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SOME REMARKS ON THE IRON AGE POTTERY FROM THE SVETA TROJICA HILLFORT



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Abstract. – Finds from the Sveta Trojica hillfort near Starigrad-Paklenica at the foot of Velebit Mountain in Croatia analysed so far have offered significant insights into various imported ceramic categories, ceramic tools for textile production, and coin distribution. Coarse ware pottery will be presented as a new study segment. Shapes and decorations of local coarse wares from Liburnian sites were often underrepresented in publications in the past, although they represent a significant portion in the overall amount of potsherds. Coarse ware from Trench 4 on Sveta Trojica is represented by several categories: pots, bowls, handles and grips, and bases. The pots and bowls are further sub-divided into types wherever possible, as are the handles and grips. Fragments with decoration are also presented, and comparisons with other Iron Age sites in the area are made in order to establish similarities or differences in the local (regional) pottery production. Finds are also dated according to analogies and the associated material from layers in Trench 4. The presented finds are consequently dated to the Late Iron Age, between 4th–1st c. BC.

Key words. – pottery, coarse ware, Late Iron Age, Sveta Trojica hillfort, Velebit Littoral, northern Dalmatia.

Introduction*

The archaeological area of Sveta Trojica (Holy Trinity) is situated north of present-day Starigrad-Paklenica (ancient *Argyrunum*), on the slopes of Velebit Mountain. It is a complex site that consists of a hillfort settlement attributed to a local Liburnian community on the location named Gradina and on the slopes beneath it, as well as a Byzantine *castrum* on the slopes closer to the sea encompassing the Holy Trinity church, which gave the entire area its name (Fig. 1).¹

* This paper was written as part of the project *Transformation of identities through the past* (TIPS), funded by the European Union – NextGenerationEU.

¹ Tonc 2011; Tonc, Radman-Livaja 2014; Tonc et al. 2015; Radman-Livaja, Tonc 2016; Domiter, Radman-Livaja 2017.

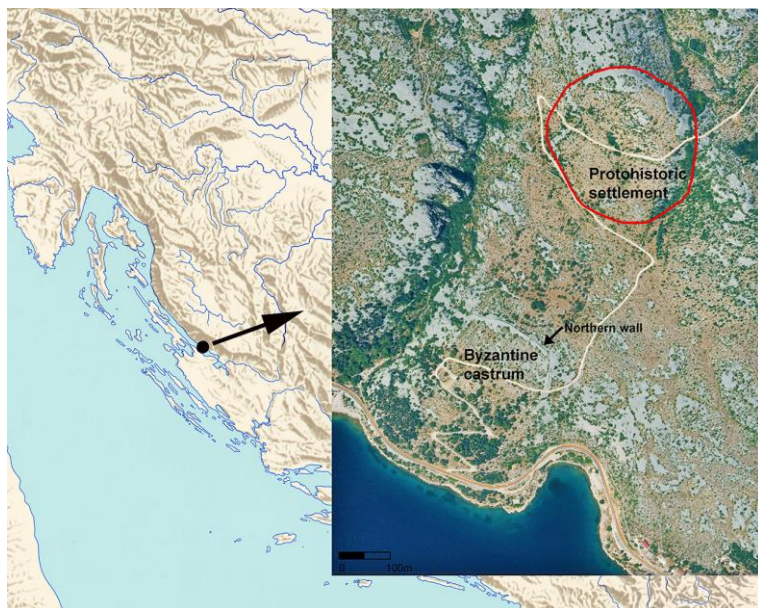


Fig. 1. Location of Sveta Trojica site with aerial view (base map: made by T. Kaniški for the Institute of Archaeology; aerial photo source: Geoportal Državne geodetske uprave, geoportal.dgu.hr; modified by A. Tonc)

The hillfort is located on a prominent position, naturally protected on one side by the canyon of the Tribanjska cove and drywall fortifications elsewhere, with the massive northern wall especially visible in the present landscape. The site gained scholarly attention due to its position along one of the routes connecting the coast with the Velebit pasturages and mountain passes toward the Lika region, with the size of the site itself, as well as the numerous pottery and metal finds, marking it as an important settlement in the southern Velebit area.² Trial excavations and field surveys conducted between 2010 and 2016³ by the Archaeological Museum in Zagreb and the Institute of Archaeology on the southern hillfort terraces and the top plateaus (Fig. 2) yielded an abundance of pottery finds alongside animal bones, shells, small metal finds, such as Numidian and Syracusan coins, and *aes formatum*. Both the numismatic finds that correspond to the so-called Mazin-type coinage⁴ and the pottery finds with the presence of imported amphorae and other Hellenistic tableware⁵ show

² Dubolnić 2006; 2007; also Dubolnić Glavan, Glavaš 2011.

³ Descriptions of excavations and trial trenches with their positions can be found in the publications cited in note 1.

⁴ Bertol 2014; for Mazin-type hoards and finds more in general see Bertol Stipetić 2022.

⁵ Overview in Tonc, Radman-Livaja 2017.

the integration of the protohistoric settlement in the wider trade and communication network of the eastern Adriatic and the surrounding areas during the Late Iron Age. Based on the chronology of the retrieved objects, it can be presumed that the settlement was undoubtedly intensively utilized between the 3rd and the 1st c. BC, but in all probability somewhat earlier as well.⁶ Traces of textile production and possible dye extraction provide interesting insights into the everyday life practices of the prehistoric inhabitants.⁷ Besides the presumed Late Roman presence in the *castrum* location, with its well preserved northern wall dominating today's landscape, a phase yet to be fully explored and better understood, a sporadic presence of Roman army forces in the Early Imperial period is to be mentioned, the nature and duration of which is not certain.⁸

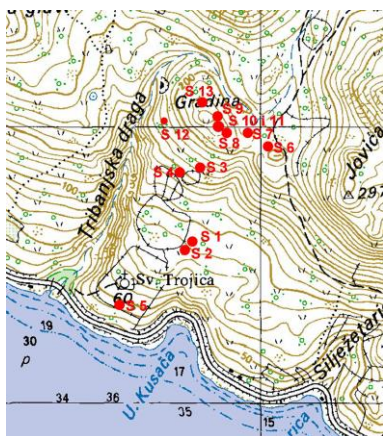


Fig. 2. Position of trenches excavated between 2012 and 2016 on a topographical map scale 1: 25000 (S – sonda = trench; source: Geoportal Državne geodetske uprave, modified by A. Tonc 2017)

The finds and their context

As is common at other settlement sites, ceramic fragments make up the bulk of the movable material collected during the aforementioned trial excavations. However, it has to be emphasised that denudation processes significantly influenced the formation of layers containing the material, thus also the condition of finds. The karstic landscape of the site is characterised by low vegetation and relatively thin soil layers covering the bed-

⁶ There is a possibility that the top plateau layers in which Hellenistic amphorae or tablewares are less present are older than the layers excavated in Trench 4 on the southern slopes, see Radman-Livaja, Tonc 2016, 152–153.

⁷ Tonc, Radman-Livaja 2018 and 2021.

⁸ Tonc et al. 2013.

rock, which, in turn, makes the cultural layers on the upper hillfort terraces significantly vulnerable to atmospheric conditions, such as strong (bora) winds and rain, which washes away material and causes it to accumulate on the slopes beneath. This situation is especially noticeable in Trench 4, excavated in 2012 and 2013 on the steep slopes south of the hillfort plateau, i.e., in the heavily fragmented material found in the layers.⁹ The edges of the fragments are often damaged or completely worn away, which generally makes it impossible to join the fragments together in order to reconstruct the entire shape of the vessel. Frequently it is not even possible to reliably say whether a particular fragment is part of the rim, bottom or handle, making identification and thus further processing of the material even more difficult. However, a certain amount of pottery fragments has been distinguished as diagnostic material, i.e., material that can be used to determine the basic shapes of vessels for the storage, preparation and consumption of food and/or drinks, such as pots, bowls or cups.

Among the ceramic fragments, by far the largest part belongs to coarse ware, sometimes referred to as kitchen ware, presumably locally made.¹⁰ This is pottery for everyday use, i.e., for storing, preparing and consuming food and drinks, mainly made without the use of a wheel, with simple, utilitarian forms that do not change much over time. Iron Age coarse wares from sites in the eastern Adriatic area were often not systematically published, but in recent decades there have been noticeable positive developments toward the valorisation of settlement finds of this type. In addition, the need for publication and the development of a typology that would enable better comparisons between individual sites across the eastern Adriatic has been pointed out.¹¹

For these reasons, it was decided to present the coarse pottery finds – perhaps a less attractive category compared to imported fine pottery like Gnathia ware or amphorae, but one that holds great significance for understanding the everyday life and pottery traditions of prehistoric inhabitants. The coarse ware from Gradina Sveta Trojica collected during the trial excavations has not been analysed in more detail so far. Some of the processed fragments were included in the preliminary overview of individual categories of ceramic material presented elsewhere.¹² M. Dubolnić published fragments of coarse pottery and amphorae found during the reconnaissance of the Gradina area and the Šilježetarica bay in its immediate vi-

⁹ The stratigraphy has already been discussed in Tonc, Radman-Livaja 2014, 141.

¹⁰ Of course, the term locally in this context does not imply strictly on site, rather a general production linked to the autochthonous communities of the wider region in contrast to imported categories such as Lamboglia 2 amphorae or Gnathia tableware, which originate from other production areas.

¹¹ Šešelj, Vuković 2013; Vuković 2014; Čelhar, Borzić 2016; Barbarić 2011 and 2016; Serventi, Vuković 2020; Paraman, Ugarković 2021.

¹² Tonc, Radman-Livaja 2017, 368, 373–374, Fig. 4, T. 2.

cinity, stating that the coarse pottery is similar to that from other Liburnian sites.¹³

A significant amount of material has been found in Trench 4 excavated in 2012 and 2013. The trench was explored in dimensions of approximately 3,20 m x 1,80 m on the southern part of the settlement perimeter. The position was chosen given the surface find of an iron knife, together with significant amounts of pottery sherds. Considering its position on a steep slope (see Fig. 4), this was probably not the position of the houses or similar settlement features that would be found on the upper terraces, and the excavations show that, as previously mentioned, the majority of the material in all probability accumulated here due to erosion from the upper terraces. The layer of soil mixed with stones and pottery, as well as animal bones and shells (stratigraphic unit¹⁴ SU 5) lay right under a very thin layer of humus and contained the bulk of the material. Along the southern edge of the profile, a series of more regularly arranged stones was noted, defined as SU 7, and cleaned for documentation. SU 7 extended approximately to the middle of the trench, and in the northern half, the layer continues without changes until the stone vein that falls steeply to the south. After documenting this phase, the stone structure was removed. Given that it is practically a single row of stones, under which there is again a layer of soil mixed with larger and smaller stones and a large number of finds, it does not seem to be a masonry structure. In the lower part, immediately on top of the stone bedrock, the soil layer was somewhat darker, with fewer amphorae (SU 6), showing that most material did indeed accumulate on the top layers by erosion. Bedrock was reached in the entire trench, with the cultural layer reaching almost 1,5 m in depth from the surface (Figs. 3 and 4).

Coarse ware finds from Trench 4 present the best overview of shapes, clay and surface characteristics that are generally applicable to the coarse ware repertoire from all the trenches excavated in the hillfort area. Possible differences that could point to chronological shifts in the usage of space, i. e., the top plateaus vs. the southern slopes outside the drywall perimeter, have yet to be assessed after all the finds have been analysed.¹⁵ Considering the mentioned presence of imported wares in the same layer, the presented coarse ware finds can be quite reliably dated to the last third of the 1st millennium BC, so it will be presented here as an attempt to provide some insight into the Late Iron Age pottery production in the area.

¹³ Dubolnić 2006, 13, Pl. II-V; 2007, 34, Pl. IV.

¹⁴ The abbreviation SU for stratigraphic unit is used hereafter.

¹⁵ The analysis and comparison of material from all the trenches will be published after the completion of the conservation of the metal finds, as well as the analysis of other material, such as zooarchaeological finds.



Fig. 3. Trench 8 at the end of excavation, view from north (photo by I. Radman-Livaja)



Fig. 4. Trench 4, view of west profile. The steep terrain is visible in the profile (photo by I. Radman-Livaja)

Coarse ware – characteristics, shapes and decorations

Coarse ware shapes presented below share some features in common. Most fragments are dark red to dark brown or gray in colour, while lighter brown pieces are less frequent (see Fig. 5 with typical fabrics). The cross-sections are usually gray to dark gray. Several pieces with a dark red surface have some kind of a dark gray to black patina, with a slightly shiny appearance, usually on the inner wall of the vessel (Fig. 5 – bottom left; Fig. 6). The fabric of the fragments, as well as that of this “coating”, does not match the other pieces attributed to gray- or black-coated tablewares, so this kind of coating of the inside wall appears to be specific to the coarse wares.¹⁶ White inclusions are most often visible to the naked eye, varying in size, but quite frequently these are rather large pieces (presumably of quartzite, limestone). The surface is, however, often rather smooth to the touch, so some kind of surface treatment must have been performed.

Based on the shape of the rim and the profiling of the recipient, several vessel types have been distinguished, which are listed below. It is certainly worth noting that there may be certain differences between the specimens included in the same type of vessel, since these are handmade vessels for which complete uniformity of the final product is not expected. Therefore, minor differences, e.g., in the inclination of the rim, are not considered crucial for distinguishing a specimen into a new type or subtype. The shapes distinguished relate to pots – larger vessels with a rounded body, generally with an outwardly curved rim, a shorter or longer neck, and a flat bottom, sometimes with handles or grips; bowls and only occasionally cups, i.e., smaller vessels probably intended for the consumption of food and/or drinks; and, less frequently, lids and strainers (Fig. 7).¹⁷ Furthermore, fragments of vessels’ bases, handles and grips have been identified, as well as fragments bearing decoration carried out by application, embossing, grooving or incising. Ceramic tools used in textile production (such as weights, spools, and spindle whorls) exhibit characteristics – clay, colour, inclusions, surface – similar to those of coarse ware shapes.¹⁸ An overview of the coarse ware finds from Trench 4 provides a basis for understanding the most common shapes and decorations within the pottery assemblage of the Sveta Trojica hillfort.

¹⁶ The dark glossy layer has an almost resin-like appearance. It could be some kind of coating related to usage, for ex. for sealing the recipient when cooking given the naturally porous nature of clay vessels, which would correspond to the placement of the coating on the inside.

¹⁷ The latter have been found in other trenches and will be published in more detail with other associated finds on another occasion.

¹⁸ Tonc, Radman-Livaja 2021.



Fig. 5. Fragments of coarse ware from Trench 4: pots, bases (photo by A. Tonc)



Fig. 6. Fragment with a black glossy coating on the inner surface (photo by A. Tonc)



Fig. 7. Fragments of strainers found in Trench 9/2014 (photo by A. Tonc)

The most numerous category is that of pots. They are generally characterised by greater height than width, or equal values, creating a deeper recipient ideal for storing and cooking. The Sveta Trojica pieces that are considered pots usually have a rounded belly and several types have been distinguished on the basis of the shape of the upper part – the rim, as well as the profile of the entire vessel. These belong to larger vessels that seem to be mostly undecorated, sometimes with grips that facilitate handling.

The first type is represented by S-profiled pots (Pl. 1. 1–9, Pl. 2). They have an outwardly curved rim with a rounded or a square edge, usually with a short neck that widens into a rounded belly. The exception is the specimen with a more elongated neck (Pl. 2. 1), which still exhibits the characteristic profilation. The edge of the rim usually exceeds the greatest width of the belly (e.g. Pl. 2. 2, 5). The end of the rim is usually rounded, sometimes slightly thicker than the neck wall. Some examples stand out because of the shape of rim. On one pot, the rim is less curved outwards, with a uniform wall thickness (Pl. 1. 1). Another fragment displays a more square-shaped rim and a significantly thickened short neck wall (Pl. 2. 3).

This first shape dominates in terms of the number among the isolated pot types. Similar pots are also found among the already published material from this site.¹⁹ Comparable pieces have been found on the Beretin hillfort in Radovin,²⁰ in Nin,²¹ on several hillforts in the Zadar Archipelago – Kruna in Božava and Omiš in Sali on Dugi Otok, Gračinica and Gračina on Sestrunj, as well as on the Gornji Gradac hillfort in Kolan on the island of Pag, and on Glavica near Stara Poveljana, also on Pag.²² Pots with a longer neck found in Radovin,²³ Nin,²⁴ the Orjak hillfort in Kali on the island of Ugljan, or Omiš in Sali on the island of Dugi²⁵ offer close parallels to the example with a longer neck from Sveta Trojica (Pl. 2. 1).

The second pot type is the one with a hanging rim, sparsley represented in the pottery assemblage from Trench 4. This shape is similar to the first type of pots with an S-shaped profile, but its rim is strongly curved, with its end hanging, i.e., bending downwards. The neck is high, conical (Pl. 3. 1; Fig. 6). A similar fragment comes from the Gračišće hillfort above Mali Iž on the island of Iž.²⁶ Somewhat comparable, but with a less “lowered” rim is the fragment from Toreta, on the island of Kornat.²⁷

¹⁹ Dubolnić 2006, T. 2. 2, T. 3. 6.

²⁰ Šešelj, Vuković 2013, T. 1. 5, 11; T. 3. 1.

²¹ Kolega 2013, T. 3. 8.

²² Batović 1973, T. LXIV. 1; T. LXXII. 1, 3; T. LXXX. 9; T. LXXXV. 1, 3, 5, 6; T. LXXXVIII. 4; Serventi, Vuković 2020, T. I. 6, 13.

²³ Šešelj, Vuković 2013, T. 1. 9.

²⁴ Kolega 2013, T. 1. 1, T. 3. 6.

²⁵ Batović 1973, T. XCVI. 1, T. LXXX. 8.

²⁶ Batović 1973, T. XCIV. 3.

²⁷ Batović 1973, T. LXXXIII.6.

The next type of pots is characterised by a bevelled rim, often square-shaped, directly attached to the body of the vessel at an acute angle (Pl. 3. 2–5; Pl. 1. 10). The width is greatest at the belly of the vessel. Analogies are found on the Beretin hillfort in Radovin,²⁸ Koženjak in Sali on Dugi Otok, the Gračinica hillfort on Sestrunj,²⁹ and Gradina in Zemunik Donji.³⁰ Some fragments from the Kočo hillfort in south-eastern Velebit also have a sharp transition to the body of the vessel.³¹ Vessels with a sharp angle and fingerprints on the rim are known from Nin,³² Glavice – Stara Poveljana,³³ and Omiš in Sali on Dugi Otok.³⁴

Several pots have rounded bellies (Pl. 4). The rim is generally thickened, with a smaller diameter than the belly. Immediately below the rim, the recipient expands into a rounded belly. Given the relatively small size of the recipients within this group (the diameter of the opening is from 11 to 14 cm), they could be interpreted as vessels intended for consumption rather than for the preparation of food and/or drink. The exception is a vessel with a significantly thicker wall (Pl. 4. 4), which, in accordance with its larger dimensions, could have been used for food storage or cooking. One specimen shows a wart-like application immediately below the rim (Pl. 4. 6). Two specimens with a somewhat different, slightly thinner rim but a similar profile (Pl. 4. 4, 8), are also classified in this type, corresponding in size to this relatively homogeneous group. A similar vessel is shown among the material from the Beretin hillfort.³⁵

Vessels with a deep, cylindrical body or upper part are represented by fragments with an outwardly drawn rim, flattened on the inside (Pl. 5. 1–6). The vessel tapers downward in a straight line, forming a fairly open shape that approaches that of bowls. However, given the larger dimensions of some pieces (with a diameter up to 38,5 cm, for example Pl. 5. 5, and a wall thickness up to 0,8–1 cm), it is quite likely that these were larger types for storage,³⁶ whereas bowls are usually associated with smaller recipients for preparation and consumption. Since it was not possible to reconstruct the entire vessel, it is not clear what the lower part of the recipient looked like. In theory, it could have expanded in a belly in the lower part, similar to the pots with a conical or cylindrical neck³⁷ from the Late

²⁸ Šešelj, Vuković 2013, T. 1. 3, 4.

²⁹ Batović 1973, T. LXXIX. 1; T. LXXXV. 6.

³⁰ Čelhar, Borzić 2016, T. 1. 11.

³¹ Vuković 2018, T. 2. 5, 6.

³² Kolega 2013, T. 3. 7

³³ Serventi, Vuković 2020, T. I. 3.

³⁴ Batović 1973, T. LXXX. 9.

³⁵ Šešelj, Vuković 2013, T. 1. 1.

³⁶ A similar conclusion is proposed for comparable pieces from Gradina in Zemunik Donji: Čelhar, Borzić 2016, 71, T. 3. 1–2.

³⁷ Forenbaher, Vranjican 1985, T. 10. 2, T. 11. 6; see also Barbarić 2011, 82–85: pots type D4 and D6.

Bronze or Iron Age layers in Vaganačka Cave. The overall form could have been conical, slightly tapering toward the bottom. According to Š. Batović, conical vessels are characteristic of the last phase of the Liburnian culture, between the 4th and 1st c. BC,³⁸ which corresponds to the dating of the layers in Trench 4. Comparable pieces have been found again on the Beretin hillfort in Radovin,³⁹ then on Glavica near Stara Poveljana on Pag,⁴⁰ as well as on the hillforts Kruna in Božava and Omiš in Sali, both on Dugi Otok.⁴¹

Other conical recipients can be attributed to bowls, i.e., more open shapes that usually have the greatest width at the opening. The Sveta Trojica examples show a slightly bevelled rim that continues directly in the conical body (T. 5. 7–12). Under the rim, there may be a tongue-shaped grip (Pl. 5. 11, 12), while the rim itself may be decorated with imprints (Pl. 5. 11), oblique grooves (Pl. 5. 12⁴²), or oblique incisions on the outside wall (Pl. 5. 8). Similar to the last are the incisions, though vertical and not oblique, on the rim and edge of the handle on the vessels from the Beretin hillfort⁴³ and Nin.⁴⁴ Oblique incisions described as rice-shaped are found on the rim of the pot with polished light brown surface in Zadar.⁴⁵ One conical bowl with a slightly outwardly curved rim has a double wart-like application that serves as a grip (Pl. 5. 10). Conical bowls with tongue-shaped or wart-like grips could be seen as a continuation of Early Iron Age pottery traditions, bearing in mind their appearance in the Late Bronze and Early Iron Age layers in the Vaganačka cave, although, of course, these have a different, much wider rim.⁴⁶

Two bowls have a more rounded, possibly hemispherical body (Pl. 6. 2–3). The piece with the rim curved inwards (Pl. 6. 3) can be compared with the bowl from the Toreta hillfort on Kornat⁴⁷ and, according to the description, with the gray-coated piece from Zadar as well.⁴⁸ Similar bowls that have a grip have also been identified on other sites, such as Zemunik Donji or Sutlija, near Trogir.⁴⁹

³⁸ Batović 1968a, 58.

³⁹ Šešelj, Vuković 2013, T. 1. 7, 10.

⁴⁰ Serventi, Vuković 2020, T. I. 5.

⁴¹ Batović 1973, T. LXXII. 2; T. LXXX. 12.

⁴² Given the larger dimensions, this piece could belong to a conical pot, but since it lacks the rim characteristics of the previously-mentioned conical shapes, it has been attributed to this group.

⁴³ Šešelj, Vuković 2013, Fig. 2. 1, T. 1. 10.

⁴⁴ Kolega 2013, T. 4. 12.

⁴⁵ Čondić, Vuković 2017, 69, No. 2.

⁴⁶ Forenbaher, Vranjican 1985, 11, T. 8. 4, 5.

⁴⁷ Batović 1973, T. LXXXIII. 4.

⁴⁸ Čondić, Vuković 2017, 68, No. 4.

⁴⁹ Paraman, Ugarković 2021, 61, T. 5. 68, 70–75 and cited analogies.

No comparable specimen has been found for the fragment with a groove under its rim (Pl. 5. 7) or the one with longitudinal grooves on the upper part of the rim (Pl. 5. 9).

Cups are underrepresented in the coarse ware category, with just one piece (Pl. 6. 1) most likely falling within this category, namely, a cup with a biconical body and an S-profile that resembles pots of the first type. However, some handles of smaller dimensions (Pl. 7. 13, 16) could have belonged to cups, since their size makes it unlikely they belonged to larger pots. The limited presence of cups in the coarse ware assemblage, while, on the other hand, *kantharoi* or *skyphoi*⁵⁰ appear in the same context, would suggest that drinking vessels, such as cups, were mostly imported – at least in this period.

In addition to fragments of rims or vessels' bodies that can be attributed to a particular shape, several handles and grips, as well as bases, have been collected, although it is often not possible to determine their specific vessel type.

Grips are rather frequently present, especially tongue-shaped grips, semicircular or trapezoidal in profile, and elliptical or square in cross-section. They are drawn horizontally outwards in relation to the body of the vessel, sometimes slightly upwards (Pl. 7. 1–5). Tongue-shaped grips with different profiles are common on Liburnian territory, as well as in other parts of Dalmatia.⁵¹ Examples have been found on sites such as the Beretin hillfort;⁵² the Vlašići hillfort⁵³ and Glavica in Stara Poveljana,⁵⁴ both on the island of Pag; Gradina on the island of Vir;⁵⁵ Kruna in Božava⁵⁶ and Omiš in Sali⁵⁷ on Dugi Island; Toreta on Kornat;⁵⁸ Gračina on Sestrunj;⁵⁹ the Kuran and Čeljanka hillforts⁶⁰ on Ugljan; Sutilija near Trogir.⁶¹

A specific shape is presented by a stub grip with an oval cross-section (Pl. 7. 6). A similar grip comes from Nin, described as a tongue-shaped grip of a round cross-section.⁶² This is a grip of a rounder oval or round cross-section that is outwardly drawn, similar to the tongue-shaped grips that are, however, characterised by a thinner, more elliptical cross-section.

⁵⁰ See Tonc, Radman-Livaja 2017, 368, T. 1, Fig. 1–3.

⁵¹ Cf. Barbarić 2011, type A grips: 158–165, 273–275, Maps 16–20.

⁵² Šešelj, Vuković 2013, T. 1. 8, 12; T. 2. 2, 7.

⁵³ Batović 1973, T. LXV. 3.

⁵⁴ Serventi, Vuković 2020, T. II. 1, 7.

⁵⁵ Batović 1973, T. LXVII. 4.

⁵⁶ Batović 1973, T. LXXIV. 3, T. LXXVI. 1–7.

⁵⁷ Batović 1973, T. LXXXI. 7.

⁵⁸ Batović 1973, T. LXXXIV. 4.

⁵⁹ Batović 1973, T. XCII. 4.

⁶⁰ Batović 1973, T. XCV. 7, 12.

⁶¹ Paraman, Ugarković 2021, 57, T. 6. 89–92.

⁶² Kolega 2013, 301, T. 7. 23.

Handles can be classified as horizontal or vertical, depending on how they are placed in relation to the base or body of the vessel. Horizontal handles (Pl. 7. 8–9) are oval in cross-section and slightly flattened on the outside, with the first being almost triangular⁶³ in profile. Such handles have been recorded again on previously-mentioned sites, such as the Beretin hillfort in Radovin,⁶⁴ Ploče in Nin,⁶⁵ the Kruna hillfort on Dugi Otok⁶⁶ or Glavica⁶⁷ in Stara Poveljana on Pag.

Vertical handles are more common (Pl. 7. 7, 10–16). They can have an oval cross-section⁶⁸ (Pl. 7. 10, 12, 14), similar to the finds from Kruna in Božava,⁶⁹ Nin⁷⁰ or Glavica in Stara Poveljana.⁷¹

The vertical handle with a protrusion that tapers toward the top (Pl. 7. 15), is made of a dark gray, well-purified clay. It most probably belonged to a vessel of finer workmanship, possibly a tableware form such as a cup. A similar shape is found on a handle from Gradina (hillfort) in Zemunik Donji, this time with two protrusions that taper at the ends.⁷² An exception among the vertical handles is a piece decorated with transverse grooves (Pl. 7. 7), which has close analogies on the Beretin hillfort⁷³ or in Zadar.⁷⁴

Strap handles represent another variant of vertical handles, with a thinner cross-section (Pl. 7. 7, 11, 13, 16). Analogies are found, once again, on previously-mentioned sites, i.e., the Beretin hillfort, Kruna in Božava and Nin.⁷⁵ Two dark gray handles with a thinner section made of purified clay, and with a relatively well polished surface (P. 7. 13, 16), could be ascribed to smaller vessels, such as cups.

Vessel bases (Pl. 8) are mostly flat, which corresponds to examples from other comparable sites.⁷⁶ They can mostly be ascribed to larger pots on which the body of the vessel continues directly on the base itself (Pl. 8. 2–5, 7, 9). Some fragments of red-fired pottery with tiny glossy inclusions belong to vessels with a different shape, i.e., the base is slightly narrower before continuing into the conical body (Pl. 8. 1, 11), or shaped as a short cylindrical or conical foot (T. 8. 10, 12, 13), in all likelihood belonging to

⁶³ The drawing is not completely accurate, see catalogue for description.

⁶⁴ Batović 1968a, T. XXVI. 1; Šešelj, Vuković 2013, T. 2. 1.

⁶⁵ Kolega 2013, T. 7. 20, 22.

⁶⁶ Batović 1973, T. LXXIV. 1.

⁶⁷ Serventi, Vuković 2020, T. II. 6.

⁶⁸ Ring-shaped form according to Š. Batović: Batović 1968a, 60.

⁶⁹ Batović 1973, T. LXXV. 4, 6.

⁷⁰ Kolega 2013, T. 8. 25.

⁷¹ Serventi, Vuković 2020, T. II. 4.

⁷² Čelhar, Boržić 2016, T. 7. 2.

⁷³ Vuković 2014, 25, Cat. Nos. 17, 42, T. 2. 1, T. 4. 5.

⁷⁴ Čondić, Vuković 2017, 68, No. 1.

⁷⁵ Šešelj, Vuković 2013, T. 3. 3; Batović 1973, T. LXXV. 3; Kolega 2013, T. 8. 27.

⁷⁶ Batović 1973, 107 with examples shown.

bowls. Two fragments of flat bases from which the body extends at a wider angle have thinner walls and are made of more purified clay, with polished surface (Pl. 8. 14–15). They could be described as bottom parts of wider platters or similar serving vessels. Considering the wall thickness, a cooking function is less likely; furthermore, this separates them from platter pieces found on other Liburnian sites that have very thick bottoms.⁷⁷

Among the bases, a ring-shaped foot (Pl. 8. 8) stands out as an exception, as ring-shaped feet are not usually present in the Liburnian Iron Age pottery repertoire, except in Nin.⁷⁸

Another interesting find is a probable tripod foot fragment (Pl. 8. 6) for which, at present, no real analogies have been found in the repertoire of ceramic finds from the previously-mentioned sites on presumed Liburnian territory. Tripods have appeared on hillfort sites in Istria since the Bronze Age and are connected to food preparation,⁷⁹ so this find might possibly indicate that such types of portable cookers were also present in other parts of the Eastern Adriatic.

One more ceramic category present in the Trench 4 layer is that of lids. They have a dark reddish colour and a bell-shaped profile, with a thickened rounded or square ending of the rim (Pl. 9. 1–4). A lid fragment from the site has already been published.⁸⁰ Usually flat shapes appear, such as the piece from Nin, while a more robust, dome-shaped piece would represent a baking lid.⁸¹ A fragment similar to the Sveta Trojica pieces has been located at Gradina in Zemunik Donji.⁸² In general, a more bell-shaped form is not found in comparable assemblages, so such lids could be a possible *novum* in the pottery production under the influences of imported pottery, or, indeed, imports themselves, although their fabric is close to the other pieces that are considered local products.

Fragments carrying some sort of decoration show that the techniques used were those of application, embossing (e.g. bands with fingerprints), grooving and incising.

Besides being decorative, single or double wart-like or other plastic applications most probably also had a practical function in the sense of making the handling of the vessel easier (such as Pl. 5. 10; Pl. 6. 12–14), similar to horseshoe-shaped or strip applications that are usually classified

⁷⁷ As in Batović 1968a, T. XXV. 3; 1973, T. LXXXVI. 1–3; Šešelj, Vuković 2013, 340, T. 3. 4; Kolega 2013, 288–289; also Marović 2002, 239–241 and Barbarić 2011, 147–151.

⁷⁸ Only a mention in Batović 1970, 37–38.

⁷⁹ Buršić-Matijašić 1999, 127; Kolega 2013, 286–287. As M. Kolega mentions, Batović does not describe in detail or present in illustrations the material identified as portable hearths/braziers, so there is a possibility that tripod fragments from Liburnian sites have just not been identified or published so far. Nevertheless, they do not seem to be common judging by newer publications of sites such as Zemunik Donji, Glavica or the Beretin hillfort.

⁸⁰ Dubolnić 2006, T. IV. 1.

⁸¹ Batović 1970, Fig. 42 and 43.

⁸² Čelhar, Borzić 2016, T. 6. 5.

as grips. Single round applications (Pl. 6. 10, 11⁸³) have analogies in Nin,⁸⁴ Glavica on Pag⁸⁵ or Gradina in Zemunik Donji, where double wart-like applications that form a grip have also been found.⁸⁶

The use of wart-like applications placed at the transition from neck to body of the vessel – similar to the one seen on a pot (Pl. 4. 6) – is already evident in Late Bronze to Early Iron Age pottery assemblages.⁸⁷ Alongside tongue-shaped grips, such applications seem to be a common feature in the entire Iron Age pottery repertoire, which speaks in favour of the continuity of motifs and shapes within coarse ware.

A particularly notable find is a fragment with three triangularly shaped protrusions (applications) that does not seem to have a good parallel in the observed assemblages (Pl. 6. 9).

Decorations of incisions or embossing are frequently found on the rim, as seen in the case of bowls. Fingerprints on the rim (as Pl. 5. 11) are noted at the Beretin hillfort in Radovin,⁸⁸ the Iron Age layers in Zadar⁸⁹ or Nin,⁹⁰ on Gradina in Zemunik Donji⁹¹ or at the Glavice⁹² hillfort.

In general, incised ornaments do not seem to be common. An interesting fragment shows, however, a more elaborate incised motif of “hanging” hatched triangles (Pl. 6. 8), rather poorly executed, while the fragment itself is also very damaged on the surface. Incised hatched triangles appear at Bribir⁹³ and Danilo.⁹⁴ A similar motif is found on the inner side of the thickened rim at Gradina in Zemunik Donji.⁹⁵ The “roots” of the motif can be found in the previous centuries and seem to be mainly associated with Late Bronze – Early Iron Age contexts.⁹⁶ The Sveta Trojica piece would indicate the longevity of this motif, and even a degeneration of it, given its lower quality compared to older examples.

In addition to the aforementioned vertical handle with transverse grooves, grooving or fluting appears on several pieces of dark gray or almost black colour, made of finely purified clay and a polished surface. Oblique grooves can appear in groups, sometimes with a blank space between them (Pl. 6. 4–5, 7; Fig. 8). The decoration is found on the shoulder of

⁸³ This piece could also represent the upper part of a lid.

⁸⁴ Kolega 2013, T. 5. 13.

⁸⁵ Serventi, Vuković 2020, T. 1. 10.

⁸⁶ Čelhar, Borzić 2016, T. 3. 8; T. 4. 5; T. 5. 5, 6, 8.

⁸⁷ Forenbaher, Vranjican 1985, T. 11. 8.

⁸⁸ Šešelj, Vuković 2013, Fig. 2. 2, T. 1. 12.

⁸⁹ Čondić, Vuković 2017, 64, 69, 70.

⁹⁰ Kolega 2013, T. 3. 7.

⁹¹ Čelhar, Borzić 2016, T. 1. 5–6, 8–9.

⁹² Serventi, Vuković 2020, T. I. 3.

⁹³ Batović 1980, T. VIII. 5, 6; Korošec, Korošec 1980, T. X. 4

⁹⁴ Korošec 1959, 222, T. XI. 4.

⁹⁵ Čelhar, Borzić 2016, 71, T. 4. 2.

⁹⁶ Barbarić 2016, 127–128, Fig. 4.

the vessel, under a shallow horizontal groove. Vertical shallow fluting appears on a piece made from red clay with traces of a dark gray slip of poor quality (Pl. 6. 6). Similar decorations of vertical, sometimes oblique fluting/grooving appear on vessels from the Beretin hillfort.⁹⁷ Vertical fluting is also evidenced on dark gray to black pieces with a polished surface from Zadar.⁹⁸ Shallow vertical grooves appear on dark gray bowls from Gradina in Zemunik Donji.⁹⁹ On Bribir, vertical grooves predominate over slightly oblique ones, and the grooved area is often separated from the rest of the surface by a row of round impressions.¹⁰⁰



Fig. 8. A fragment with oblique shallow grooves shown on Pl. 6. 4 (photo by A. Tonc)

Dating coarse ware finds

Among the basic characteristics of the so-called coarse hillfort pottery highlighted by Š. Batović, it is stated that this type of pottery was made in a similar way throughout the Iron Age and shows very limited typological and morphological variations over time that would enable more precise dating (Batović 1968a, 60–61; 1973, 106–107; 1987, 372), and, therefore, the fragments are often very generally dated to the entire Iron Age.¹⁰¹ According to Š. Batović, in Liburnian pottery the shapes are mostly limited to hemispherical, spherical or biconical bowls and pots, sometimes with cylindrical or conical necks, outwardly curved rims, and flat bottoms. Vertical ring-shaped and strap handles as well as horizontal handles appear, sometimes decorated, as well as horseshoe (saddle-shaped), tongue-shaped

⁹⁷ Vuković 2014, 25, T. 1. 5; Cat. units 20, 24, 34, 35.

⁹⁸ Čondić, Vuković 2017, 66, 3, 4.

⁹⁹ Čelhar, Borzić 2016, 71, T. 5. 7, 9, 11.

¹⁰⁰ Korošec, Korošec 1980, 130, 132, T. XI. 2, 3, 5, 6; T. XII. 1–4, 6–8; T. XIII. 1, 2, 6.

¹⁰¹ Batović 1968a, 60–61; 1973, 106–107; 1987, 372; Čondić, Vuković 2017, 52.

and wart-shaped grips. According to the same author, decoration does not occur often, and when it does, it is most often a plastic band with impressions or punctures and other plastic decoration in the form of waves, hops and the like, then fluting and engraving, as well as other techniques.¹⁰² A more recent analysis of the decoration on Liburnian pottery indicates that there was, nevertheless, a relative variety of decorative techniques and combinations.¹⁰³ Although advocating the longevity of various shapes and decorations, Batović also identified certain features as characteristic in the pottery production for a specific period, placing the faceting of edges and handles, as well as the incising or combining of indentation and punctures in the Early Iron Age (from the 9th to the 5th century BC), while setting the plastic wave decoration exclusively in the last phase, from the 4th to the 1st century BC.¹⁰⁴ According to J. and P. Korošec, plastic decoration (wavy or straight plastic ribs) prevails in the younger phase of the Late Iron Age, while in the older phase, decoration made with shallow flutes appears.¹⁰⁵ The stratigraphy of the Beretin hillfort, however, did not provide more reliable data on the time limit of a particular way of decoration,¹⁰⁶ so the cited statements should be carefully reconsidered and by no means uncritically applied. In his doctoral dissertation,¹⁰⁷ V. Barbarić attempted to establish and define more precisely the morphology of the vessels from the Late Bronze and Iron Ages for the area of Dalmatia, including its northern part, which is naturally connected to the coastal area of the Velebit Mountains where the site of the Gradine Sveta Trojica is located. This work is, however, only partially applicable to the Sveta Trojica material, since the majority of the material used by Barbarić dates from the Late Bronze and Early Iron Age up to the 3rd c. BC, which could be regarded as the beginning of our assemblage. Another more recent attempt to assess the chronology and (dis)continuity of particular shapes has been offered in the analysis of pottery from Vrčevo – Gorica.¹⁰⁸ Again, most of the material is reliably dated only to phases preceding the Late Iron Age one, with several layers containing mixed material or insufficient data for reliable dating, though some differences between Bronze and Iron Age shapes have been noted. For example, another reason to approach some of Š. Batović's remarks with caution is the conclusion that wavy plastic bands already appear in the Bronze Age.¹⁰⁹ In general, some issues regar-

¹⁰² Batović 1968a, 60–61; 1973, 107–109; 1987, 371–373.

¹⁰³ See Vuković 2014.

¹⁰⁴ Batović 1987, 373.

¹⁰⁵ Korošec, Korošec 1980, 137.

¹⁰⁶ Vuković 2014, 27–29.

¹⁰⁷ Barbarić 2011.

¹⁰⁸ Šokčević 2016, unpublished MA thesis.

¹⁰⁹ Šokčević 2016, 66–67, 74. Also see Barbarić 2011, 213–215 on problems of different bases used for dating by various authors.

ding the problem of the stratigraphy of hillfort sites, which frequently lack reliable contexts and/or publications, as well as systematic excavations, are still relevant when dealing with Iron Age pottery from the region, though several new publications do show a shift toward the appreciation and re-valorisation of coarse ware finds.

Given the situation that most of the cited analogies from the other sites are generally attributed to the Iron Age, a few remarks¹¹⁰ on other finds from Trench 4 are in order for the purpose of a better chronological assessment of coarse wares from the site. Amphorae can be attributed to Lamboglia 2 and possibly also Greco-Italic types, datable into the last two centuries BC.¹¹¹ Gnathia ware such as *skyphoi* is generally datable to the period between the 4th and 2nd c. BC,¹¹² while other imported pottery finds, such as gray- or black-glazed cups, have analogies in shapes dated between the 3rd and the 1st c. BC.¹¹³ A coin of Hiero II of Syracuse (274–216/215 BC), a find tied to the phenomenon of Mazin-type hoards and coins, further supports the dating into the last centuries BC.¹¹⁴ The iron knife found in the surface layer has strongest parallels in finds from Mahrevići, Krajčinovići, Široki or Gostilje, i.e., in group IIIB according to the typological division by M. Parović-Pešikan, dated to the 3rd to the 2nd c. BC.¹¹⁵ A fragment of *terra sigillata* ware, though not possible to determine typologically, serves as a chronological marker of the end of the period in which Trench 4 finds should be dated, namely the end of the 1st c. BC or even the beginning of the 1st c. AD. Considering the associated material in Trench 4, as well as the previously discussed comparable material from other sites, the overall dating of the assemblage, including coarse ware types presented above, is between the 4th and the 1st c. BC. Although it is often pointed out that “domestic” Liburnian ceramics cannot be reliably dated based on their shape due to the longevity of certain types of vessels, it is worth noting that the material from Sveta Trojica discussed here lacks those shapes that have been dated predominantly to the Late Bronze – Early Iron Age at certain localities, such as tall pots with an ovoid body and a curved rim, or conical bowls with wide rims.¹¹⁶ However, given the marked fragmentation of the material, it is possible that the entire form simply cannot be recognised based on individual fragments alone. Even so, other material in the layers of Trench 4 supports a dating to the Late

¹¹⁰ With reference to existing publications for more details.

¹¹¹ Tonc-Radman Livaja 2017, 370; on the type for ex. Cambi 1989, 311–322; Cipriano, Carre 1989, 82–84; Jurišić 2000, 6, Map 17; also Glavaš et al. 2020 on the distribution in this part of the Adriatic.

¹¹² Tonc, Radman-Livaja 2017, 368; Lippolis 1994, 356–359; Miše 2013.

¹¹³ Tonc, Radman-Livaja 2017, 368; Šešelj 2005; 2009; Čelhar, Borzić 2016, 80–83.

¹¹⁴ Bertol Stipetić 2022, 46.

¹¹⁵ Tonc 2013, 119; Parović-Pešikan 1982, 40–41, T. IV. 3–8.

¹¹⁶ Cfr. Barbarić 2016, 133, Fig. 14.

Iron Age, which is also evident from the pottery shapes.¹¹⁷ Furthermore, it is worth noting that characteristics such as wart-like applications or tongue-shaped grips can, indeed, be traced back to the Early Iron Age or even the Late Bronze Age pottery tradition of the region, so their chronology should be analysed only in context and using a combination of features: from possible differences in colour, clay and inclusions, surface treatment, to morphological features.

Conclusion: coarse ware in the regional context

The majority of coarse ware finds are pots that can be interpreted as crockery used for preparing and storing food and beverages, but there are also fragments with better purified clay, fired dark gray (handles, bi-conical cups and fragments with a fluted decoration), which can be attributed to tableware. Both groups can be ascertained as having been made in the local tradition. Some pieces share several features – such as fabric and clay characteristics – with this locally made ware, but exhibit new shapes – such as conical bowls on foot, lids, and a possible tripod fragment. These could have been imported, although at the moment their provenance is unclear. Another possibility is that these were new shapes that entered the local pottery production under various influences, modelled on imported vessels during the final centuries BC. The presence of diverse imported wares and coins indicates that this was a time of openness, contact and communication across the Adriatic during which changes in the repertoire of shapes are not surprising and may serve as indirect evidence of new consumption patterns and needs. In this context, the settlement of Sveta Trojica undoubtedly profited from its position near mountain passes and the coast, which enabled the use of both land and coastal/maritime routes.

The community that inhabited the Sveta Trojica hillfort fits into presumed Liburnian territory.¹¹⁸ The comparisons of coarse ware are particularly significant for assessing similarities with particular sites since these are presumably locally made, specifically produced to meet the needs and preferences of the local community, whereas ceramic wares stemming from foreign production areas reached various markets regardless of the final user. Judging by the comparisons listed above, the Sveta Trojica hillfort, unsurprisingly, fits into the area of northern Dalmatia, i.e., Ravni Kota-

¹¹⁷ It is interesting to note that Š. Batović considered the appearance of spools to be the result of Italic influences for the transition from the Early to the Late Iron Age, i.e., between 6th–4th c. BC (Batović 1987, 373). On Sveta Trojica they are found in Trench 8, excavated on the hillfort plateau, which could be somewhat earlier than the Trench 4 layers, i.e., roughly dated after the middle of the 1st millennium BC: Tonc et al. 2015, 85–86; Tonc, Radman-Livaja 2021, 108. This would generally support the dating proposed by Batović, but a more detailed analysis of all the finds is needed.

¹¹⁸ On the issue of collective or ethnic identification, see Tonc 2022.

ri and the islands from Pag to Kornat. Only occasionally are there parallels in Bribir near Šibenik or Danilo further south, both lying on or on the other side of the southern border of presumed Liburnian territory, marked by the course of the river Krka. This difference has already been noted by Batović, who stated that “from all Liburnian sites, Bribir differs the most from Radovin.”¹¹⁹ It should be added that a time difference certainly needs to be considered as well, since, for example, pottery from Bribir decorated with string impressions is dated to the Early Iron Age.¹²⁰ All comparable sites (Gradina in Zemunik Donji, Glavica – Stara Poveljana, the Beretin hillfort, to name but a few) present quite a comparable array of coarse wares, from shapes to decorations and fabric characteristics, such as darker red or brown colours and white inclusions. In addition, some features, such as tongue-shaped or horseshoe-shaped¹²¹ grips and grooved decorations on dark gray vessels, reflect traditions from earlier periods, thus supporting the persistence of traditions among the Iron Age populations in northern Dalmatia. This is further reinforced by the frequent continuity of habitation at specific sites. Indeed, local pottery products are crucial elements of the everyday life of the Iron Age inhabitants and without them our vision and understanding of their customs or their identity – within the region and beyond – has to be regarded as incomplete. Together with other categories, a look at the coarse wares from Sveta Trojica has enabled a better understanding of the position of the Iron Age settlement within the regional network of contact and communication, both over short and long distances. Fortunately, recent publications will undoubtedly improve our understanding of Iron Age coarse wares and hopefully resolve at least some of the issues that continue to pose challenges to scholars dealing with this kind of material.

CATALOGUE

All finds from Trench 4, 2012–2013 with the exception of Pl. 7. 7 (Trench 1). N – number of find (in Croatian *nalaz*); SU – stratigraphic unit; d. – diameter; dim. – dimensions of fragment; wall th. – wall thickness

Drawings: Miljenka Galić, Hana Ivezić

¹¹⁹ Talking about northern Dalmatian hillfort sites; Batović 1968a, 64; 1980, 7.

¹²⁰ Korošec, Korošec 1980, 128; Batović 1968a, 58. Further analysis of pottery from other trenches, including those on the top plateau of the hillfort, which could be earlier than the material on the southern slopes, could provide more insight and a basis for comparisons.

¹²¹ The latter are present on other sites, but on Sveta Trojica few examples come from other trenches.

Pl. 1

1. N-18, SU 7

Fragment of rim and neck of pot. Rim thickened, outwardly curved. Light orange outer surface, dark gray inner surface.

D. opening 4,2 cm; d. neck 13,7 cm; wall th. 0,6 cm.

2. N-1, SU 5

Rim of pot with outwardly curved rounded rim. Dark red to gray clay, smooth surface.

Dim. 3 x 1,8 cm; wall th. 0,5–0,7cm (rim).

3. N-1, SU 5

Fragment of outwardly curved and slightly thickened pot rim. Surface hard, rough, dark red clay with numerous white inclusions of different size.

D. opening 19,4 cm; wall th. rim 0,8 cm; wall th. 0,5 cm.

4. N-1, SU 5

Fragment of outwardly curved rim. Dark red clay with several large white inclusions. Inner wall darker brown. Surface smooth.

D. 16,5 cm; dim. 4 x 2,9 cm; wall th. rim 0,5 cm; wall th. 0,3 cm.

5. N-1, SU 5

Fragment of curved, thickened rim. Brown with several inclusions, smooth surface.

D. opening 16,2 cm; wall th. 0,4; wall th. rim 0,5 cm.

6. N-1, SU 5

Fragment of outwardly curved rim. Dark gray.

Dim. 3,3 x 1,4 cm; wall th. 0,5 cm.

7. N-1, SU 5

Fragment of slightly curved rim with rounded edge. Brownish-gray, uneven colour.

Dim. 3,5 x 2,5 cm; wall th. 0,5–0,6 cm.

8. N-1, SU 5

Fragment of slightly curved rim. Red-brown colour clay with small white inclusions.

Dim. 2 x 2 cm; wall th. 0,4 cm.

9. N-1, SU 5

Rim fragment of larger pot, rounded and outwardly curved. Reddish-brown clay with small white inclusions. Smooth surface.

D. 26 cm; wall th. rim 0,8 cm; wall th. 0,6 cm.

10. N-32, SU 5

Fragment of S-shaped pot with oblique rim and short neck. Dark brown surface, well-purified clay, smooth. Red in cross-section.

D. opening 20 cm; d. neck 19 cm; wall th. 0,5–0,7 cm (rim).

Pl. 2

1. N-18, SU 7

Fragment of pot with rounded, outwardly curved rim. Dark brown clay with inclusions but smooth surface. Inner wall darker, gray.

D. body 16 cm; d. neck 13,7 cm; d. opening 16 cm; wall th. rim 0,9 cm; wall th. body 0,5 cm.

2. N-7, SU 5

Fragment of pot with outwardly curved rim and short neck. Dark brown, very uneven outer surface, inside red with several white inclusions of different size.

D. opening 22 cm; d. neck 20,3 cm; d. body 21,5 cm; wall th. 0,5 cm.

3. N-7, SU 5

Fragment of outwardly curved rim and thickened neck wall. Dark gray clay, uneven surface colour (red to gray).

D. opening 12 cm; d. neck 11,8 cm; wall th. 0,5 cm.

4. N-7, SU 5

Fragment of outwardly curved, rounded rim. Dark gray, several inclusions of different size but smooth surface.

Dim. 4 x 4 cm; wall th. 0,5 cm.

5. N-7, SU 5

Part of pot with outwardly curved rim, short neck and rounded belly. Uneven colour, in cross-section darker gray, on the surface brown to reddish with darker spots on the outer wall (traces of heat/fire exposure during cooking?).

D. opening 20 cm; d. neck 18,2 cm; d. body 19,5 cm; wall th. 0,6 cm.

6. N-32, SU 5

Fragment of outwardly curved rim with rounded edge. Smooth surface, well-purified brown clay.

D. opening 14,3 cm; d. neck 13 cm; wall th. 0,4–0,6 cm (rim).

Pl. 3

1. N-23, SU 7

Fragment of pot with hanging rim of square section and conical neck. Uneven colour, from dark red to dark gray, visible larger and smaller white inclusions. Smooth surface.

D. rim 17 cm; d. opening around 14 cm; d. body (preserved) 18 cm; d. neck 15 cm; wall th. 0,5–0,7 cm.

2. N-9, SU 6

Fragment of outwardly curved rim with square section. Light brown with tiny inclusions, smooth.

D. opening 19 cm; d. neck 17,5 cm; d. body 18,5 cm.

3. N-18, SU 7

Fragment with oblique, slightly rounded rim. Brown-gray uneven colour but relatively smooth surface.

D. opening 14 cm; d. neck 12,6 cm; d. shoulder 13,5 cm; wall th. 0,4 cm; wall th. rim 0,5 cm.

4. N-7, SU 5

Fragment of square rim. Dark brown, uneven colour.

D. opening 14,5 cm; d. neck 13 cm; wall th. 0,5; wall th. rim 0,7 cm.

5. N-32, SU 5

Fragment of pot with slightly thickened rim, short neck and rounded body with small protrusion. Light brown, few inclusions, smooth.

D. opening 13,5 cm; d. neck 11,5 cm; d. body 13,7 cm; wall th. 0,4 cm; wall th. rim 0,6 cm.

Pl. 4

1. N-18, SU 7

Fragment of rim and body. Rim thickened, almost vertical. Dark gray, well-purified clay and smooth surface.

D. opening 11 cm; d. body 12,3 cm; wall th. 0,5 cm.

2. N-1, SU 5

Fragment of thickened, slightly outwardly projecting rim and body. Dark gray clay with small white inclusions.

D. opening 13 cm; d. body 13,7 cm; wall th. 0,5 cm.

3. N-11, SU 6

Fragment of pot with thinned rim, triangular on the outside and irregularly shaped body. Light to dark gray with several white inclusions of different size (Fig. 5, upper right). Inner wall surface irregular and rougher, with some kind of patina.

Dim. 6,2 x 4 cm; wall th. 0,5 cm.

4. N-1, SU 5

Fragment with slightly thickened rim, oblique on the inside, and rounded belly. Very rough surface with numerous inclusions of different size. Dark red on the outside, more gray, but uneven on the inner wall.

Dim. 6,5 x 6,3 cm; wall th. 1 cm.

5. N-11, SU 6

Thin rim, triangular on the outside, rounded body. Gray, uneven surface, with darker gray and reddish spots (see Fig. 5, upper left).

D. opening 14 cm; d. body 15 cm; wall th. 0,5 cm.

6. N-18, SU 7

Fragment of vessel with thickened rim under which there is a wart-like application. Surface relatively smooth. Dark gray with several larger white inclusions.

D. opening 13 cm; dim. application approximately 1,5 cm; wall th. 0,6 cm; wall th. rim 0,5 cm.

7. N-1, SU 5

Fragment of pot with thickened rim, slightly outwardly curved, short neck and rounded body. Brown clay with large white inclusions, on the inner wall red to gray, uneven colour.

D. opening 13 cm; d. neck 12,6 cm; d. body 13,5 cm; wall th. 0,5 cm.

8. N-18, SU 7

Fragment of thickened rim, oblique on the inside, with body extending almost vertically below the rim. Dark gray with inclusions, but fine, smooth surface.

D. opening 12 cm; wall th. 0,4 cm.

Pl. 5

1. N-1, SU 5

Fragment with wide beveled rim with vertical neck/body. Darker red, smooth surface, but the rim has a darker gray colour, possibly a trace of usage.

D. opening 19,2 cm; wall th. rim 0,7 cm; wall th. 0,3 cm.

2. N-1, SU 5

Fragment of pot with outwardly extended, thickened rim. Dark gray, smooth surface, with several white inclusions.

D. opening 23,5 cm; wall th. rim 0,8 cm; wall th. 0,6 cm.

3. N-7, SU 5

Fragment of pot with vertical neck/body and outwardly bent rim. Dark red, well-purified clay.

D. opening 22,5 cm; d. neck 19,5 cm; wall th. 0,8 cm.

4. N-1, SU 5

Fragment with flattened rim and vertical neck/body; possibly also a tripod foot or lid? Dark red clay, rough, with many inclusions, gray in section.

Dim. 4 x 3,5 cm; wall th. 0,7 cm (rim) – 1 cm (body).

5. N-1, SU 5

Fragment of large pot with beveled rim of square section. Light brown with many small white inclusions.

Ratio on drawing 1: 2. D. opening 38,5 cm; d. body (preserved) 15 cm; wall th. 1 cm.

6. N-9, SU 6

Fragment of curved rim with flattened inner section. Dark red with tiny inclusions.

Dim. 6 x 2,5 cm; wall th. 0,8 cm.

7. N-1, SU 5

Fragment of rim with triangular section and shallow groove under it. Dark brown to gray, several inclusions but smooth surface.

Dim. 3,5 x 3 cm; wall th. 0,4 cm.

8. N-1, SU 5

Fragment of rim with deep oblique incisions on it. Dark brown outer wall, dark red inner wall, with small white inclusions.

Dim. 4 x 3 cm; wall th. 0,6 cm; wall th. rim 0,8 cm.

9. N-1, SU 5

Fragment of thickened vertical rim with two longitudinal grooves on top. Lighter, yellowish-gray clay.

Dim. 3 x 2 cm; wall th. 0,5 cm; width of rim top 1 cm.

10. N-18, SU 7

Fragment of bowl with slightly oblique, rounded rim and double wart-shaped application/grip. Dark red, relatively rough, several inclusion of varying size.

D. opening 18,2 cm; d. body (under rim) 15,5 cm; grip size 3 x 1,5 cm; wall th. 0,6 cm.

11. N-7, SU 5

Fragment of rim with fingerprint impressions and tongue-shaped grip. Outer wall reddish-brown, inner wall dark gray, several large white inclusions.

Dim. 5 x 4,5 cm; wall th. 0,6 cm; width of grip 3,5 cm; thickness of grip 1,5 cm.

12. N-1, SU 5

Fragment of rim and neck of bowl. Thickened rim has oblique grooves, under the rim remains of tongue-shaped grip. Light orange, with several inclusions.

Dim. 7,5 x 5,2 cm.

Pl. 6

1. N-32, SU 5

Small pot/cup with oblique rim and biconical body. Brown clay, smooth surface.

D. opening 8,4 cm; d. neck 7,5 cm; d. body 9 cm; wall th. 0,5 cm.

2. N-1, SU 5

Fragment of hemispherical body with rounded rim. Dark red, smooth surface.

Dim. 2 x 2 cm; wall th. 0,5 cm.

3. N-18, SU 7

Fragment of hemispherical bowl with inwardly curved rim. Dark gray, several inclusions but smooth surface.

Dim. 4,2 x 3 cm; wall th. 0,5 cm.

4. N-11, SU 6

Fragment of body with oblique grooves divided in two groups, under one horizontal groove. Dark gray, with small white inclusions (Fig. 8).

Dim. 4 x 4 cm; wall th. 0,7 cm.

5. N-23, SU 7

Fragment of black body with polished surface and parallel oblique grooves on the shoulder, under a horizontal groove.

Dim. 4 x 2,3 cm; wall th. 0,7 cm.

6. N-32, SU 5

Fragment of body with shallow grooves. Red clay with small white inclusions and traces of dark gray coat on the outer wall, of poor quality.

Dim. 3,5 x 2,4 cm; wall th. 0,5 cm.

7. N-11, SU 6

Fragment of body with oblique shallow grooves and traces of grip/handle. Dark gray, finely purified clay and smooth surface.

Dim. 5,5 x 3,5 cm; wall th. 0,7 cm.

8. N-7, SU 5

Fragment of body with incised hanging hatched triangles. Light brown to orange.

Dim. 4 x 3,5 cm; wall th. 0,6 cm.

9. N-23, SU 7

Fragment of body with three triangular protrusions. Dark red, with several inclusions.

Dim. 4 x 3,7 cm; wall th. 0,6 cm.

10. N-18, SU 7

Fragment of body with a wart-like round application. Dark gray with numerous white inclusions of different size.

Dim. 6 x 5,5 cm; d. of application 1,3 cm; wall th. 0,5–0,8 cm.

11. N-13, SU 7

Fragment with a wart-like round application (lid?). Red, shiny surface, relatively rough.

Dim. approximately 5 x 3, cm; wall th. 0,9 cm; d. application 1,5 cm.

12. N-18, SU 7

Fragment of body with a double wart-like application. Dark gray, rough surface.

Dim. 5,5 x 4 cm; wall th. 0,6 cm; d. application 2,5 x 1,6 cm.

13. N-1, SU 5

Fragment of body with applied grip (2 x 1,2 cm). Inner wall dark gray, outer wall dark red, with large white inclusions.

Dim. 4 x 3,5 cm; wall th. 0,5–0,7 cm.

14. N-1, SU 5

Fragment of body with a double wart-like application. Rough surface, grayish clay with numerous white inclusions, outer wall light red (5YR 6/6 reddish yellow) and almost as a coating layer, approximately 2 mm thick.

Dim. 4,5 x 3,5 cm; wall th. 0,8 cm; dim. application 1,2 x 1 cm.

Pl. 7

1. N-18, SU 7

Tongue-shaped grip. Outer wall dark red, inner wall orange, rough surface with several large white inclusions.

Dim. 5,5 x 2,5 cm; wall th. 0,9 m; dim. grip 4,5 x 0,9 cm, th. grip 0,6 cm.

2. N-18, SU 7

Tongue-shaped grip. Outer wall dark brown, inner wall and in section dark gray. Several white inclusions of varying size.

Dim. 5,4 x 3 cm; wall th. 0,7 cm; grip 4 x 1 cm; th. grip 0,7 cm.

3. N-18, SU 7

Tongue-shaped grip or handle fragment. Dark, red to gray clay with several inclusions.

Dim. 4,3 x 4 cm; wall th. 0,9 cm; width grip 3 cm, th. grip 0,8 cm.

4. N-18, SU 7

Grip fragment, damaged, light brown.

Dim. 3,5 x 2 cm; width grip 3 cm; th. grip 0,8 cm.

5. N-7, SU 5

Tongue-shaped grip. Reddish-brown, light clay with numerous inclusions.

Dim. 4,3 x 1,6 cm; width grip 1,5–3 cm.

6. N-18, SU 7

Stub grip with oval cross-section. Outer wall dark red with large white inclusions, in section dark gray. Irregularly made, with denting on one part, almost like a fingerprint.

Dim. 3 cm; th. 1,8–2 cm; d. approximately 2 cm.

7. Trench 1/2010, N-5, SU 2

Handle with round section and shallow transversal grooves. Dark gray clay, brown surface.

D. handle 2,5 cm.

8. N-7, SU 5

Horizontal handle with oval cross-section and triangular profiled outer edge. Light brown, with several inclusions.

Width 2 cm; length 4,8 cm; section 2 x 1,8 cm.

9. N-7, SU 5

Horizontal handle with oval cross-section, slightly thinned toward the outer edge. Smooth surface, grayish-red, dark with several inclusions.

Length 4,5 cm; width 2 cm; section 2,4 x 1,8 cm.

10. N-18, SU 7

Vertical handle with oval cross-section. Dark gray with small white inclusions and smooth outer surface, inner wall dark red.

Length 4,3 cm; width 2,1 cm; th. 1,5 cm.

11. N-9, SU 6

Vertical handle with oval cross-section, widened toward the edge. Red to brown, with small white inclusions.

Dim. 5 x 3,5 cm; section 3 x 1 cm.

12. N-9, SU 6

Vertical handle with oval cross-section. Red, purified clay. Colour differs from most pieces.

Dim. 5,5 x 2,7 cm; th. 1,5 cm.

13. N-18, SU 7

Strap handle with flattened oval section. Dark gray with several inclusions but smooth surface.

Length 4,6 cm; section 1,6 x 0,6 cm.

14. N-1, SU 5

Part of body with vertical handle with oval cross-section. Dark red, with numerous large white inclusions, rough to the touch. Part of the handle has a dark gray spot, as if from burning.

Dim. 6 x 4 cm; handle length 4 cm, section 2 x 1 cm; wall th. 0,5 cm.

15. N-13, SU 7

Vertical handle with "horn-like" protrusion on one side. Dark gray, well-purified clay with smooth surface.

Dim. 3,9 x 1,7 cm.

16. N-1, SU 5

Vertical strap handle, rounded in profile. Dark gray.

Length 2,3 cm; width 2 cm; th. 0,5 cm.

Pl. 8

1. N-18, SU 7

Flat base of pot. Dark red, in section dark gray, smooth surface with small white and glossy inclusions, but covered by a dark brown incrustation.

D. base 7 cm; th. base 0,4–0,5 cm; wall th. 0,5 cm.

2. N-18, SU 7

Flat base. Dark red, smooth surface, inner wall rougher with more visible inclusions.

D. base 10 cm; th. base 0,7 cm; wall th. 1 cm.

3. N-32, SU 5

Flat base. Dark brown to red clay, inner wall of base dark red, but dark gray wall. Smooth outer surface.

D. 12 cm; th. 0,8 cm.

4. N-1, SU 5

Flat base. Outer wall dark red, inner wall dark gray with several small white and glossy inclusions, rough to the touch.

D. 12 cm; th. base 0,6 cm; wall th. 0,8 cm.

5. N-7, SU 5

Flat base. Dark brown-red with several white inclusions.

D. base 14 cm; th. 0,7 cm.

6. N-18, SU 7

Tripod foot. Dark gray clay with several white inclusions of varying size. Surface of vessel bottom dark red, smooth. Very damaged.

Height 3 cm; th. 1 cm; th. bottom vessel 1,2 cm.

7. N-7, SU 5

Flat base. Dark gray clay, dark red on the outer wall.

D. base 14 cm; th. base 1,2 cm.

8. N-18, SU 7

Base fragment (foot?). Dark red to gray colour, rough.

Dim. 4,3 x 2,5 cm; wall th. 0,5–0,7 cm.

9. N-7, SU 5

Flat base. Dark brown-grayish colour, rough surface.

D. base 12,5 cm; th. base 0,5 cm; wall th. 0,7 cm.

10. N-7, SU 5

Ring-shaped foot. Light red colour with several white inclusions.

D. base 8,2 cm; th. base 0,6 cm.

11. N-1, SU 5

Flat base. Uneven colour with several tiny white inclusions, smooth.

D. base 10 cm; d. body (preserved) 14 cm; th. base 1,5 cm; wall th. 1,1 cm.

12. N-1, SU 5

Flat base. Light orange to red with white inclusions of varying size, relatively rough.

D. base 10,5 cm; th. base 1,2 cm.

13. N-11, SU 6

Base with conical foot. Red, with several white and glossy inclusions, smooth surface. Inner wall brown.

D. foot 8,7 cm; d. base 8 cm; height of foot 0,8 cm.

14. N-1, SU 5

Flat base with recipient at wide angle. Brown to light red, smooth surface.

D. base 8 cm; th. base 0,4 cm; wall th. 0,5 cm.

15. N-1, SU 5

Flat base with recipient at wide angle. Dark brown outer wall, dark red inner section, smooth surface.

D. base 9,9 cm; wall and base th. 0,4 cm.

Pl. 9

1. N-18, SU 7

Possible fragment of lid with rounded rim.

Dim. 3,5 x 2,5 cm; wall th. 0,4–0,8 cm.

2. N-1, SU 5

Bell-shaped lid with square rim. Dark red with small inclusions. Traces of dark coating on the inner wall (?).

Dim. 4 x 3,8 cm; wall th. 0,8 cm.

3. N-1, SU 5

Bell-shaped lid with rounded thickened rim. Reddish to brown, smooth surface.

D. 20,4 cm; rim th. 0,7 cm; wall th. 0,4 cm.

4. N-7, SU 5

Thickened rim, probably of a lid. Dark red, purified clay.

Dim. 5 x 4,5 cm; wall th. 0,5 cm; rim th. 0,9 cm.

PLATE 1

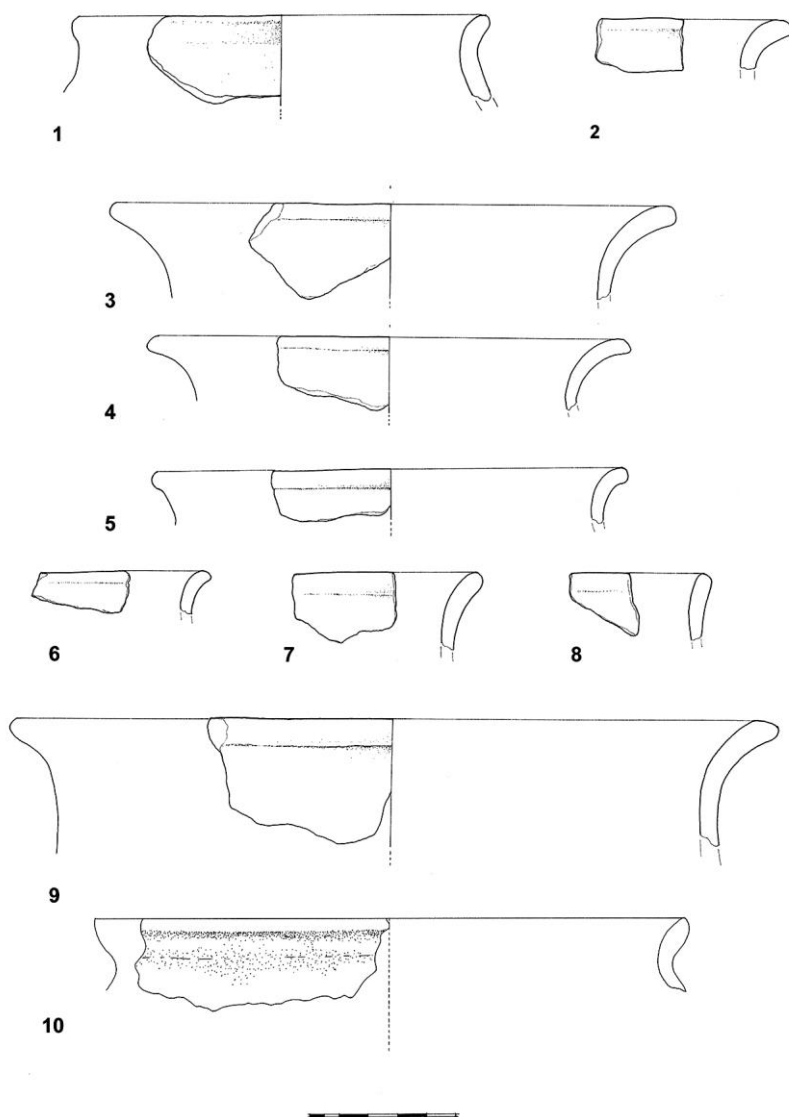


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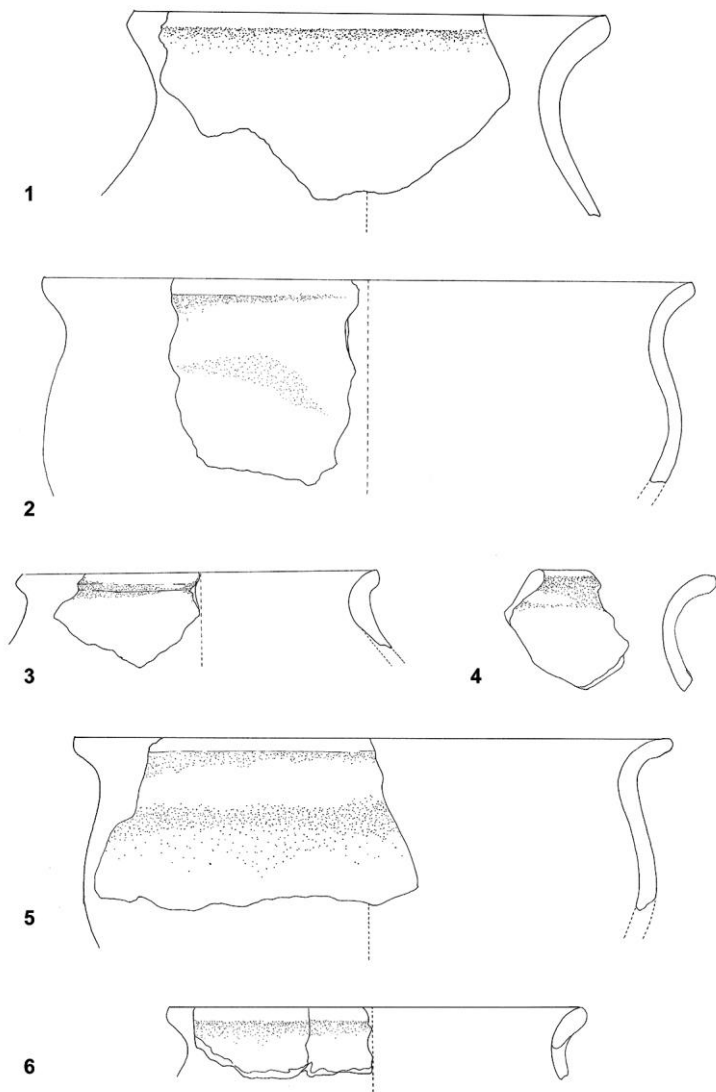
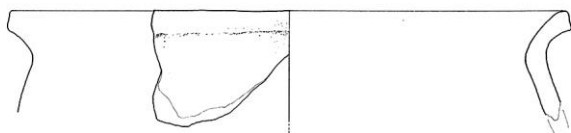


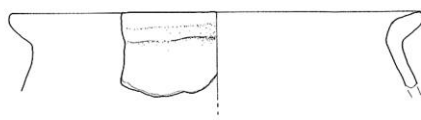
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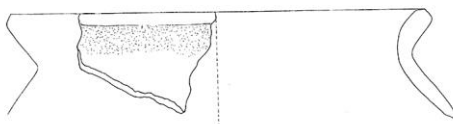
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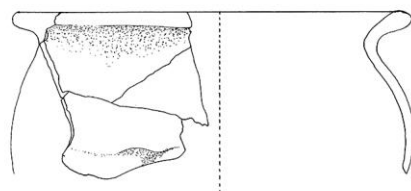
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4



5



PLATE 4

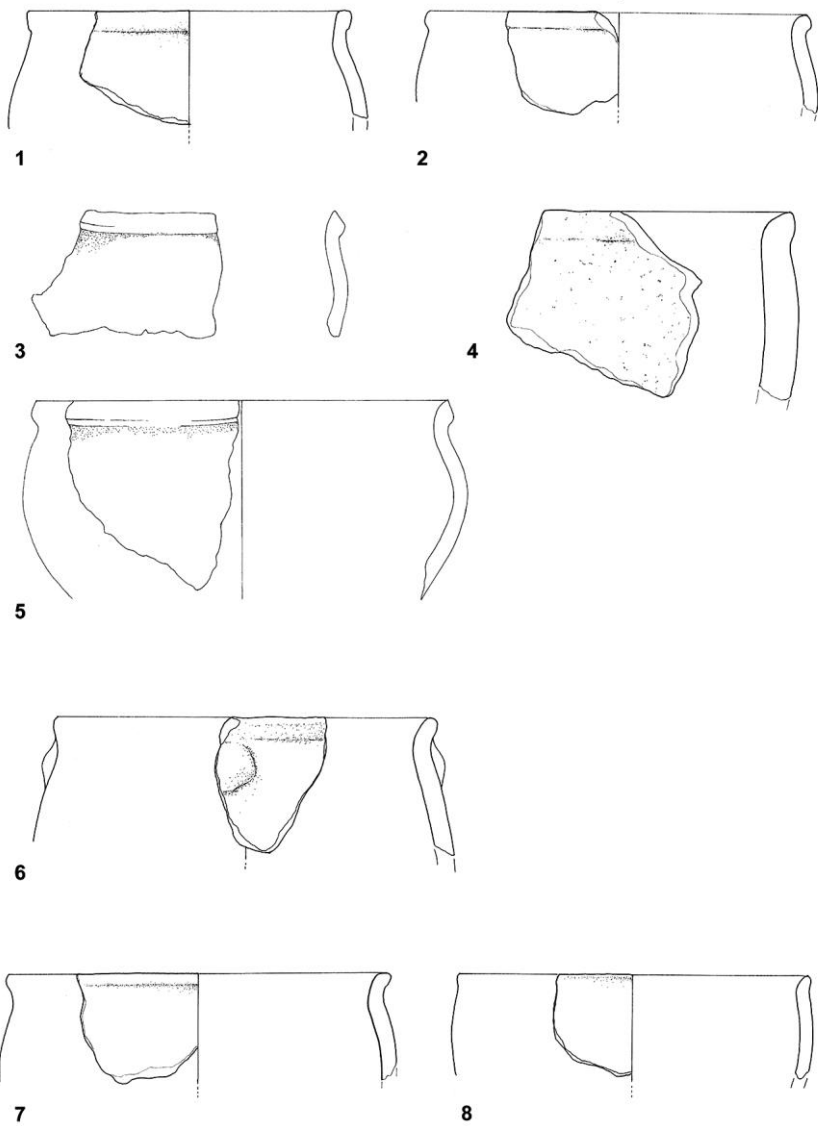


PLATE 5

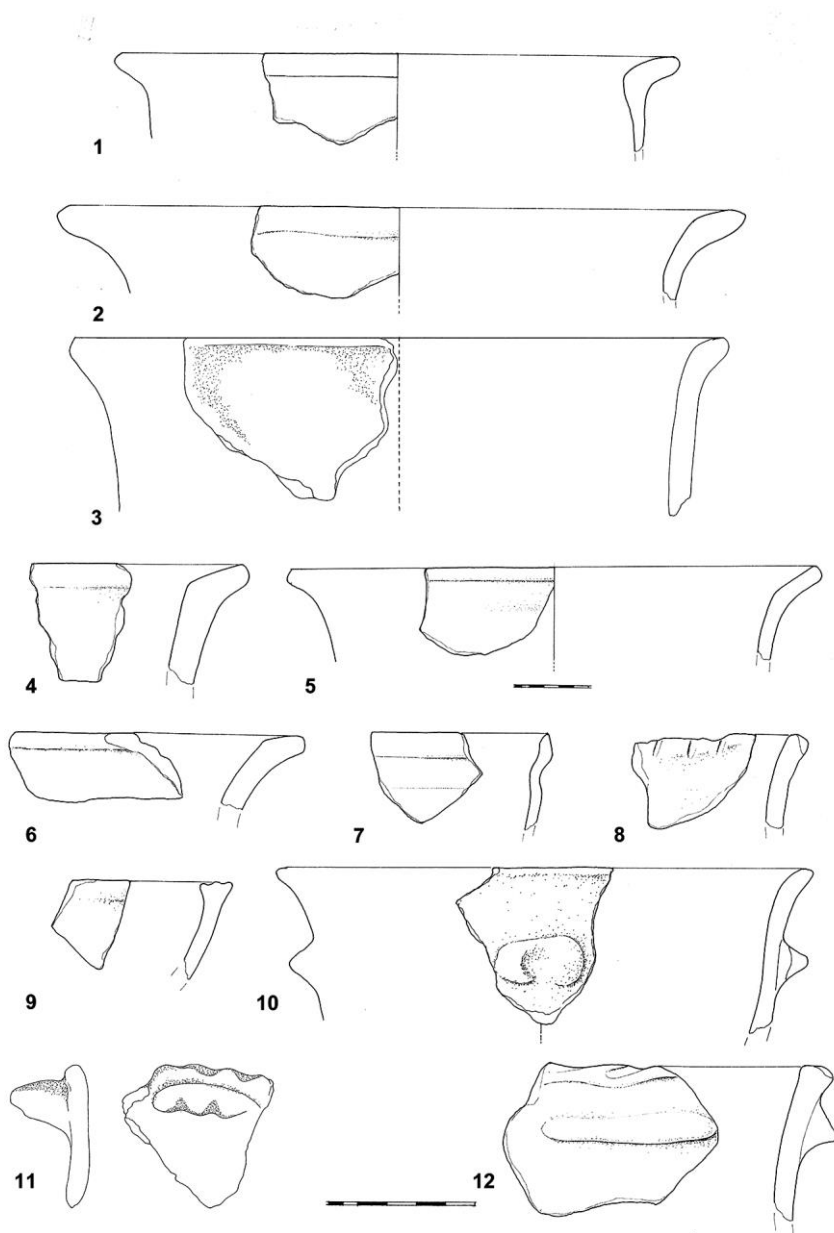


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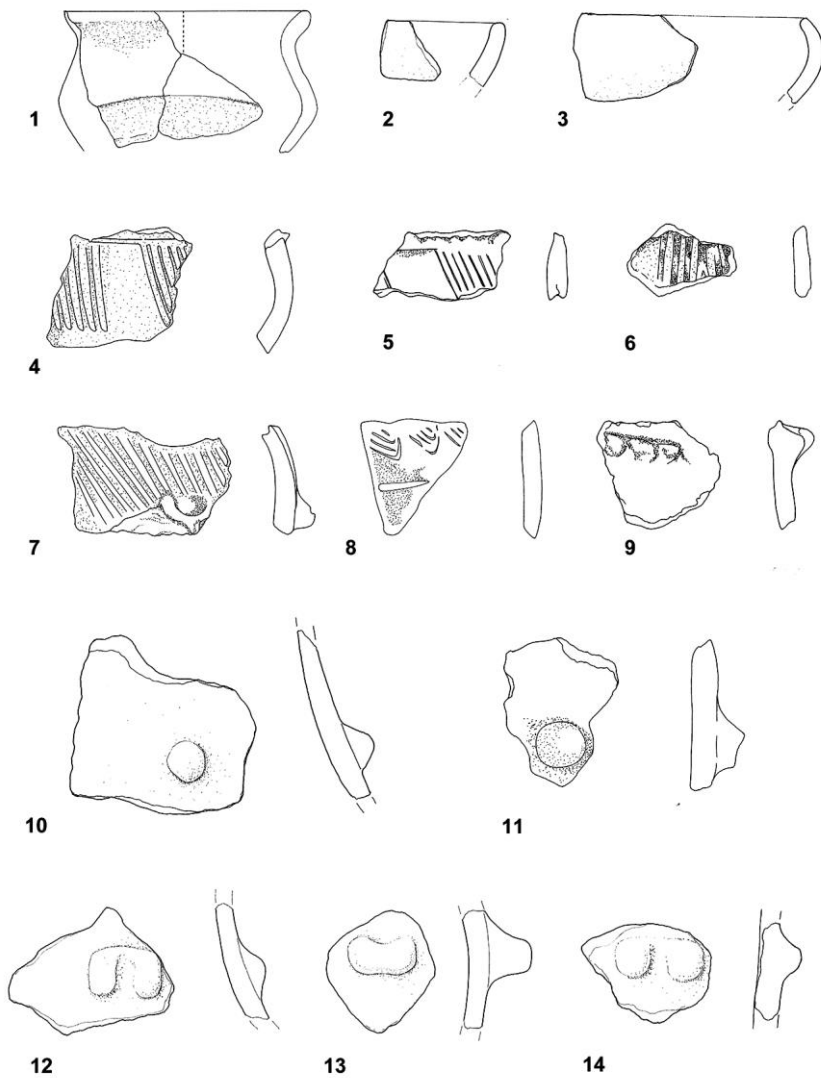


PLATE 7

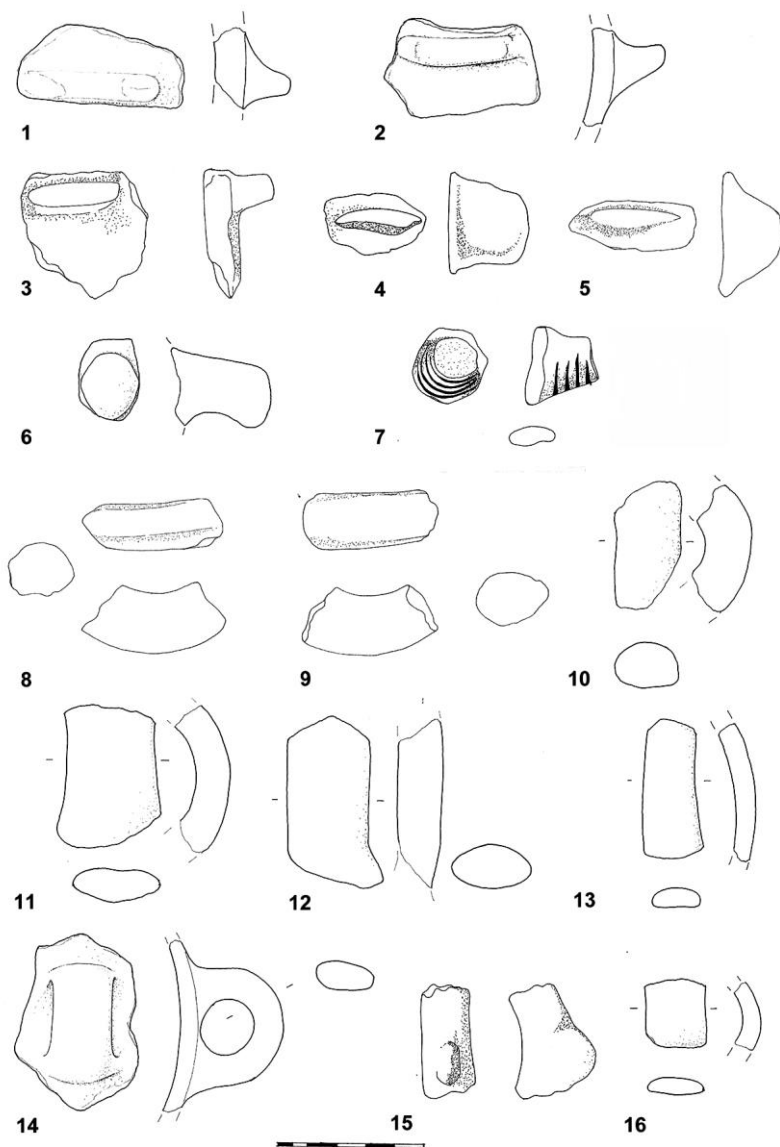


PLATE 8

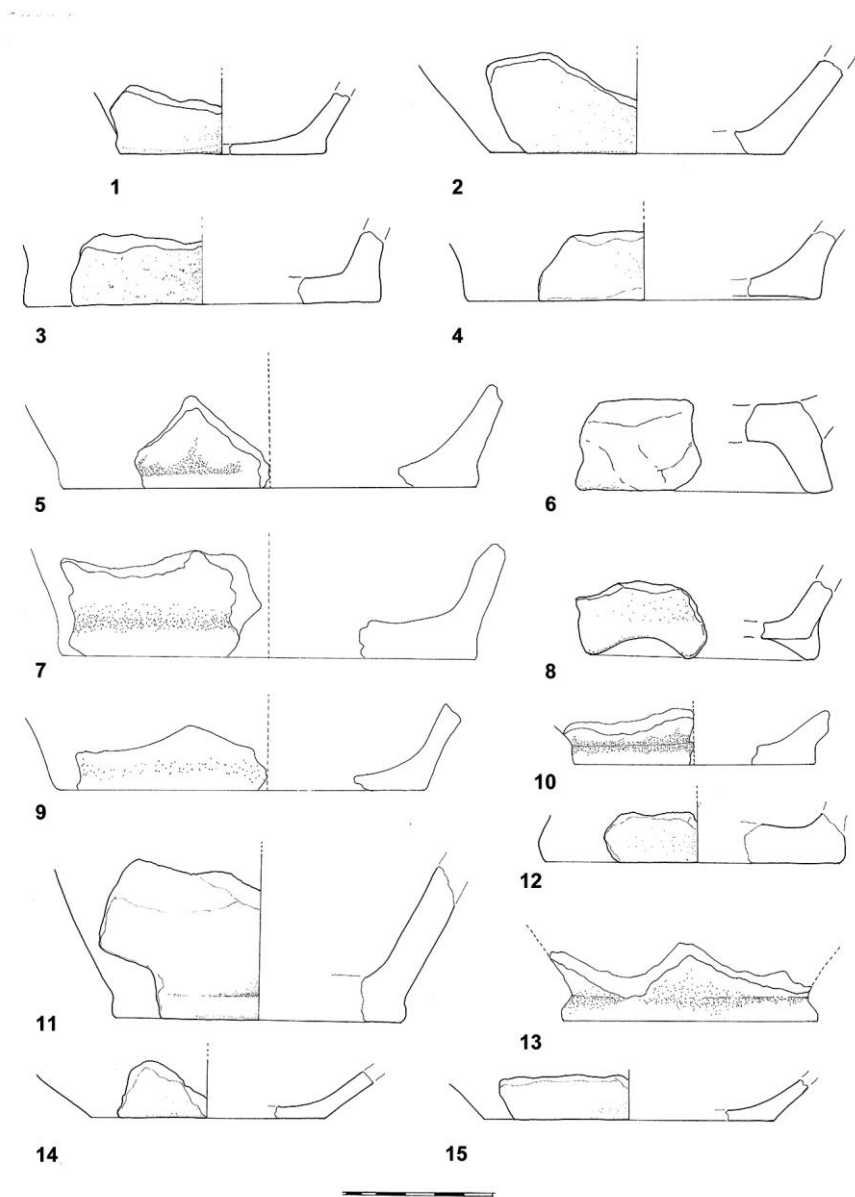
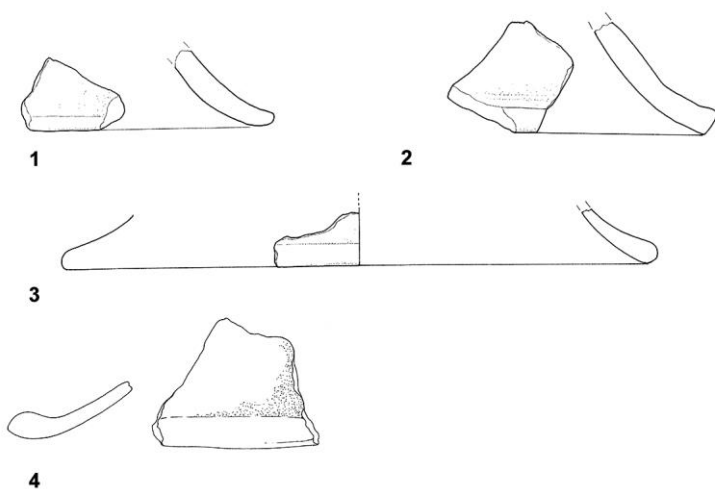


PLATE 9



REFERENCES

- Barbarić, V. *Tipologija lončarije iz kasnoga brončanoga i željeznoga doba s područja Dalmacije*, Unpublished PhD thesis, University of Zagreb, 2011.
- Barbarić, V. "Indigenous Pottery in Dalmatia During the Last Millennium BC", in *Croatia at the Crossroads. A consideration of archaeological and historical connectivists*, Proceedings of a conference held at Europe House, Smith Square, London, 24–25 June 2013 to mark the accession of Croatia to the European Union, (eds.) D. Davison, V. Gaffney, P. Miracle, J. Sofaer, Oxford, 2016, 123–138.
- Batović, Š. "Istraživanje ilirskog naselja u Radovinu", *Diadora* 4, 1968a, 53–74.
- Batović, Š. "Istraživanje ilirskog naselja u Bribiru 1967. godine", *Diadora* 4, 1968b, 85–91.
- Batović, Š. "Istraživanje liburnskog naselja u Ninu 1969. godine", *Diadora* 5, 1970, 33–48.
- Batović, Š. "Prapovijesni ostaci na zadarskom otočju", *Diadora* 6, 1973, 5–165.
- Batović, Š. "Istraživanje prapovijesti u Bribiru", *Diadora* 9, 1980, 55–94.
- Batović, Š. "Liburnska grupa", in *Praistorija jugoslavenskih zemalja* V, (ed.) A. Benac, Sarajevo, 1987, 339–390.
- Bertol, A. "Individual finds or a coin hoard: Analysis of the Mazin-type material from the Sveta Trojica hill-fort near Starigrad Paklenica", in *Miscellanea Historiae Antiquitatis: Proceedings of the First Croatian-Hungarian PhD Conference on Ancient History*, (eds.) G. Németh, D. Bajnok, Budapest, 2014, 111–142.
- Bertol Stipetić, A. *Ostava iz Mazina / The Mazin hoard*, Katalozi i monografije Arheološkog muzeja u Zagrebu, svezak XIX, Zagreb, 2022.
- Buršić-Matijašić, K. "Ceramica del castelliere di Monte Orcino in Istria", *Histria Archaeologica* 28 (1997), 1999, 108–134.
- Cambi, N. "Anfore romane in Dalmazia", in *Amphores romaines et histoire économique: dix ans de recherche (actes colloque Sienne 1986)*, Collection de l'École française de Rome 114, Rome, 1989, 311–337.
- Cipriano, M. T., Carre, M.-B. "Production et typologie des amphores sur la côte adriatique de l'Italie", in *Amphores romaines et histoire économique: dix ans de recherche (actes colloque Sienne 1986)*, Collection de l'École française de Rome 114, Rome, 1989, 67–104.
- Čelhar, M., Borzić, I. "Gradina u Zemuniku Donjem – nalazi iz željeznog i rimskog doba", in *Zemunik u prostoru i vremenu*, Zadar, 2016, 68–117.
- Čondić N., Vuković M., *U temeljima grada: iz arheoloških slojeva liburnskoga Zadra / In the city's foundations: the archaeological layers of the Liburnian Zadar*, Katalozi i monografije 27, Zadar, 2017.
- Domiter, O., Radman-Livaja I. "Istraživanje i komunikacija baštine u Starigradu", *Senjski zbornik* 44, 2017, 577–594.
- Dubolnić, M. "Prapovijesna nalazišta na području Starigrada Paklenice", *Radovi Zavoda za povijesne znanosti HAZU u Zadru* 48, 2006, 1–55.
- Dubolnić, M. "Argyrunum i njegov teritorij u antici", *Radovi Zavoda za povijesne znanosti HAZU u Zadru* 49, 2007, 1–58.
- Dubolnić Glavan, M., Glavaš, V. "Prilog poznavanju najstarijeg optjecaja novca na prostoru južnog Velebita / Contribution to the study of the oldest coin circulation on the territory of Southern Velebit", *Prilozi Instituta za arheologiju u Zagrebu* 28, 2011, 95–121.
- Forenbaher, S., Vranjican P. "Vaganačka pećina", *Opuscula archaeologica* 10, 1985, 1–21.
- Glavaš, V., Konestra, A., Tonc, A. "Wine consumption in the Kvarner and Sub-Velebit area (NE Adriatic) in the last centuries BCE: evidence from amphora finds", in *3rd IARPotHP conference Exploring the neighborhood: the role of ceramics in understanding place in the Hellenistic world*, (eds.) I. Kamenjarin, M. Ugarković, Wien, 2020, 271–286.
- Jurišić, M. *Ancient shipwrecks of the Adriatic: maritime transport during the first and second centuries AD*, BAR International Series 828, Oxford, 2000.

- Kolega, M. "Nalazište Ploče – prilog poznavanju liburnske Enone / The Ploče site: a contribution to the understanding of Liburnian Aenona", *Diadora* 26/27, 2012/2013 (2013), 277–332.
- Korošec, J. "Prethistorijski željeznodobni keramički nalazi na Gradini u Danilu kraj Šibenika", *Ljetopis Jugoslavenske akademije znanosti i umjetnosti za godinu 1956*, Knjiga 63, 1959, 214–225.
- Korošec J., Korošec P. "Istraživanja na Bribirskoj glavici u Bribiru", *Diadora* 9, 1980, 95–164.
- Lippolis, E. (ed.) *Catalogo del Museo Archeologico Nazionale di Taranto III.1. Taranto, La necropoli: aspetti e problemi della documentazione archeologica tra VII e I secolo a. C.*, Taranto, 1994.
- Marović I. "Sojeničko naselje na Dugišu kod Otoka (Sinj)", *Vjesnik za arheologiju i historiju dalmatinsku* 94, 2001, 217–295.
- Miše, M. "Prilog proučavanju isejske keramike tipa Gnathia / A contribution to the study of Gnathia ware from Issa", *Vjesnik za arheologiju i povijest dalmatinsku* 106, 2013, 99–130.
- Paraman, L. Ugarković M. "Gradinsko utvrđenje Sutlija: nove spoznaje temeljene na arheološkim nalazima prikupljenim neinvazivnim istraživanjima/The hill-fort of Sutlija: new knowledge based on archaeological finds collected by non-invasive research", *Vjesnik za arheologiju i historiju dalmatinsku* 113(1), (2020/2021), 2021, 41–99.
- Parović-Pešikan, M. "Grčka mahajra i problem krivih mačeva", *Godišnjak Centra za balkanološka ispitivanja* 20(18), 1982, 25–52.
- Radman-Livaja, I., Tonc, A. "Rezultati probnih iskopavanja na Gradini Sv. Trojice 2015. godine", *Annales Instituti Archaeologici* 12, 2016, 152–154.
- Serventi, Z., Vuković, M. "Keramički nalazi iz Glavice – Stare Povelje u kontekstu prapovijesnih naselja na otoku Pagu / Ceramic Finds from Glavice – Stara Povelja in the Context of Prehistoric Settlements on the Island of Pag", *Miscellanea Hadriatica et Mediterranea* 7, 2020, 11–42.
- Šešelj, L. "Utjecaji dirahijskih keramičkih radionica na području srednje Dalmacije", *Vjesnik za arheologiju i povijest dalmatinsku* 98, 2005, 49–61.
- Šešelj, L. *Promunturium Diomedis: Svetište na rtu Ploča i jadranska pomorska trgovina u hele-nističkom razdoblju*, Unpublished PhD thesis, University of Zadar, 2009.
- Šešelj L., Vuković, M. "Liburnsko naselje u Radovinu: preliminarna analiza keramičkog materijala / Liburnian settlement in Radovin: preliminary analysis of pottery assemblage", *Diadora* 26/27, (2012/2013), 2013, 333–350.
- Šokčević, A. *Keramički nalazi s gradine Vrčevo – Gorica*, Unpublished MA thesis, University of Zadar, 2016.
- Tonc, A. "Rezultati probnih istraživanja na Gradini Sv. Trojice kod Starigrada-Paklenice 2010.", *Annales Instituti Archaeologici* 7, 2011, 85–87.
- Tonc, A. "Rezultati probnih iskopavanja na gradini Svete Trojice 2012. godine", *Annales Instituti Archaeologici* 9, 2013, 116–120.
- Tonc, A. "To be or... NOT to be Liburnian. Views on ethnicity in the Iron Age of the eastern Adriatic", in *Who do you think you are? Ethnicity in the Iron Age Mediterranean*, (eds.) F. Saccoccio, E. Vecchi, Accordia Specialist studies on the Mediterranean Volume 8, Accordia Research Institute, University of London, London, 2022, 115–131.
- Tonc, A., Radman-Livaja, I. "Rezultati probnih iskopavanja na gradini Svete Trojice 2013. godine", *Annales Instituti Archaeologici* 10, 2014, 140–143.
- Tonc, A., Radman-Livaja, I. "Il materiale ceramico da Gradina Sv. Trojica: analisi preliminare", in *Rimske keramičarske i staklarske radionice. Proizvodnja i trgovina na jadranskom prostoru*, Zbornik III. međunarodnog arheološkog kolokvija, Crikvenica, 4. – 5. studenoga 2014., (eds.) G. Lipovac Vrkljan, B. Šiljeg, I. Ožanić Roguljić, A. Konestra, Zbornik Instituta za arheologiju 12, Institut za arheologiju, Muzej grada Crikvenice, Crikvenica, 2017, 365–385.
- Tonc, A., Radman-Livaja, I. "Protohistoric dye production on the Eastern Adriatic?", in *Textiles and Dyes in the Mediterranean Economy and Society*. Proceedings of the VIth International Symposium on Textiles and Dyes in the Ancient Mediterranean World, Padova – Este –

- Altino, Italy 17 – 20 October 2016, (eds.) M. Stella Busana, M. Gleba, F. Meo, A. R. Tricomi, *Purpureae Vestes VI, Libros Portico*, Zaragoza, 2018, 225–230.
- Tonc A., Radman-Livaja I. “Tragovi tekstilne proizvodnje na Gradini Svete Trojice”, *Annales Instituti Archaeologici* 17, 2021, 104–111.
- Tonc, A., Radman-Livaja, I., Bertol, A. “Rezultati probnih iskopavanja na gradini Svete Trojice 2014. godine”, *Annales Instituti Archaeologici* 11, 2015, 83–86.
- Tonc, A., Radman Livaja, I., Dizdar, M. “The warrior grave from Sveta Trojica near Starigrad Paklenica”, in *Rimska vojna oprema u pogrebnom kontekstu. Radovi XVII. ROMEC-a. Weapons and military equipment in a funerary context*, Proceedings of the XVIIth Roman Military Equipment Conference Zagreb 2010, (eds.) M. Sanader, A. Rendić-Miočević, D. Tončinić, I. Radman-Livaja, Filozofski fakultet Sveučilišta u Zagrebu, Arheološki muzej u Zagrebu, Zagreb, 2013, 245–258.
- Vuković, M. “Razmatranja o liburnskoj keramici iz sonde 63 s Beretinove gradine kod Radovina / Thoughts on Liburnian pottery found in archaeological trench 63 at the Beretin hillfort in Radovin”, *Diadora* 28, 2014, 21–52.
- Vuković, M. “Preliminarni rezultati rekognosciranja jugoistočnog Velebita / The preliminary results of the survey of southeastern Velebit”, *Diadora* 32, 2018, 49–88.