

THE COPPER AGE SETTLEMENT AT ZALABAKSA

Remains of a Copper Age settlement were uncovered at Zalabaksa, a settlement surveyed as part of the Kerka Valley Micro-Region Project.

In the autumn of 1995, Eszter Bánffy, Mária Bondár, Ferenc Redő and Béla Miklós Szőke identified a roughly 10 m by 10 m large grey patch near the Jewish cemetery. A few worn, indistinct Copper Age and medieval sherds were collected (*fig. 17. 1–27*). In the spring of 1996, Eszter Bánffy, Mária Bondár and Ferenc Redő collected more sherds during their field survey (*fig. 20. 9–22*).¹

The finds indicated the presence of a Copper Age settlement. Since there are few known Copper Age sites in this area – the most important of these being Becsvölgye, where a richly decorated figurine fragment was found in 1951² – we conducted a sounding excavation at Zalabaksa with the aim of determining the nature and the exact age of the site.

The modest OTKA fund and the generosity of the local council enabled us to conduct a three weeks long excavation in the summer of 1996 and 1997.³ We opened four trenches, covering a 216 m² large area, for investigating the site. This report offers an overview of the excavation and its findings.

The site

The site lies on the left side of Road 86, by the northern end of Zalabaksa, south of the abandoned Jewish cemetery, on the hill between the cemetery and the Castrol car dismantler (*fig. 1*). The area does not have a separate geographic name according to the 1:10,000 map; the locals call the area “Zsidótemető” [Jewish cemetery], a name we have adopted and retained. The one-time Jewish cemetery contains no more than a few gravestones, enclosed within a hedge. It is under constant decay, with even the gravestones often removed. The area of the site was owned by the local forestry at the time of the investigation, which leased it to various individuals for cultivation.

Description of the excavation

In 1996, I opened two trial trenches in order to find the patches, i.e. the one-time settlement features observed during the field survey. The soil was extremely compact, yellow clay, a type primarily characteristic of the Lenti Basin. Detailed observations, the identification of settlement features based on discolorations in the soil was only possible at dawn and in the early morning hours owing to the almost unbearable heat and the compact clay. Owing to the compactness of the soil and the heat we could only proceed rather slowly. We removed the humus every two meters, watered the soil and then covered it with plastic foil.

Trench 1

The first trial trench, oriented in a north to south direction and measuring 8 m by 3 m, was opened in the area of the intensive patch observed during the field survey. We removed the humus along the entire length of the trench. The reddish layer mixed with specks of charcoal and small fragments of burnt daub could be well distinguished from the overlying reddish, ferriferous clay under the humus layer. We found two post-holes in the trench, lying some 1.5 m from each other.

¹ For a description of the finds collected during the field survey, cf. pp. 69–71, site 44, in this volume.

² *J. Korek*: Adatok Zala megye őskorához (Angaben zur Urgeschichte des Komitates Zala), in:

I. Szentmihályi (ed.): A Göcsej Múzeum Jubileumi Emlékkönyve 1950–1960. Zalaegerszeg 1960, 67–82.

³ I would here like to thank Mayor Ottó Horváth for his generous and unfailing support.

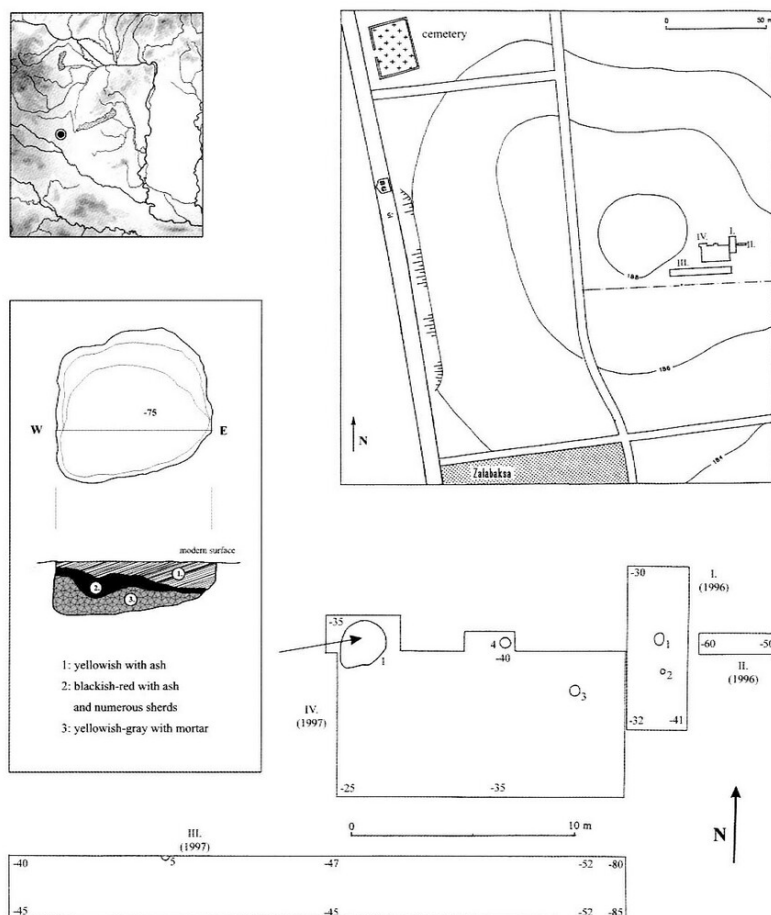


fig. 1. Zalabaksa-Zsidótemető. Map of the excavation

Post-hole 1 had a diameter of 50 cm and a depth of 80 cm with a loose, light grey fill. A pebble and a worn, thick-walled, reddish body sherd lay at a depth of 30 cm. Three other indistinct, worn Copper Age sherds and another pebble were recovered from a depth of 70 cm during its clearing.

Post-hole 2 had a diameter of 20 cm and a depth of 57 cm. It did not contain any finds.

We opened a new trench in order to determine whether the reddish layer mixed with charcoal and burnt daub fragments was an artificial, archaeological feature or a natural phenomenon.

Trench II

The second trial trench, measuring 4 m by 1 m, was opened in line with the large post-hole in Trench I; the trench was perpendicular to the first trench and lay 0.5 m from it. The yellowish clayey soil was underlain by a mixed greyish clay layer, under which we found a layer of reddish clay. We investigated the area to a depth of three spade spits.

The large, deep post-hole and the reddish fill mixed with charcoal specks and burnt daub fragments suggested a building. Unfortunately, it proved impossible to assign the pottery

sherds found during the field survey to a specific Copper Age culture and neither was it clear whether there was a building in the excavated area during the five day sounding excavation. Knowing that most Copper Age settlements are characterised by a rather loose settlement structure with houses standing far apart from each other, it is rather difficult to find house remains or a continuous row of post-holes on a smaller surface.

We covered Trench I with a plastic foil before refilling it in the hope that we could continue the excavation the next year in order to determine the age of the Copper Age settlement and the extent of the building to which the post-holes had belonged. We hoped that we could remove the upper humus layer mechanically and thus investigate a larger area.

In 1997, we received enough funds to conduct a two-week excavation. The mayor of Zalabaksa provided a bulldozer for the excavation. Unfortunately, the driver was rather inexperienced and we could not remove the upper humus layer as we had originally planned; only a 15 cm thick layer was removed mechanically from a 25 m by 40 m large area. We had to continue the excavation manually, which greatly limited the potential results in view of the available funds and the time at our disposal.

Trench III

We opened an east–west oriented, 30 m by 3 m large trench in the area cleared by the bulldozer. The virgin soil lay at a depth of 40 cm in the western half of the trench, while the reddish layer mixed with specks of charcoal and burnt daub fragments was noted in its eastern half. We also recovered a few pottery sherds. The trench did not contain any settlement features, except for the section of a post-hole (post-hole 5, with a diameter of 40 cm and a depth of 35 cm).

According to the locals, the “fill” with charcoal specks and burnt daub fragments did not represent the remains of a levelled prehistoric building, but was natural clay, similar to the one from Zalabaksa-Cup used by the brick factory before it was closed down. There were quite many potters active in the area; as a matter of fact, we noted several sources of good quality clay for pottery manufacture in the ploughland.

In the second week of the excavation, the mayor provided a new, more experienced bulldozer operator. Even so, we had to discard our original plan for the investigation of a larger area and the humus was only removed from a 20 m by 10 m large area between the area excavated in 1996 and Trench III. The outlines of a pit and two post-holes could be observed after the removal of the upper humus layer.

Trench IV

The new trench was opened in the mechanically cleared area. The trench measured 7 m by 14 m, its distance from Trench III was 3 m. After clearing, we immediately covered the visible settlement features – two post-holes and a larger pit – with plastic foil to prevent the soil from drying out.

Post-hole 3 had a diameter of 30 cm and a depth of 40 cm. It yielded three indistinct Copper Age body sherds.

Post-hole 4 had a diameter of 40 cm, a depth of 45 cm. Its fill contained small, indistinct Copper Age sherds.

Pit 1 had an irregular shape. Its sides were straight and it had a dished floor. Only a smaller part fell into the trench and we therefore had to enlarge the trench in that area. Its diameter was roughly 230 cm, its depth was 75 cm.

We halved the pit, first clearing its southern half. The pit was outlined by a roughly 15–20 cm wide black patch with burnt daub fragments. The fill of the pit was made up of yellowish-black clay mixed with burnt daub fragments, which did not contain any finds, under which lay a loose, black layer containing burnt daub fragments and crumbling pottery sherds. This layer was roughly 20 cm thick and it yielded various finds. It was followed by a yellowish pebbly layer and a greyish one. The finds from the northern half of the pit too were recovered from the black layer mixed with charcoal. Most of the finds came from this pit.

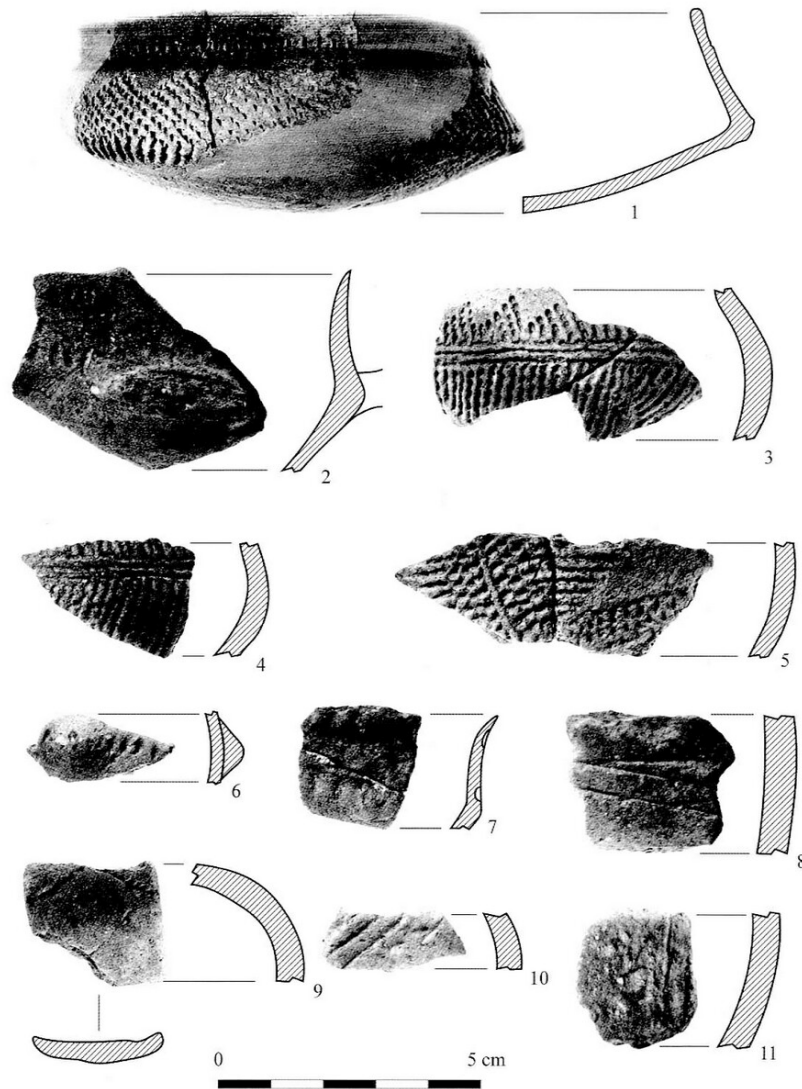


fig. 2. Zalabaksa-Zsidótemető. Finds from pit 1

Description of the finds

1. One handled cup. Dark grey biconical cup with short neck and rounded belly, decorated with impressions around the neck and impressions arranged into triangles on the belly. The handle broke off. The cup was assembled from its fragments. Diam. of mouth: 9 cm, height: 4,5 cm (*fig. 2. 1*).
2. Fragment of a one-handled cup. Small, brownish cup decorated with impressions under the rim and on the neck. The handle, originally rising above the rim and resting on the vessel shoulder, is broken. It is unclear whether the belly was also decorated (*fig. 2. 2*).
3. Cup fragments. Fragments of greyish and brownish thin-walled cups decorated with impressions (*fig. 2. 3–5*).
4. Body sherd from a small, brownish cup decorated with a small knob encircled by a pattern of short stabs on its belly (*fig. 2. 6*).
5. Neck fragment of a reddish, thin-walled cup decorated with a pattern of short stabs arranged into two horizontal rows (*fig. 2. 7*).
6. Brownish body sherds decorated with incised lines (*fig. 2. 8, 10–11*).
7. Fragment of a brownish, narrow strap handle decorated with a pattern of short stabs arranged into two arcs along the handle's axis (*fig. 2. 9*).
8. Rim and body sherds from a large, thick-walled, greyish conical bowl with funnel neck (*fig. 3. 1*).
9. Brownish, carefully made, large storage jar (?) with a narrow, horizontally set subcutaneous handle under the rim (*fig. 3. 2*).
10. Base fragment from a light grey, thick-walled pedestalled vessel tempered with chaff (*fig. 3. 3*) and a body sherd from a similar vessel.
11. Brownish storage jar (?) with characteristic profile decorated with a small, round, perforated knob on its neck (*fig. 3. 4*).
12. Brick coloured, poorly fired body sherd decorated with an upward pointing, small, pointed knob (*fig. 3. 5*).
13. Body sherd from a large, brownish storage jar decorated with a finger impressed rib on the belly (*fig. 3. 6*).
14. Body sherd from a light brownish storage jar decorated with a small loop handle (*fig. 3. 7*).
15. Fragment of a brown, thin-walled, conical bowl with funnel neck (*fig. 4. 1*).
16. Rim and body sherds from brick coloured, poorly fired pots (*fig. 4. 2*).
17. Rim fragments from reddish-brown, thin-walled pots with cylindrical neck, assembled from their fragments (*figs 4. 3; 5. 9*).
18. Rim and neck fragments from larger, light brown, thin-walled pots assembled from their fragments (*figs 4. 4; 5. 15*).
19. Rim fragments (*fig. 4. 5. 7*) and body sherds from large, reddish-brown, thick-walled storage jar; one sherd has a handle set on the shoulder (*fig. 5. 5*).
20. Body sherd from a large, dark brown, biconical storage jar with the stump of the handle on the shoulder (*fig. 4. 6*).
21. Rim fragments from dark grey and brownish pots with characteristic, inward angular profile along a short section (*fig. 5. 1–3*).
22. Rim fragment from a greyish, thick-walled, hemispherical bowl (?) (*fig. 5. 4*).
23. Rim fragments from greyish, thin-walled jugs (*fig. 5. 6*).
24. Rim fragment from a small, greyish bowl with straight cut rim (*fig. 5. 7*).
25. Fragments of brick coloured loop handles and brownish and reddish-brown strap handles (*fig. 5. 8, 10*).
26. Rim fragment from a light grey jug with characteristic profile and the stump of a handle rising above the rim (*fig. 5. 11*).
27. Body and base fragments from reddish, thick-walled storage jars (*fig. 5. 12, 14*).
28. Undecorated body and base sherds from reddish, thick-walled jugs (*fig. 5. 13*).
29. Body sherd from a greyish-brown, large jug decorated with slightly curving, obliquely incised parallel lines (*fig. 6. 1*).
30. Handle fragment of a grey clay ladle (*fig. 6. 2*).
31. Three cylindrical, perforated clay beads of varying size (*fig. 6. 3, 6, 8*).
32. Base fragment of a reddish strainer (*fig. 6. 4*).
33. Body sherd from a greyish cup decorated with punctates (*fig. 6. 5*).
34. Reddish and light brown chert fragments (*fig. 6. 7*).
35. Large, light brown, flattened biconical spindle whorl (*fig. 6. 9*).
36. Undecorated fragments from the basal part of greyish jugs and storage jars.

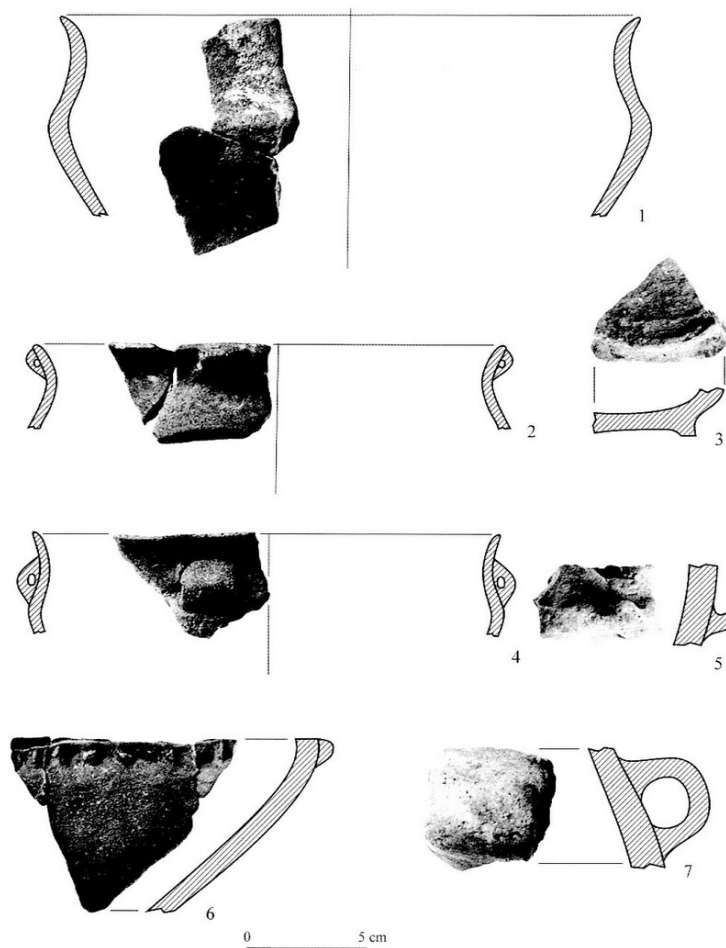


fig. 3. Zalabaksa-Zsidótemető. Finds from pit 1

- 37. Body sherds from a greyish, biconical bowl with rounded belly.
- 38. Body and base sherds from dark grey, thick-walled storage jars.
- 39. Body and base sherds from light brown, thin-walled pots.
- 40. Fragment of a light grey, short loop handle.
- 41. Rim fragment of a dark brown pot with characteristic profile.
- 42. Body sherd from a dark brown, thick-walled pot.
- 43. Rim fragment from a brownish, carefully made jug with curving rim and smoothed surface.
- 44. Body sherds from dark brown and reddish, thin-walled jugs decorated with small, round knobs.
- 45. Rim fragment from a reddish, thin-walled jug.
- 46. Rim and body fragment from a grey and red mottled vessel.
- 47. Body sherd from a greyish brown vessel with smoothed surface.
- 48. Loop handle fragment from a greyish brown jug.
- 49. Rim fragments from greyish, thick-walled bowls.
- 50. Rim fragments from reddish, thin-walled jugs.
- 51. Body sherd from a brownish-red cup with the stub of the handle.

The findings of the excavation

A glance at the finds from the pit excavated at the Zalabaksa site reveals that the cultural attribution of the settlement would be rather difficult on the basis of the analogies to individual sherds. One part of the pottery finds would not be alien to the Balaton–Lásinja culture, while others, such as the bowl with characteristic profile and the subcutaneous handle, are also typical of the so-called Protoboleráz material as defined by Nándor Kalicz (e.g. from the Keszthely-Fenekpuszta site).

Several traits recalling the Balaton–Lásinja culture can be noted among the pottery finds (greyish-blue, worn surface; poorly fired fabric; bowls with a sharp carination; ladle; pedestalled bowl; clay beads). Had the finds not included decorated vessel fragments, the site could well be regarded as a settlement of the Balaton–Lásinja culture. The few sherds decorated with a grid pattern and incised lines (figs 2; 6. 1), the bowl with characteristic profile and the vessels with subcutaneous handles (fig. 3. 1–2) and the pots with characteristic profile (figs 3. 4; 5. 1–3), however, indicate that the pit was a settlement feature of the *Furchenstich* (Stroke Ornamented Pottery) culture. The finds from the closed pit at the Zalabaksa site can thus be assigned to the *Furchenstich* pottery culture. These finds come from a period, which was bound to the preceding Balaton–Lásinja culture with many strands, and they represent the household wares of a community, which integrated many new elements into its material culture.⁴

Furchenstich pottery is characterised by a handful of vessel types: a few bowls, one-handed jugs and wide-mouthed cups, coming both in undecorated and decorated varieties, amphoras with a short handle and ribbed decoration, and pots with slightly coarsened surface and the occasional scalloped rim (fig. 7). Fine wares were usually carefully made vessels, often with a polished surface. The cups and jugs in this category are decorated with bundles of incised lines, patterns of stabs arranged into bands and highlighted with lime incrustation. Coarse pottery is characterised by vessels with a coarsened surface. These pottery types all occur among the finds from Zalabaksa.

Owing to the excavation circumstances described in the above, the settlement features uncovered at Zalabaksa are unsuitable for reconstructing the layout of the settlement. It seems quite certain that the large post-holes were dug for the timbers of a rather massive building. We know little about the houses and the settlement structure of the *Furchenstich* pottery culture.⁵ While our knowledge of the houses and the settlements of the preceding Balaton–Lásinja period has been greatly expanded owing to the large-scale investigations conducted at Zalavár-Basasziget,⁶ Kaposvár-61-es út,⁷ and in the Győr area,⁸ only pits have been uncovered on *Furchenstich* sites, meaning that other settlement features of this culture have not been excavated even during the course of large-scale excavations.

The internal periodisation of the Middle Copper Age has been greatly refined by research conducted during the past few decades.

Originally regarded as a cultural complex with three separate phases (Balaton group and Balaton–Lásinja culture),⁹ the Balaton complex is now interpreted as three

⁴ In contrast to László András Horváth, who assigned the Zalabaksa site to the Protoboleráz horizon (Horváth 2001 Abb. 5), I have assigned this site to the *Furchenstich* pottery culture.

⁵ Virág 1996 24; Horváth – H. Simon 2003 127–128.

⁶ Zs. Virág: Vorbericht über die Ergebnisse der Freilegung der kupferzeitlichen Siedlung von Zalavár-Basasziget (Angaben zur Siedlungsstruktur und Wirtschaft der Balaton–Lásinja [L.]-Kultur). *ZalaiMúz* 2 (1990) 71–77; Virág 1996.

⁷ K. Somogyi: A Balaton–Lásinja kultúra leletanyaga Somogy megyében (Die Funde der Balaton–Lásinja-Kultur im Komitat Somogy). *CommArchHung* 2000 5–48; K. Somogyi: Előzetes jelentés a Kaposvár-61-es út elkerülő szakasz 1. sz. lelőhelyén végzett feltárásról (Preliminary report of the excavation of

Site No. 1 situated on the encircling section of Road 61 around Kaposvár). *SMK* 14 (2000) 245–249.

⁸ Zs. M. Virág – M. Bondár: Rézkor. Települések [Copper Age. Settlements], in: Zs. Visy (ed.): *Magyar régészet az ezredfordulón*. Budapest 2003, 128.

⁹ N. Kalicz: A rézkori balatoni csoport Veszprém megyében (Die kupferzeitliche Balaton-Gruppe im Komitat Veszprém). *VMMK* 8 (1969) 83–89; Kalicz 1969–1970; N. Kalicz: Über die chronologische Stellung der Balaton-Gruppe in Ungarn, in: B. Chropovský (hrsg.): *Symposium über die Entstehung und Chronologie der Badener Kultur* (Symposium 8.–11. Dezember 1969, Nitra). Bratislava 1973, 131–136; N. Kalicz: Újabb adatok a rézkori Hunyadi-halom csoport időrendjéhez (Neue Beiträge zur Chronologie der kupferzeitlichen Hunyadi-halom-Gruppe). *SzMMÉ* 1979–1980, 43–62.

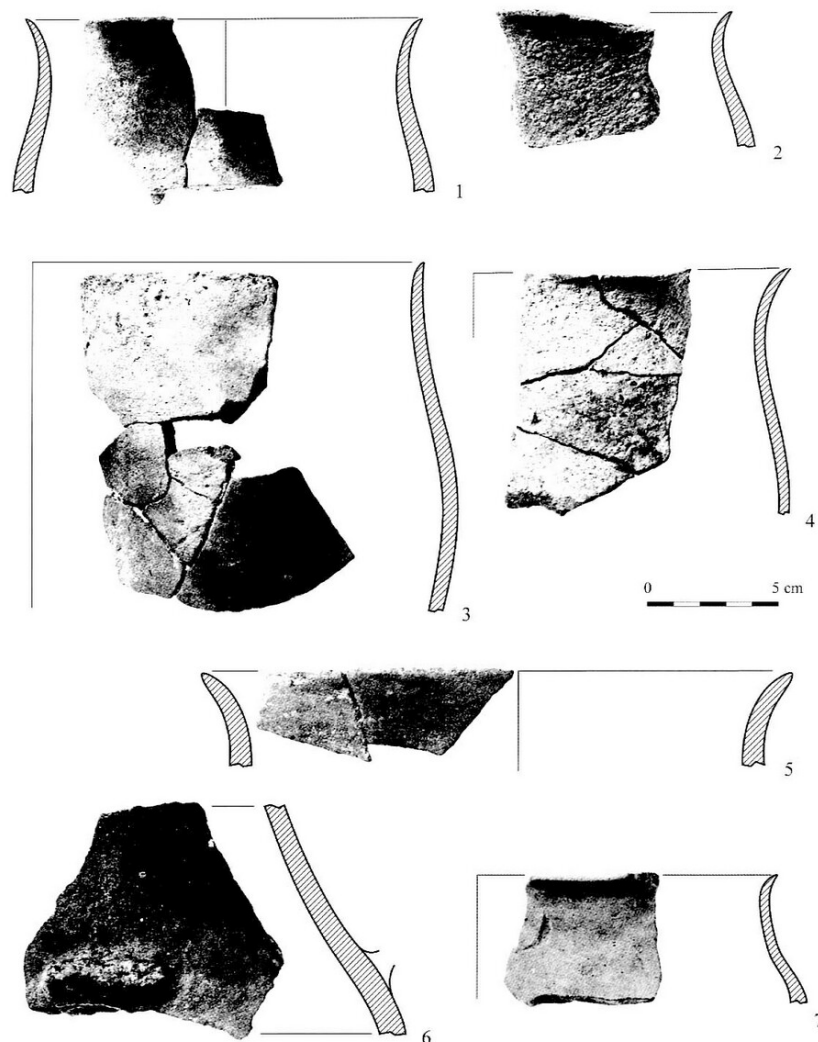


fig. 4. Zalabaksa-Zsidótemető. Finds from pit 1

separate cultures, which emerged under different cultural impacts. These diverse cultural components were discussed by Nándor Kalicz in his first overview.¹⁰ Balaton I was dominated by southern elements, principally Vinča influences,¹¹ while in the Balaton II–III period, cultural contacts shifted more to the west, with cultural impacts from the eastern Alpine region.¹² In his study on the historical context of the Balaton–Lásinja culture, Kalicz defined Balaton–Lásinja I and Balaton–Lásinja II–III as two separate cultures,¹³ and suggested that the latter should rather be labelled *Furchenstich* pottery culture.¹⁴ In

¹⁰ Kalicz 1969–70 87–88.

¹¹ Kalicz 1969–70 87.

¹² Kalicz 1969–70 88.

¹³ N. Kalicz: The Balaton–Lásinja culture groups in Western Hungary, Austria and Northwestern

Yugoslavia. Concerning their distribution and origin. JIES 8 (1980) 247–267; Kalicz 1982 3, 9.

¹⁴ Kalicz 1982 8.

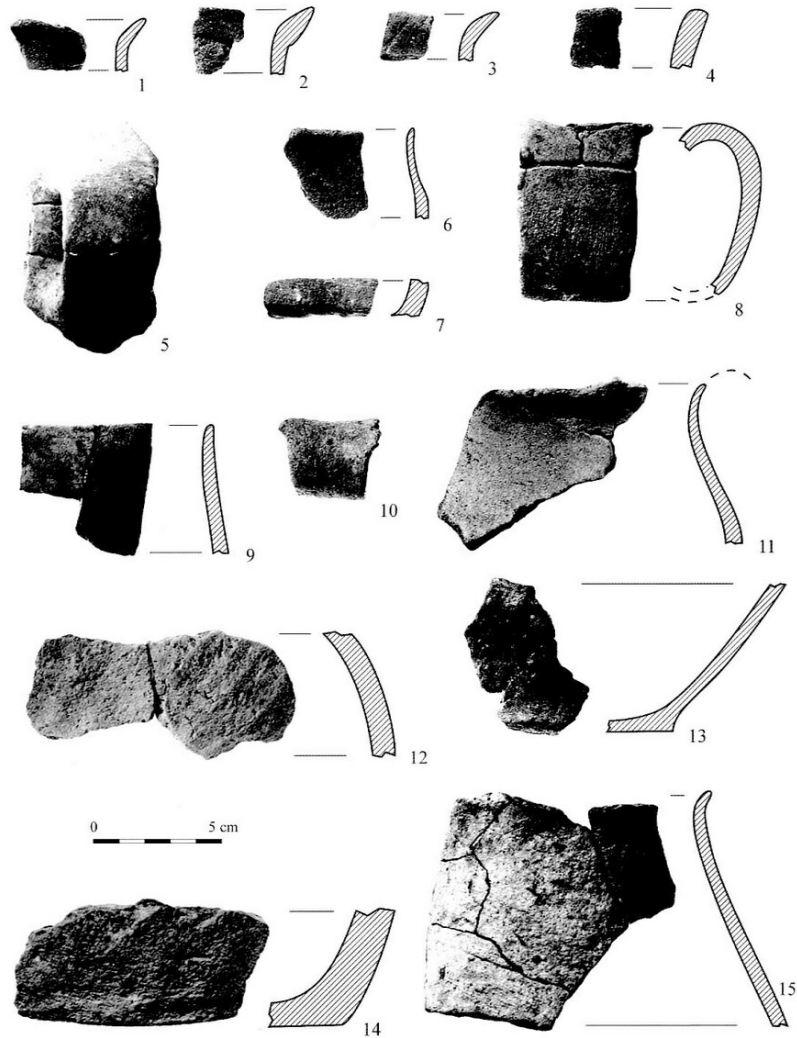


fig. 5. Zalabaksa-Zsidótemető. Finds from pit 1

his most recent studies, Kalicz regarded Balaton I as corresponding to the Lásinja I culture and he used this label for the Balaton–Lásinja culture.¹⁵ The periodisation of the Balaton–Lásinja II–III culture was similarly refined: a part of the sites earlier assigned to Balaton–Lásinja II and Balaton–Lásinja III are now known to be *Furcheustich* sites, while a new cultural unit, the Protoboleráz culture has also been distinguished among the Balaton III sites.¹⁶ The typological separation of the Protoboleráz culture was based on the observation that while several *Furcheustich* forms survived, low, wide-mouthed, one-handed cups

¹⁵ Kalicz 1991 Abb. 4; N. Kalicz: Die Balaton–Lásinja Kultur und ihre südlichen Beziehungen. SP 11–12 (1992) 313–315; Kalicz 1993 329; N. Kalicz: Die Balaton–Lásinja-Kultur in der Kupferzeit Südost- und Mitteleuropas, in: T. Kovács (hrsg.): Neuere

Daten zur Siedlungsgeschichte und Chronologie der Kupferzeit des Karpatenbeckens. IPH 7. Budapest 1995, 37.

¹⁶ Kalicz 1991 375, 380; Kalicz 1993 329; Kalicz 2001.

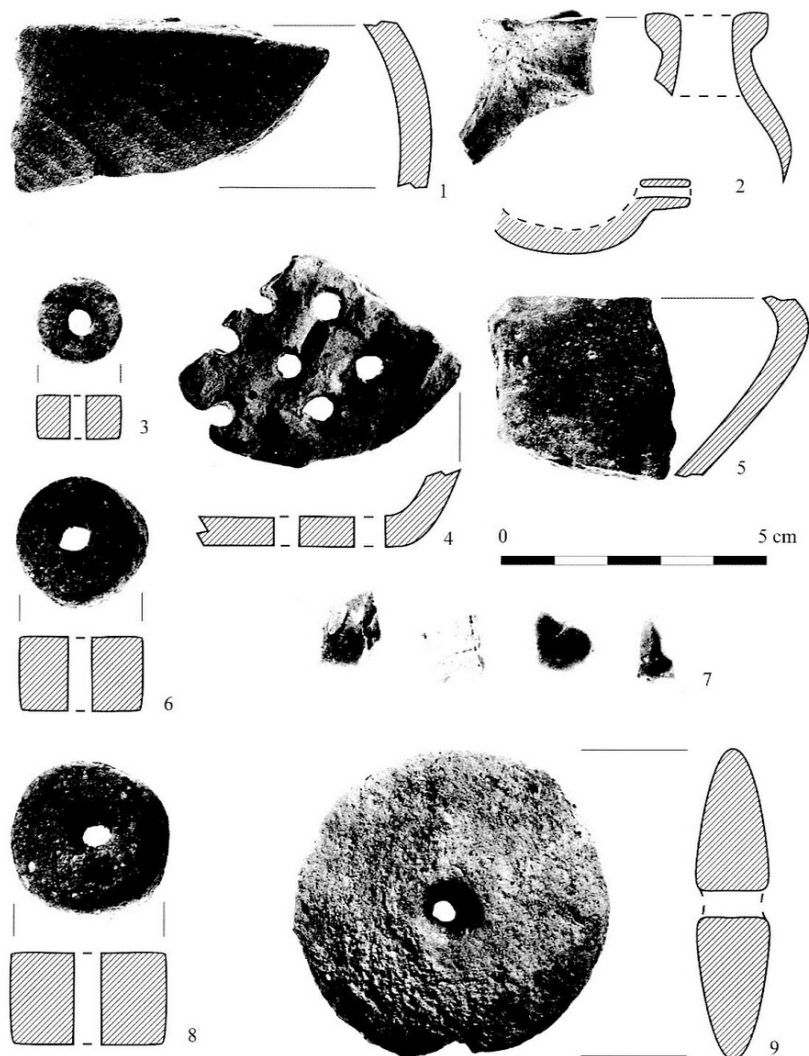


fig. 6. Zalabaksa-Zsidótemető. Finds from pit 1

with the characteristic ornamentation are lacking from Protoboleráz, and new elements, such as channelling, made their appearance. *Kerbschnitt* (excised patterns), *Furchenstich* (stab and drag) and incised network patterns disappeared or were transformed. Incrustation too disappeared.¹⁷ According to Kalicz's most recent overview,¹⁸ thirty-three sites can be assigned to the Protoboleráz horizon in the Carpathian Basin, with ten new sites identified during the past ten years.¹⁹ This new cultural unit, however, is a source of uncertainties in the cultural attribution of find assemblages and also in archaeological terminology. The

¹⁷ Kalicz 1991 375, 380.

¹⁸ Kalicz 2001 417.

¹⁹ Kalicz 1991 Abb. 17; Kalicz 2001 Karte 1.

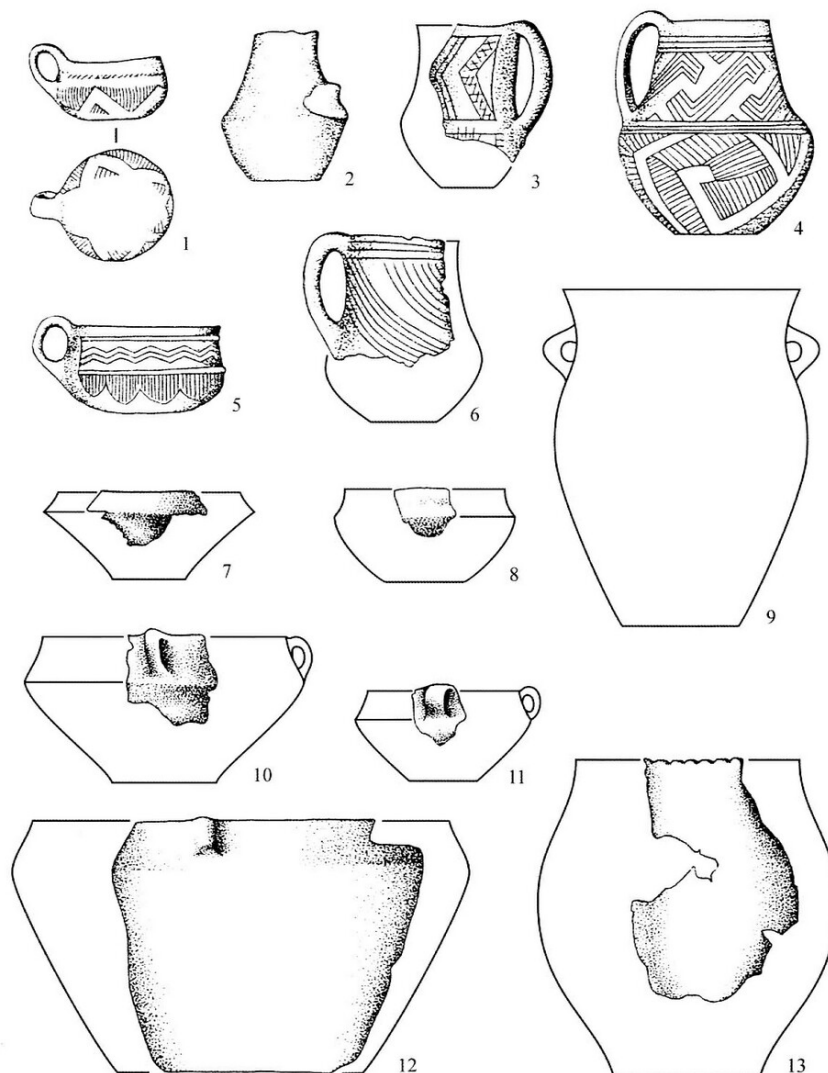


fig. 7. Type chart (after *Kalicz 1991* and *Točík 1969*)

demonstration of typological differences is currently based on stray finds and is sometimes quite vague. As a matter of fact, I have my doubts whether certain sites can indeed be assigned to the Protoboleráz horizon.²⁰ Excavations conducted over extensive areas using up-to-date techniques will no doubt contribute to resolving this issue.

²⁰ *M. Bondár*: L'état des recherches sur la culture de Baden en Hongrie. (Les découvertes récentes concernant la période ancienne), in: *Roman – Diamandi 2002* 440; *M. Bondár*: A badeni kultúra

kutatási helyzete Magyarországon. Vázlat (Der Forschungsstand der Badener Kultur in Ungarn. Abriss). *MFME – Studia Archaeologica* 8 (2002) 9.

The *Furchestich* pottery culture (known as the Bajč–Retz–Gajary and Kevderc–Djerdap complex in neighbouring countries) has been discussed in several studies.²¹ László András Horváth too has devoted several studies to the *Furchestich* finds from Hungarian sites and the research of this culture.²² He has offered an excellent overview of the chronology, the settlements and the few known burial of the *Furchestich* pottery culture, together with an analysis of the pottery types and the metal finds.²³

Summary

One result of the Kerka Valley Micro-Region Project was the investigation of a Middle Copper Age settlement, where one of the features yielded a rich assemblage of *Furchestich* pottery.

Very little was known about the Copper Age in this region before the micro-region investigation, even though the discs from Csáford and the idol from Becsvölgye indicated that this region had been settled by larger communities during the Middle Copper Age. However, only a few stray finds were known before the systematic field surveys. A total of five new Copper Age sites were identified in the Kerka Valley (Szentgyörgyvölgy-Katolikus templomdomb, Csesztreg-Sarjas kertek, déli vég, Ramocsa-Cikkelyes, Kerkakutas-Cupi patak and Nemesnép-Kövecses-dűlő); one of these, the Csesztreg site was occupied by a *Furchestich* community. Another twelve sites are known from the eastern part of County Zala.²⁴ In other words, we now know that the region which was a “*terra incognita*” owing to the lack of research, had been continuously settled, as shown by the growing number of newly identified sites. The excavations conducted in association with the motorway construction projects will undoubtedly enrich our knowledge of the life of the Middle Copper Age communities in this region.

²¹ O. Seewald: Die jungneolithische Siedlung in Retz (Niederdonau). PHWien 7 (1940) 1–15; A. Točík: Keramika zdobená brázdovým vpichom na juhozápadnom Slovensku (Die Furchestichkeramik in der Südwest-Slowakei). PA 52 (1961) 321–344; A. Točík: Záchraný výskum v Bajči–Vlkanove v rokoch 1959–1960 (Rettingsgrabung von Bajč–Vlkanovo in den Jahren 1959–1960). SZ 12 (1964) 5–185; E. Ruttkay: Eine neue Grube mit Furchestichkeramik aus Niederösterreich. AKorr 1 (1971) 141–146; V. Janák: Keramika typu Retz–Křepice–Bajč ve Středním Podunají a problémy jejího vzniku (Die Keramik vom Typus Retz–Křepice–Bajč im mittleren Donaugebiet und ihre Entstehungsprobleme). SPFFBU 20–21 (1976) 25–33; S. Dimitrijević: Zur Frage der Retz–Gajary Kultur in Nordjugoslawien und ihrer Stellung im Pannonischen Raum. BRGK 61 (1980) 15–89; E. Ruttkay: Zur Problematik der Furchestichkeramik aus östlichen Alpenvorlandes: Beitrag zum Scheibenhenkelhorizont. SIA 36 (1988) 225–240; E. Ruttkay: Das Ende der donauländischen Welt. MAGW 121 (1991) 159–181; E. Ruttkay: Spätneolithikum, in: E. Lenneis – Chr. Neugebauer-Maresch – E. Ruttkay (hrsg.): Jungsteinzeit im Osten Österreichs. Wissenschaftliche Schriftenreihe Niederösterreich 102/103/104/105. St. Pölten – Wien 1995, 108–209; E. Ruttkay: Zur jungneolithischen

Furchestichkeramik im östlichen Mitteleuropa. Die Fazies Gajary, in: C. Becker et al. (hrsg.): Chronos. Beiträge zur Prähistorischen Archäologie zwischen Nord- und Südosteuropa. Festschrift für Bernhard Hänsel. Espelkamp 1997, 165–180; J. Pavúk: Hausgrundriss und Furchestichkeramik der Gruppe Bajč–Retz aus Čataj in der Slowakei, in: Roman – Diamandi 2002 563–578.

²² L. A. Horváth: Beziehungen zwischen der Tiefebene und Transdanubien in der mittleren Kupferzeit. ZalaiMúz 2 (1990) 113–135; L. A. Horváth: A Kárpát-medence középső rézkorának történeti és kronológiai kérdései (A tüzdelt barázdás keramika helyzete az Alföldön) [Historical and chronological issues of the Middle Copper Age in the Carpathian Basin. Furchestich pottery in the Great Hungarian Plain]. Budapest 1993. PhD Dissertation; L. A. Horváth: Beiträge zur Chronologie der mittleren Kupferzeit in der Grossen Ungarischen Tiefebene. ActaArchHung 46 (1994) 73–105; L. A. Horváth – K. H. Simon: A neolitikum és rézkor Zalaegerszeg környékén [The Neolithic and the Copper Age in the Zalaegerszeg area], in: I. Kapiller (ed.): Zalaegerszeg évszázadai. Várostarténeti tanulmányok. Zalaegerszeg 1997, 7–48; Horváth 2001.

²³ Horváth – H. Simon 2003.

²⁴ Horváth – H. Simon 2003 124–126.

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