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Late Bronze and Early Iron Age Pottery in the Upper Thracian Plain, Tundzha Valley and the Burgas Lowland, Bulgaria – Diversity, Technology and Distribution

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ABSTRACT

The main purpose of this article is to present Late Bronze Age and Early Iron Age pottery of the not so known Upper Thracian Plain, Tundzha Valley and the Burgas Lowland in Bulgaria, with an emphasis on ceramic diversity, technology, distribution, and use of vessels in archaeological contexts. The investigation shows that the ceramic of both periods consists of wares for serving, cooking, storage, and transportation. The classes of cups, jugs, plates, bowls, kantharoi-like vessels, amphora-like vessels, jars, storage vessels, and *pyraunoi* had been in widespread use until the 8th century BC, when a new pottery class – pithoi with a 'wide stamp' – was added. The general transformations, which occurred during the beginning of the Early Iron Age, included modification of the above-mentioned pottery classes to a flattened spherical form; the treatment of the surface through burnishing with the effect of polishing; decoration with a combination of flutes and knobs and firing in reduced atmosphere with control of the process to achieve the desired uniform dark colour. However, absence of major changes in the morphology of Early Iron Age ceramics probably illustrate permanently established eating habits. According to ethnographic models, each change in the pottery production which included a stylistic variation of the vessels realized without marked changes in energy investment on the part of the craftsman, such as the introduction of new decorative motifs, new ways of arranging existing motifs and even some small changes in vessel forms, points to a horizontal differentiation of the society and increased numbers of equivalently ranked groups in a given society – a change that occurred in our study area in the Early Iron Age.

KEYWORDS

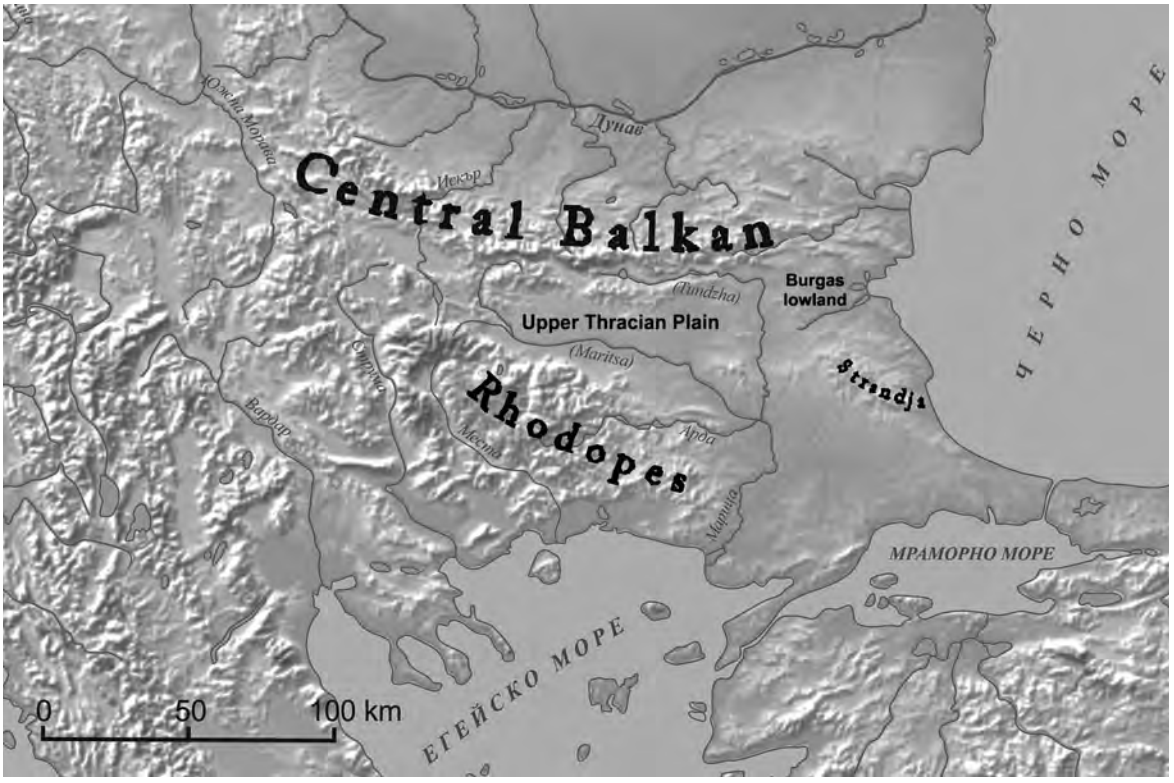
Upper Thracian Plain; Tundzha Valley; Burgas Lowland; Late Bronze Age; Early Iron Age; pottery diversity; technology; distribution.

GEOGRAPHICAL FRAMEWORK

The borders of the area under discussion include the Upper Thracian Plain, the Tundzha Valley and the Burgas Lowland (**Map 1**), which are differentiated not only by geographical characteristics but also by economic and cultural traits. The Upper Thracian Plain is located between 42°23' and 42°7' latitude with a length from west to east of around 180 km and average altitude of 168 m above sea level. The greater part of the territory is drained by the huge Maritsa River (tr. Meriç; gr. Ἔβρος)[1] and its tributaries. The Central Balkan range

1 The main water artery of the Upper Thracian Plain is the Maritsa River, which runs approximately in the middle of the lowland. It accepts many Rhodopes and Sredna Gora straits, and the flat terrain allows for the whole lowland to become irrigated (Donchev – Karakashev 2001, 119). The area of its drainage basin (to the Turkish-Bulgarian border) is 21,084 km^2 and represents ⅕ of the total area of the country. Until entering the Upper Thracian Plain it has the features of a mountain type of river regime, and in the Lowlands its water flow is formed by higher volume tributaries (Galabov 1982, 289).

(Stara Planina) surrounds it on the north, which as a natural border crosses Bulgaria from west to east, and divides the country into two main parts – northern and southern. The low mountain ranges of the Rhodopes, Sakar and Strandja are placed on the south. The Upper Thracian Plain is divided into two parts by the Chirpan Heights. The western part includes the Pazardzhik-Plovdiv field, stretching between Sredna Gora, the Rhodopes, and the Chirpan Heights. There the terrain is flat, whereas to the east the relief, which is a little hilly, includes the Stara Zagora Plain (Donchev – Karakashev 2001, 117). On the east, the great part of the territory is drained by the huge Tundzha River (tr. Tunca; gr. Τόνζος),[2] which takes its source from the central parts of Stara Planina, and flows until it reaches the Maritsa (Penchev 1982, 289). More to the east of the middle course of the Tundzha River is the Burgas Lowland characterized by the well-expressed radial valley network, whose river arteries run to the Burgas Bay (Georgiev 1991, 380). The conditions in these regions since ancient times were suitable for agriculture and cattle-breeding activities. The main reason for this regional fertility is the rich water supply from the two major rivers, which likely also served as transport links (Leshtakov 2009, 55–57).



Map 1: Map of the investigation area of the Upper Thracian Plain to the Burgas Lowland in Bulgaria.

2 The length of the Tundzha River to the Turkish border is 350 km and the area of its drainage basin may be divided into two clearly formed parts: in the first one, the river passes through the Under Balkan Mountain fields, and the second part starts from its gorge to the north of Yambol, and to the south it reaches the border (Galabov 1982, 289).

THE LATE BRONZE AGE

CHRONOLOGICAL REMARKS AND HISTORY OF RESEARCH

Present day Bulgaria is situated between two large and archaeologically well investigated cultural areas –the Aegean and Anatolia on the one hand, and with Central Europe on the other. Depending on which part of Bulgaria is being discussed, the one or the other periodization system has been applied. For example, the 'Central European' tripartite periodization scheme – early, middle, and late periods of the Bronze Age – has been applied to the areas north of the Balkan range, in Southwestern and in Southeast Bulgaria, including the Rhodopes Mountains. However, in lowland Thrace the nomenclature of the Bronze Age follows the terminology of the neighbouring countries to the south (Alexandrov 2018, 85–87).

Among the earliest, and significant for its time, studies dedicated to the Late Bronze Age is the monograph by Bernhard Hänsel (1976). Although the emphasis in the said work is placed on the regional and chronological development of the Lower Danube region, actual materials from South-East Bulgaria have also been published. The author introduces a new ceramic group 'Čerkovna' and stresses that the spherical kantharoid-like vessel is a typical form of Plovdiv-Zimnicea-Čerkovna culture (Hänsel 1976, 204). While in the 1980s Bulgarian archaeology perceived the major division just between Northwestern, Northeastern, and Southern Bulgaria (Panayotov – Valcheva 1989, 12–13), presently there has been a tendency towards a more detailed regionalization of the Bronze Age chronology. Ivan Panayotov suggests a periodization according to which the Bronze Age in Thrace covers six periods. He associates the fifth of them with the Late Bronze Age (Razkopanitsa VII-Asenovets) and the sixth (Plovdiv-Zimnicea) with the end of the Late Bronze Age/beginning of the Early Iron Age (Panayotov 2003, 29–30).

During the last few years the expansion of the archaeological record for the Late Bronze Age in the discussed territory was the result mostly of rescue excavations. A consequence of the large-scale infrastructure and energy projects, such as the building of the 'Maritsa' and 'Thrakia' highways or the work on the 'Maritsa-Iztok' energy complex, is the accumulation of new information on almost all the main site-types dating to the second millennium BC: settlement sites, sanctuaries, flat and barrow cemeteries. New evidence from pottery, together with a new series of high-precision radiocarbon (AMS) dates, fill the gap in the settlement chronology during the 2nd millennium and show that the Late Bronze Age in Upper Thrace started in the 16th/15th centuries BC (Leshtakov – Tsirtsoni 2016, 481–488, cf. especially the Chokoba 18 A site). The number of stray finds – hoards and individual metal artefacts excavated and purchased – was also significant and summarised in a special volume *Gold & Bronze. Metals, Technologies and Interregional Contacts in the Eastern Balkans during the Bronze Age* (Alexandrov *et al*. eds. 2018).

Despite the accumulated data, except for some general articles related to the Upper Thracian Plain (Leshtakov 2002; Ivanova – Todorova 2014; Bozhinova 2012; Leshtakov – Tsirtsoni 2016), the surroundings of Drama (Lichardus *et al*. 2001; 2003), and a few articles on several archaeological sites situated to the east of Tundzha (Hristova 2009; 2010; 2011), there are no summary publications for the region between the Upper Thracian Plain and the Burgas Lowland. Given these facts, the following paragraphs represent an attempt to retrace the changes in forms, technology, and distribution of the pottery during the Late Bronze and Early Iron Ages across the study area and should help with the future reconstruction of the past of ancient Thracian society.

THE LATE BRONZE AGE POTTERY

Morphology

The Early and Middle Bronze Age Thracian society was probably organized in the form of some type of chiefdoms, which were characterized by the existence of tribal elites and tribal associations (Bonev 2003, 125–126). This organization is possibly reflected in the concentration of valuable objects – e.g. the élite graves of Ovchartsi, Izvorovo, or Kamen (Alexandrov 2018, 95). The period of the Late Bronze Age (16/15th–12/11th century BC) was a time of 'ethnic' consolidation in Thracian society, and that process may also be reflected in contemporary pottery assemblages. Thracian ethnogenesis has often been part of the Bronze Age discourse in Bulgaria and cannot be completely omitted here. However, since this a more complex topic, I prefer not to go any deeper into the matter. In any case, certain features of pottery production and design which emerged during that period (for example, forming technique, forms) persisted throughout the Early Iron Age that followed (Bozkova 2015, 229).

On the basis of technological features, such as the clay quality, wall thickness, surface treatment and firing, the pottery can be divided into various groups. On the other hand, according to function, vessels can be classified as tableware, cooking ware, and storage and transportation containers – the majority of them belonging to cooking ware. The pottery from Thrace contains locally produced hand-made pottery. A few wheel-made fragments have been found, but they are all considered to be imports. The following hand-made vessels display a large variety of shapes: cups, jugs, plates, bowls, kantharoid vessels, amphora-like vessels, jars, double-vessels, storage vessels, and *pyraunoi*, all common over a large area (Bozkova 2015, 229–230; Hristova 2011, 104–137). Local combinations of shapes vary, with certain types predominating: for example, jugs and cups at the Nova Zagora cemetery (Kanchev – Kancheva 1990); kantharoid vessels in the Ovcharitsa cemetery (Kancheva-Russeva 1991); jugs and cups at Malkata Mogila Tumulus, near Golyana Detelina village and Manchova Mogila Tumulus, near Malka Detelina village (Kanchev 1991, 42–44; 46–47), and so on. In the following lines, each of the main typological groups will be discussed.

Cups are the better-preserved vessels in the region. The size of the body and the inverted rims can be used as evidence for the function of the cups as drinking vessels. They can be divided into two main groups: large cups (**Fig. 1:1**) with high hollow feet and small cups with a flat base (**Fig. 1:2–10**). Quite commonly used were the S-profile vessels (**Fig. 1:5–7**), inverted truncated cone-shaped (**Fig. 1:10**), cylindrical (**Fig. 1:8–9**) and spherical cups (**Fig. 1:2**). Some of the vessels are richly decorated with Furchenstich, a type of decoration typical for the period, placed on the widest part of the body (**Fig. 1:1,4,8**). Ornamentation includes mainly angles, triangles and rhombi, sometimes ending with spirals.

Jugs are also among the popular vessels used during the Late Bronze Age. Most of them have spherical, flattened-spherical (**Fig. 2:2–9**) or oval bodies with conical necks (**Fig. 2:10–11**); the territory discussed here yielded some samples with rich Furchenstich decoration (**Fig. 2:4,7**). The preferred motif is the circle, which, in many cases in combination with other geometric elements, creates an impression similar to the so-called 'solar motifs'. The inclusion of additional elements such as spirals, straight or curved lines, dots, combined in different ways gives the impression of a variety of these 'solar images' (**Fig. 2:1,3,7**; Borislavov 2002).

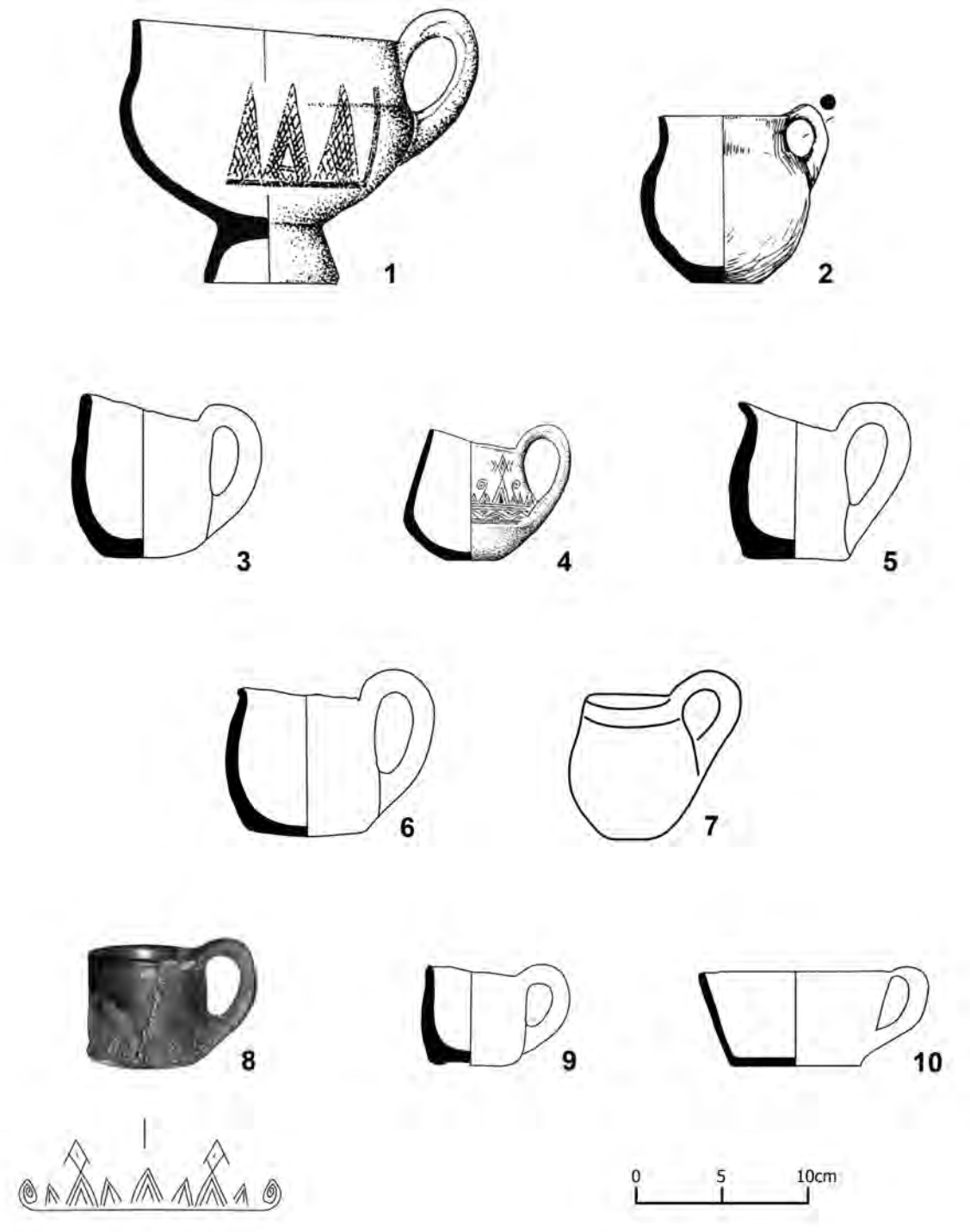


Fig. 1: Late Bronze Age cups: 1. Nova Zagora (after Nikov 2001, fig. 4c); 2. Radnevo 'Staroto Selishte' (Savatinov 1995, fig. 2e); 3. Nova Zagora (drawing by R. Hristova); 4. Izvor (after Nikov 2001, fig. 4f); 5, 6. Nova Zagora (drawing by R. Hristova); 7. Tsenino (after Hänsel 1976, Taf. 36:1); 8. Vratitsa (photo and drawing by R. Hristova); 9. Nova Zagora (drawing by R. Hristova); 10. Ovcharitsa II (after Kancheva-Russeva 1991, fig. 3g).

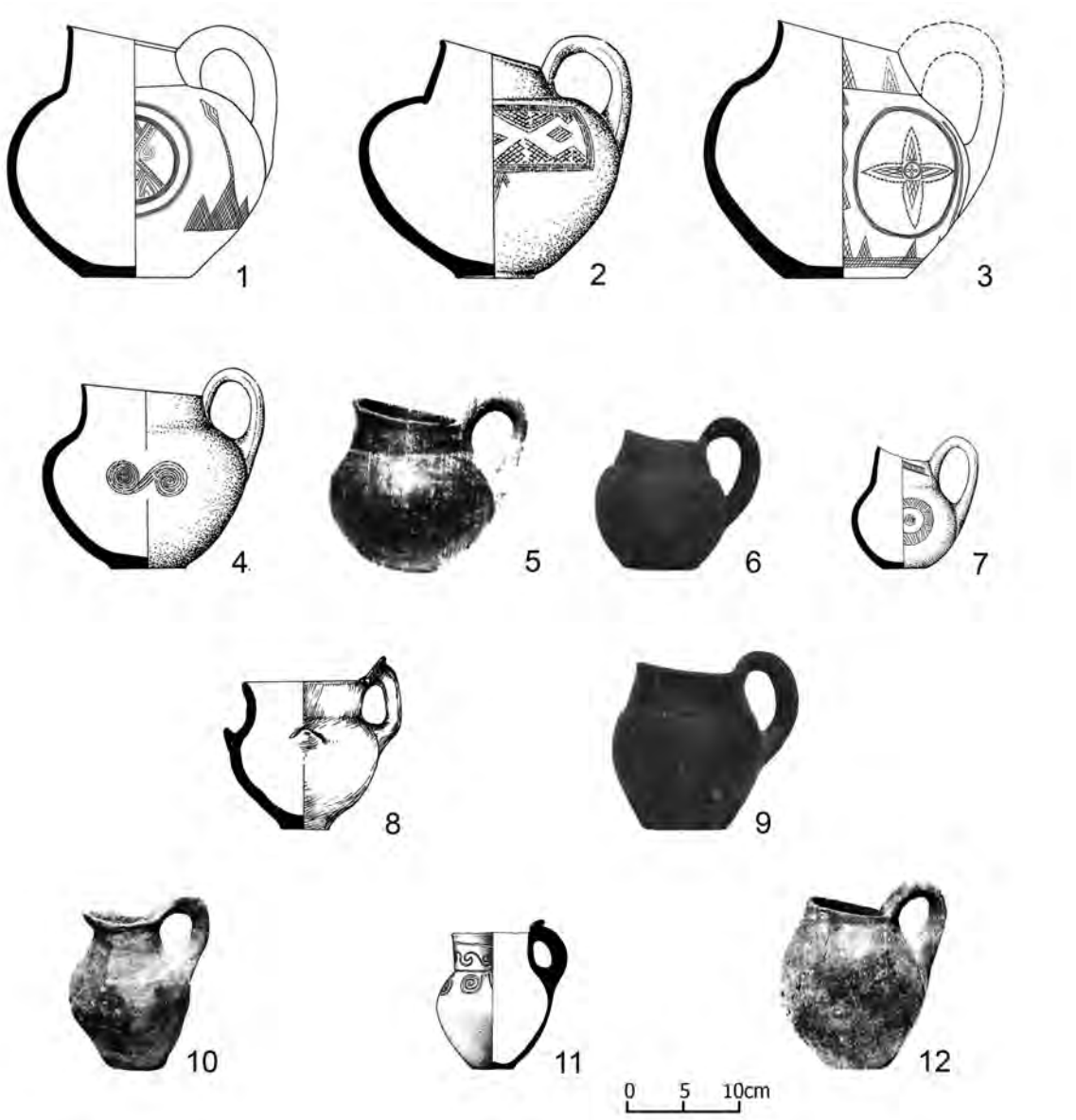


Fig. 2: Late Bronze Age jugs: 1. Malkata Mogila Tumulus (after Kanchev 1991, fig. 7a); 2. Nova Zagora (after Nikov 2001, fig. 4b); 3. Goliama Detelina (after Kanchev 1991, fig. 6b); 4. Nova Zagora (after Nikov 2001, fig. 4d); 6, 9. Nova Zagora (picture by R. Hristova); 7. Chatalka (after Nikov 2001, fig. 4e); 8. Radnevo 'Staroto Selishte' (after Savatinov 1995, fig. 2d); 5, 10, 12. Plovdiv (after Detev 1964, fig. 4); 11. Zagortsi (after Kancheva-Russeva – Leshtakov 2015, fig. 3).

Plates and bowls (**Fig. 3,4**) can be defined as food-serving vessels. Although both categories are associated with food consumption, certain differences in their function are suggested. Bowls were probably used for food distribution and were therefore deeper, while plates were used for food consumption (Leshtakov 1988, 7). The presence of a spout (**Fig. 4:2–4**) in some vessels is an indication of their main function associated with the serving of food and pouring liquids. Finding the fragmented ceramics sometimes creates a problem in distinguishing between bowls and plates because of their similar forms. Most of the vessels have slightly bi-conical or spherical to hemispherical shapes. Some of them are equipped with spouts, a form popular

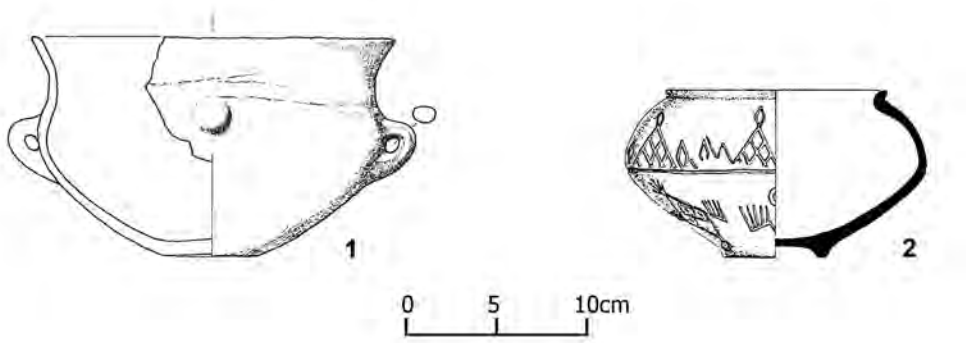


Fig. 3: Late Bronze Age bowls: 1. Chokoba 18 A (after Leshtakov 2010, fig. 1:3); 2. Ovcharitsa II (after Kancheva-Russeva 2000, fig. 25.2:4).

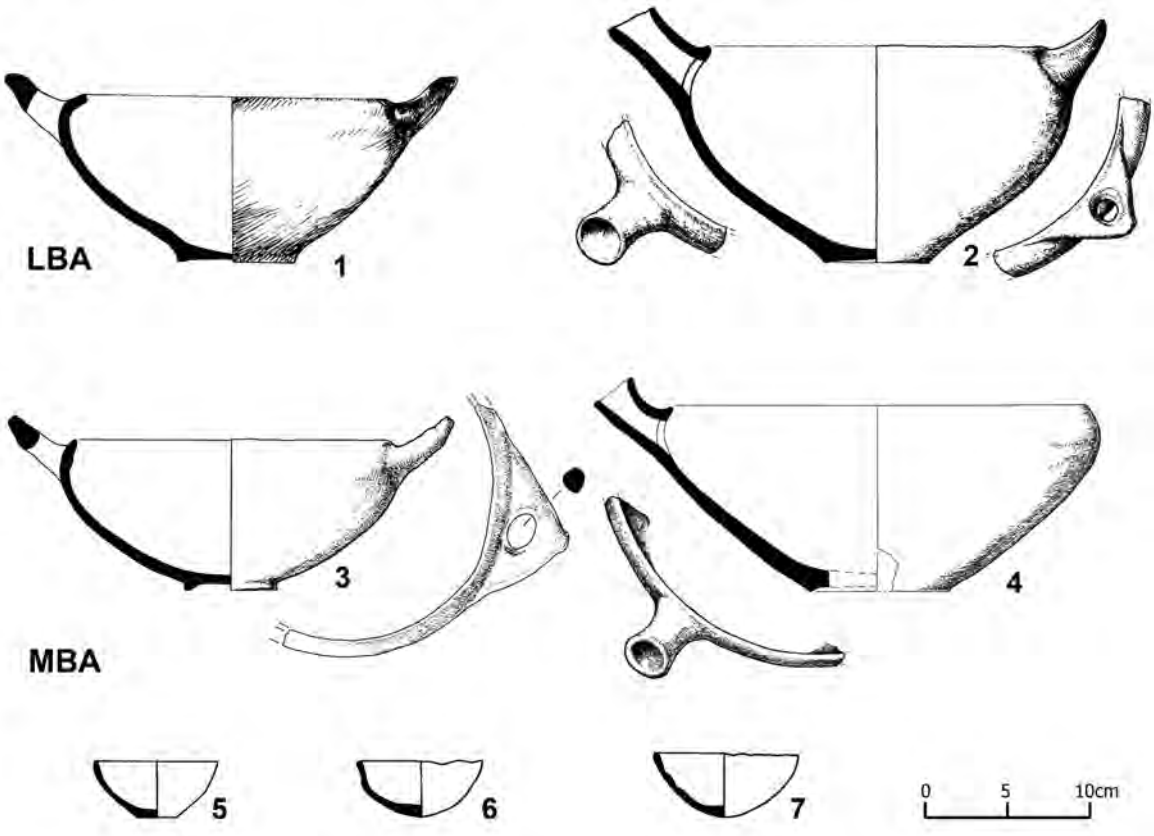


Fig. 4: Late Bronze Age plates/bowls: 1. Radnevo 'Staroto Selishte' (after Savatinov 1995, fig. 2g); 2. Chokoba 18 A (after Leshtakov 2010, fig. 1:4); 3, 4. Chokoba 18 (after Petrova – Katsarov 2010, fig. 2); 5–7. Ovcharitsa II (after Kancheva-Russeva 1991, fig. 3).

since the Middle Bronze Age (Leshtakov – Tsirtsoni 2016, 486, 488, fig. 5). Most plates and bowls are not decorated, or have very ordinary ornamentation, such as knobs (**Fig. 3:1**). In a few cases, ornaments such as angles, triangles, rhombi, nets, stylized birds were incised over the whole outer surface. The rich ornamental style of the vessel in **Fig. 3:2** follows the

traditions of the Balkan geometric style characteristic of the culture with encrusted pottery in Northwest Bulgaria, Southwest Romania, and Northeast Serbia in the Late Bronze Age (Kuncheva-Russeva 2000, 325; Shalganova 2005, fig. 33, 46).

The kantharoid vessels have a specific form and style characteristic for the Late Bronze Age: rounded bodies, conical necks, sometimes a low hollow base. Two handles are attached to the orifice. Some sub-types differ in the location of the handles and the transitional part between the neck and the shoulders. Some of the vessels are richly decorated with incisions which

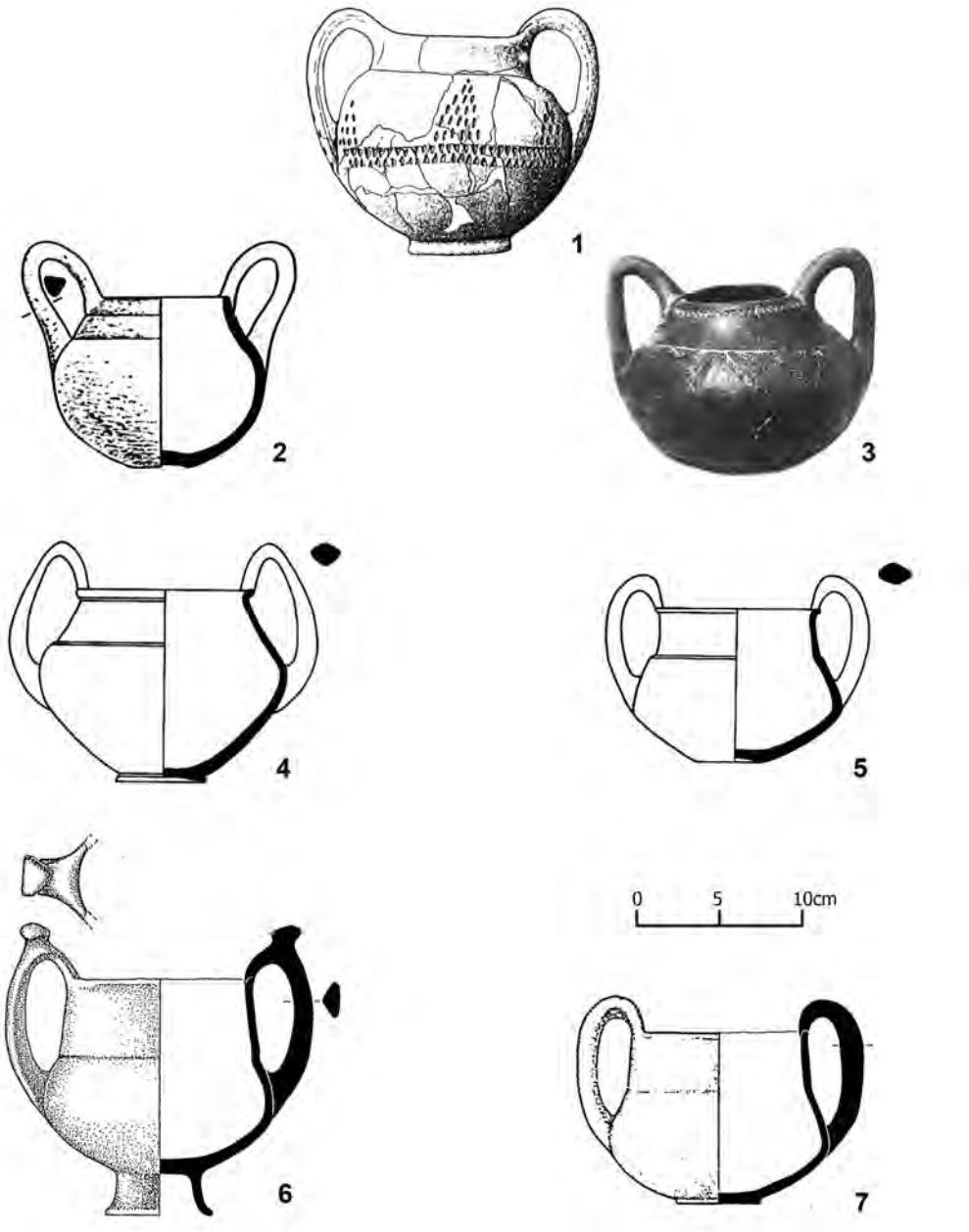


Fig. 5: Late Bronze Age kantharoid vessels. 1. Drama-Merdžumekja (after Lichardus *et al.* 2003, Abb. 2); 2. Tsenino (after Hänsel 1976, Taf. 36:2); 3. Razkopanitsa (after Katincharov 1989, fig. 5f); 4–5. Manchova Mogila Tumulus (after Kanchev 1991, fig. 4b, d); 6–7. Ovcharitsa II (after Kancheva-Russeva 2000, fig. 25.2:1–2).

Fig. 6: Late Bronze Age Amphora-like vessels: 1–4. Plovdiv (after Detev 1964, fig. 6a, g,v, 7v).

cover most of the body and the lower part of the handles (**Fig. 5:1,3**). Designs with triangles are popular while dots and lines are added to the composite pattern. The relief decoration of small knobs applied in the zone of the shoulders is also notable. Spherical kantharoid vessels are widespread in the Balkan Peninsula; they were quite typical for a long time: from 1600 to 1200 BC (Alexandrov – Petkov – Ivanov 2007, 373–387; Wardle – Wardle 2007, pl. 14; Andreou – Psaraki 2007, fig. 5; Mitrevski 2007, 443–450; Bulatovich 2011, fig. 1). Kanthoroid vessels with a hemispherical shape, a straight profiled neck, high hollow feet or a plate base, and specifically shaped relief decoration on the top of the handles (**Fig. 5:6**) are identified as belonging to the transitional period between the Late Bronze and the Early Iron Age (Kuncheva-Russeva 2000, 325). For an overview of the development in the west cf. Horejs 2007, 115–126.

The shape of amphora-like vessels points to their function as liquid storage and transportation containers. Amphora-like vessels were also among the popular classes during the Late Bronze Age, attested in several types. Most numerous in this category are those with a funnel-like rim, a flaring neck, and a spherical or ovoid body (**Fig. 6**) with two or four vertical handles at the broadest part (**Fig. 6:1–4**), with a flat bottom (**Fig. 6:1–3**) or small feet (**Fig. 6:1**). Decorations such as knobs, lugs, and plain relief bands were applied at the transition between body and neck or in the zone of maximum vessel diameter (**Fig. 6:3**). It should be mentioned that the type of amphorae found in Plovdiv and Razkopanitsa is quite characteristic of the cultures in the west, in the territory of Koprivlen culture and Brnjica culture, where they have been encountered in cremation graves in flat necropolises, dated to the 12th–11th century BC (Alexandrov – Petkov – Ivanov 2007, 378, tabl. 4; Luci 2007; cf. also Horejs 2007, 153–159). All of these vessels display regional differences and variants belonging to populations from different cultural groups with diverse material and spiritual cultures (Bulatovich 2011, map 2).

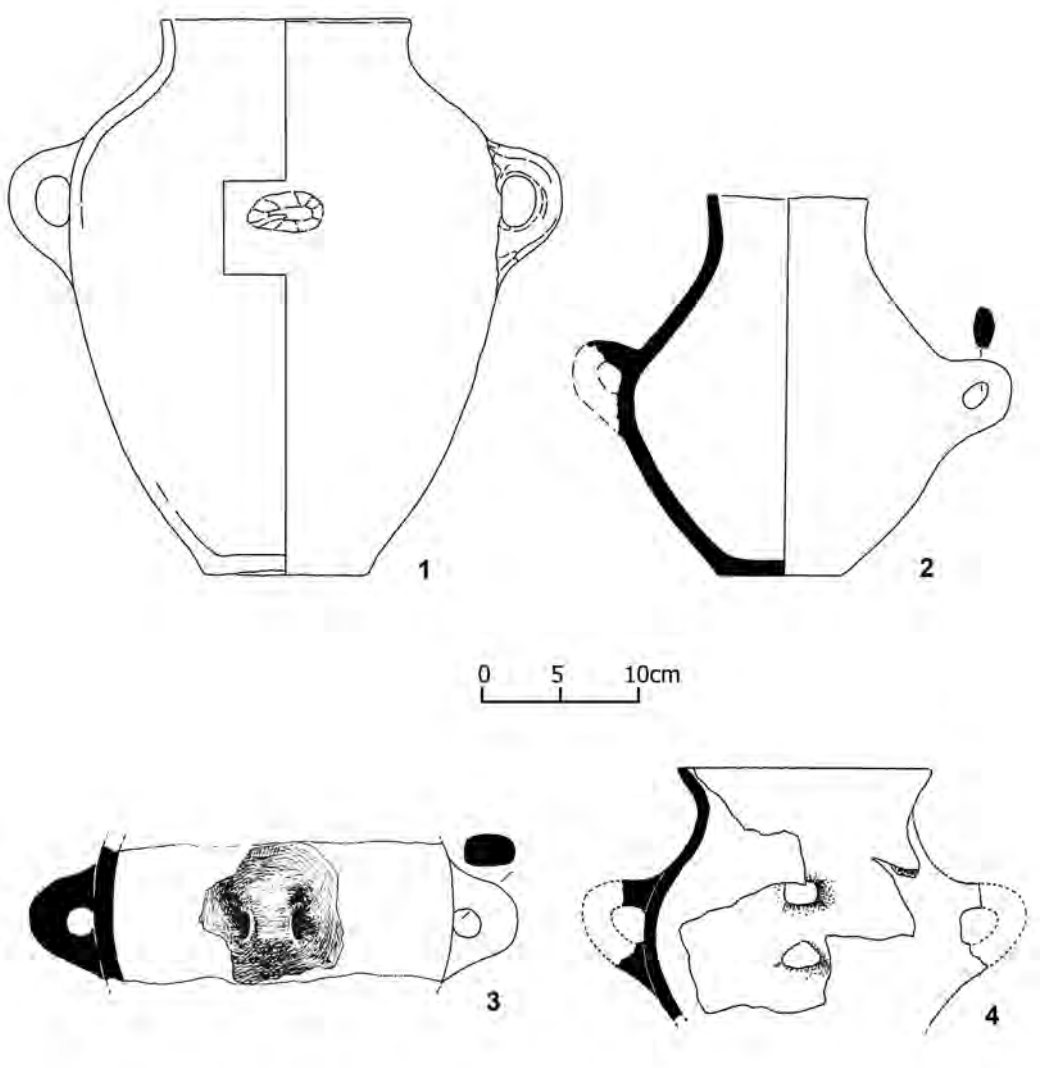


Fig. 7: Late Bronze Age jars: 1. Badu Bunar (drawing by Lee Sougjoo); 2. Yambol 'Cherven bair' (after Lichardus *et al.* 2002, Abb. 8.3); 3. Radnevo 'Staroto Selishte' (after Savatinov 1995, fig. 2zh); 4. Polski Gradets (after Nikov 2001, fig. 3a).

The most eastern site in which they have been discovered is Vratitsa, where amphorae decorated with small knobs created by pushing inside out testify to a later date– the transition between the Late Bronze and Early Iron Age (Hristova 2010, 44).

Jars as kitchen ware were used mainly for cooking (**Fig. 7**). These are the most numerous vessels in the ceramic assemblage of the archaeological sites, as they were probably the most commonly used vessels during the Late Bronze Age. The different types can be distinguished according to the shape of the vessels and their mouths: pots with oval, cylindrical, conical, beehive-shaped bodies. Some of them have a short straight or strongly flaring neck. The vessels have three varieties of handles – two symmetrical vertical handles placed on the widest body part, tongue-like handles, or crescent-shaped handles. Their decoration includes plain bands or sometimes bands bearing oval finger imprints and incisions. Usually, these are situated outside on the rim or below it. Only one complete vessel and a few fragments belonging to small size pots stand out in the assemblage with a single or bifurcated tongue-shaped lug inside, about 3 cm below the rim (**Fig. 8:1–4**). The only whole preserved vessel is not decorated, while on the fragments, decoration consists of slashes on the lip or the rim outside and one of the fragments bears an appliqué of combined curved and straight relief bands. No lid fragments were discovered: these lugs were not lid supports. Their function is probably similar to the popular andirons widely used in the Bronze Age and later (Hristova 2011, fig. 21).

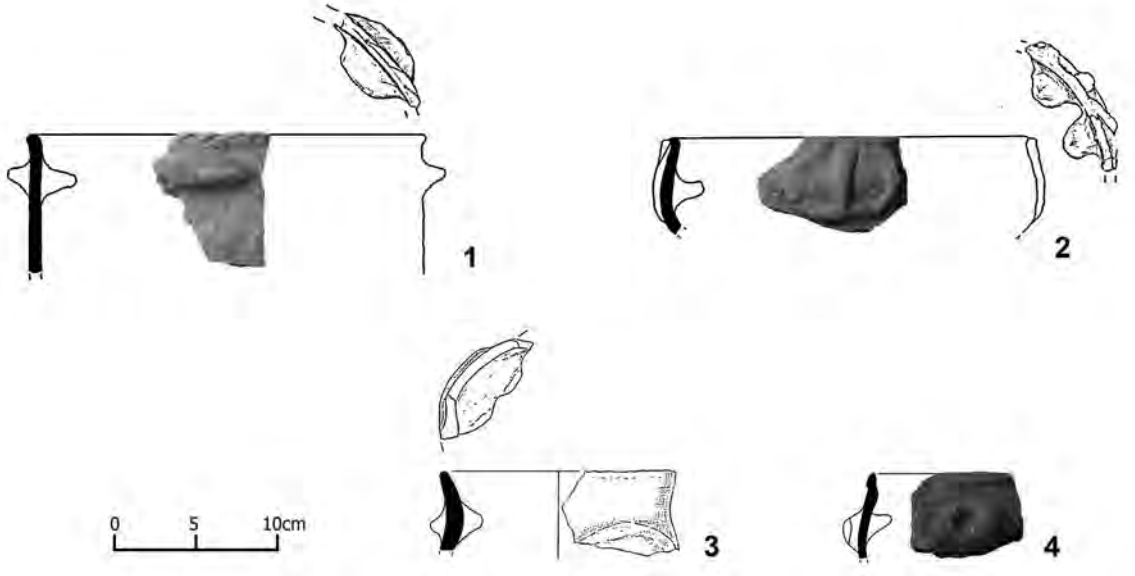


Fig. 8: Late Bronze Age pots with single or bifurcated tongue: 1–4. Vratitsa (Hristova 2010, fig. 21).

Pyraunos is a generic term for what was portable cooking equipment, known in the literature as 'portable hearths with or without embedded vessel', to which insufficient attention has been paid in the literature (Romsauer 2003; Horejs 2007, 148–153, Abb. 97). The vessel body includes an embedded pot, central and ventilation openings, stands, and a base. The variety of shapes might have been due to both the function of the *pyraunoi*, and the individual taste of the potter. Combinations of two or more kinds of openings on one stand are also possible. Sometimes there are finger imprints, pricks, and cuts. The decoration on the built-in vessels of the *pyraunoi* is similar to that on the pots. Decoration on the middle of the stands is only rarely observed. In the territory of the Upper Thracian Plain, only one full graphic reconstruction of

this class of vessel was found, at the Vratitsa site. The *pyraunoi* from Vratitsa can be classified under the A1 type with a built-in vessel after Romsauer, IA type after Scheffer, and A3 type after Romsauer (Romsauer 2003, 171).

Types of decoration

Four principal types of decoration have been attested from the Late Bronze period in our area: incised, Furchenstich, plastic, and pricked decorations. Plastic decorations prevail in the form of plastic bands with differently rendered finger imprints and cuts. Storage vessels, pots, and amphora-like vessels were mainly decorated in this way. Knobs and lugs are mostly typical of amphora-like, kantharoid vessels and jugs. The Furchenstich technique, a specific characteristic of Late Bronze Age ceramics, is attested on fragments from kantharoid vessels, jugs, bowls, and cups. Designs with triangles and lozenges were very popular while incised circles, dots, pricks, and lines fill in the triangles and lozenges in composite patterns. The decoration was applied in the zone of the maximum vessel diameter, below the rim, and on the handles (**Fig. 9** and **10**). In some cases, the central place in the overall composition is taken by solar symbols or spiral figures. The motifs organized around the centre are frequently bound by linear or figurative friezes located along the shoulders or the base of the vessel. As a result of this variety, it is difficult to find two completely identical images of a solar sign not only in the territory of an archaeological site, but even on the walls of the same vessel. The use of the principal decorative patterns conforms to vessel category (cf. Detev 1968, fig. 22; Kanchev–Kancheva 1990, fig. 8b; Kanchev 1991, fig. 4, 6, 7; Savatinov 1995, fig. 2; Kuncheva-Russeva 2000, fig. 25:2; Nikov 2001, fig. 3–5; Borislavov 2002, 32–44; Hristova 2009, fig. 11; Leshtakov 2010, fig. 1; Hristova 2011, fig. 4:2,4; 5:8; 6:1-3,5; 7:1; 13:3–10; 22:3).

Composite motif decorated fine vessels, while simpler ones (plastic bands, knobs, and cuts) were applied on coarse and thick-walled vessels. Upon analysis of the features of the Late Bronze Age pottery complex from the Upper Thracian Plain, similarities became apparent with the pottery forms and decorations from the Eastern Rhodope Mountains, where they are richer and more varied (Popov 2018, fig. 10, 11; Horejs 2017; Nikov 2016; Dimitrova 2014).

Technology

Although some research has been done, very little is known about the technological characteristics of Late Bronze Age pottery from the studied region.[3] Details on the clays, surface finishing and firing are mentioned only in very general terms in the publications, which makes any attempt at outlining possible specific regional features difficult. Key specifics of local production can be defined as 1) clay including assorted tempers, 2) the vessel shape, and 3) modelling by hand. Most of the vessels have a spherical shape, thick walls, burnished surfaces. The pottery surface has various colours which show that the firing process has taken place in an imperfect reducing atmosphere.

The available data in the literature shows that the composition of the clay used for the manufacture of the vessels and their surface finishing are directly connected to the region of

3 Part of the observations connected with the technological characteristics of the vessels of the Late Bronze and Early Iron Age is a result of personal researches of the author made during archaeological excavations and the preparation of her dissertation *Technological Innovations and Craft-Specialization of the Ancient Ceramic Production in Upper Trace Valley, Southeastern Bulgaria* (2017).

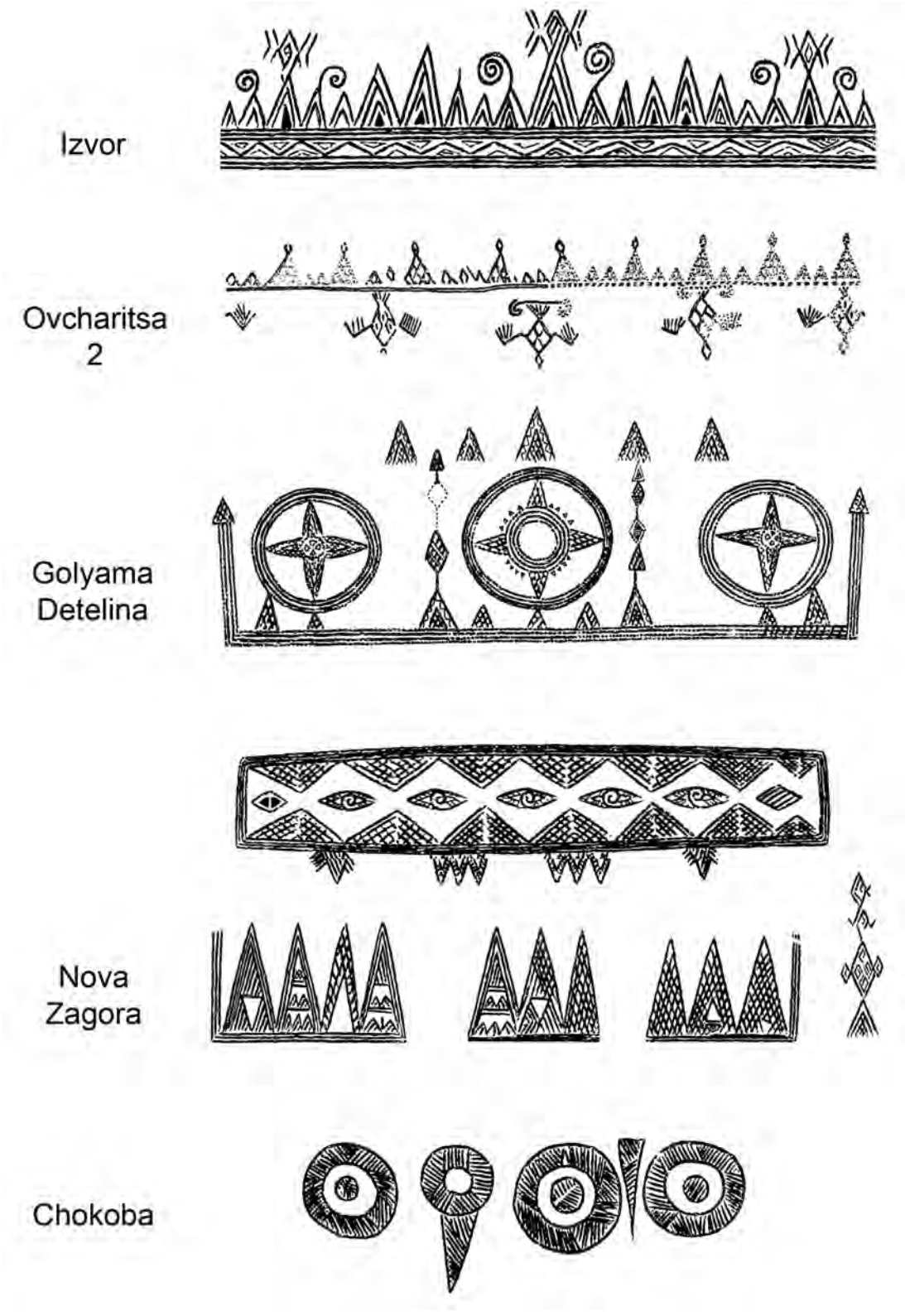


Fig. 9: Furchenstich decoration. Late Bronze Age: 1. Izvor (after Nikov 2001, fig. 5e); 2. Ovcharitsa II (after Kuncheva-Russeva 2000, fig. 25:4); 3. Golyama Detelina (after Nikov 2001, fig. 5a); 4. Nova Zagora (after Nikov 2001, fig. 5c); 6. Chatalka (after Nikov 2001, fig. 5e).

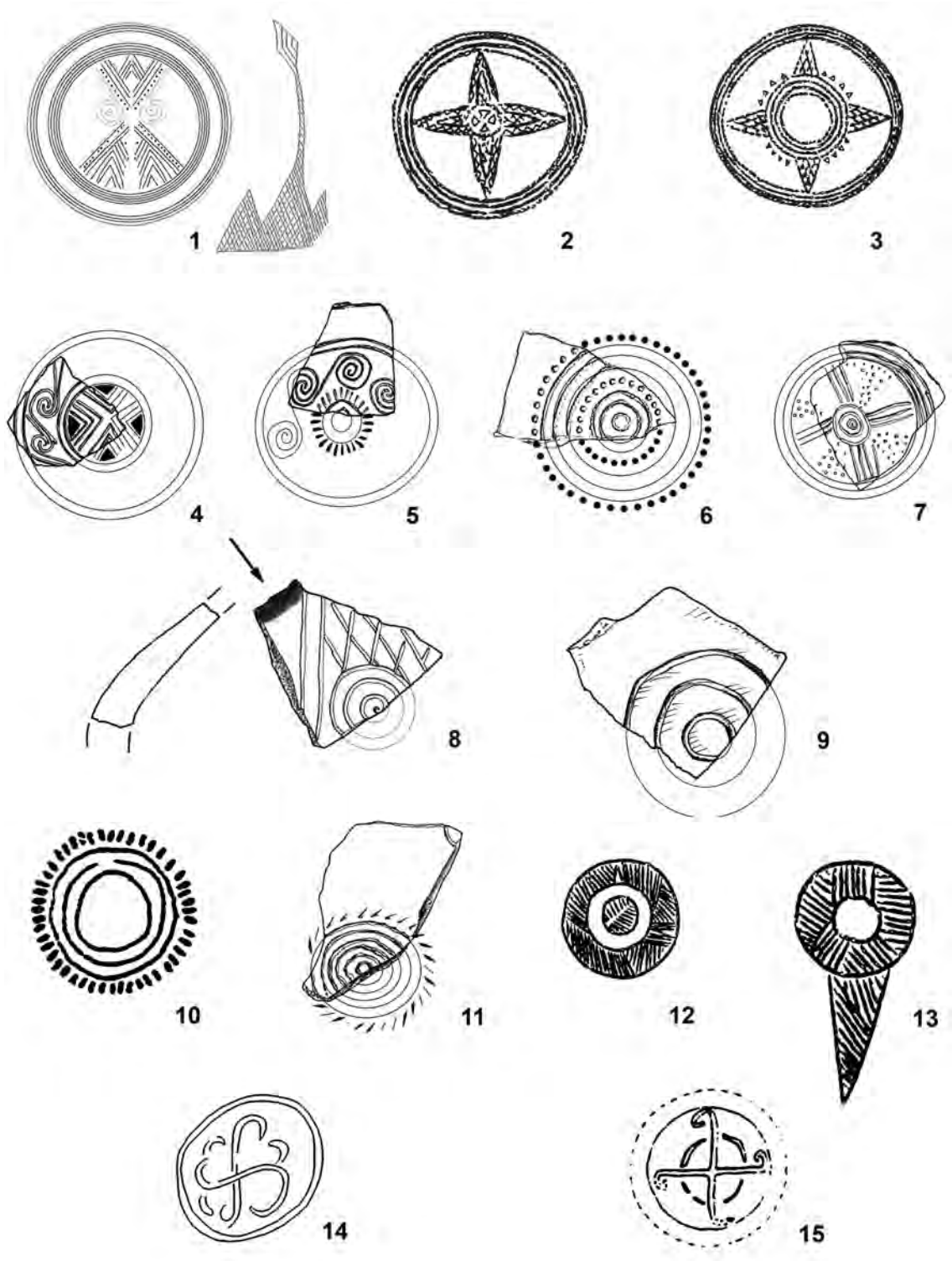


Fig. 10: 'Solar' motifs. Late Bronze Age: 1. Malkata Mogila Tumulus (see Kanchev 1991, fig. 7a); 2, 3 (see Nikov 2001, fig. 5); 4–9, 11. Vratitsa (drawing by V. Petrova and N. Todorova with additional work by the author); 10. Yambol 'Krnčovica' (after Lichardus *et al*. 2002, Abb. 1); 12–13. Chatalka (after Nikov 2001, fig. 5d); 14. Manchova Mogila Tumulus (after Kanchev 1991, fig. 4g); 15. Ovcharitsa II (after Kuncheva-Russeva 2000, fig. 25.2:4). ← = graphite.

their provenance (Savatinov 1995, 148). The personal observation of the author shows that there exist three main principal groups of clay paste ('clay' in short) from which vessels were formed: *fine*, *coarse*, and *very coarse* clay.[4] Fragments made of coarse clay prevail. The following inclusions (tempering) have been attested: quartz particles of different sizes, light and dark mica, chamotte, and organic materials (documented mainly as tiny straw impressions), while their combination differs at the different archaeological sites. Probably the light and dark mica are natural tempers as they are present in all fragments regardless of the shape and function of the vessels. Quartz, sand, chamotte, and organic material are considered additions deliberately introduced by the potters. Some of the clay includes fragmented rock prepared in advance and added by the potters. Light and dark mica as well as sand grains of small and medium size, often mixed with chamotte and organic particles, comprise the contents of *fine clay*. Plates, bowls, jugs, cups, and kantharoid vessels were made of such clay. Incised and Furchenstich decoration is typical of these vessels. No fragments made of very fine clay were found in the archaeological complexes. This group included only clay with light and dark mica and tiny grains in a lower concentration and was represented by imported wheel-made samples. *Coarse clay* is characterized by a higher concentration of medium- and small-size quartz grains, crushed rock, mica, chamotte, and organic particles. Mainly amphorae, kantharoid vessels, and pots can be included in this group. A relief band with cuts usually decorates these vessels. In some other cases, they have relief applications, lugs, and knobs. *Very coarse clay* includes light and dark mica, medium- and large-size rock and sand grains in a higher concentration, chamotte, and organic particles. Most of the fragments originate from big pots, vessels for storage, and *pyraunoi*. Decorations are only of the relief or finger imprint type. The clay from different archaeological sites displays a different combination of tempers. Thus, a large variety of paste composition shows a high frequency of vessels made by different artisans.

The forming techniques of Late Bronze Age vessels were among the simplest hand-building techniques used in ceramic manufacturing – pinching and ring-building methods. Pinched vessels were made by holding a ball of clay in one hand and shaping it with the other hand by making a hole in the centre and then thinning the vessel wall by drawing the clay out from the base with thumb and forefingers (Sinopoli 1991, 17; Rye 2002, 70). Pinching is well suited to forming small vessels (cups, small plates, bowls) but also to forming the bases of larger vessels. In these cases, the upper part of the vessel was formed by adding coils with an approximate width of 5 cm or coils from pull-up modelling of the walls. Ring-building is another technique by which one or more flat slabs of clay, formed as coils, are pressed together into the desired vessel shape. The coils can be joined together by hand or using a wooden tool. This technique was used for building large and very large vessels (Sinopoli 1991, 17; Rye 2002, 67).

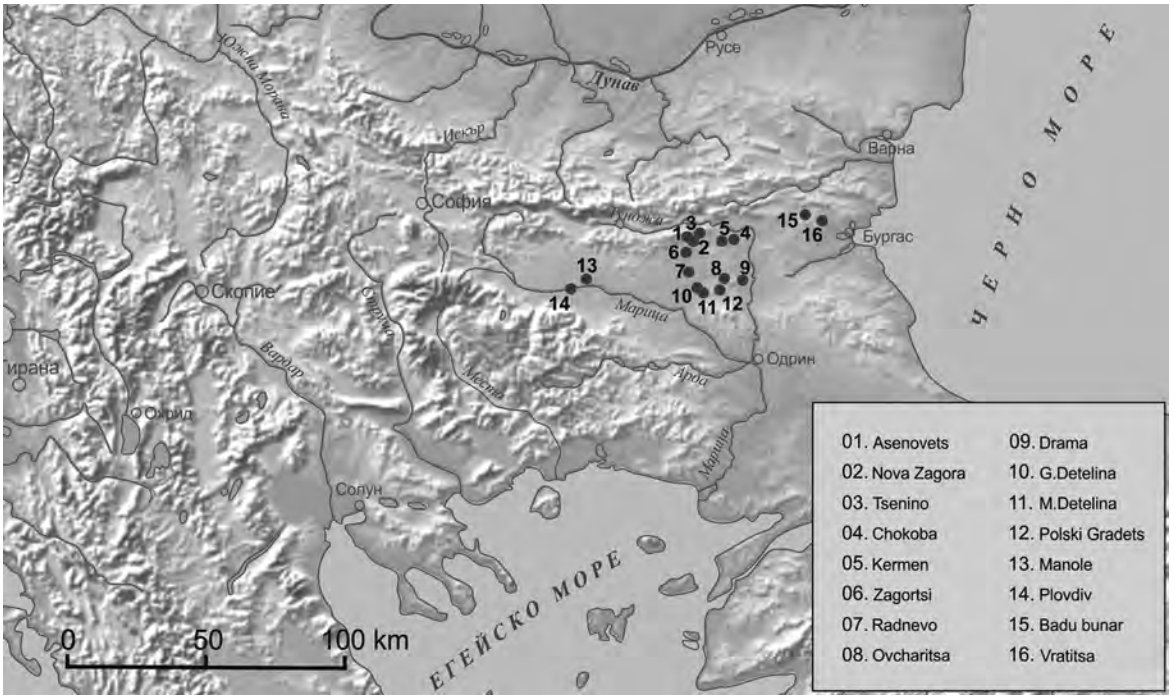
Handmade vessels can be divided into some technological groups according to the type and manner of surface treatment: very rough surface or uneven surface; smoothed and burnished surface. Vessels produced from fine clay have smoothed or burnished surfaces, while coarse clay vessels have smoothed or very rough surfaces. A smoothed surface has a uniform texture, as the non-glossy appearance is probably the result of the final forming by the potter's wet hands. Burnished surfaces are more lustrous than smoothed ones, but the lustre is irregular, and it is possible to identify lines left by the passage of the polishing over the vessel. The burnished surface was achieved by using a tool (small pebbles) after drying the vessel, as

4 The definition of the temper is based on the types of particles, their frequency, their forms and sizes. *Very fine clay paste*: hardly visible particles; *fine clay*: particles < 1 mm with moderate frequency; coarse clay: particles with sizes 1–4 mm and *very coarse clay*: particles > 4 mm.

the remaining traces are visible to the naked eye (Sinopoli 1991, 25–26). Some vessels show evidence of a shell being used to achieve the desired form. Given the fact that Late Bronze Age settlements were established close to rivers, using river shells as forming tools is understandable. Pottery surfaces included various colours, mostly shades of brown, black, grey, red, and beige. The cores display a variety: one-, two, three, or multi-layered breaks,[5] and show different firing conditions.

Types of Evidence

Generally, most of the Late Bronze Age material (**Map 2**) comes from *flat necropoleis*: Nova Zagora, Kermen, Radnevo 'Staroto Selishte', Polski Gradets, Ovcharitsa II, Drama-Merdžumekja, Badu Bunar, Tsenino, Manole, Plovdiv-Djendemtepe (Kanchev – Kancheva 1990; Nikov – Stoitsov – Yorgova 2010; Savatinov 1995, 147–149; Nikov 2001, 70–71; Kuncheva-Russeva 2000; Lichardus *et al*. 2001, 172; Koychev 1959; Gotsev 2008, 110); *tumuli*: Manchova Mogila Tumulus, Malkata Mogila Tumulus (Kanchev 1991, 42–43, 46–47), *villages*: Razkopanitsa tell, Ovcharitsa-1, Asenovets, Radnevo 'Staroto Selishte', Vratitsa,[6] Zagortsi, Chokoba 18 A (Detev 1968, fig. 22; Kancheva-Russeva 1991, 71–74; Kanchev 1984, 136–149; Savatinov 1995; Hristova 2011, 104–137; Kancheva-Russeva 2010, 170–171; Kancheva-Russseva – Koleva 2011, 147–150; Leshtakov 2010, 129–131; Leshtakov 2011, 126–129) and *pit complexes*: Badu Bunar, Plovdiv (Hristova 2009, 41–42; Detev 1964).



Map 2: Map of the investigated archaeological sites from the Late Bronze Age in the territory of the Upper Thracian Plain to the Burgas Lowland.

5 According to B. Horejs to classify the break of a sherd, the following visually identifiable categories have proved sufficient: smooth, slaty, and grainy, with intermediate grades if necessary (Horejs 2010, 21).

6 Some of the pottery drawings from the Vratitsa site are made by V. Petrova and N. Todorova (Sofia University) with additional work by the author.

The preferred burial inventory in the flat cemeteries were cups, jugs, and kantharoid vessels. In general, the decorated vessels found in graves are not numerous (Malkata Mogila Tumulus, Nova Zagora, Drama-Merdžumekja, Ovcharitsa, and Kermen). Finding a decorated kantoroid vessel with a bronze rapier (i.e. a slender, sharply pointed sword) in the grave of Drama, as well as a decorated jug together with a bronze arrow from the Malkata Mogila Tumulus shows that decorated vessels were a specific burial commodity. These decorated ceramics were placed in the graves of warriors or special status people.

The type of vessel excavated from a grave with cremation located close to the village of Manole is described in the literature as amphora type Gava A. This amphora is interesting because its shape was unfamiliar in Thrace and had no further development. Conversely, it was typical in the Carpatho-Danubian region's fluted pottery cultures, dated probably to the 11th century BC, but not later than the second half of the 10th century BC (Gumă 1995; Chichikova 1968, 17–18; Gotsev 2010). According to Aleksey Gotsev these vessels mark the transition period between the Late Bronze Age and the Early Iron Age in Thrace. Despite the cremation from the Malkata Mogila Tumulus, the burial sites of Badu Bunar, Manole, and Djendem Tepe are also in contrast with the tradition of inhumation common in the region during both the Late Bronze and Early Iron Age. It is possible that these objects trace some movements of peoples or ideas in the first centuries of the Early Iron Age (Gotsev 2010, 76).

Unlike cemetery materials, the ceramics from the settlements represent all known categories for the period. Among the excavated Late Bronze pottery only a few wheel-made fragments were found, which are considered imports. In the Upper Thracian Plain, such pottery only came from the archaeological sites of Vratitsa (Burgas district; Hristova 2011, 105). Initially, some finds with an incised wavy-line decoration from Drama-Kayryaka (Yambol district) were interpreted as comparable to Late Troy VI and VIIa (Lichardus *et al*. 2002, 177, Abb. 12), but later on it became clear that the fragments actually date to the Early Iron Age (Troy VIIb) (Pavúk 2018, 274).

THE EARLY IRON AGE

PERIODIZATION AND DEVELOPMENT

The end of the Late Bronze Age and the beginning of the Early Iron Age in the territory of the Upper Thracian Plain to the Burgas Lowland have not yet been clearly distinguished. According to some archaeologists, such as Henrieta Todorova (1973), Ivan Panayotov (1989, 1995), and Rumen Katincharov (1982), the Late Bronze Age finished in the 12th century BC, while Vasil Mikov (1971) and Yavor Boyadziev (1995) assumed the Bronze Age continued until the 11th century BC. According to new radiocarbon datings of material from different sites situated in the territory of Southeastern Bulgaria the transitional period between the Late Bronze Age and the Early Iron Age started in the 12th century BC, while the Early Iron Age spanned the 11th and 10th century BC (Nekhrizov – Tzvetkova 2018, 36). The absence of a stratified sequence in the culture layers from Late Bronze to Early Iron Age in archaeological sites situated in the Upper Thrace Plain, as well as the absence of systematically excavated and published sites, is the main problem in defining the end of the use of Bronze Age pottery. In the Rhodope Mountains it is presumed that between 1100–1050 BC there existed a ceramic style preceding the fluted decorated pottery typical for the Early Iron Age. This style combined elements and features typical of both the end of the Bronze Age and the beginning of the Early Iron Age (Leshtakov 2007, 85–99). Based on this evidence, Kr. Leshakov claimed this short period could certainly be described as a transition.

Due to the fact that the ceramics from the Upper Thracian Plain show developments in ceramics similar to those in the Eastern Rhodopes (Zdravkova-Dimitrova 2007, fig. 7:4–6, 8:8–14, 9:5–7; Dimitrova 2009), it is completely possible a similar development be traced in the lands north of the Rhodope Mountains. At this stage of archaeological research, in the Upper Thracian Plain the pottery of Manole, Djendemtepe, and Ovcharitsa II showed signs of transience and probably fall within that transitional period (Gotsev 2010, 76; Kuncheva-Russeva 2000, 325–329).

The ceramic materials from the investigated region show that the new pottery style characterized by flutes (cannelures, channels; **Figs. 12–15**) replaced that of the Late Bronze Age within quite a short period in the first stage of the Early Iron Age and remained conservative for the entire Early Iron Age. The prototypes of the new shapes with fluted decorations are to be found in the Urnfield cultures of the central part of Eastern Europe (Chichikova 1968, 16–19; Bozhinova 2012, 54). This decoration evolved first in the final stage of the Lower Danube Culture with encrusted pottery during the Ha A1 period, under influences from the Middle and Lower Danube cultures. Slightly later it became popular over nearly all of Thrace (Hänsel 1976, 113–117; Bozhinova 2012, 54). A similar trend is marked for the contacts of Troy: imports from the East Mediterranean that are numerous in the Troy VI layers cease in the following layer, Troy VIIb, where they are mainly of northwestern origin. According to recent research the appearance of the new pottery style is much more likely to represent a new fashion than a major migration. A possible mechanism for its spread in Thrace was the import of metal vessels.[7] The theory about this northern influence can be explained with another European influence noticeable in the appearance of fibulae in Thrace at the end of the Late Bronze Age, which was starting to become a typical feature of Thracian culture from the beginning of the Iron Age onwards. While the settlement pattern of the Early Iron Age in Upper Thrace shows continuity with the previous age, the Late Bronze Age, the appearance of fluted pottery coincides with new traditions in the burial rites where inhumation with the body laid in a stretched position was established as the predominant ritual (Bozhinova 2012, 54–56).

The other problem of the Early Iron Age in the Upper Thracian Plain is connected with the clarification of the different phases making up the period, with the border at the 9th–8th century BC. It must be established that either 1) there exists one clear phase of fluted decoration followed by a horizon with stamped decoration; or 2) only one horizon with mixed ceramics during the whole Early Iron Age. This is the main unresolved issue. The problem comes from the fact that until now in the whole investigated region under study there is no archaeological site where a layer with fluted pottery style is followed by a layer with a stamped style. In the vicinity of Sakar and the Eastern Rhodope Mountains there are some sanctuaries (for example: Perpericon, Aul kaya, Ada Tepe, Semercheto: Leshtakov 2007, 88–92; Zdravkova-Dimitrova 2007, 496–497; Nekhrizov – Tzvetkova 2018, 22; Bozhinova 2012, 53) that meet the needed criteria, but the direct transfer of information from sacred places to ordinary settlements, as well as vice versa, is very risky (Leshtakov 2004, 65). Despite the lack of clarity about the periods of the Early Iron Age in the area it is a fact that the style of ceramics changed significantly after the 9th century BC. The 8th century BC was characterized by an evolutionary development of all aspects of the culture, including ceramics (Shalganova– Gotsev 1995,

7 In the whole territory of modern Bulgaria some golden bowls decorated in the European style of flute wares have been found. One is a find from the Danube island of Belene; one is part of a treasure found in Sofia along with a bronze cauldron and a clay bowl; the other one was found in a grave with inhumation under a tumulus (together with fluted pottery and an iron sword of the Naue type); the last one originated probably from Central North Bulgaria, Pleven region, and is now part of a private collection. A dating from the 8th to 7th century BC was suggested for these finds (Bozhinova 2012, 54–55).

330–334; Gotsev 1994, 97–128). This developed phase (II) of the Early Iron Age is identified with a pottery style known as the Pshenichevo group[8] (**Figs. 16–17**). Pshenichevo is the name of the first excavated site in which richly geometrically decorated pottery was found (Hänsel 1976, 192–213). The main characteristic of these vessels is decoration implemented by stamps – mainly concentric circles connected with tangents, an S-ornament forming rows of running spirals, and pseudo-cord motifs. All these motifs were often combined with flutes. Pottery decoration develops gradually from simple to elaborate compositions. The rich geometric decoration of the Pshenichevo style is a phenomenon common to all of Southeast Thrace – the region of the Maritsa and Tundzha Rivers, Sakar, Strandja, and the Eastern Rhodopes. The ornate decoration is less often seen in the west, where its perimeter should be placed in the region of Plovdiv. Further to the east, this diversity is presented in single objects (Ravadinovo). Judging by the materials known so far, Early Iron Age pottery after the 9th century BC demonstrates a tendency to the formation of local variants. In contrast to its gradual beginning, this second phase ends abruptly (Bozhinova 2012, 58–59).

THE EARLY IRON AGE POTTERY

Morphology

Compared with the vessels from the Late Bronze Age there are no changes in the classes of Early Iron Age pottery. Forms include various types of cups, jugs, plates/bowls, kantharoid vessels, amphora-like vessels, jars, and large storage vessels. According to their function, Early Iron Age pottery can be said to fall into several groups – for liquids (cups, jugs, kantharoid vessels), for food (plates/bowls), and food storage (amphora-like vessels, storage vessels). The group which comprises vessels for liquids is subdivided into vessels for drinking (cups and kantharoid vessels), for pouring liquids (vessels with oblique rims), for transportation or storage of liquids (amphora-like vessels), and vessels with special functions (double vessels). We should keep in mind that some of the vessels were used for various purposes, i.e. they were multifunctional (**Fig. 11:4**).

At the beginning of the Early Iron Age, most cups had hemispherical bodies decorated only with flutes (Bozhinova 2012, fig. 5) – horizontal on the transition between the mouth and the body and vertical on the body (**Fig. 11:2–5**). In some cases, a small knob was formed on the widest part of the vessel (**Fig. 11:4,5**). The handles rise high above the mouth, sometimes with 'elbow' bends in its upper part, with fluted decoration in some cases. Cups with a conic shape and high handles without decoration are very typical for that period and can be used as a marker of the very beginning of the Early Iron Age. This shape has very good parallels with the golden cups (kyathoi) from the Vulchitrun treasure,[9] whose date according to some

8 In 1976, Hänsel defined the successive Early Iron Age groups of 'Chatalka' and 'Pshenichevo', and synchronized them with similar groups to the north (Babadag I and II) and south (Limnotopos, Axiochory, Kerameikos). Concerning the absolute dating, he suggested the 11th century BC for 'Chatalka' and the beginning of the 10th – end of the 7th century BC for 'Pshenichevo' (Hänsel 1976, 195–213). Even now, after decades of investigations of the Early Iron Age culture in Thrace revealing better stratified and studied sites, the term is used synonymously for the typical Early Iron Age stamped decoration (Nekhrizov – Tzvetkova 2018, 17–18).

9 On December 28, 1924, while deep-ploughing a vineyard in the Durtite Lozya vineyard near the village of Vulchitrun, workers unexpectedly dug up a collection of gold objects: a kantharos, four kyathoi, a triple vessel, and disks with handles in the form of bulbs. All are made of solid gold, alloyed with silver and small quantities of copper and iron. At the present stage of research the ritual function of the treasure is accepted as the most plausible (Bonev 1995, 277, 287).

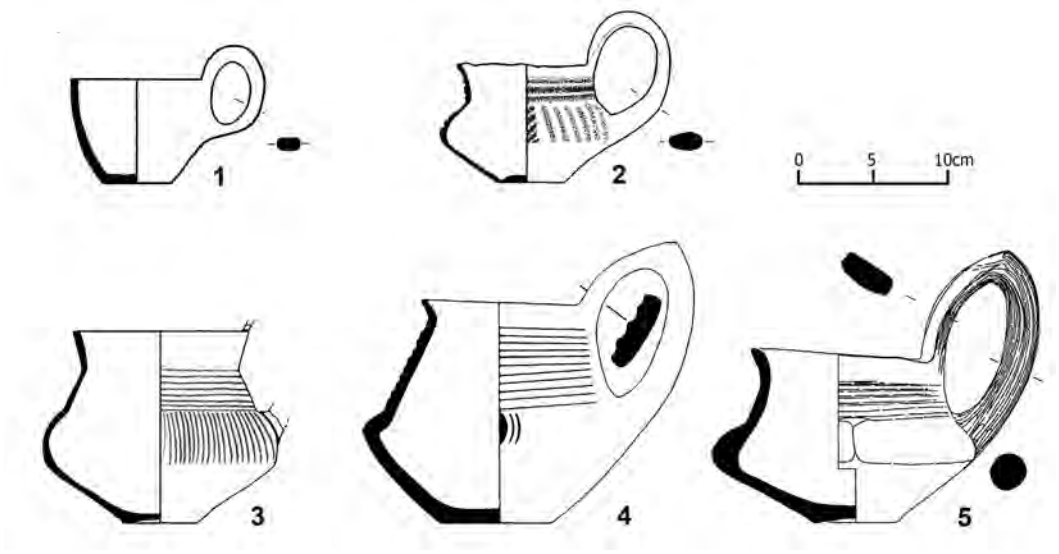


Fig. 11: Cups with flute decoration. First phase of the Early Iron Age: 1–2. Ovcharitsa II (after Kancheva-Russeva 1991, fig. 3d, e); 3. Radnevo 'First Primary School' (after Georgieva 1991, fig. 1a); 4. Yambol (after Shalganova – Gotzev 1995, fig 2:3); 5. Kabyle (drawing by Hyungjoo Lee).

scientists is attributed to the end of the Late Bronze Age, while others noted that the treasure marks the very beginning of the Early Iron Age (discussion in Bonev 1977; Shalganova 2003).

There is also a tendency for jugs to have a hemispherical body; during the beginning of the Early Iron Age, jugs were limited in quantity, even absent. It is possible because some cups larger in size could have been used as jugs (**Fig. 11:4**).

Compared with the forms of the Late Bronze Age, kantharoid vessels changed to hemispherical; handles became taller and 'fan-shaped' (**Fig. 12:1–2**). During the first centuries of the Early Iron Age decoration included only flutes, placed on the body and upper visible part of the handles, as well as the small knob on the wider part of the body, likewise on the cups.

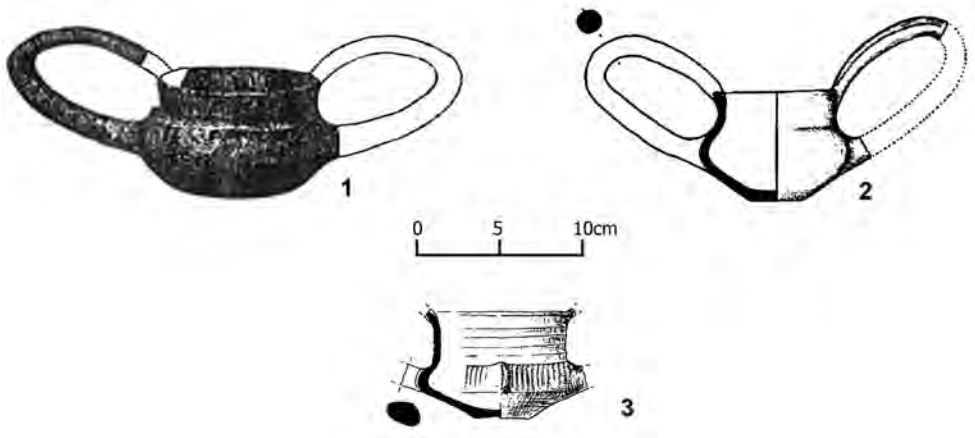


Fig. 12: Kantharoid vessels with flute decoration. First phase of the Early Iron Age: 1. Kukuva Mogila Tumulus, Duvanlii (after Filov 1934, fig. 33); 2. Malko Tranovo (after Bozhkova – Nikov 2010, fig. 6); 3. Gorno Cherkovishte (after Bozhinova 2011, fig. 17).

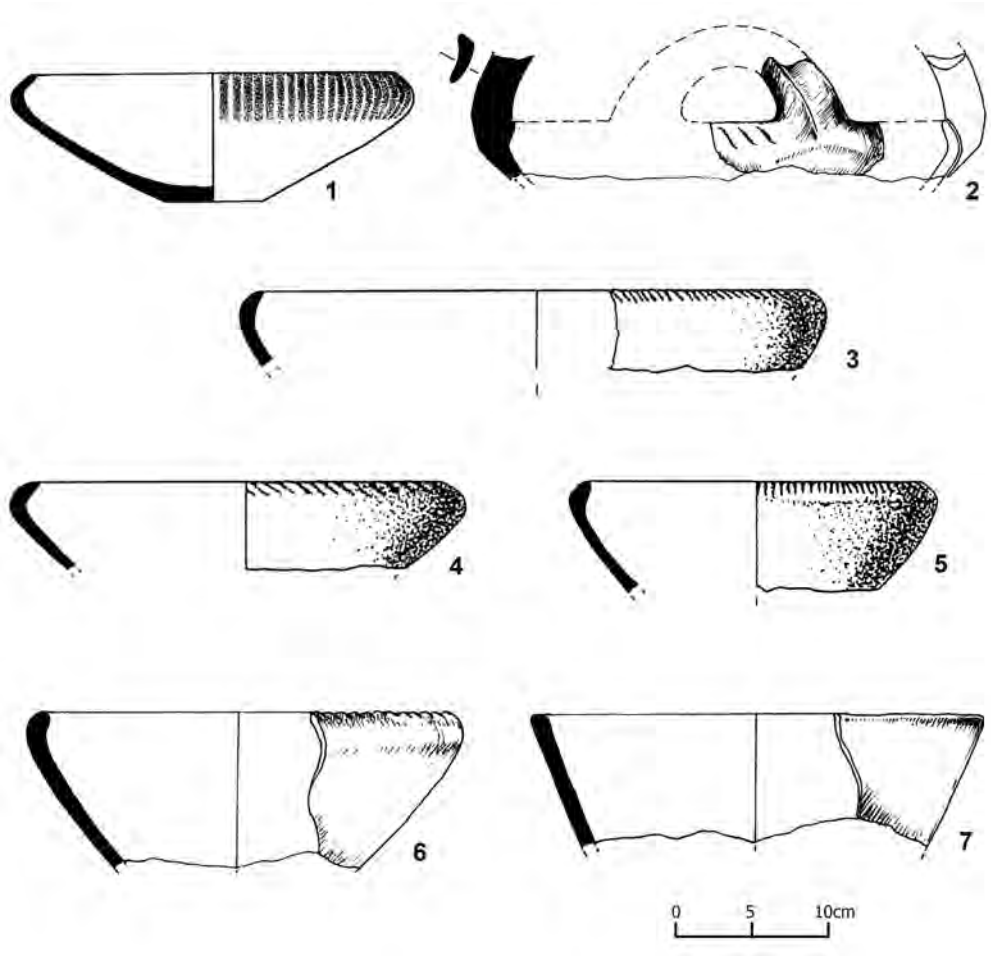


Fig. 13: Plates. First phase of the Early Iron Age: 1. Ovcharitsa II (after Kancheva-Russeva 1991, fig. 4b); 2–7. Radnevo 'First Primary School' (after Savatinov 1995, fig. 3a, b, m and Nikov 1994, fig. 3a, b, v).

Inverted cone-shaped plates with incurved rims and slanting flute decoration on the rim, are represented in the region under study by several types and variants. (**Fig. 13**). The vessels with slanted flutes on the rim were the most common. They are persistent and have a wide-range of analogies (Bozhinova – Michailov 2009, 91). A plate excavated from Staroto Selishte, near Radnevo (Savatinov1995, 149–150, fig. 3a) deserves particular attention because it has been found as a single example, with its high horizontal handle held above the mouth (**Fig. 13:2**). Similar handles rising above the mouth are characteristic of the Late Bronze Age (the so-called 'wishbone'). The closest – and single – parallel among the materials in Bulgaria is the plate from Badu Bunar, near the town of Karnobat, dated later, between the 9th and 8th century BC. These vessels have been found throughout the Early Iron Age in Macedonia and are evidenced in all layers of Kastanas, a site that is the main chronological benchmark in the Balkans for the Iron Age (Bozhinova – Michailov 2009, 93).

The amphora-shaped assemblage deserves special attention, as a part of the representative local Balkan variant of Gava amphorae Type B, or the so-called 'Buckel Amphorae'. This pottery class (**Fig. 14**) resembles the other vessels for serving and eating. They are impressive with their outer surfaces in black burnished to a metallic shine and decoration consisting of small or big hollow knobs/buckles combined with horizontally and vertically placed flutes.

Some of the vessels have no handles, others have no buckles. This type of vessels is a natural continuation of the popular Gava Type A, which was popular during the period HaA (12th–11th century BC) after Müller-Karpe (Chichikova 1968, 17).

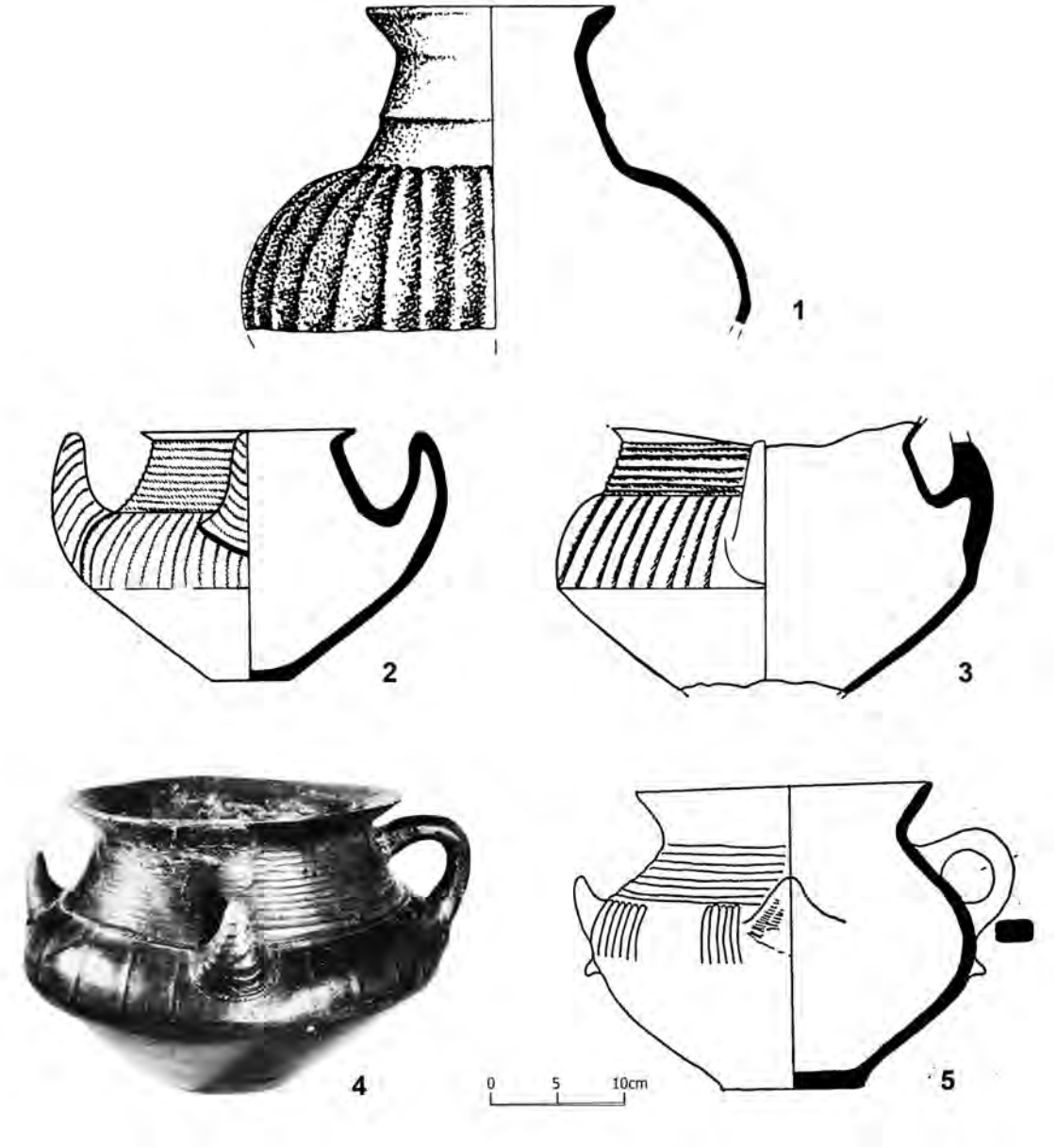


Fig. 14: Amphorae with flute decoration. First phase of the Early Iron Age: 1–3. Radnevo 'First Primary School' (after Nikov 1994, fig. 5a and Georgieva 1991, fig. 1b, v); 2. Maritsa-Iztok region (after Gotzev 1994, fig. 1v); 4. Asenovets (after Bozhinova 2012, fig. 3); 5. Gabarevo (after Gotsev 1994, fig. 1g).

Jars are among the most widely represented vessels. Their shape and decoration have not changed much compared to the previous period. They are most often provided with two vertical handles and uniform ornamentation, mostly plastic elements, relief bands, and incisions.

While the main repertoire of types was formed in the first centuries of the Early Iron Age, the evolution of the pottery that followed (after the 9th century BC) concerned mostly decoration, especially incised and stamped patterns, as well as their combination with flutes or embossed projections. There is a change in some forms.

The S-shaped or bi-conical cups have handles high above the mouth and decoration made by a combination of straight lines composed of triangles (Gergieva 1983, 124). The handles of the kantharoid vessels are shorter and their bodies are decorated with incised lines (Shalganova – Gotsev 1995, 331, fig. 2.5).

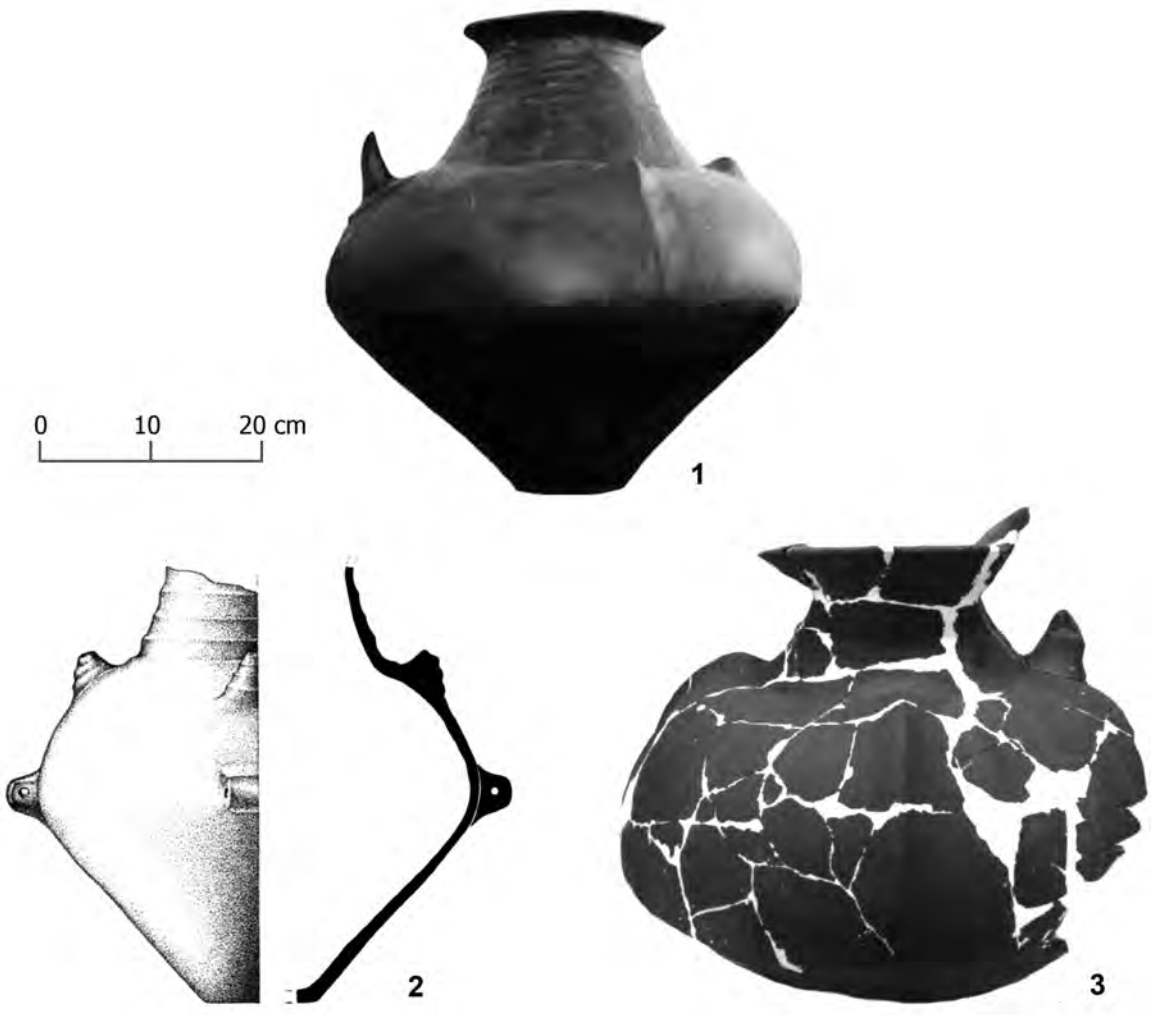


Fig. 15: Storage vessels. Early Iron Age (9th–8th century BC): 1. Chenger №1 (after Balabanov – Pantov 2015, fig. 2); 2. Kermen (after Kancheva-Russeva – Leshtakov 2013, fig. 3); 3. Zavoi (after Bakardziev 2010, fig. 2).

Jugs of the 9th–8th century BC have elongated necks and spherical bodies, also decorated with the preferred incised lines. The pots used for storage (**Fig. 15**) have increased in size and grown diversified in shape. The vessel shown in **Fig. 15:2** has a single parallel found in the East Rhodope Mountains at the Gluhite Kamuni site in level IV (Nehrizov 2017, 21), but there the form is ornate in the style of the second stage of the Early Iron Age (**Fig. 19:3** and **4**).

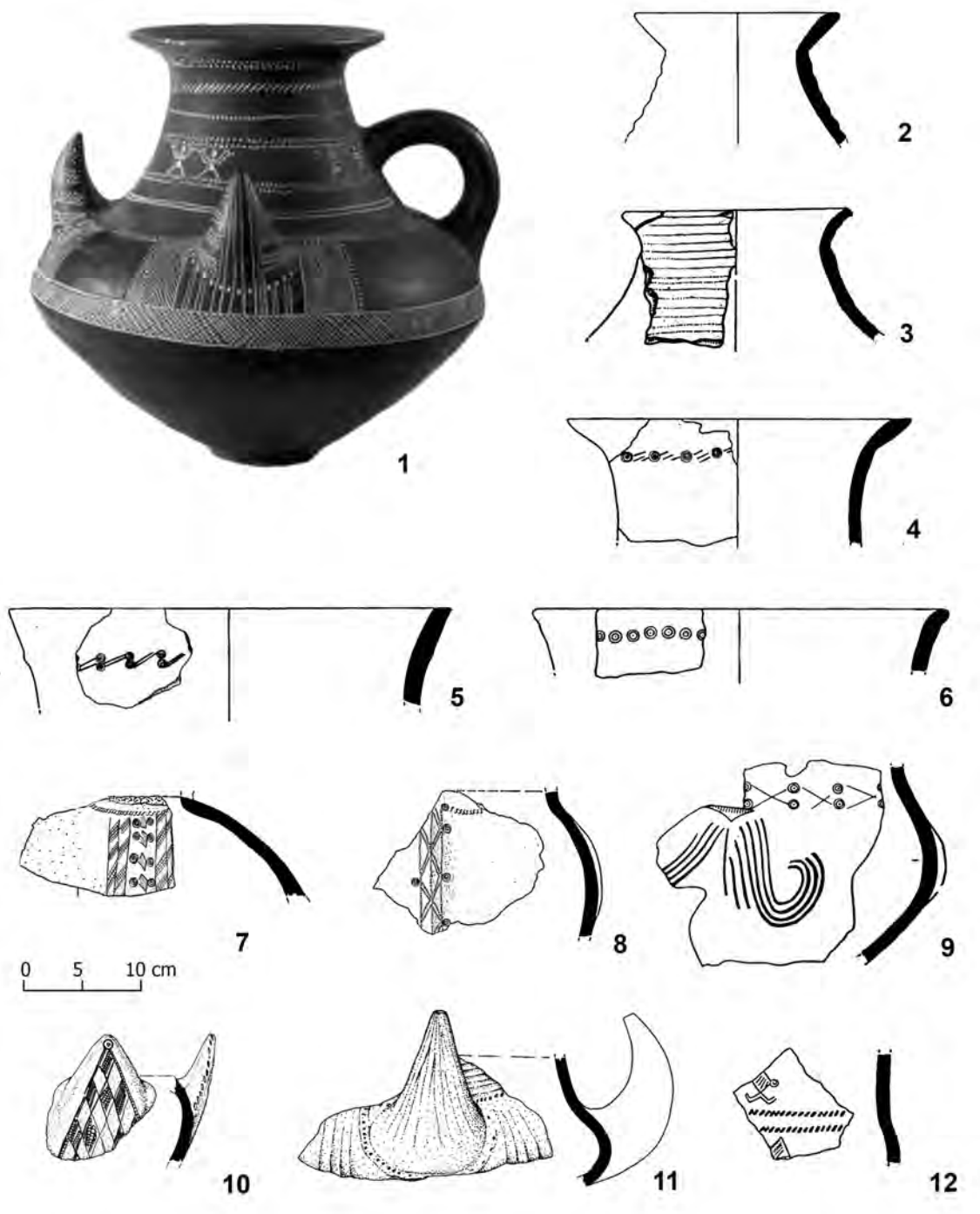


Fig. 16: Amphorae from the Second phase of the Early Iron Age: 1. Nova Zagora tell (after Bonev 2003, tabl. 68); 2, 7, 8, 10, 11. Diadovo (after Czyborra 2001, Taf. 26, 27); 3–6, 9. Pshenichevo (after Gotzev 1994, fig. 8:12, 9:4, 6, 8, 10); 12. Ravadinovo (after Gotzev 1994, fig. 9:7).

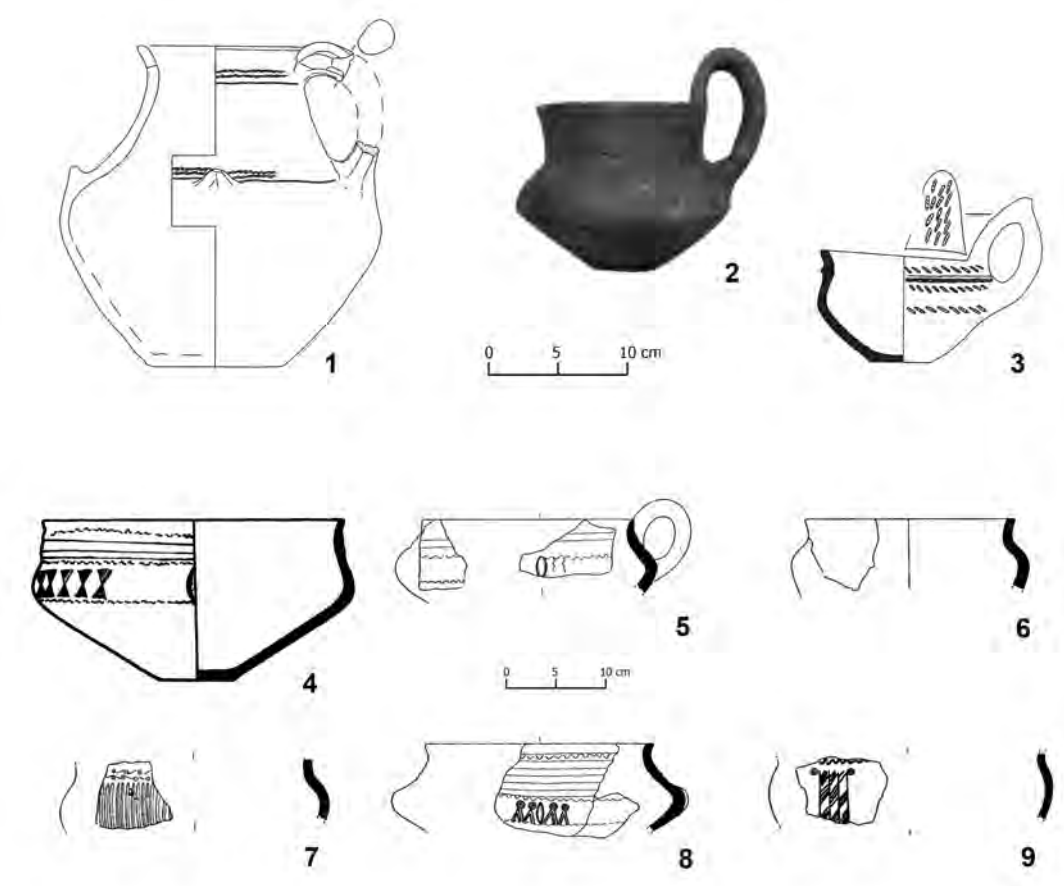


Fig. 17: Jugs, cups, and bowls from the Second phase of the Early Iron Age: 1–2. Jeleznik (drawing by Sungjoo Lee and after Daskalov *et al.* 2010, fig. 3); 3–5, 8. Ravadinovo (after Shalganova – Gotzev 1995, fig. 2:2 and Gotzev 1994, fig. 4:12, 6:4–5); 6, 7, 9. Pshenichevo (after Gotzev 1994, fig. 8:4, 6, 7).

The time after the 9th century shows a tendency to richer decoration, which is observed on cups, bowls, kantharoid and amphora-like vessels (**Fig. 16–17**). The aesthetic effect of stamped and incised motifs was strengthened by a white filling. Towards the middle of the 8th century BC, a new class of pottery – pithoi appeared, called 'wide stamp' decoration. The appearance and development of these pithoi in Southeastern Thrace has been well established (from the mid-8th century to the 6th century BC) (Georgieva 2003, 170), but unfortunately, all known examples from Southern Thrace are fragmented, which allows no certainty in form identification. Despite the variety of decorative patterns, the motifs can be defined as S-shaped stamps, large round stamps, herringbone decoration. The geographic distribution of this pottery allows for differentiation in three spatial groups – Northeast (the region of Tundzha and Sakar), South (Rhodope Mountains), and Northwest (the region around Plovdiv and south of it; **Fig. 18**). Such pottery was also found further south in Aegean Thrace and Phrygia. Because there was no direct contact between these areas, the connection was indirect and was accomplished through metal ornaments (Nikov 2002, 19–27).

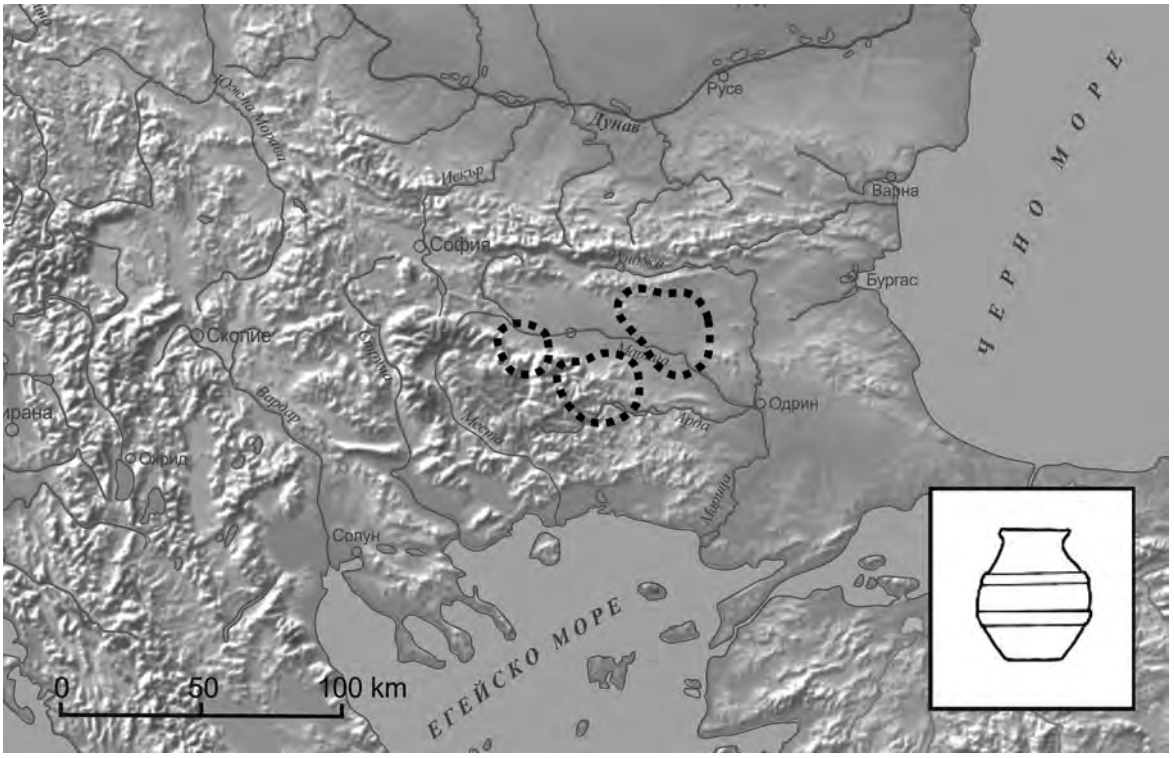


Fig. 18: Distribution map of pithoi with big stamped designs (after Nikov 2011, fig. 7).

Technology and decoration

The pottery of the Early Iron Age preserved the main Late Bronze Age technological characteristics, as the composition of the clay paste was still dependent on the size of the vessels and their intended purpose. The vessels from this period can in most general terms be distinguished through: clay, including numerous tempers – organic, chamotte, and quartz; hemispherical forms, the thickness of the walls, black burnished to polished inner and outer surfaces. The black colour of the vessels shows the firing process took place under a strict controlled reduction atmosphere (Sinopoli 1991, 30).

Two predominant hand-made pottery groups can be distinguished: coarse (kitchen and storage) ware and fine (table) ware. Coarse ware includes mainly storage vessels, pots, bowls, all of which are made of clay with a lot of inclusions and have a poorly burnished or smoothed surface. Most of these vessels are not slipped and display traces of uneven firing. The hand-made tableware can be divided into several subgroups: vessels for liquids (cups, kantharoid vessels, amphorae-like vessels) and vessels for food (bowls, plates). They were produced from finer clay, and their surfaces are well polished or even burnished. Statistically, the pottery from the fine group predominated with its dark (uniform black) colour on both outer and inner surfaces.

The forming methods of the vessels were similar to the Late Bronze Age tradition – pinching and ring-building. The smaller vessels were made from one ball while drawing the clay by hand to achieve the desired form. The bigger vessels were manufactured from different parts (two or three) joined together. The forming of some vessels started on the bottom and then strips of different widths were added. Burnishing/polishing was achieved with the help of a tool (probably a pebble), the traces of which are visible on the surface. To achieve the

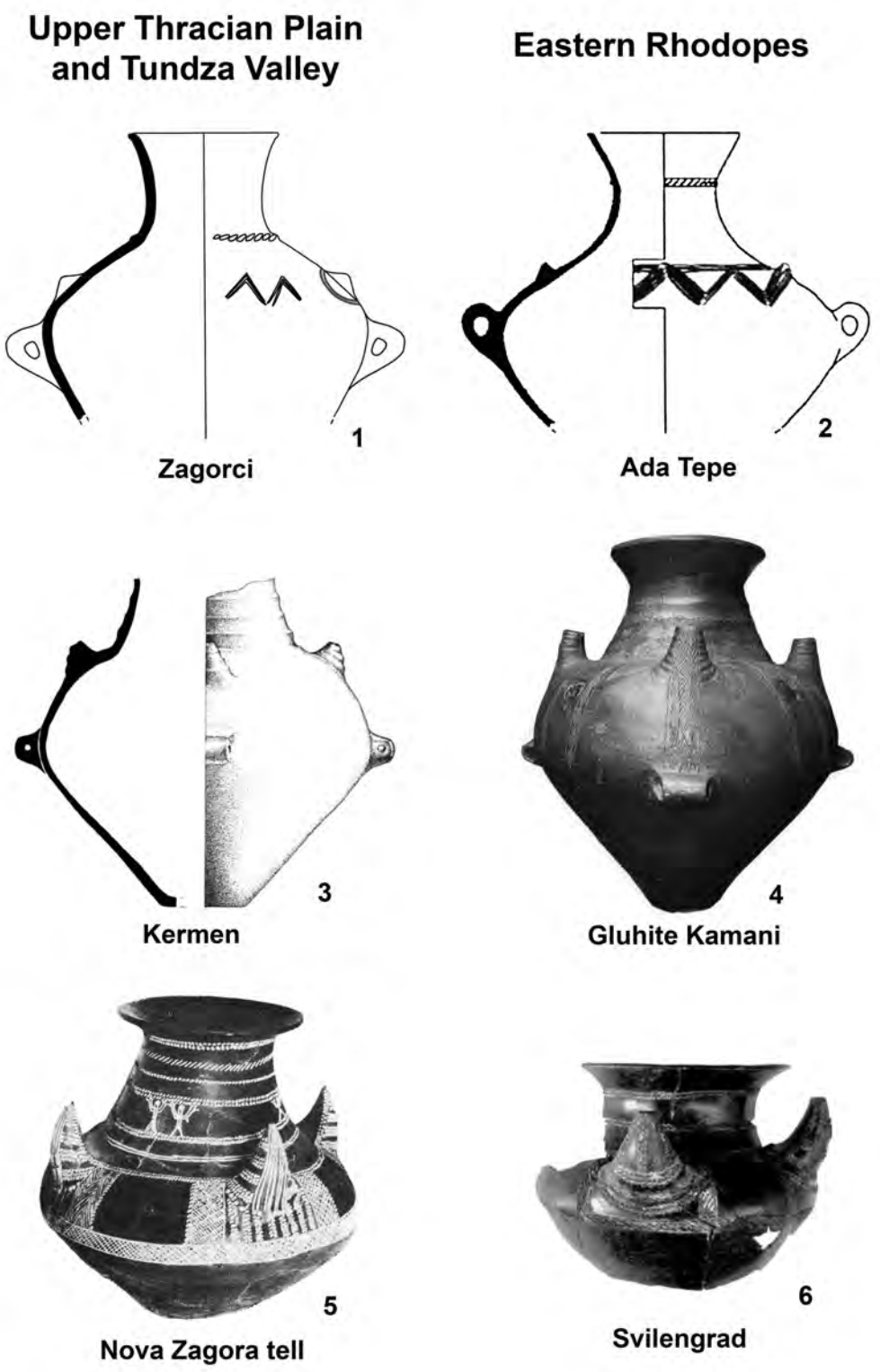


Fig. 19: Comparison of the vessels from the Early Iron Age in the territory of the Upper Thracian Plain and Tundzha valley and the Eastern Rhodope Mountains and their cultural spheres: 1. Zagortsi (drawing by R. Hristova); 2. Ada Tepe (after Zdravkova-Dimitrova 2007, fig. 7:6); Kermen (after Kancheva-Russeva 2010, fig. 3); 4. Gluhite Kamani (after Nehrizov *et al.* 2017, 21); 5. Nova Zagora tell (after Kanchev 1984, fig. 17g); 6. Svilengrad (after Nehrizov 2006, fig. 23).

lustrous effect, the burnishing was repeated several times on the same surface, in different directions. Over some of the big size pots, because the burnishing was made after excessive drying of the clay, uneven scratches were left on the outer container surface.

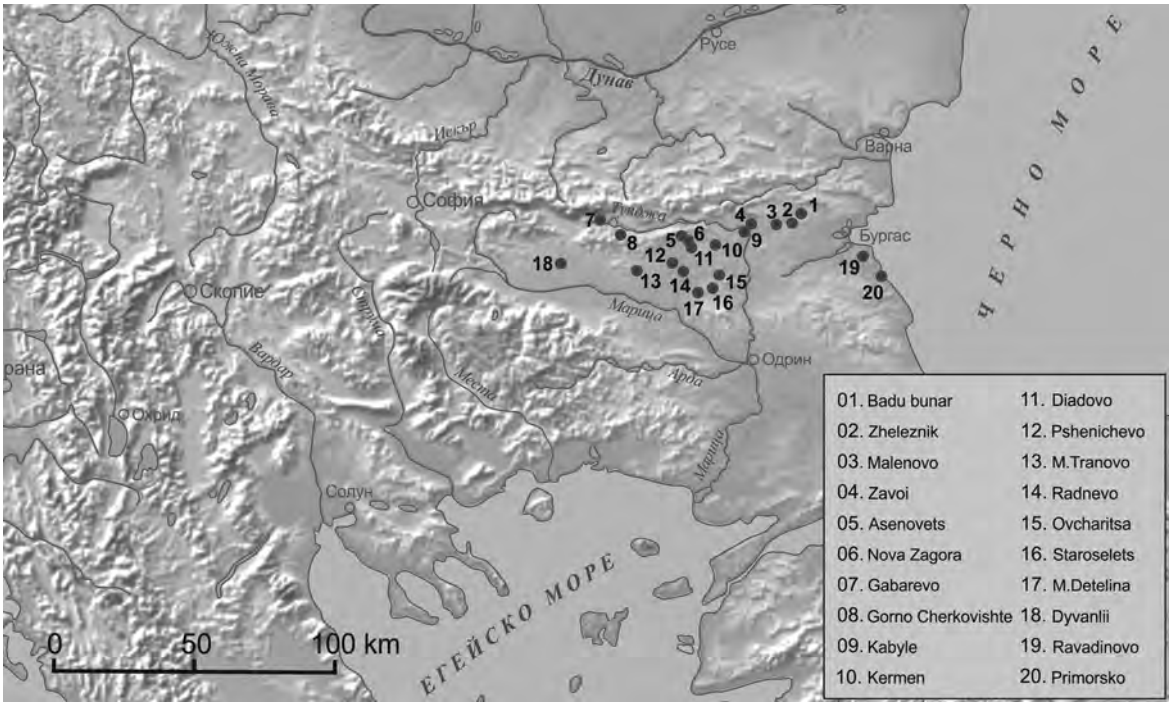
In most cases, the flutes and stamp decorations were placed on vessels made of fine clay and burnished (polished) surfaces, while incisions have the same frequency on vessels as coarse clay and smoothed and burnished surfaces. The small hollow knobs placed on the wider part of the body are typical for the cups, jugs, and kantharoid vessels from the second phase of the Early Iron Age. They were probably made with a small pebble used to achieve the desired shape of the knobs. Sometimes the flutes over the handles were made with a wooden stick, as were the horizontal flutes on the neck, but not with fingers. Rectangular beds at their base are well indicated.

Stamp decoration demonstrates a variety of motifs. Excavation data show that the most frequently used stamped ornaments are: circles, pseudo-cord and S-like motifs, rhombi, half-moons, angles, and squares; the same motifs were found on clay stamps found within the settlements. The making of clay tools for stamping did not require special conditions or abilities. They fall into two groups – stamps with one working part and stamps with two working parts. The stamped pottery follows a common style, characterized by its strict geometrical aesthetics, symmetry, and rhythmical repeating details. Although on the territory of the Upper Thracian Plain and the Eastern Rhodope Mountains the vessels with stamped ornaments are widespread, the stamp tools for decorating are known from just a few sites (Nehrizov 2006, Карта 1).

THE EARLY IRON AGE REGIONALISM

In the whole territory of Southeastern Bulgaria, Early Iron Age pottery originated from villages, tumuli, fortresses, dolmens, and ritual pits, while in the area of the Upper Thracian Plain (**Map 3**) it was excavated mostly from settlements: Radnevo-First Primary School and Staroto Selishte, Pshenichevo, Kermen, Zavoi, Ravadinovo, Asenovets, Ovcharitsa-1, Badu Bunar, Chenger №1, Nova Zagora tell, Diadovo tell, Gorno Cherkovishte (Nikov 1994, 143–150; Savatinov 1995, 149–150; Čičikova 1978; Kancheva-Russeva – Leshtakov 2013, 112–114; Bakardzhiev 2010, 149–150; Gotsev 1994; Kanchev 1984; Kancheva-Russeva 1991, 71–74; Bozhinova – Michailov 2009, 79–107; Balabanov 2014, 188–191; Balabanov – Pantev 2015, 237–238; Shalganova – Gotzev 1995, fig. 2, 4; Kanchev 1984, 156–157; Georgieva 1983, 105–111; Bozhinova 2011, 46–51); a cult site: Kabyle-Zajci Vrah (Gergova – Iliev 1982, 14); cemeteries: Gabarevo,[10] Zavoi, Jeleznik, Malenovo, Kukuva Mogila Tumulus close to Duvanlii, Manchova Mogila Tumulus (Dimitrov 1968, 11–12; Getov 1965; Bakardzhiev 2010, 149–152; Daskalov–Trendafilov 2009, 258–260; Daskalov *et al.* 2010, 147–149; Bozhkova – Petrova 2010, 158; Filov – Velkov – Mikov 1934, 2–28; Kitov–Bozhinova 2005, 115–120) and fields with pits: Radnevo-First Primary School and Staroto selishte, Staroselets, Malenovo, Malko Tranovo (Nikov 1994, 143–150; Savatinov 1995, 149–150; Bozhkova–Petrova 2011, 144–145; Dankova – Belkov – Nikov 1991, 308–312, fig. 5–9; Bozhkova – Nikov 2010, 215–216).

10 In all scientific publications (Dimitrov 1968; Hänsel 1976, 199, 208, Taf. 69:5; Kuzmanov 2008, fig. 1, 4), the vessel of Gabarevo, due to the exact parallels with ceramics from Troy VIIb, was dated to the beginning of the Early Iron Age. However, in recent years, during the excavations of Kr. Nikov pieces of such vessels were found together with fragments of grey ceramics, which showed the long use of these vessels after their first appearance.



Map 3: Map of the investigated archaeological sites from the Early Iron Age in the territory of the Upper Thracian Plain to the Burgas Lowland.

Based on the excavated material, Krassimir Nikov (2000) tried to find the meaning of the regionalism and differentiation of the ornate local pottery style, culminating in the 8th century BC–a time when Southern Thrace became part of the Eastern Mediterranean Geometric *koine*. So far it has been difficult to locate both the initial cores and the stages in the development of this decoration. However, regions which offer specific information from some archaeological sites allow the singling out of some peculiarities of the ceramics in question. Nikov noticed that existing local groups could be distinguished that partially overlapped or coincided with some of the geographical regions. The co-existence of a greater number of motifs or their combinations in larger zones outlines territories with relatively well-expressed features. Besides the two emblematic patterns of Southern Thrace – concentric circles connected with tangents and S-shaped spirals – an area of preference for the checker-board arrangement of geometric patterns in rectangular, trapezoid, and triangular panels could be specified. It comprised the northern slopes of the Sakar Mountain and the Sazliyka River valley. There is some data of similar decoration beyond this region, but the technique and decorative patterns known so far have no parallels outside the area.

Another decoration pattern –bird images– appeared in the 8th century BC at almost the same time, in Greece (the end of the 9th and/or the beginning of the 8th century BC), Phrygia (in the middle of the 8th century BC), and the Lower Danube basin (the 8th century BC). The emergence of these representations in the transitional period between the first and the second stage of the Early Iron Age is symptomatic. That time can be connected with the appearance of a new system of ideas and concepts, as well as a new mentality in which bird images played a certain role (Nikov 2000, 308). They were found only near big rivers (the Maritsa and Sazliyka Rivers) and their tributaries, real bird species being recognized in most of them. It can be assumed that this was not an accidental fact but rather circumstantial evidence for the climate of the region and the proliferation of certain species to the extent that they could have influenced

pottery decoration imagery. If this idea is correct, it leads to the assumption of the existence of large marshy areas or lands periodically flooded by rivers. They were the natural environment for most of the recognized birds, as well as marsh vegetation (Nikov 2002, 215).

On the other hand, the pottery discovered further east, mainly in the Burgas Bay area, displays distinct features, in addition to the elements common in the central part of Southern Thrace. Some groups of patterns display a clear geographical distribution due to the lack of physical barriers (Nikov 2002, 219). Nikov believes that the limited distribution of the motifs was due to the existence of tribal boundaries but with no archaeological proof of such boundaries, this remains a hypothesis. On the other hand, the written tradition also cannot support this assumption for an earlier period, when this pottery flourishes (Nikov 2011, 209–223).

The complete absence of field data related to the final stage of the Early Iron Age (6th century BC) prevents the working out of a clear set of criteria for the transitional period to the Late Iron Age where the emergence of grey ware is one of the sure symptoms. The beginning of the end of the Early Iron Age can be said to be the 7th century BC in some regions of Southern Thrace, judging by archaeological assemblages with evidence of wheel-made pottery. Some of this material suggests the existence of long-distance trade, for example the grey vessels imported from Aeolia reached the Thracian lands in the 7th century BC as rare imports and their local production started in the 6th century (Nikov – Bozhkova 2017, in print).

CONCLUSIONS

Late Bronze Age and Early Iron Age pottery displays the use of simple forming and firing techniques. The ceramic of both periods consists of serving, eating, drinking, cooking, storage, and transportation ware. The classes are cups, jugs, plates, bowls, kantharoid vessels, amphorae-like vessels, jars, storage vessels, and *pyraunoi*. In the 8th century a new class – pithoi with a 'wide stamp' – was added. This lack of changes in the main ceramic classes probably illustrate permanently established eating habits during both the periods (Nikov 2002).

Compared with the preceding Late Bronze Age there was no change in the recipes for preparing clay paste or the forming techniques still preferred, probably because they were suitable for making containers to satisfy the demand. The general transformations which occurred during the beginning of the Early Iron Age included modified vessel bodies to a squat spherical form; the treatment of the surface through burnishing with the effect of polishing; decoration with a combination of flutes and knobs; firing in reduced atmosphere with control of the process to achieve the desired uniform colour. Tableware was distinguished by uniform black burnished/polished outer and inner surfaces during the whole Early Iron Age. The fluted decoration is most often horizontal over the neck and vertical on the body. The combination of flutes and knobs on the widest part of the vessels was typical for both larger and smaller vessels. Decorations implemented by stamps became richer after the 9th century BC as the motif effect was strengthened by filling with white matter. This new decoration was applied to the surfaces of table and storage vessels and was produced by using clay tools (stamps) with motifs in negative such as circles, S-like, rhombi, and other shapes.

According to some ethnographic models (Pollock 1983) each change in the pottery which included a stylistic variation of the vessels realized without marked changes in energy investment on the part of the craftsman – the introduction of new decorative motifs, new ways of arranging existing motifs and even some small changes in vessel form shows horizontal differentiation of the society and increased numbers of equivalently ranked groups in that society (Pollock 1983; Sinopoli 1991, 128).

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