Thrace through the Ages

Pottery as Evidence for Commerce and Culture from Prehistoric Times to the Islamic Period

Edited by

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Cover: Top left: Late Bronze Age mud-brick relief recovered from Level V of Maydos-Kilisetepe, Gallipoli Peninsula (photo: G. Sazcı and M. Başaran Mutlu). Top right: Relief pot inspired by oinophora from Racătău, northern Thrace (photo: M.-C. Popescu with V. Căpitanu's permission). Bottom left: Kantharos 'karkhesion' from grave no. E13ST37M33, Su Terazisi Necropolis (photo: S. Başaran). Bottom right: Glazed, mould-decorated filter jug fragment with geometric composition, from the İznik Tile Kilns Excavation (photo: B. Demirsar Arlı, Ş. Kaya, Ö. Erol, H. Arlı).

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Foreword

From prehistoric times onwards Thrace has been an important passageway between the Aegean and the Black Sea, the Balkans and Asia Minor. Pottery is one of the most important categories of archaeological evidence for tracing cultural and political phases and providing us with important data about production centers, commercial relations, daily life, religious rituals and burial customs.

As classical archaeologists and ceramic specialists we are conscious of the scarcity of research on ancient pottery from both east and west Thrace. This inspired the current contribution, which we hope will help close this gap. We organized the Congress 'Commercial Networks and Cultural Connections in Thrace: Evaluating the Pottery Evidence' which took place from 26-28 April 2017 in Istanbul/Mimar Sinan Fine Arts University. Over three days, 40 speakers from eight countries (Azerbaijan, Bulgaria, Germany, Greece, Italy, Romania, Turkey, USA) were represented in 12 different sessions. We would like to thank all participants to the conference for their precious contributions. We also would like to thank the Rectorate of Mimar Sinan Fine Arts University/İstanbul and Dean of Faculty of Letters and students of Department of Archaeology for their support when organizing this event. We are also grateful to Bursa Uludağ University, Astaş Holding Company, İstanbul Metropolitan Municipality and Beta Analytic-Testing Laboratory for their kind help and support.

Initially we intended to publish the contributions in a volume devoted to the Congress proceedings. Subsequently we decided to include also contributions from colleagues who could not join us at the time but who also worked in this area. For this reason we chose to expand the publication to an edited volume organized thematically. We believe that an arrangement according to research questions, including how people have chosen to evaluate and interpret their material, will offer readers a view both of the variety of finds from different periods as well as an overview of different approaches. Within each section contributions appear in chronological order of the material presented.

The volume opens with a paper devoted to research history by **Zeynep Koçel Erdem:** 'Ceramic Research in Turkish Thrace: Past and Present, Approaches and New Methods.' Research in Turkish Thrace was relative scanty at the beginning of the 20th century, but by the last two decades of the century the region gained in popularity. Today Turkish Universities and Museums conduct large numbers of surveys and excavations here.

Pottery is critical for evaluating commercial and cultural interactions; the papers in the first section focus on these themes. In their article 'Thrace's Gateway to Anatolia and the Aegean in the Bronze Age: Maydos-Kilisetepe', Göksel Sazcı and Meral Başaran Mutlu use pottery from the site's earliest settlement layers to review relations between Maydos Kilise Tepe, Thrace, Northwest Anatolia, and the Balkan Peninsula. The pottery especially illuminates interactions between the Black Sea and the Aegean during the Bronze Age. The second contribution belongs to Ashlee B. Hart. In her article: 'Variation in Late Iron Age Thracian Ceramics from Bulgaria: A preliminary evaluation of cultural interaction via ceramic manufacture and consumption' she embraces a theoretical approach. Her investigation of ceramics from an inland market site in western Bulgaria allow her to identify differences between the indigenous Thracian population and Greek settlers in the Late Iron Age. Melike Zeren Hasdağlı in her article 'On the Terracotta Sarcophagi from Ionia and the Northern Aegean' examines the special type of sarcophagi known as Clazomenian Sacophagi, whose decoration reflect the impact of Ionian art. She compares examples from Clazomenai, other Ionian cities and Aeolis with examples of the same type from Thrace, discussing them from the vantage point of style as well as from the perspective of burial customs.

The circulation of Athenian and Atticizing pottery in Thrace gives important clues about cultural and commercial relations. Nikos Akamatis, in his article 'Remarks on the trade in red-figure pottery in Macedonia and Aegean Thrace during the fourth century BC' evaluates both Athenian and local red figure pottery of the 4th century from Macedonia and Aegean Thrace. Similarly, in their article 'Attic Vases in Thrace as Agents of Commercial and Cultural Values' **Despoina Tsiafaki** and **Amalia Avramidou** present a preliminary report of their research project *Attic Pottery in Thrace* (APT). Based on shapes, usage, and quantity of pottery found at sites in Thrace and its close periphery, they are able to trace patterns and preferences for Attic pottery. **Reyhan Şahin**, in her article 'Attic and Atticizing Glazed Pottery in Eastern Thrace: The Evidence from the Ganos (Işıklar Dağı/Tekirdağ)

Survey' investigates the finds from the Ganos (Tekirdağ) survey. She evaluates the finds in their cultural contexts, and considers the distribution of local examples as compared to other sites in Thrace and neighbouring regions.

Oya Yağız, in her article 'Interprétation des Timbres Amphoriques et des Monnaies provenant des Fouilles d'Héraion Teichos.' investigates amphora stamps from Heraion Teichos (Tekirdağ/Thrace) in relation to the coins from the same contexts. She uses the data to analyse trade relations between the poleis, emporia and castle-type settlements on the shore of Propontis.

The emergence of new production centers in late Hellenistic and Roman times had a pronounced effect on the pottery repertoire of Thracian settlements. Mariana-Cristina Popescu in her contribution 'The Impact of Imports from Asia Minor on Local Production by Northern Thracians in the Second Century BC – First Century AD' deals with those effects in the area inhabited by the Getae and the Dacians, Thracian tribes who settled north of the Danube, in the territory of present-day Romania. In her article 'Ilion and its Role in Aegean Trade', Billur Tekkök Karaöz reveals the role of Ilion in interregional trade from the Aegean to Propontis and the Black Sea. She deals with the major types of local pottery during the late Hellenistic and Roman periods at Ilion as well as common imported pottery groups. Asuman Lätzer-Lasar in her article 'The Commercial Network of Ainos from Hellenistic times to Late Antiquity' deals with that site's Roman pottery. She shows that the ceramics indicate that Ainos was settled throughout the Roman Period and had widespread commercial trade connections with the Mediterranean world and especially with the cities of western Asia Minor.

The second section of the volume, Pottery in Cult Rituals, is dedicated to finds from religious contexts. In the opening contribution, 'Late Bronze-Early Iron Age pottery artefacts in the Menekse Çatağı Pit Sanctuary' **Fisun Frank** uses the finds from a prehistoric cult context to discuss chthonic practices as well as inter-regional cultural connections. **Mario Ivanov** evaluates an assemblage of cult pottery in 'Pottery and ceramic finds in the domestic cult practices of Serdica.' The material derives from private houses in Serdica (Sofia/Bulgaria) excavated from 2010-2012. Ivanov discusses morphological and functional features and draws some conclusions about the location of domestic cult spaces in private houses. **H. Arda Bülbül**, in his article 'Evaluating a cult place in the light of the ceramics from the Northern Propontis' examines the ceramic finds from the Ganos Mountain survey. The finds, which come from the Iron Age through the Roman period, shed light on the different phases of the cult place as well as on the various ethnic groups who worshipped there.

The next section of the volume includes papers that evaluate pottery from surveys and excavations, using their specific contexts to help diagnose settlement types, the functions of individual buildings or specific spaces, and also settlement chronology. In her article 'Pre- and Protohistoric Ceramics from the Thracian Side of İstanbul' Sengül G. Aydıngün reveals results from two archaeological projects. The variety of finds emphasize the changing function of the Bosphorus, sometimes as a connector and other times more of a hindrance for cross-cultural interactions. Sait Başaran, in his article 'Ainos Pottery from the Early Period' reports on the 7th -6th century BC pottery from that site's long running excavations. The material includes the earliest painted pottery which offers evidence for the establishment of the city of Ainos, Yasemin Polat and R. Gül Gürtekin Demir investigate the material from Anaia (Kadıkalesi). Their material comprises the imported Greek and Anatolian pottery dated between the seventh and first centuries BC. They evaluate the available material within the regional context of pottery interfaces. Gülseren Kan Şahin and Şengül G. Aydıngün, in their article 'Newly Discovered Hellenistic Pottery from Western İstanbul', offer significant evidence for understanding the city's settlement history and trade relations during the Hellenistic Period. Ergün Karaca, in his article 'Pottery from the Lower Hebros and the Kocaçay Valley Survey', evaluates the pottery finds recovered during surface surveys along the eastern coast of the Hebros River. These finds help him to determine the geographical location of settlements in this area and their trade relations.

In the final section contributors classify and interpret ceramic wares. Two contributions deal with coarse ware. Maria Deoudi, in her article 'Gebrauchskeramik aus nordgriechischen Befunden' analyses the typology of kitchen ware from the 4th-3rd centuries BC from Maroneia. Sevingül Bilgin Kopçuk in her article 'Coarse ware study from Ganos: A panoramic approach', analyses survey material according to form and type and draws conclusions on trade relations. Two contributors focus on Byzantine Glazed Pottery. Filiz İnanan in her article 'Byzantine Glazed Pottery from Thrace' analyses mainly Zeuxippus Ware from the Ganos Survey. Ayşe Çaylak Türker in her article 'Byzantine Glazed Pottery From Thracian Chersonessos: Karainebeyli – Hisarlık' investigates two incised wares – Aegean Ware and Zeuxippus Ware – along with plain glazed potsherds. The last contribution in this volume treats the latest finds. B. Demirsar Arlı, Ş. Kaya, Ö. Erol, and H. Arlı in their article 'Mould-Decorated

Filter Jugs in Unearthed During the İznik Kilns Excavations' examine a special group among Islamic ceramics from the 8th century onward. Based on various earthenware mould fragments with similar fabric characteristics and similar decorative techniques on the surface, they conclude that these vessels were produced in Iznik.

Unforeseen conditions due to the coronavirus pandemic delayed this volume's projected publication date. Yet this delay has allowed us to appreciate how day by day the amount of new evidence for pottery research in Thrace increases. For this reason we would like to end this foreword with our intention that this volume will be the first of future installments. We hope to discuss current discoveries in upcoming conferences in the near future and publish the results, thereby opening up the study of ancient Thrace to all scholars and keeping our knowledge of this vital area up to date.

Zeynep Koçel Erdem and Reyhan Şahin

Research History

Ceramic Research in Turkish Thrace: Past and Present, Approaches and New Methods

Zeynep Koçel Erdem¹

Abstract

Due to its strategic importance, Turkish Thrace has always been an area of continuous passage between Anatolia, the Balkans, the Aegean and the Black Sea. According to the ceramics, the Thracian territory has been inhabited from the prehistoric period onwards. Both local and imported pottery groups prove the existence of different cultures.

Although starting at the beginning of the 20th century, archaeological studies in Turkish Thrace were relatively low in number by comparison to Bulgarian and Greek Thrace. The surveys initiated by Prof. Dr. Mehmet Özdoğan in the 1980s can be characterized as a turning point for Thracian archaeology, as they opened new horizons in terms of archaeological research. Particularly the significance of excavations at Kırklareli, conducted by him, must be emphasized in this regard. Nowadays research on Turkish Thrace has been accelerated, with the study of ceramics gaining its deserved importance.

In this article, although still limited, several studies on the ceramics from the Thracian territory will be surveyed. In the light of available data, acquired mainly from the published excavation and survey materials, traditional methods and new approaches in evaluating the pottery finds will be introduced in general.

Keywords

TURKISH THRACE, EASTERN THRACE, PROPONTIS, ATTIC POTTERY, ROMAN POTTERY, FIGURED POTTERY

Introduction

Turkish Thrace, in other words, eastern Thrace, is located at position between Anatolia, the Balkans, the Aegean and the Black Sea, of strategic importance since prehistoric times. It hosted many cultures and communities such as indigenous people, Thracian tribes, Greek, Roman and Byzantine settlers for centuries in this dynamic location and wide hinterland.

This article aims to provide an overview of past and present publications about ceramic studies of Turkish Thrace from prehistoric times to Late Antiquity in the light of various excavations and research conducted

¹ Prof. Dr. Zeynep Koçel Erdem, Mimar Sinan Fine Arts University, Department of Archaeology, e-mail: zerdem@gmail.com. in the area. The international symposium titled 'Commercial Networks and Cultural Connections in Thrace: Evaluating the Pottery Evidence' held at the İstanbul Mimar Sinan Fine Arts University in 2017 has been a crucial step in this direction. It provided an opportunity to scholars working on this subject to exchange views and share information by bringing together pottery evaluations from different periods from Turkish Thrace and other parts of Thrace for the first time.

Although eastern Thrace has many archaeological remains from different periods, regular excavations and surveys carried out in the region have been very limited up to now. Excavations in Turkish Thrace are not many compared to those both in other parts of Turkey and the stakeholder countries of the Thracian lands with our country, Bulgaria and Greece. Therefore, Turkish Thrace has been defined *terra incognita* by some scholars in the context of archaeological studies, and various opinions have been expressed about the causes (Archibald 1998: 6; Sazcı 2020, 9). Several different factors have contributed to this situation: First, part of Thrace is in the military zone; second, with the establishment of archaeology departments -especially in the context of Classical Archaeology- most of the studies started in the Aegean and Mediterranean regions and researchers focused on these; third, agricultural activities in Thrace, rapid urban development, etc. can be considered other main factors. Yet, studies in Thrace have gained momentum with new excavation projects and surveys in recent years (For the history of archaeological studies in Thrace, see Sayar 2016, 193 f.).

Current scientific studies throughout Turkish Thrace comprise the rescue excavations by İstanbul, Tekirdağ, Edirne, Kırklareli and Çanakkale Museums, excavations by the universities, various survey studies and independent individual scientific studies (Figure 1). The Republic of Turkey Ministry of Culture and Tourism, General Directorate for Cultural Heritage and Museums regularly publishes the results of the museums' rescue excavations in *Results of Museum Excavations Book*, and reports on the results of university excavations and surveys other than museum excavations are presented in *Excavation Results Meeting Books*. Ceramics are also briefly mentioned in these publications, in addition to the findings in the study areas. Several archaeometric



Figure 1. The map showing the current excavations in eastern Thrace. Map: Google Earth

analyses within the scope of ceramic studies have also been included in these books in recent years.

The Istanbul Archaeology Museums, which conduct many rescue excavations throughout Istanbul, publish their findings in the *Annual of the Istanbul Archaeological Museums*, which includes catalogued ceramics with brief information (Özek 2001). The monograph of the Istanbul Saraçhane excavation which contains interpretation of the excavation results and presentation of the ceramics is still among the standard reference sources for ceramic studies (Hayes 1992).

Moreover, although not containing comprehensive information, some settlements and some ceramic finds are introduced, depending on various contexts in the cultural inventory books prepared by the aforementioned museums, which includes the registered artefacts and registered areas of the cities. (Keskinel *et al.* 2014; Kırçın 2013; Tombul 2015).

Below, the ceramic studies of various periods of Turkish Thrace from the prehistoric period to Late Antiquity will be evaluated and discussed under the headings of excavations, survey studies and individual studies².

Excavations

The first systematic scientific studies started in Turkish Thrace at the beginning of the early 20th century and continued with the establishment of the Archaeology department of the Istanbul University in 1930, with the excavations especially concentrated on tumuli started by Prof. Dr. Arif Müfit Mansel in Kırklareli (Belli 2000; Özdoğan 2008: 75 ff.).

Some of the excavations carried out in and around Istanbul are: by A. M. Mansel Yalova in 1932; by the Istanbul Archaeological Museums, A. M. Mansel and A. Ogan Rhegion in 1938-1940-1941; by Ş. A. Kansu in the Yarımburgaz Cave in1960 (Belli 2000, 9 f., 269 f.; Sayar 2016, 193 ff.). These studies, some undertaken in collaboration with the Istanbul Archaeological Museums, contributed to the ancient history of Thrace and introduced the material culture and different cultural periods of the region.

The Istanbul University Fikirtepe and Pendik excavations, carried out between 1952 and 1954, help to understand the oldest cultural layers of Istanbul, especially the Neolithic period of the region (Belli 2000: 42 f.). Together with the survey studies started by Prof. Özdoğan in 1980, the excavations in Kırklareli Tilkiburnu (1980), Taşlıcabayır (1980), Aşağı Pınar (since 1993), Kanlıgeçit (1994) and Edirne Enez Hocaçeşme (1991-

² Ceramics of the excavations from various periods of some settlements like Ainos (Edirne Enez), Menekşe Çatağı (Tekirdağ), Maydos (Çanakkale Gallipoli Peninsula Eceabat) and Bathonea (Istanbul Küçükçekmece Lake Basin) are introduced in this book.

1993) are among the important studies to understand the material culture and introduction of ceramics from the prehistoric period (Özdoğan 1998, 8; Özdoğan, E. 2016). They provided an understanding of not only the place of Turkish Thrace between Anatolia and the Balkans, but also highlighted the local characteristics along with their impact on these two regions, and opened up new perspectives and enhanced results in Thracian archaeology.

Even though the early studies were the first systematic scientific studies, detailed examinations and comments on archaeological material were not included. In these studies, ceramics were selectively collected and analogically dated. Among the tumulus excavation finds from Prof. Mansel's work, only metal vessels were published as a monograph, still considered an important reference source (Onurkan 1998). New evaluations have been made with different perspectives in recent years. For instance, a doctoral thesis in which archaeological finds obtained from Prof. Mansel's tumulus excavations were reinterpreted and new dating suggestions made in the context of ceramics that provided up-to-date information (Aksan 2015).

The archaeological material obtained from the recent tumulus excavations has been approached with more systematic evaluations. For example, ceramic materials are also examined and evaluated in detail among with the other artefacts in the publications of the Tekirdağ Askertepe and Kırklareli Yündolan C tumulus excavations (Yıldırım 2007, 2010; Delemen *et al.* 2010).

Recently, during the excavations carried out in Istanbul between 2004-2014 by Istanbul Archeological Museums within the scope of the 'Marmaray' subway line works numerous ceramic artefacts were unearthed, dating from the 7th century BC to the 4th century AD (Yenikapı, Sirkeci, Üsküdar excavations). In the Yenikapı Theodosius Harbour, Neolithic Age artefacts similar to Fikirtepe culture findings were found especially under the harbour filling. In addition to pottery fragments originating from the Greek colonization in Greece and western Anatolia, Byzantine period artefacts were also found in the area. In the Sirkeci excavations, artefacts from the Greek and Roman periods were predominant (Pekin 2007; Asal 2010; Kızıltan et al. 2013; Kızıltan 2014, 2016; Kara 2011, 2015, 2019). The enormous amount of unearthed ceramic artefacts once again reveals the necessity and importance of using rapid examination and current methods instead of traditional methods which were used in the first years of Thracian studies. In this context, extensive laboratory analyses have been started. Kurgan tombs discovered during the Beşiktaş Metro Excavation of the Istanbul Archeological Museums in 2017 (Figure 2) and associated with the migration wave of Kurgan communities from

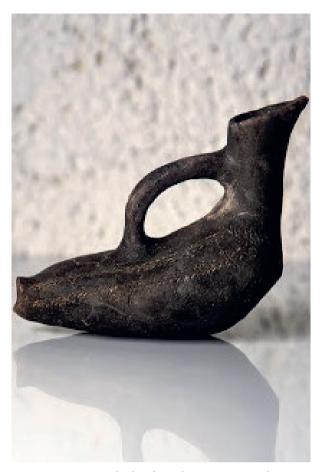


Figure 2. A ritual askos from the Kurgan at Beşiktaş excavation. Photo: Y. Aslan, Asal *et al.*, 2020, 41.

the northern steppes at the end of the Chalcolithic period, and similarly, the Cambaztepe Kurgan artefacts excavated in Silivri (Polat 2016), Istanbul, are the most recent finds that fieldwork and publication preparations are documenting.

Although the investigation of ceramics by archaeometric analysis has become widespread in recent years, one of the pioneering works on this subject is a workshop organized within the scope of examining Late Antique pottery productions in Istanbul (Waksman 2012).

The Ainos (Edirne Enez) excavation is the first comprehensive and long-lasting ancient settlement excavation in Turkish Thrace which started under the directorate of Prof. Dr. Afif Erzen from Istanbul University in 1971 and continued under the chairmanship of Prof. Dr. Sait Başaran from 1994. In addition to various publications made in recent years, especially on Orientalizing, Archaic, Classical, Hellenistic, Roman and Byzantine period ceramics of the ancient city (Parman 1996; Başaran 2003, 2016; Karadima 2004, Irmak 2010; Laetzer Lasar 2016), a variety of masters and doctoral



Figure 3. Stamped Sinopean amphora handle from Heraion Teichos (Tekirdağ Karaevlialtı). Photo: Heraion Teichos Archive

studies evaluating excavation ceramics also added important interpretations of the ceramic findings (Şahin 2013, 2016, 2017; Kurap 2020). The examination of the ceramics with archaeometric methods continued by taking samples from the clay deposits of Ainos and its surroundings in order to investigate the origin and production technique (Kurap *et al.* 2010)³.

Among the other ancient settlement excavations carried out by universities, in the Tekirdağ Menekşe Çatağı Excavation, started by Prof. Dr. Mehmet Özdoğan in 1997 and after a short time-span continued under the leadership of Aslı Erim-Özdoğan (1994-2007, 2015), Early Bronze Age and Iron Age ceramics have been identified (Aksaç 2001; Özdoğan-Işın 2003). Apparently used as a sanctuary during the Late Bronze-Early Iron Age, in addition to the ceramics of this period which provide important information in the context of local rituals, studies have also been made on Classical and Hellenistic period ceramics (Stoyanov-Erim-Özdoğan 2003; Turan 2006; Stoyanov 2020). Besides the findings from Menekşe Çatağı region, artefacts and cult vessels unearthed by the museum salvage excavation (1989) in Toptepe Mevkii near the ancient city of Tekirdağ Perinthos provided important information about the belief concepts in the region (Özdoğan 2016: x11).

Heraion Teichos (Tekirdağ Karaevlialtı) is another centre very close to Menekşe Çatağı, its excavation carried out by Prof. Dr. Neşe Atik from Tekirdağ Namık Kemal University since 2000; the site is among the few regularly excavated in eastern Thrace. Many ceramics, especially from the Archaic to the Roman periods were found in the Heraion Teichos excavations similar to

Ainos, with Hellenistic period pottery and amphora handles (Figure 3) published with selected examples (Atik 2003, 2006; Yağız 2007). And in the meantime the red-figured imports from Athens of the Classical period were also presented in various publications4 (Koçel Erdem 2002, 2007a, 2007 b, 2007 c) (Figure 4). In several Propontis coastal settlements such as Heraion Teichos (as detected in the surveys of the region also), an excess number of imported Attic ceramic groups have been recorded, especially from the middle of the 5th century BC. In addition to imported ceramics, mainly 4th century BC pottery was detected especially in the area interpreted by Prof. Atik as a 'Hera / Kybele sanctuary', unearthed in the acropolis of the city. Ceramics of apparently local production, associated with rituals dated between the 1st century BC and the 1st century AD, were documented in another area called the Asclepius sanctuary and healing centre (Atik 2003).

Although Perinthos/Herakleia is one of the important ancient settlements in Tekirdağ, no detailed work has been done other than museum salvage excavations. In the monograph on the unearthed basilica of the settlement as part of a building research, Late Antique ceramics were represented within the scope of the finds⁵ (Aslan 2016).

The Eceabat Maydos Kilise Tepe Mound excavations, the only in Çanakkale Gallipoli Peninsula carried out by Prof. Dr. G. Sazcı from Çanakkale 18 Mart University since 2010, provided important and up-to-date data in the context of the relationship between the Balkan, Troas, Black Sea and Aegean regions in the Bronze Age in the light of various finds as well as pottery evaluations (Sazcı 2016; Sazcı-Sazcı 2020, 75). In addition to prehistoric period artefacts, ceramics from the Archaic and Classical layers have also been studied in the excavation (Chabot Aslan-Sazcı 2016; Sazcı 2020, 62 f.).

Another recent excavation in Istanbul is located in the Küçükçekmece Lake Basin (Bathonea) carried out by Prof. Dr. Ş. Aydıngün from Kocaeli University. During the excavations and surveys, numerous pottery finds from the Neolithic period to Late Antiquity have been unearthed and dealt with in various publications (Aydıngün 2017, 2019; Kara 2017; Kaya 2017; Türkmen 2017).

In terms of understanding the relations between the regions through material culture, surveys and excavations in northwest Anatolia (the Troas Region)

³ Analyses of some ceramics obtained in Tekirdağ Ganos Surveys are also carried out in the laboratories of Istanbul Mimar Sinan University Conservation and Restoration of Artworks Department like the Ainos (Enez) excavations.

⁴ The 4th century BC Attic Red Figured ceramics of the ancient city are being prepared for publication by the author.

⁵ Excavations in the Perinthos/Herakleia Ancient City (Tekirdağ Marmara Ereğlisi) will be carried out by Mimar Sinan Fine Arts University under my direction in 2021 with the official permission of the Ministry of Culture and Tourism of the Republic of Turkey.



Figure 4. Tondo of a red-figured cup from Heraion Teichos (Tekirdağ Karaevlialtı). Photo: Heraion Teichos Archive

and the northern Aegean (Gökçeada / Imbros) can be evaluated within the context of eastern Thrace, due to their proximity and based on important data collected in recent years. In addition, the excavation results from Maydos, Troy and Gökçeada boost the interpretation of the period from the Early Bronze Age to the Late Bronze Age of the area (Gökçeada Excavations: Erdoğu 2012; Hüryılmaz 2020). Ceramic studies undertaken in the wake of excavations at Troy and Parion offer important comparative material for Greek and Roman times (for Troy: Heath-Tekkök 2008; Tekkök-Biçken 1996, 2009; Tekkök *et al.* 2008; for Parion: Ergürer 2013, 2014, 2015, 2016). In additional, a number of new survey result publications from the Troas region include information on the ceramics from different periods (Kaşka 2019).

Survey studies

Parallel to the first scientific excavations in eastern Thrace, listed in the previous section (Belli 2000: 308 f.; Özdoğan 2008: 76), a number of survey studies had been initiated: A. M. Mansel in - 1936; N. Fıratlı- in 1958; Z. Taşlıklıoğlu - in1959; Ş. A. Kansu- in 1965. Although ceramics were not evaluated elaborately in these early studies, Prof. Z. Taşlıklıoğlu documented the various archaeological remains including ceramics, which he encountered in his epigraphic research between 1959-1970 in Thrace (Taşlıklıoğlu 1971).

In northwestern Thrace Prof. F. Dirimtekin initiated one of the early studies, documenting monuments of art history, while, ceramic finds were not mentioned. The research on the dolmens in the region comprised the evaluation of the ceramics found in the structures and their surroundings (Akman 2016). Nowadays, studies in the same region carried out by Prof. Dr. E. Beksaç from Trakya University within a cult area, and the surface ceramics together with some artefacts from various times have been briefly mentioned in the reports of the *Research Results Books* (Beksaç 2007).

Under the directorate of Prof. Dr. Mehmet Özdoğan the Istanbul University Prehistory Department had started survey studies (1980-1990). They provided a rapid scan of almost the entire region of Thrace, and became a real turning point in the archaeological studies of Thrace. In conjunction with the following excavations mentioned above, this research brought a new momentum and perspective to the investigation, with important results presented in the study of the region's local characteristics and the relations with different regions, discussed in detail for the first time in the light of ceramic studies (Özdoğan 2007, 2016).

With the increasing number of surveys and numerous ceramics identified during these investigations, information is now collected and examined more



Figure 5. Amphorae from the coastline settlements of Tekirdağ Şarköy Survey. Photo by Author

systematically. Thus, stronger relations can be established between settlements and regions with regard to the understanding of particular local features of the identification of local and imported ceramics.

Among the short-term surveys undertaken in eastern Thrace it is possible to list periodic, regional and studies related to a doctoral degree. In particular, the short-term prehistoric period study conducted in Edirne in 1996 (Erdoğu 1996) and doctoral dissertation studies in the Edirne, Kırklareli and Tekirdağ provinces should be noted (Karaca 2019). Karaca published his doctoral study as a monograph and mentioned ceramics by their find spots. The article about the local imitations of the black-glazed wares detected in the analysis of a trial piece revealed remarkable results on the local productions in Thrace (Hasdağlı 2017).

Two long-term planned surveys started in and around Istanbul; the first part of the 'Istanbul Prehistoric Archaeological Surveys' conducted by Ş. Aydıngün from Kocaeli University; the second is the 'IstYA Project-Istanbul Survey Project' conducted by E. Güldoğan from Istanbul University Prehistory Department (Gündoğan-Altun 2015; Yumaklı 2015). In her study Aydıngün, made very important and new contributions to clarify the 3rd and 2nd millennia BC, which are particularly problematic in the region. Moreover, she presented fresh interpretations about the connections between the Balkans and northwestern Anatolia and the migration routes in the light of Early Bronze Age

ceramics (Aydıngün-Aydıngün 2013; Aydıngün-Bilgili 2016).

There are ongoing surveys in the central and Şarköy districts of the Tekirdağ province⁶ as well as simultaneously on the Gallipoli Peninsula in the province of Çanakkale, since 2008 directed by the author of this article from Istanbul Mimar Sinan Fine Arts University. Their aim is the identification cultural assets both in interior settlements and in coastline sites. In the ceramic evaluations within the scope of the study, the abundance of Classical-Late Roman ceramics is noteworthy, especially in the coastline settlements (Figure 5). In the Classical period ceramics, Attic wares and their local imitations are predominant (Koçel Erdem 2022). In the Hellenistic period, the output from western Anatolian workshops drew particular attention in the first evaluation7 (Koçel Erdem-Bülbül 2020). The Roman period terra sigillata of some regional centres was studied within the scope of this research (Karakaş 2019). Numerous ceramic slags and stilt fragments uncovered during the research indicate local productions.

Still in the Tekirdağ Ganos region, the surveys and excavations of amphora kilns, carried out in collaboration with Prof. Dr. N. Günsenin and the

⁶ The region is called the 'Ganos Region' by researchers.

⁷ The Tekirdağ Ganos Region survey ceramics and other finds are in publication preparation.



Figure 6. Ganos amphora from Tekirdağ. Photo: Seçkin Tercan



Figure 7. A squat lekythos display on Tekirdağ Museum Photo: Seckin Tercan

Tekirdağ Museum laid the essential ground with regard to the identification, classification, new terminology suggestions and chemical analyses of commercial amphorae specific to the region (Günsenin 1992a, 1992b, 1997, 2003; Işın-Günsenin 1994). Ganos amphoras constitute the best-defined regional ceramic group during Late Antiquity (Figure 6). In addition, the research in Thrace revealed that the region's ceramic tradition, continued from the beginning in ancient times until, the present day with the same methods.

Nowadays studies on ceramics are approached thematically, and although there are more publications on fine ware of the Classical and Hellenistic periods which provide relatively easy dating, an increase of common ware studies is noticeable in doctoral dissertations, which had been ignored up to now. The doctoral dissertation aiming to examine the economic structure of the region in the light of the Hellenistic, Roman and Late Roman periods' coarse wares found in the Tekirdağ Ganos Region survey is one of the first studies on this topic (Bilgin Kopçuk-Koçel Erdem 2019; Bilgin Kopçuk, 2022). Surface ceramics from the Bronze Age to the Byzantine period, found in the Bolayır (Lysimakheia) and Bakla Burnu (Kardia) settlements in Çanakkale Gallipoli Peninsula, have been the subject of

yet another thesis, in which common wares have been evaluated the heading 'eastern Thrace epigraphic and historical geography studies' together with different groups. Carried out by Prof. Dr. M. H. Sayar, the research sheds light on the historical process of the region in the light of ceramics (Bektaş 2021).

Together with various prehistoric materials ceramics have been investigated in a thematic survey of the Prehistoric Age carried out in Gallipoli Peninsula (Özbek 2010). Some Archaic-to Roman period ceramics have been examined in another survey conducted in Eceabat Sestos and its surroundings in the Gallipoli Peninsula (Körpe 2014). The Byzantine period of the region is investigated by Prof. Dr. A. Çaylak Türker, with ceramics discussed in various articles (Çaylak Türker 2005, 2019). Findings and ceramics of interior settlements, never investigated before, will be evaluated within the scope of a doctoral study that has just started in the Gallipoli Peninsula and focusses on localization problems and occupational finds⁸.

⁸ Within the scope of the aforementioned study, the findings of the Gallipoli Peninsula survey conducted under the direction of Koçel Erdem and the findings of the new research will be discussed.

Individual studies

Except for the aforementioned general studies on ceramics form excavations and surveys, there are also a number of individual studies and publications documenting former excavation material preserved in exhibitions and warehouses of various museums. Hence, two red-figured vessels in the Tekirdağ Museum, dated to Classical period, were published in an article (Tuna-Nörling 2001; Koçel Erdem 2013) (Figure 7). Additionally, the Tekirdağ Naip and Karaevli Tumulus findings exhibited in Tekirdağ Museum were evaluated and published a long time after the excavations (Delemen 2004; Koçel Erdem 2009).

Furthermore, ceramic finds of various periods have also been studied in some individual publications; in particular the Greek and Roman period ceramics found in Turkish Thrace have been discussed thematically in an article (Koçel Erdem-Şahin 2016).

All these publications based on the visual examination of ceramics contribute to fill the historical gaps of the region.

Conclusions

The ceramics unearthed in many excavations and presented in studies on sites in Turkish Thrace (Tekirdağ, Kırklareli, Edirne, Istanbul and Çanakkale) and in the adjacent regions, north-western Anatolia and the northern Aegean, represent important findings for retracing and reconstructing the cultural history of eastern Thrace.

Considering the results obtained in the context of ceramics in general, their contribution from the early period excavations of Fikirtepe and Pendik in Istanbul is essential for decoding the influence of the different cultures of the region during the Neolithic period. In addition, the excavations at Kırklareli Tilkiburnu, Taşlıcabayır, Aşağı Pınar, Kanlıgeçit and Edirne Hocaçeşme and the new survey studies carried out in Istanbul provide important data on the recognition of prehistoric period ceramics.

The sanctuary finds from the Archaic to the Roman periods in Heraion Teichos (Tekirdağ Karaevlialtı) and from the Late Bronze- Early Iron Age in Menekşe Çatağı, as well as the Toptepe cultic pottery, enhanced our understanding of the belief concepts in the region. The Early Bronze Age and Iron Age ceramics found in Menekşe Çatağı have been evaluated from different perspectives like chronology and origin: in addition, ceramics from the Classic and Hellenistic periods have been studied.

Gökçeada (Imbros) in the northern Aegean and Troas Region right next to Thrace provided important data for understanding the relations between regions through material culture, based on surveys and excavations. Furthermore, the excavations at Maydos, in the Gallipoli Peninsula, at Troy and Gökçeada provided remarkable evidence for defining the region's the settlement phases from the Early Bronze Age to the Late Bronze Age. The results of extensive surveys and excavations undertaken throughout Thrace by Prof. Dr. M. Özdoğan, added very important particulars to the archaeological studies of eastern Thrace. Also, the study of the ceramics unearthed in the recent excavations by the Istanbul Archaeological Museums on the Istanbul subway lines resulted in important changes to the chronology of the region.

In recent years, significant studies have been carried out on Orientalizing, Archaic, Classical and Hellenistic period ceramics of Ainos (Enez) Ancient City. The finds from Heraion Teichos also revealed important data from the Archaic to the Roman periods, with amphora handles, some published, an essential ceramic category for the understanding the regional trade net-works. Imported Attic red-figured ceramics are well presented among the other ceramic finds. In addition to imported ceramics, valuable information has been obtained about local productions. Some special types of ritual pottery, uncovered in places considered sanctuaries, and dating between the 4th century BC and the 1st century BC - 1st century AD, appear to have been produced in local workshops.

Additional substantial findings of Attic ceramics in Thrace are generally from the settlements on the Propontic coast and were particularly numerous in the region in the mid 5th century BC. Also, the excavations at Troy and Parion provided important comparative material in the context of Greek and Roman period ceramics. In addition, some recently published survey results add information on ceramic finds in the Troas region.

So far, the identified corpus indicates that the ceramic repertoire of cities in Thrace in the ancient periods had a cosmopolitan structure consisting of different components, local and imported. Amphoras obtained from centres such as Heraion Teichos, Ganos and Ainos signify that the commercial activities involved different regions, especially the northern Aegean and Black Sea. Furthermore, the figured ceramics found in these cities during the Early Archaic period indicate that the pottery produced in Attica and the eastern Aegean were in circulation in the region with the Greek colonization.

The ceramics retrieved from the aforementioned excavations and surveys are relevant in terms of recognizing local and imported products, in establishing relations within Thrace and beyond and filling the chronological gaps. They enable scholars to draw important conclusions about the developing and changing cultural interaction between the regions via production, trade, population mobility, political relations, etc. in eastern Thrace from prehistoric times onward.

Although the ceramic evaluations based on the published research can explain the history and archaeology of Thrace, the increasing number of studies, publications and archaeometric analyses that will complement the known archaeological findings will provide an additional wealth of new information on the material culture and ceramics of Thrace.

Bibliography

- Akman, M. 2016: 'Türkiye Trakya'sı Megalitik Anıtları' *Arkeoloji ve Sanat* 152: 71–4.
- Aksaç, F. 2001: Trakya ve Marmara Projesi. Menekşe Çatağı Prehistorik Çanak Çömlek Buluntuları. Unpublished MA Thesis, Istanbul University, Istanbul.
- Aksan, M. 2015: Güneydoğu Thrakia Tümülüsleri: 1881–1964 Yıllarında Kazılan Tümülüslerin Yeniden Değerlendirilmesi. Ph.D. Thesis, Istanbul University, Istanbul.
- Archibald, Z. 1998: The Odrysian Kingdom of Thrace: Orpheus Unmasked, Oxford, Clarendon Press.
- Asal, R. 2010: Yenikapı, Marmaray ve Metro Kurtarma Kazıları Buluntuları İşığında İstanbul'un Roma ve Bizans Dönemi Deniz Ticareti. Unpublished MA Thesis, Trakya University, Edirne.
- Asal, R., Polat, M.A., Ortak, G. 2020: 'En Eski Beşiktaş' Beşiktaş Kent Kültürü Dergisi b+ 28: 31–41.
- Aslan, B. 2016: 'Ausgewählte Funde aus den Ausgrabungen am Kalekapı' in S. Westphalen (ed.), Herakleia-Perinthos. Bericht über die Ausgrabungen am Kalekapı in Marmara Ereğlisi 1992–2010, Istanbuler Forschungen 55. Tübingen, Ernst Wasmuth Verlag: 145–219.
- Atik, N. 2003: 'Tekirdağ Karaevlialtı (Antik Heraion Teikhos) Hellenistik Devir Çanak Çömlekleri, 3. Uluslararası Eskişehir Pişmiş Toprak Sempozyumu Bildiriler Kitabı, Eskişehir, Eskişehir Tepebeşı Belediyesi: 298–306.
- Atik, N. 2016: 'Tekirdağ'da Traklar ve Antik Heraion Teikhos Kenti' *Arkeoloji ve Sanat* 152: 75–86.
- Aydıngün, Ş. (ed.) 2017: *Istanbul* Küçükçekmece Göl Havzası Kazıları (Excavations of Küçükçekmece Lake Basin) (BATHONEA). Istanbul, Arkeoloji ve Sanat Yayınları.

- Aydıngün, Ş. 2019: 'The Role of Bathonea Harbour in Ancient Trade' in O. Dumankaya (ed.), Çağlar Boyunca Üretim ve Ticaret, Prehistorya'dan Bizans Dönemi'ne, Ankara, Bilgin Kültür Sanat: 521–33.
- Aydıngün, Ş., Aydıngün, H. 2013: 'Erken Demirçağ'da Istanbul Boğazı Üzerinden Trak, Frig Kavimlerinin Anadolu'ya Geçişine Ait ilk Bulgular' *Arkeoloji ve Sanat* 142: 65–78.
- Aydıngün, Ş., Bilgili, A.E. 2016: 'Istanbul Tarihöncesi Arkeolojik Yüzey Araştırmaları ve Küçükçekmece Göl Havzası (Bathonea) Kazılarının Istanbul'a Katkıları' in C. Yılmaz (ed.), *Antik Çağ'dan 21. Yüzyıla* Büyük Istanbul Tarihi 1. Istanbul, Kültür A.Ş: 374–402.
- Başaran, S. 2003: 'Ainos'un Geç Hellenistik-Erken Roma Dönemi Seramik Buluntuları' in C. Abadie-Reynal (ed.), Les céramiques en Anatolie aux époques hellénistique et romaine: Actes de la Table ronde d'Istanbul, 22-24 mai 1996. Varia Anatolica 15. Istanbul, Institut Français d'Études Anatoliennes-Georges Dumézil: 71-7.
- Başaran, S. 2016: 'Enez-Ainos' *Arkeoloji ve Sanat* 152: 97–132.
- Beksaç, E. 2007: 'Kuzeybatı Anadolu ve Trakya'da Erken Kültistik Kaya/Kaya Oyma ve Megalit/ Anıtlar ve Kült Alanları Projesi: Edirne ve Kırklareli İlleri 2005 Yüzey Araştırması', *Araştırma Sonuçları Toplantısı* 24/1: 183–200.
- Bektaş, G. 2021: Şehir Devletinden Başkente: Gelibolu Yarımadası'nda Kurulmuş Olan Kardia, Agora, Paktye Şehir Devletlerinin Lysimakheia Başkentine Dönüşmesi Sürecinin Yüzey Buluntuları Aracılığıyla İrdelenmesi. PhD Thesis, Istanbul University, İstanbul.
- Belli, O. (ed.) 2000: Türkiye Arkeolojisi ve Istanbul Üniversitesi (1932–1999). Istanbul, İstanbul Üniversitesi Yayınları.
- Bilgin Kopçuk, S. 2022: Güneydoğu Trakya Bölgesi Hellenistik, Roma ve Geç Roma Yalın Seramikleri Işığında Bölgenin Ekonomik Yapısının İncelenmesi. Ph.D. Thesis, Mimar Sinan Fine Arts University, Istanbul.
- Bilgin Kopçuk, S., Koçel Erdem, Z. 2019: 'Late Roman Coarse and Cooking Wares from Southeastern Thrace (Turkey)' 7th International Conference on Late Roman Coarse Ware, Cooking Ware and Amphorae in the Mediterranean: Archaeology and Archaeometry. The End of Late Roman Pottery. The Last Centuries at the Crossroads. Valencia-Riba-Roja de Turia-Alacant [Paper presentation].
- Chabot Aslan, C., Sazcı, G. 2016: 'Across the Hellespont Maydos (Ancient Madytos), Troy and the North-Eastern Aegean in the Late Eight to Early Sixth Century BC' *The Annual of the British School at Athens* 3/1: 121–62.
- Çaylak Türker, A. 2005: 'Gelibolu'da Bizans Seramikleri ve Ökaristik Ekmek Damgası' *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi* 22/2: 87–104.

- Çaylak Türker, A. 2019: 'Ceramic Braziers From Çanakkale' Çanakkale Onsekiz Mart Üniversitesi Uluslararası Sosyal Bilimler Dergisi 4: 101–10.
- Delemen, İ, 2004: *Tekirdağ Naip Tümülüsü*. Istanbul, Ege Yayınları.
- Delemen, İ., Çokay Kepçe, S., Yılmaz, Z. 2010: 'Güneydoğu Trakya'dan MÖ 4. Yüzyıl Ortasına Ait Bir Savaşçı Mezarı' TÜBA-AR: Turkish Academy of Sciences Journal of Archaeology 13: 91–106.
- Erdoğu, B. 1996: 'Edirne İli 1995 Yılı Yüzey Araştırması' Araştırma Sonuçları Toplantısı 14: 273–91.
- Erdoğu, B. 2012: 'Uğurlu-Zeytinlik: Gökçeada'da Tarih Öncesi Dönemlere Ait Bir Yerleşme' *Trakya Üniversitesi Edebiyat Fakültesi Dergisi 2/4*: 1–16.
- Ergürer, H.E. 2013: 'Seramikler' in C. Başaran (ed.), Antik Troas'ın Parlayan Kenti Parion. 1997-2009 Yılları Yüzey Araştırmaları, Kazı ve Restorasyon Çalışmaları. Istanbul, Ege Yayınları: 137-51.
- Ergürer, H.E. 2014: 'Late Roman Light Coloured Ware From Parion' in H. Meyza (ed.), Late Hellenistic to Mediaeval Fine Wares of the Aegean Coast of Anatolia Their Production, Imitation and Use. Warsaw, Iksio Pan: 175–219.
- Ergürer, H.E. 2015: 'Parion, Agora ve Dükkanlarında Ele Geçen Sigillatalar ve Kırmızı Astarlı Seramikler' in C. Başaran, V. Keleş (ed.), *Parion Kazıları 10. Yıl Armağanı*. Ankara, Bilgin Kültür ve Sanat: 87–99.
- Ergürer, H.E. 2016: 'Parion Tiyatrosunda Bulunan Seramikler. 2006–2015 Yılı Çalışmaları, Mimarisi ve Buluntuları' in C. Başaran, H.E. Ergürer (eds.), *Parion Roma Tiyatrosu*. Ankara, İçdaş Yayınevi: 123–64.
- Güldoğan, E., Altun M. (eds.) 2015: Silivri: Istanbul İli Yüzey Araştırmaları 2013. İstanbul, Silivri Belediyesi.
- Günsenin, N. 1992a: 'Ganos: Bin Yıldır Şarap ve Amphora Üreten Kutsal Dağ' *Türk Arkeoloji Dergisi* 30: 197–207.
- Günsenin, N. 1992b: 'Ganos: Centre De Production D'Amphores A L'Epoque Byzantine' *Anatolia Antiqua* 2/2: 193–201.
- Günsenin, N. 1997: 'Ganos Amphoraları: Analyses chimiques comparatives des amphores de Ganos, de l'île de Marmara et de l'épave de Serçe Limanı (Glass-Wreck)' Anatolia Antiqua 5: 249–60.
- Günsenin, N. 2003: 'Au Moyen-Age, un Centre De Production En Propontide Dominant Aussi Le Bassin Mediterraneen: Le Cas De Ganos' in C. Bakırtzis (ed.), *Teme Congres International sur la Ceramique Medieval en Mediterranee*, Thessaloniki, Caisse des recettes archéologiques: 67–70.
- Hasdağlı, İ. 2017: 'Bir Deneme Parçası Işığında Doğu Thrakia'da Attika Taklidi Siyah Firnisli Seramik Üretimi' *Trakya Üniversitesi Edebiyat Fakültesi Dergisi* 7/13: 42–67.
- Hayes, J.W. 1992: Excavations at Saraçhane in Istanbul2: The Pottery. Princeton New Jersey, Princeton University Press.
- Heath, S., B. Tekkök (eds.) 2008: Greek Roman and Byzantine Pottery at Ilion (Troia) Study Collection and

- Catalogued Pottery. http://classics.uc.edu/Troy/GRBPottery/
- Hüryılmaz, H. 2020: 'Gökçeada-Yenibademli Höyük'te Keramik Endüstrisi: Troas Bölgesi Etkili ve Yerel Yapımlar' in V. Keleş (ed.), *Propontis ve Çevre* Kültürleri, *Propontis and Surrounding Cultures*, *Parion* Studies 3. Istanbul, Ege Yayınları: 402–13.
- Iakovidou, A. (ed.) 2007: Thrace in the Graeco-Roman World: Congress International de Thracologie 18-23 October 2005 Komotini-Alexandroupolis. Athens, National Hellenic Research Foundation.
- Irmak, E.N., 2010: Enez'de (Ainos) Ele Geçen Oryantalizan Seramikler. MA Thesis, Trakya University, Edirne.
- Işın, M.A., Günsenin, N. 1994: 'Tekirdağ İli, Hoşköy-Gaziköy Amphora Fırınları Kurtarma Kazısı 1992' Müze Kurtarma Kazıları Semineri 4: 497–512.
- Kara, Ü. 2011: Istanbul Yenikapı Limanı'nda Geç Roma-Erken Bizans Amphoraları Üzerindeki Yazıtlar (Graffiti ve Dipintiler) ve Damgalar. MA Thesis, Istanbul University, Istanbul.
- Kara, Ü. 2015: 'Yenikapı Limanı'nda Ele Geçen Damgalı Amphoralar' in A. Diler, K. Şenol, Ü. Aydınoğlu (ed.), Antikçağ'da Doğu Akdenizde Zeytinyağı ve Şarap Üretimi. Izmir, Ege Üniversitesi Yayınevi: 243–51.
- Kara, Ü. 2017: 'Küçükçekmece Göl Havzası (Bathonea?) Kazıları'nda Ele Geçen Dipintolu LR2 ve Damgalı LR13 Amphoraları' in Ş. G. Aydıngün, (ed.), Istanbul Küçükçekmece Göl Havzası Kazıları Excavations of Küçükçekmece Lake Basin (Bathonea). Istanbul, Arkeoloji ve Sanat Yayınları: 277–87.
- Kara, Ü. 2019: Geç Antik Çağ'da (M.S. 4.-7.yüzyıl) Doğu Akdeniz'de Üretilen Ticari Amphoralarda Dipinti, Graffiti ve Mühür Kullanımı. PhD Thesis, Ege University, Izmir.
- Karaca, E. 2019: Milattan Önce Birinci Binde Doğu Trakya. Istanbul, Homer Kitabevi.
- Karadima, C. 2004: 'Ainos: An Unknown Amphora Production Centre in the Evros Delta' in. J. Lund, J. Eiring (eds.), Transport Amphorae and Trade in the Eastern Mediterranean: Acts of the International Colloquium at the Danish Institute at Athens, September 26-29, 2002. Aarhus, Aarhus University Press: 155-61.
- Karakaş, G. 2019: 'Tekirdağ Yeniköy Mermer Höyük Kırmızı Astarlı Seramikleri' in B. Öztürk, H.S. Öztürk, K. Eren, B.B. Aykanat, H. Azeri (eds.), *Mnemes Kharin.* Filiz Dönmez-Öztürk Anısına Makaleler. Istanbul, Homer Kitabevi: 271–99.
- Kaşka, M. 2019: 'Çanakkale Merkezilçe Yüzey Araştırması Arkaik Dönem-Roma Dönemi Seramikleri' in D. Yılmaz (ed.), Kuzey Troas'ta Yeni Araştırmalar. Neolitik Çağ'dan Demir Çağ Sonuna Kadar Çanakkale Merkez Yüzey Araştırması. İstanbul, Ege Yayınları: 171–91.
- Kaya, D. 2017: 'Küçükçekmece Göl Havzası (Bathonea?) Kazıları Geç Antik Çağ Unguentariumları-2013' in Ş. G. Aydıngün (ed.) *Istanbul Küçükçekmece Göl Havzası Kazıları*. Istanbul, Arkeoloji ve Sanat Yayınları: 239– 59.

- Keskinel,, B., Özdemir, N., Öztürk N. Ö., Güven, N., Meriç, G., Demirkıran, A., Erdem, L., Ayber, E.K., Şahin, Z., Çelik, Ö. 2014: *Tekirdağ Kültür Envanteri*. Tekirdağ, Tekirdağ Valiliği.
- Kırçın, Ş. 2013: Edirne Taşınmaz Kültür Varlıklari Envanteri 1–2. Edirne, Edirne Valiliği.
- Kızıltan, Z. 2014: 'Marmaray-Metro Projeleri ve Yenikapı Arkeolojik Kurtarma Kazıları' *Colloquium Anatolicum*13: 11–45.
- Kızıltan, Z. 2016: 'Istanbul Kazıları: Marmaray-Metro Projeleri ve Arkeolojik Kurtarma Kazılarının Şehir Tarihine Katkıları' in C Yılmaz (ed.), *Antik Çağ'dan* 21. Yüzyıla Büyük Istanbul Tarihi 1. Istanbul, İstanbul Büyükşehir Belediyesi Kültür AŞ: 338–69.
- Kızıltan, Z., Çelik, G.B. (eds.) 2013: Saklı Limandan Hikayeler. Yenikapı'nın Batıkları. İstanbul, Koç Üniversitesi Yayınları.
- Koçel Erdem, Z. 2002: 'Heraion Teichos Antik Kenti Pişmiş Toprak Figürlü Kapları' 2. Uluslararası Eskişehir Pişmiş Toprak Sempozyumu Bildiriler Kitabı. Eskişehir, Eskişehir Tepebaşı Belediyesi: 17–30.
- Koçel Erdem, Z. 2007a: 'The Red-figured vases from Tekirdağ Karaevlialti (Heraion Teichos)' in Iakovidou 2007: 155–63.
- Koçel Erdem, Z. 2007b: 'The Importance of Heraion Teichos (Tekirdağ Karaevlialtı) in the Black Sea Ceramic Trade During the 4th Century BC' Studia Hercynia 11: 99–104.
- Koçel Erdem, Z. 2007c: 'The Cult and the Mythological Scenes on Athenian Export Red Figure Vases During the 4th Century BC' *Anodos*, 6/7: 241–52.
- Koçel Erdem, Z. 2009: 'Finds from a plundered Tumulus at Karaevli, Tekirdağ in Turkish Thrace' *Anatolia Antiqua* 17: 209–38.
- Koçel Erdem, Z. 2013: 'Tekirdağ Müzesi'nden Meidias Üslubu'nda Bir Bodur Lekythos' in M. Tekocak (ed.), K. Levent Zoroğlu'na Armağan. Istanbul, Suna & İnan Kıraç Akdeniz Medeniyetleri Araştırma Enstitüsü: 385–94.
- Koçel Erdem, Z., 2022: 'The Attic imports and their local imitations from the settlements east of the Hebros river (modern Turkey) in D. Tsiafaki, A. Avramidou, N. Michailidou, Y. Mourtos, M. Karta (eds.), AtticPOT Attic painted pottery in ancient Thrace (6th-4th century BC). New approaches and digital tools, Xanthi, 307–322.
- Koçel Erdem, Z., Şahin, R. 2016: 'Türkiye Trakya'sında Yunan ve Roma Dönemi Seramikleriyle İlgili Araştırmalar' *Arkeoloji ve Sanat* 152: 237–40.
- Körpe, R. 2014: 'Sestos ve Çevresi Yüzey Araştırmaları' *Araştırma Sonuçları Toplantısı* 32/1: 135–48.
- Kurap, G. 2020: Ainos (Enez) Siyah Figürlü Kyliksleri. PhD Thesis, Istanbul University, Istanbul.
- Kurap, G., Akyüz, S., Akyüz, T., Başaran, S., Çakan, B. 2010: 'FT-IR Spectroscopic Study of Terra-Cotta Sarcophagi Recently Excavated in Ainos (Enez) Turkey' Journal of Molecular Structure 976: 161–67.

- Laetzter Lasar, A. 2016: 'Das Römische Handelsnetz von Ainos: Ausgewaelte Keramik vom Spaethellenismus bis zur Spaetantike' *Rei Cretariae Romanae Favtorvm Acta* 44: 1–8.
- Onurkan, S. 1998: Doğu Trakya Tümülüsleri Maden Eserleri, Istanbul Arkeoloji Müzesi'ndeki Trakya Toplu Buluntuları. Ankara, Türk Tarih Kurumu Basımevi.
- Özbek, O. 2010: 'Gelibolu Yarımadası Tarihi Milli Parkı'nda Prehistorik Dönem Araştırmaları 2008 Sezonu' Araştırma Sonuçları Toplantısı 27/1: 239–59.
- Özdoğan, A.E., Işın, M.A. 2003: 'Tekirdağ Menekşe Çatağı, Doğu Çatak Kazısı' *Kazı Sonuçları Toplantısı* 24/1:377–88.
- Özdoğan, E. 2016: '23. Yılında Kırklareli Projesi: Aşağı Pınar ve Kanlıgeçit Yerleşimleri' *Arkeoloji ve Sanat* 152: 1–31.
- Özdoğan, M. 1998: 'Tarihöncesi Dönemlerde Anadolu ile Balkanlar Arasındaki Kültür İlişkileri ve Trakya'da Yapılan Yeni Kazı Çalışmaları' *TÜBA-AR: Turkish* Academy of Sciences Journal of Archaeology 1: 63–94.
- Özdoğan, M. 2007: 'Tarih Öncesi Dönemde Trakya' Aktüel Arkeoloji 3: 12–24.
- Özdoğan, M. 2008: 'Tarih Öncesi Istanbul' *Aktüel Arkeoloji* 8: 74–84.
- Özdoğan, M. 2016: 'Istanbul Üniversitesi Trakya Tarihöncesi Araştırmaları Projesinin 36. Yılında Genel Bir Durum Değerlendirmesi' *Arkeoloji ve Sanat* 152: 7–18.
- Özek, H. 2001: 'Istanbul Arkeoloji Müzeleri Yıllığı Makaleler Bibliyografyası' Annual of the Archaeological Museums of Istanbul 17: 43–56.
- Parman, E. 1996: 'Edirne Arkeoloji Müzesi'nde Bulunan Enez Kazısı 1990 Yılı Bizans Sırlı Seramikleri' *Anadolu Araştırmaları* 14: 391–414.
- Pekin A.K. (ed.) 2007: Gün Işığında Istanbul'un 8000 Yılı. Marmaray, Metro, Sultanahmet Kazıları. İstanbul, Vehbi Koç Vakfı.
- Polat, M.A. 2016: 'Cambaztepe Tümülüsü (Kurgan) Kazısı ön Değerlendirmesi' *Trakya Kazıları Özel Sayısı, Arkeoloji ve Sanat* 152: 231–37.
- Sayar, M.H. 2016: 'The Research Activities of Turkish Historians and Archaeologists in Southeastern Thrace through the 20th Century' in P. Adam-Veleni, E. Tsangaraki, K. Chatzinikolaou (eds.), Rhaidestos-Thessaloniki. Antiquities in a Refugee Journey. Thessaloniki, Archaeological Museum of Thessaloniki: 193–201.
- Sazcı, G. 2016: 'Trakya-Anadolu Sınırında Bir Tunç Çağı Yerleşmesi: Maydos Kilisetepe Höyüğü' *Arkeoloji ve Sanat* 152: 57–71.
- Sazcı, G., Sazcı, D. Ç. 2020: 'Maydos Kilisetepe Höyüğü' in G. Sazcı (ed.), *Maydos* 1. Çanakkale, Ege Yayınları: 13–75.
- Stoyanov, R. 2020: 'Attic Red-Figure Pottery 6th-4th Centuries BC from Menekşe Çatağı at Propontis' in V. Keleş (ed.), *Propontis ve Çevre Kültürleri, Propontis*

- and Surrounding Cultures, Parion Studies 3. Istanbul, Ege Yayınları: 791–801.
- Stoyanov, R., Erim-Özdoğan, A. 2003: 'Ceramic Finds form the Layer of Destruction on the Settlement Menekşe Çatağı in Propontis' *Ancient World and Archaeology* 16/3: 215–39.
- Şahin R. 2013: Ainos (Enez) Kazılarında Bulunan Kırmızı Figürlü Keramikler. PhD Thesis, Istanbul University, Istanbul.
- Şahin R. 2016: 'Red-figured Pottery of the 4th Century BC from Ainos (Enez) in Thrace: The Final Phase of the Classical Tradition in Eastern Thrace' in S. Japp, P. Kögler, P. (eds.), *Traditions and Innovations. Tracking the Development of Pottery from the Late Classical to the Early Imperial Periods*, Proceedings of the 1st Conference of IARPotHP, Berlin, November 2013, 7th–10th. Vienna, Phoibos Verlag: 329–40.
- Şahin R. 2017: 'Red-figure Pottery form Ainos /Thrace (Enez): Its Spectrum from the Earliest Finds until the End of the 5th Century BC' TÜBA-AR: Turkish Academy of Sciences Journal of Archaeology 20: 93–116.
- Taşlıklıoğlu, Z. 1971: *Trakya'da Epigrafi Araştırmaları*. Istanbul, Edebiyat Fakültesi Basımevi.
- Tekkök Biçken, B. 1996: *The Hellenistic and Roman Pottery from Troia. The Second Century B.C. to the Sixth Century A.D.* PhD Thesis, University of Missouri, Columbia.
- Tekkök, B. 2009: 'The Roman Pottery' in A. William (ed.), The Agora of Ilion. Final Reports of the Post-Bronze Age Excavations, Mainz.
- Tekkök, B., Akyol, A.A., Kadıoğlu, K., Demirci, Ş. 2008: 'Bir Grup Troia Seramiğinde Sır ve Malzeme Analizleri' Arkeometri Sonuçları Toplantısı 23: 173–86.
- Tombul, M. 2015: Çanakkale Kültür Envanteri, Arkeolojik Yerleşim Alanları ve Sanat Tarihi Yapıları. İstanbul, Matsis Matbaa Hizmetleri.

- Tuna Nörling, Y. 2001: 'Polyxena bei Hektors Lösung. Zu einem attisch-rotfigurigen Krater aus Tekirdağ (Bisanthe-Rhaidestos)' *Archäologischer Anzeiger* 2001/1: 27–44.
- Turan D., 2006: Menekşe Çatağı Hellenistik Dönem Seramiği. M Thesis, Trakya University, Edirne.
- Tuna Nörling, Y. 2008: 'Menekşe Çatağı Hellenistik Dönem Seramiği. Hellenistic Ceramics of Menekşe Çatağı' in B. Erciyes (ed.), Marmara Araştırmaları Sempozyum Bildirileri. Yerleşim Arkeolojisi Serisi 2. İstanbul, Ege Yayınları: 13–22.
- Türkmen, G. 2017: 'Bizans Dönemi Sırlı Seramikleri Hakkında Kısa Bir Değerlendirme' in Ş. G. Aydıngün (ed.), *Istanbul Küçükçekmece Göl Havzası (Bathonea) Kazıları*. Istanbul, Arkeoloji ve Sanat Yayınları: 297–313.
- Waksman, Y. 2012: 'The First Workshop of Byzantine Ceramics Discovered in Constantinople/Istanbul: Chemical Characterization and Preliminary Typological Study' in S. Gelichi (ed.), Atti del 9 Congresso Internazionale Sulla Ceramica Medievale Nel Mediterraneo. Firenze, All' Insigna del Giglio: 147–52
- Yağız, O. 2007: 'Anses d'amphores timbrees trouvées à Tekirdağ-Karaevlialti (Ancient Heraion Teichos)' in Iakovidou 2007: 698–704.
- Yıldırım, Ş. 2007: 'Trakya'da Tümülüs Tipi Mezar Geleneği ve İkiztepe B Tümülüsü' *Aktüel Arkeoloji* 3: 83–90.
- Yıldırım, Ş. 2010: 'Askertepe Tümülüsü' Anadolu/Anatolia 36: 149–78.
- Yumaklı, H. 2015: 'Istanbul İli Yüzey Araştırmaları (İstYA) Projesi 2013 Yılı Silivri İlçesi Çalışmalarında Karşılaşılan Çanak Çömlek Buluntuları' in Güldoğan, Altun 2015.