which today show evidence of mass wasting. Curved ridges within the liman are exposed to northeast winds and waves.



III Model of liman evolution and isolation.

On the left: major coastal landforms. *A* – drowned river mouths flooded during rising sea level, with no barriers (subaerial sand bodies) at their mouths; *B* – a chain of barrier islands and spits separated by inlets from each other and by lagoons from the mainland. Whereas no chronological order is assumed between stages *A* and *B*, it is likely that stillstands or reductions in the rate of sea-level rise would favor the scenario shown in *B*; *C* – baymouth barriers and spits attached to mainland promontories (headlands) precluding navigation between the bays, similar to the modern coastal configuration (at present, most of the smaller limans do not have river channels leading into them). On the right: *D* – Satellite image of the northwestern coast of the Black Sea showing variable styles of linkage between the limans and the sea (NASA Visible Earth images).



IV Fabrics of the Black Sea: amphorae of the Roman period: 1-8 – Herakleia (1-4 – fabric 2; 5-8 – fabric 1); 9-15 – Sinope; 16-24 – Colchis (16-19 – fabric 1; 20 – transitional variety; 21-4 – fabric 2).





V Stele from the Trëkhbratnie kurgans. Kerch State Historical and Cultural Preserve, inv. no. 1267 (photo by Vladimir Tolstikov).



a



b



c

VI Stelai with figures placed on pedestals: *a* – Pushkin State Museum of Fine Arts, Moscow, inv. no. F-609 (photo courtesy of the museum); *b* – State Hermitage, St. Petersburg, inv. no. P.1842.16 (drawing by Elise Helmers); *c* – State Hermitage, St. Petersburg, inv. no. PAN.150 (drawing by Elise Helmers).





VII Half-figure in a civilian dress from Phanagoreia. Pushkin State Museum of Fine Arts, Moscow, inv. no. F-862 (photo courtesy of the museum).





VIII Half-figure in military attire, from the vicinity of Phanagoreia. Kerch State Historical and Cultural Preserve, inv. no. KL-1092 (photo courtesy of Valentina I. Mordvintseva).



IX Mud-volcanoes in the vicinity of Pantikapaion (photo by Maya Muratov).





X Stele with the tamga of Tiberius Iulius Sauromates from Phanagoreia. Kerch State Historical and Cultural Reserve, inv. no. KL-68 (photo courtesy of Valentina I. Mordvintseva).



XI Stele with the tanga of Tiberius Iulius Eupator flanked by two Nikai. Kerch State Historical and Cultural Reserve, inv. no. 100 (photo courtesy of Valentina I. Mordvintseva).