# THE CULTURAL AND CHRONOLOGICAL CONTEXT OF THE BRONZE AGE CEMETERY FROM SEBEȘ—ÎNTRE RĂSTOACE

# Gabriel BĂLAN

Muzeul Național al Unirii Alba Iulia, Romania liviugabrielbalan@yahoo.com

# Colin P. QUINN

Hamilton College, Anthropology Department Clinton, NY, USA cquinn@hamilton.edu

# **Gregory HODGINS**

University of Arizona, AMS Laboratory Tucson, AZ, USA ghodgins@email.arizona.edu

# **Keywords:**

The Bronze Age cemetery at Sebeş-Între răstoace was discovered in the summer of 2011 and rescue archaeological excavations were conducted during November and December of the same year (Fântâneanu et al. 2013, 173; Fântâneanu et al. 2014, 1). The site is situated on a low terrace of the Secaş River, close to the foothills of the South-Western edge of Secaş Plateau, part of the Transylvanian Plateau. The Mureş River, which in prehistory was an important route that linked Transylvania to Pannonian Plain (O'Shea 2011), runs at 8 km WNW from the site (Fig. 1–2).

The funerary area at Sebeş includes 61 cremation in urn burials (M1–61) and two stone structures (features Cx. 21 and 73) identified in the site Între răstoace (Pl. 1/1–2). The necropolis is covered by a depositional level with artifacts dated to the Late Bronze Age/Early Iron Age (Gáva culture) and Migration

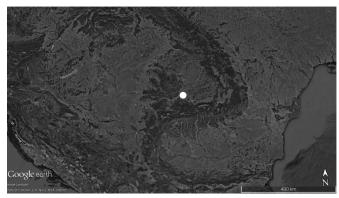


Fig. 1. Location of Sebeş–Între răstoace site in the Carpathian Basin on a satellite image (Google Earth).



Fig. 2. Delimitation of the site on the motorway project.

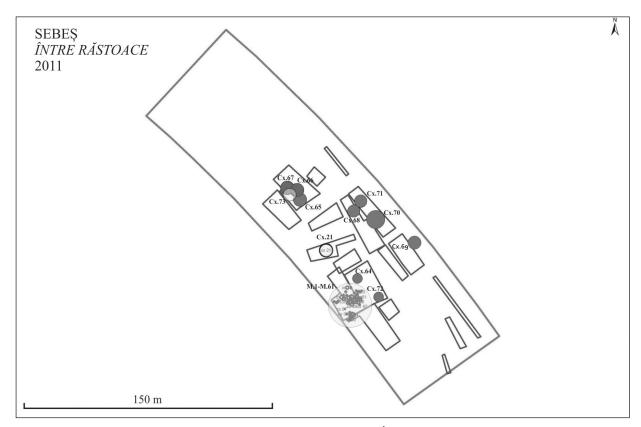


Fig. 3. Plan of the excavations in Sebeş–*Între răstoace* site.

Period (Fig. 3). The Bronze Age level, contemporary with the cemetery, is a brown clayey soil identified at 1.40–1.60 m depth in the main group of burials area and at 1.10–1.20 in Cx. 73 area. The Bronze Age level is situated directly over the archaeologically sterile soil. The outline of pits into which the urns at Sebeş-Între răstoace were deposited could not be identified because the soil used for their filling has the same texture and colour as the one they were dug into. Based on previous work at Wietenberg cemeteries at Turia (Székely 1995, 127-130, fig. 3) and Aiton (Soroceanu et al. 1976, 60), we suppose that there were two types of pits: (a) rectangular shaped, in which stone structures (cists) were arranged, as the case of M38, M44 and Cx. 21, and (b) round or oval shaped, which contain the urns. In M49 two urns were placed next to each other (Fig. 4/3). Inside, the remains of a 23-30 year old female (49a) and a 2-5 year old child (49b) were identified. A few other graves from the cemetery are also placed in close proximity with each other (Pl. 1/2), which may represent a consanguinity or family relationship: burials M3 (adult male), M4 (9 months-1 year old child) and M5 (6 months-1 year old child); burials M41 (adult male), M42 (1-3 years old child) and M43 (adult male); burials M38 (9-10 years old child) and M44 (adult male).

In the funerary area at Sebeş stone structures built inside and outside grave pits were discovered (Pl. 1/1). The structures built inside pits are cists made of carved stone slabs, blocks or boulders placed to create rectangular boxes to be used for urn deposition. In the main group of burials at Sebeş (group I) two such cists were placed next to each other (burials M38 and 44) (Fig. 5/1). A third cist which did not contain vessels, pottery fragments, bones or ashes was constructed at 26 m NW from the main group of graves (Fig. 5/4). This archaeological context is hypothesized to have been disturbed, possibly as a process of returning (Quinn 2015) or robbing the grave during ancient times. The stone structures outside of pits are made of slabs or big rocks used to cover the graves: M12, M13 (Fig. 5/3), M15 and M32 (Fig. 5/2). Urns covered with lids were found in direct association with these slabs or stones. Another type of stone structure is Cx. 73, built 35 m to the NW of the cist in Cx. 21 and 61 m NW from the main burial group. This structure was made up of a 6.4 m row of slabs, fixed on the edge and oriented E-W. The function of this feature is unknown, but it is possible that it is part of a structure similar to a funerary enclosure or cist. A Late Bronze Age and two deepened Migration Period dwellings were built above and near this structure, disturbing the Middle Bronze Age stone structure.

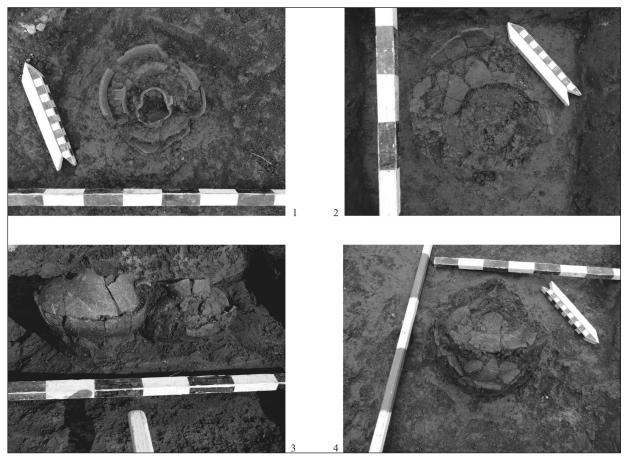


Fig. 4. Burial types at Sebeş: 1. Urn, lid and addiacent vessel (M12); 2. Urn without lid (M27); 3. Double burial (M49); 4. Urn and lid (M25).

The ceramic vessels in which cremated remains were placed (urns), as well as the vessels used to cover the urn opening (lids), serve as containers and can be considered to be part of the grave structure, along with the pit and other stone structures (MOTZOI-CHICIDEANU 2011, 62). The graves from Sebes can be divided in two main categories: (a) with urn without lid (27 burials) and (b) with urn and lid (33 burials). Wietenberg burials were placed at a shallow depth below the Bronze Age ground level, which left the burials susceptible to later disturbances (more recent habitations, agricultural workings, floods etc.). These disturbances especially impacted the upper part of graves, including the lid. Even in well-preserved contexts, later disturbances can be identified.

In 4 burials at Sebes, additional vessels deposited in the urn (M3 and M56) or in the lid-vessel (M12) were found (Fig. 4/1). Fragments from an additional vessel were discovered near the urn of burial M43, but it is possible that they fell into the pit from the upper side of the urn.

Faience beads were found among the calcined bones in 6 burials (M3, M4, M24, M25, M29 and M42). It is interesting that faience beads appear mostly in the burials of infants, except for burial M29 where an adult female of 25-40 years old was deposed.

Ceramic fragments from several types of vessels were discovered, but in some cases they could be reconstructed (Anghel 2014). The vessel types from the cemetery are pots (type A), bowls (type B), a dish (type C), cups (type D) and a pyxis (type E) (Fig. 6). The general typologies used for Wietenberg ceramics that we refer to were created by Chidioşan (1980, 27-60), Andriţoiu (1992, 35-44) and Boroffka (1994, 115-198). Pots of various types were found in the greatest number: A.1 is biconical shaped, with a well outlined shoulder and the maximum diameter of the body wider than the vessel's rim which is slightly or more everted; in some cases, it has knobs or small handles on or under the maximum diameter (type Chidioşan A3; Boroffka TA4b-c, e-f; Andriţoiu IV/e; Berecki I.6); analogies are observed at Turia (Székely 1995, pl. III/1, 5; IV/1, 5; V/1, 5; VI/2; VI/4; X; XI/3-4), Derşida (Chidioşan 1980, pl. 7/8), Deva-Dealul cetății (Andrițoiu 1992, pl. 28/9) and Deva-Dâmbul Popii (Andrițoiu 1978, fig. 5/1), Uioara de Jos (Andrițoiu 1992, pl. 38/9), Oarța de Sus (Kacsó 1987, fig. 25/3-5; 26/5-6; 27/4; Kacsó 2004, pl. XVII; Kacsó 2013, fig. 8; 12; Kacsó 2015, fig. 197; 204-205); Braşov-Bartolomeu-Schottergrube (Boroffka 1994,

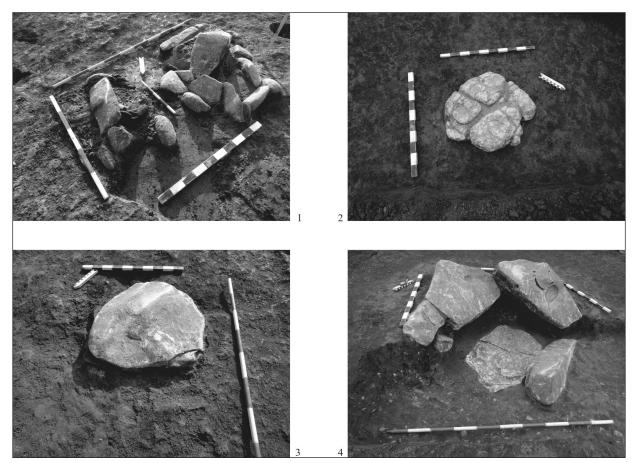


Fig. 5. Stone structures in Sebeş cemetery: 1. two cists (M38 and M44) in the main group of burials; 2. Stones covering the burial (M32); 3. Stone slab covering the burial (M13); 4. Cist outside the cemetery (Cx. 21).

Taf. 18/1), Bistrița (Crișan 1970, fig. 8/3/B; 10/3/B); Sibișeni (Boroffka 1994, Taf. 124/1, 3) and Luduș (Berecki 2016, 83-84); A.2 is derived from the previous type and has a rounder body, wider rim and base, and a well- defined shoulder (the closest variant is Boroffka TA2c); there is an analogous vessel at Sibişeni (Boroffka 1994, Taf. 122/7); A.3 has a spherical body, flat base, an everted neck, a vertically pinched rim, and two handles on the maximum diameter (the closest analogy is type Andriţoiu IV; Andriţoiu 1992, pl. 43/14); there is an analogous vessel at Alba Iulia (Andrițoiu 1992, pl. 27/12); A.4 also has a spherical body, short neck, a slightly everted rim and a flat base (Andrițoiu V type; Andrițoiu 1992, pl. 43/23); there is an analogous vessel at Ghirbom-Sub vii (Boroffka 1994, Taf. 81/3); A.5 has a slender body, flat base, a slightly everted rim, and two handles symmetrically applied on the neck (type Boroffka TA2a, Andriţoiu V, Chidioşan A2); analogies are found at Oiejdea (Andriţoiu 1992, pl. 38/16), Deva-Dâmbul Popii (Andriţoiu 1978, fig. 2/10), Sighișoara-Herțeș (Boroffka 1994, Taf. 129/7-8), Dumbrăvița (Soroceanu-Retegan 1981, fig. 8/1; 12/3) and Derşida (Chidioşan 1980, pl. 11/3; 30/4); A.6 is a short pot, like the bowls, with an Sshaped profile and two handles applied on the neck and shoulder (it is a combination between the types Boroffka TC2b and TC3e); A.7 is a short pot with a slender body and flat base (it is a combination between types Boroffka TC2b and TC3a); analogies are found at Turia (Székely 1995, pl. V/3; VI/3) and Sibişeni (Boroffka 1994, Taf. 120/1); A.8 has a flat base, slender body, an everted neck, and a vertically pinched rim (it is a combination between types Boroffka TA4f and TC2b); A.9 has a flat base, rounded body, an inverted neck, and a vertically pinched rim (type Boroffka TA3a, Chidioşan Ib); an analogous vessel was found at Bistrița (Crișan 1970, fig. 9/2); A.10 is the short variant of A.1 type; analogies have been found at Fântânele (Marinescu 2008, pl. II/2) and Luduş (Berecki 2016, pl. 32/12). The most common types of pots in the cemetery at Sebeş are A.1 and A.10, which were used as urns that contained calcined bones.

There are 5 types of bowls: B.1 has a flat base, slender body, short neck and an everted rim (it is a combination between Boroffka TC2b and TC2c types); analogies are found at Oarța de Sus (Kacsó 1987, fig. 24/10, 13; Kacsó 2013, fig. 13/5), Turia (Székely 1995, pl. V/6), Dumbrăvița (Soroceanu-Retegan 1981, fig. 3/1); B.2 has a different neck shape from the previous type – it is inverted and the rim is vertically pinched (a combination of Boroffka's TC2a and TC2b types); B.3 is short, with an S-shaped profile, flat base and an everted rim (type Chidiosan E2, Boroffka TD3d, Berecki III.3); analogies are found at Baraolt (Boroffka 1994, Taf. 8/7), Sibişeni (Boroffka 1994, Taf. 124/6), Sighişoara-Wietenberg (Boroffka 1994, Taf. 132/5), Bistrița (Crișan 1970, fig. 10/3/A, 4; 11/3, 5/A), Cicău (Boroffka 1994, Taf. 49/7, 12), Chintelnic (Boroffka 1994, Taf. 29/4, 18; 31/9-10; 32/12), Cluj-Napoca-Str. Banat (Rotea-Wittenberger 1999, pl. V/1; VII/2), Luduş (Berecki 2016, 86) and Dumbrăvița (Soroceanu-Retegan 1981, fig. 16/3); B.4 has an S-shaped profile, annular base, rounded body, everted rim, and a handle applied under the rim to the shoulder (a combination of types Boroffka TD2b and TD2c); the vessel discovered at Boiu is a similar shape (Boroffka 1994, Taf. 14/1); B.5 is represented by a fragmentary vessel with the profile curved towards interior and a handle applied on the shoulder (a combination of types Boroffka TD1b and TD1c); analogous vessels have been found at Stolna-Podurile Domnești (Daróczi-Ursuțiu 2015, pl. 112/1873b) and Romos (Bălan et al. 2016, pl. 3/19). A single dish was identified in the cemetery, in M32: type C is a form with flat base, truncated cone-shaped body, well-defined shoulder, everted neck, and a strongly everted rim; analogies are found in the Nagyrév (Vicze 2011, pl. 2/9; 6/7; 8/14), Kisapostag (Vicze 2011, pl. 22/11; 23/2) and Vatya (Vicze 2011, pl. 36/1, 6; 47/3; 50/11) cultures.

Only three types of cups have been found in the cemetery: D.1 is a small variant of the B.3 type with a high handle (type X/61 Andriţoiu); analogies have been found at Oarta de Sus (Kacsó 2013, fig. 11/2-3, 5, 8), Lancrăm-Glod (Popa-Simina 2004, pl. 2/1, 3); D.2 is similar to D.1, but is taller and lacks a handle (type Andrițoiu IX/57); analogies are found at Brașov-Valea Răcădăului (Boroffka 1994, Taf. 18/8), Chintelnic (Boroffka 1994, Taf. 26/3) and Luduş (Berecki 2016, pl. 13/5; 18/3); D.3 is a large cup, with slender body, flat base, short neck, vertically pinched rim and a high handle (type Andritoiu XI; the closest variant is Boroffka TC2b); analogies have been found at Păuleni (Rotea 2000, pl. IV/2, 5), Deva-Dâmbul Popii (Andrițoiu 1978, fig. 2/5), Oarța de Sus (Kacsó 1987, fig. 24/5, 9; Kacsó 2013, fig. 13/1; Kacsó 2015, fig. 202), Cicău (Boroffka 1994, Taf. 45/6), Ciceu-Corabia (Boroffka 1994, Taf. 59/6), Sighişoara-Wietenberg (Boroffka

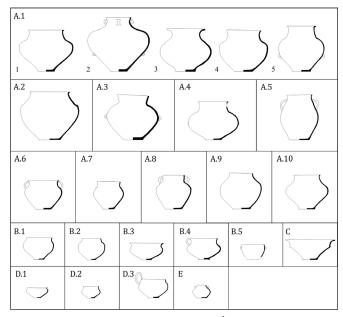


Fig. 6. Pottery shapes at Sebeş-Între răstoace.

1994, Taf. 131/5), Telna-Pe coastă (Boroffka 1994, Taf. 135/9) and Romos (Bălan et al. 2016, pl. 3/21). One pyxis was discovered, in burial M12: type E has a globular body, short inverted neck, a slightly everted rim, and two small handles with vertical perforations; the closest analogy in Wietenberg sites is the pyxis in the settlement at Derşida (Chidioşan 1980, 44, pl. 22/16); analogies are also found in the Vatya (Bóna 1975, 53, pl. 25/8; 29/4-7) and Transdanubian Encrusted Pottery cultures (Bóna 1975, pl. 249/5, 15, 17).

The decoration on the vessels at Sebeş is made by techniques such as grooving, incision and stamping. There is another ornamentation technique that can be considered a hybrid between grooving and incision: wide channel. Among the relief ornamentations, knobs of different shapes are present, applied on or under the widest part of the vessel. These knobs likely have a more functional than ornametntal role, similar to handles. There are few cases of applied ornamental bands on the vessels at Sebeş. Motifs and combinations of motifs (Fig. 7-8) on the vessels found in cemetery (31) were placed by the Bronze Age potters on the rim (on interior or exterior), on the neck (rarely), on the body and on the base (on exterior, on the vessel's foot). Most decorations were placed on the upper portion of the vessel's body (the most visible part of the vessel). Motifs extend around the body of the vessel, and can consist of simple (motifs 10.1 and 10.2) or complex decorations (combinations: 12-20, 23, 26-27). In rare instances, the combinations of motifs are unique. All the vessels with rich ornamentation from the cemetery are unique within the site. Additionally, the specific combinations of motifs found at Sebeş are not found on any other vessels from the entire cultural area. The main motifs used on the pottery at Sebeş are: diagonal line (used in most combinations: 1–2, 4, 8, 10–23, 25), triangle (combinations: 23–27), herringbone (combinations: 21 and 25), spiral (combinations: 28 and 29) and garland (motif combination: 30). The ceramics at Sebes

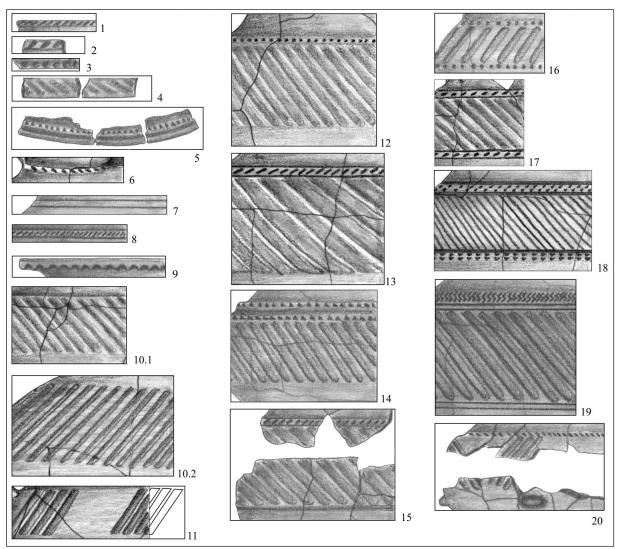


Fig. 7. Motifs and combinations of motifs (1–20) on the pottery at Sebeş–*Între răstoace*.

lack decoration techniques and motifs that define later Wietenberg culture phases, such as simultaneous stitching (Chidioşan 1980, 54, type 2g; Andrițoiu 1992, 42, type Ib7; Boroffka 1994, 183-188, type VC), successive wide stitching (Andrițoiu 1992, 42, type Ib6; Boroffka 1994, type VB), lime encrustation (Chidioşan 1980, 79), broken spiral motif (Andrițoiu 1992, 41, type Ia12/e) and the meander motif (Chidioşan 1980, 59, types 2f and 6; Andrițoiu 1992, 42, type Ia13; Boroffka 1994, types VD 14/variants 5-6 and 19; VD33; VC8/variants 8-12; VC18-19, 20-28).

The shape of nine of the 62 urns discovered at Sebeş could not be identified due to poor preservation. Except two graves, cremains were placed in pots (type A). The specific type of pot was unidentifiable, due to poor preservation, for 15 of the 49 pots. In the cemetery at Sebeş, the most common pot type used as an urn is A.1 (16 vessels). A.1 pot variants were found in burials as follows: A.1.1 - M17, M32, M36, M39, M48, A1.2 - M3, A.1.3 - M58, A.1.4 - M6, A.1.5 - M13, M15, M19, M26 and M34. The reconstructed vessel profiles of the urns in burials M30 and M31 do not clearly match the A.1 type. The next most common pot is A.10 type (7 burials), which include variants A.10.1 - M43, M51, M56 and M57 and A.10.2 - M47. There are also A.10 type urns in M22 and M27. The other urn types are: A.5 - M2, M49a and M61; A.4 -M25 and M37; A.9 - M40 and M59; A.2 - M41, A.3 - M9; A.6 - M12 and A.8 - M20.

In the cemetery at Sebeş only one bowl (M55) and one cup (M42) were used for the deposition of calcined bones. Both burials belonged to children aged 1-3 years old. Also in burial M5, which was of a child (6 months-1 year), the bones were placed in a small vessel which was not preserved.

There are differnces related to age and gender associated with the various types of urns from Sebeş cemetery. Community members preferred to use bigger vessels (A.1, A.2, A.3 and A.5 types) for adults. Sub-adults burials (Infans I and II) were placed in shorter pots of A.10, A.4.2, A.8, A.9 and A.6 types, as

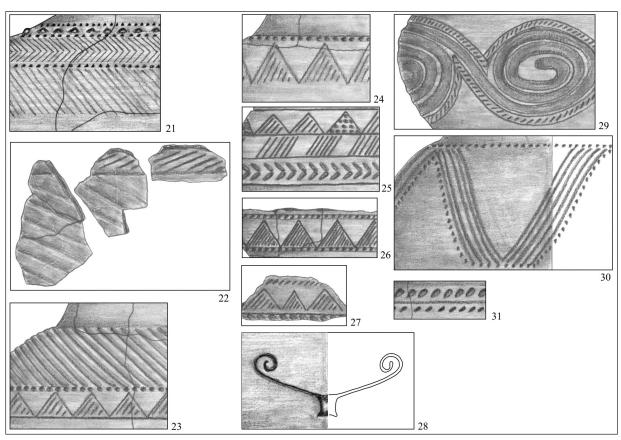


Fig. 8. Motifs and combinations of motifs (21–31) on the pottery at Sebeş-Între răstoace.

well as two bowls (one of B.1 type) and a D.3 type cup. Only a few fragments of the urns from burials M24 and M52 were preserved, but they are clearly parts of small pots. Children were rarely interred inlarge vessels of A.1, A.9 and A.4.1 types. Adult males were primarily interred in urns of types A.1 (8), A.2 (1), A.3 (1), A.10 (1). Adult female remains were normally placed in pots (7), but the poor preservation state made it only possible to identify shapes in three cases: M15 (A.1.5.), M2 (A.5) and M49a (A.5). The same situation was identified in the cemeteries at Bistriţa (Crişan 1970, 141-153) and Luduş (Berecki 2016, 53-58): cremains of adults were placed in bigger vessels, while the cremains of children and adolescents were placed in smaller vessels.

At Sebes, 33 vessels were used as lids to cover urns. Of these lids, 15 could not be assigned a shape or vessel type. Most vessles used as lids are bowls (10), preserved whole or partially. The type of vessel was identified in 7 cases: B.1 (M31, M13, M40), B.2 (M49b), B.3 (M25), B.4 (M12), B.5 (M8). The vessel used as lid in M36 is fragmentary (only the lower part was preserved), but may also be a bowl. Cups of two types were used to cover urns in four cases: D.1 (M49b) and D.3 (M15, M17 and M58). Only one dish (type D) was found in the cemetery at Sebeş, in burial M32, which was covered with large stones. This is the only context in the cemetery where a vessel was placed upside down to cover the urn. In burial M9, a short pot (A.7) was placed vertically to cover the urn. Based on the fragmentary lids and those made from the lower halves of vessels, we assume that some lids were pots (M4, M5 and M51) or from shorter vessels, such as bowls or cups (M2, M6 and M48). Type B.1 is found in the burials of an adult male, over 30 years old (M13), and a child of 11-12 years old (M31). Type D.3 covered urns in which there were adult males, one of 30-40 years old (M17), another one of 20-23 years old (M58) and an adult female of 23-25 years old (M15).

The four companion vessels at Sebeş, placed next to urns, are of two types: small cups (D.2 type) in burials M3, M43 and M56 and a pyxis (E type) in M12. Cups placed near or inside urns have been found in other cemeteries of Wietenberg culture: Luduş, in Gr. 2, 13-14, 19, 25, 27 (Berecki 2016, 63); Deva, in burials M9, M16 and M17 (Andriţoiu 1978, 243-246); Turia, in burial M10a-b (Székely 1995, 128-129); Băcăinți (Andrițoiu 1987, 59; Berecki 2016, 44); Oiejdea (Ciugudean 1990, 71); Sânnicoară (Berecki 2016, 63); Bistrița, in burials 6, 8, 13, 17-19, 22 and 34 (Crișan 1970, 144-153), Sibișeni (Paul 1995, 165; Berecki 2016, 63), Aiton, in burial C (Soroceanu et al. 1976, 59). Pyxies of different shapes than the one at Sebeş were discovered inside burials 16 and 17 at Deva (Andriţoiu 1978, 243-246) and in burial 15 at Luduş (Berecki 2016, 55, pl. 11/5).

There are three different shapes of faience beads at Sebeş: (a) four-pointed, (b) cylindrical and (c) segmented (Fig. 9). The majority are four-pointed beads, discovered in 5 burials, all belonging to children of Infans I age. In the Wietenberg culture, the only analogy is at Cerişor, discovered in the Middle Bronze Age level from cave no. 1 (ROMAN ET AL. 2000, 15, pl. IV/9; BELDIMAN-SZTANCZ 2005, 51, fig. 3/2). Published as ceramic object, we suppose that it is also made from faience. A segmented-shaped bead was discovered in M29 together with the remains of an adult female of 25-40 years old. Another fragment of a segmented bead was discovered in M4 (an Infans I), which was part of a necklace, together with other four-pointed beads. A similar object was in the urn (M15) of an Infans I child (2-4 years old) from Luduş (Berecki 2016, 55, 67, pl. 12/6). In the settlement at Dersida, in cremation burial no. 3, two segmented beads, likely made of faience, have been published (CHIDIOŞAN 1980, 23, fig. 7/3/a). Another segmented bead was discovered in pit number 1 from the settlement at Giurtelecu Şimleului-Coasta lui Damian (Bejinariu 2005, 367, pl. 12/2; Berecki 2016, 67). The cylindrical bead doesn't have analogs in the area of Wietenberg culture, but it is widely found in Monteoru culture cemeteries (Bârzu 1989, 57, 61, 75, 78, fig. 10/T. 32/5; 11/T. 35/8; 25/T. 122/4; 27/T. 142/2; MOTZOI-CHICIDEANU 2011, 424-425). Faience beads may be considered to be local products and not long distance trade objects, and have been found often in Early and Middle Bronze Age in the Carpathian Basin. Four-pointed faience beads appear to be limited to the Carpathian Basin (HARDING 1984, 96, fig. 26).

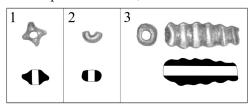


Fig. 9. Types of vitrous paste beads: 1. Four-pointed; 2. Cylindrical; 3. Segmented.

During the Middle Bronze Age in the Carpathian Basin and its surrounding regions, the organization in family clusters in cemeteries is a common thing (Motzoi-Chicideanu 2011, 342). In Vatya culture cemeteries, where the main rite is cremation and burial in urns, discrete spatial groups and clusters are observed at Dunaújváros-Duna-dűlő, Kulcs-Császártanya, Szalkszentmárton-Cifrahíd and Szigetszentmiklós-Felsőtag (Vicze 2011, 38). The Intracarpathian region during the Middle Bronze Age appears to have had a similar spatial organization as that seen at Vatya cemeteries. As stated before, the organi-

zation of burials into distinct spatial groups has been noted at Sebeş, Sibişeni, Luduş, Bistriţa and Turia (Motzoi-Chicideanu 2011, 531, 534, 540; Bălan 2014, 25-26; Berecki 2016, 49-50).

Three groups of burials have been observed at Sebeş (Pl. 1/1–2), including a main group (44 burials) and two secondary (one of 12 burials and one of 4). There are also two isolated burials (M7 and Cx. 21) and another possible isolated burial in the north western limit of the site (Cx. 73) that has been disturbed by later occupations. These groups can be divided further, into clusters according to the distance between burials and their orientation (Pl. 1/2). Inside group I there are 6 clusters (A-F) and inside group II, 2 clusters (A–B).

The 9 small clusters within the larger groups at Sebeş (12, if we include the two stone structures and the isolated burial 7) may represent the remains of different nuclear families. In the main group at Sebes (I), small children (Infans I) are found in the majority of clusters: A, B, and C clusters D and E are different from the others. One difference observed is related to age, as there are no small children (Infans I) in cluster D and E. The majority of individuals from clusters D and E are adults: several are over 30 years old (M13, M33 and M45), between 25-40 years old (M29) and between 30-40 years old (M9). The only individuals over 60 years old in the cemetery are part of these two groups (M34 and M32). Cluster B from group II at Sebeş includes only adults, including two individuals over 45 years old (M2 and M21). The graves with stone structures are present only in clusters D and E: burials covered with slabs and stones in cluster E and the stone cists in cluster D.

Stone structures were built for both adults, including 3 males (M13 - over 30 years old; M32 - over 60; M44) and a female (M15 - 23-25 years old), and for 2 sub-adults between 7-14 years old (M12) and 9-10 years old (M38). The sub-adult in M38 was buried next to an adult male (M44), most probably a close family relative. Funerary architecture is often associated with increased energy expenditure (O'SHEA 1984; SAXE 1970). The special funerary structures, slabs and stones that cover burials and stone cists (M38, M44 and Cx. 21) discovered in the Sebeş cemetery, may be the "expression of certain groups with a special social status" (MOTZOI-CHICIDEANU 2011, 417). The presence of an isolated cist from the rest of burials (Cx. 21) may indicate the funeral of a person with a different identity.

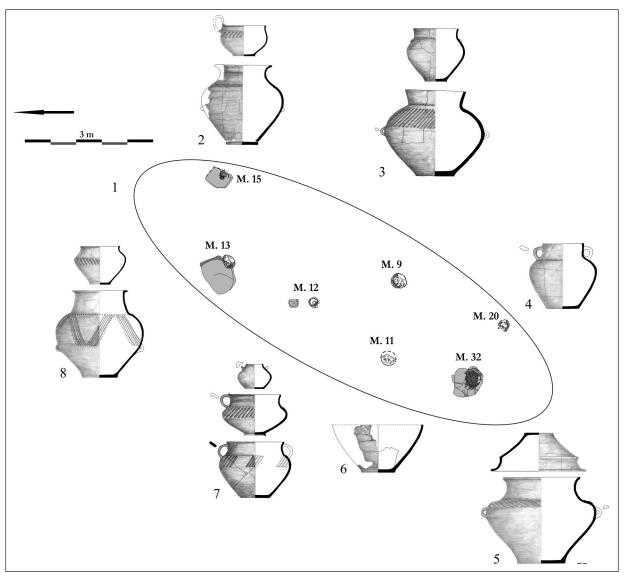


Fig. 10. 1. Cluster E in the Sebeş cemetery main group (I): different type of vessels (some of them having unique shape or decoration in the cemetery) found in burials; 2. M15; 3. M9; 4. M20; 5. M32; 6. M11; 7. M12; 8. M13.

Some vessels found in the cluster E burials are unique both in the cemetery as well as in Wietenberg culture area (Fig. 10): the spheric-shaped pot with two handles applied on the maximum diameter, decorated with diagonal grooves in M9 (Fig. 10/3), the pot with garland ornamentation from M13 (Fig. 10/8), the dish from M32 (Fig. 10/5) and the pyxis from M12 (Fig. 10/7). The last two vessels, which we consider to be imports, have analogies in the Nagyrév (VICZE 2011, pl. 2/9; 6/7; 8/14), Kisapostag (VICZE 2011, pl. 22/11; 23/2) Vatya (Bóna 1975, 53, pl. 25/8; 29/4-7; Vicze 2011, pl. 36/1, 6; 47/3; 50/11) and Transdanubian Encrusted Pottery cultures (Bóna 1975, pl. 249/5, 15, 17). The urn shape from M9 reseambles with pots found at Dunaújváros-Duna-dűlő (VICZE 2011, pl. 22/8; 24/4; 25/3; 26/5; 61/6). It seems important that individuals buried with imported ceramics are placed together. It is possible that the objects may reflect a link between these individuals and their place of origin. The closest cultural group with funerary rites similar to the Wietenberg culture during the early 2<sup>nd</sup> millennium BC is Vatya communities in the Carpathian Basin.

The presence of isolated graves at Sebes is similar to Turia, where an isolated burial was set apart from the other graves through the stone slab and a stone axe, and is situated at 300 m away from the cemetery (Székely 1995, 130). We do not know for sure what the function of the slab row from the northern part of the site was, but it was likely linked to the sacred area of the Middle Bronze Age site. There are only four stone cists known from Wietenberg cemeteries: Gheorghieni - SD CX8 and SC CX25 (Crişan et al. 2009, 304), Aiton - burial E (Soroceanu et al. 1976, 59, fig. 5/2), and Florești - burial M29 (Rotea et al. 2008, 52-53). In two of these cases, special grave goods were discovered inside: a bronze sword was placed under

one of the two urns in SD CX8 at Gheorghieni and a gold lock-ring was found in burial 29 at Floreşti-Polus. According to the authors, the stone cist at Florești, together with a burial very close to it (M30), were isolated from the rest of the cemetery (Rotea et al. 2008, 52–53).

Wietenberg funerary areas are often placed in close proximity to the settlements, as has been observed at Sibişeni (Paul 1995), Luduş (Berecki 2016), Oiejdea (Ciugudean 1990, 71-72), Bistriţa (Crişan 1970, 141) and Sighişoara-Herțeș (Andrițoiu-Rustoiu 1997, 17). They often cover large areas, with empty spaces between groups, clusters of graves and isolated burials. Until recently most graves were found in isolation, which has led researchers to consider this practice to be one of the "specifics of mortuary behavior/funerary standard" of Wietenberg culture (Motzoi-Chicideanu 2011, 541). The recent archaeological research at Sebeş, Luduş, Stolna-Podurile Domneşti and Floreşti confirms only part of this theory. There are isolated burials at these sites, but they are either close to settlements like the one from Stolna (Daróczi-Ursuțiu 2015, pl. 1a) and Luduș (Berecki 2016, pl. 2), and/or to a cemetery, like Luduș (Berecki 2016, fig. 19), Sebeş and Floreşti (Rotea et al. 2008, 52-53). Given this recent evidence, we do not believe that Middle Bronze Age peoples from the Intra-Carpathian area were buried at random or according to a plan at long distances, at several kilometers away from home. The isolated discoveries and the researches limited to few trial trenches (BĂLAN 2014, 21-24) inside some funerary spaces similar to the ones at Sebeş or Luduş had as result spreading wrong suppositions about the presence of isolated burials or groups of isolated burials. Only with large-scale horizontal excavation of cemeteries, as was the case at Sebeş, is it possible to confidently distinguish burial groups, clusters, or isolated graves.

In Wietenberg culture flat cemeteries, grave pit outlines have only been observed at Aiton (SOROCEANU ET AL. 1976, 60) and Turia (Székely 1995, 127-130, fig. 3), where round, oval and rectangular funerary structures (stone cists are arranged in rectangular pits) have been found. There are two types of special structures: (a) stone cists built in rectangular pits, from Aiton (SOROCEANU ET AL. 1976, 59), Sebeş, Gheorghieni (Crişan et al. 2009, 304) and Florești (Rotea et al. 2008, 52-53, pl. XVIII/3), and (b) slabs or stones which cover burials and are surface markers for the burial place, from Sebeş, Aiton (SOROCEANU ET AL. 1976, 58-59), Ilişua (BERECKI 2016, 63) and Dumbrăvița (SOROCEANU-RETEGAN 1981, 197-200).

In few cases, cremated bones collected from pyre were placed directly in pit and not within urns, sometimes among or covered by pot sherds: Luduş - 2 burials (Berecki 2016, 59), Aiton - 3 burials (SOROCEANU ET AL. 1976, 58-60; BERECKI 2016, 59), Bratei (POPA 2010, 156; BERECKI 2016, 59), Turia (Székely 1995, 128; Berecki 2016, 59), Dumbrăvița (Soroceanu-Retegan 1981, 197, 199; Berecki 2016, 59), Sibişeni (Paul 1995, 167; Berecki 2016, 59-60), Gheorghieni (Crişan et al. 2009, 304; Berecki 2016, 60) and Rotbav (Dietrich 2014a, 260; Berecki 2016, 60). The mortuary standard in many cemeteries was the deposition of cremated bones in urns covered with lids, as seen at Sebes, Sibiseni (PAUL 1995; Motzoi-Chicideanu 2011, 533-536), Bistriţa (Crişan 1970), Dumbrăviţa (Soroceanu-Retegan 1981, 195–207), Turia (Székely 1995), Aiton (Soroceanu et al. 1976, 58–60; Motzoi-Chicideanu 2011, 530-531), Luduş (Berecki 2016, 44-67), Oiejdea (Ciugudean 1990, 71-72), Sighişoara-Herțeș (Andrițoiu-Rustoiu 1997, 17), and Deva (Andrițoiu 1978). Urns lacking ceramic vessel lids have also been found, which leaves the possibility that other perishable materials (e.g., wood, animal skins) may have been used to cover urns.

Among the few grave goods discovered in Wietenberg cemeteries, most were adornment items presumably worn by the deceased during the incineration process: faience beads at Luduş (Berecki 2016, 55, 67, pl. 12/6) and Sebeş, moon or rectangular-shaped bronze pendants at Luduş (Berecki 2016, 65; Rezi 2016, 122), human bone and stone pendants at Luduş (BERECKI 2016, 66), bone plates at Dumbrăvița (SOROCEANU-RETEGAN 1981, 196-197), bone and bronze pins at Luduş (BERECKI 2016, 65; REZI 2016, 122), a bronze wire at Gheorghieni (CRIŞAN ET AL. 2009, 304) and a gold lock-ring at Florești (ROTEA ET AL. 2008, 52-53). Other objects were deposited in the urn - two stone axes and an anthropomorphic figurine at Turia (Székely 1995, 130) – or under the urn – a bronze sword at Gheorghieni (Crișan et al. 2009, 304). We have indications of other special artifacts found in graves at Gheorghieni, in SC CX15 - a bronze link (Crișan et al. 2009, 304; Berecki 2016, 66), at Sibișeni - a bronze pin near grave 19 (Paul 1995, 165; BERECKI 2016, 66), at Florești - bronze bracelet, stone pendant and bone pin (ROTEA ET AL. 2008, 52), at Ocna Sibiului – bone plates (Вегескі 2016, 66), at Deva – bone bead (Andrițoiu 1978, 246, 248; Berecki 2016, 67), and at Bistrița - a clay bearing block (Crișan 1970, 144, fig. 8/4A; Berecki 2016, 65). In the triple burial in a stone cist at Gheorghieni, the researchers mention an offering of meat (CRIŞAN ET AL. 2009). Animal bones with traces of burning are mentioned in burials 25 (inside the urn) and 12 (inside the lid-vessel) from the cemetery at Luduş (BERECKI 2016, 65).

The burials within other cemeteries in the Wietenberg area are organized in groups and clusters similar to Sebeș-Între răstoace: 3 groups at Luduș: I – 21 burials, II – 4 burials, III – 2 burials; possible two clusters in group I; in the cemetery there are other two isolated burials, from which one, Gr. 2, is close to group II (Pl. 2/6); 2 groups and 4 possible clusters at Sibişeni: I – 21 burials, II – 23 burials (Pl. 2/7); 2 groups at Bistrița: I - the majority of burials (with possible clusters), II - 3 burials (Pl. 2/5); 3 groups/ clusters at Turia: I - the majority of burials, II - 4 burials, III - 3 burials (Pl. 2/1); an isolated burial was discovered 300 m away from the cemetery (M27); 2 clusters at Deva (Pl. 2/2); 3 clusters at Dumbrăvița (Pl. 2/4); 2 possible clusters and an isolated burial at Aiton (Pl. 2/3).

In some cases, the small groups of burials were organized in a slightly curved line similar to those seen in the Vatya culture. Two examples are seen in group III at Sebeş (Pl. 1/2) and group II at Luduş (Pl. 2/6). The presence of isolated burials or small groups of two burials might reflect the intention to form new family burial clusters that were not expanded, likely do to the abandonment of local settlements. An analogous situation is seen at Dunaújváros-Duna-dűlő, where Vatya I burials complete small burial clusters from previous phases (VICZE 2011, 37–39).

Based on spatial relationships, we can say that the cemeteries of Wietenberg culture are organized into family clusters, which, after a time, grow to cover a large area and connect to each other (groups of graves). The presence of multiple bodies in graves suggests that related individuals were buried in close proximity to each other. There are double and triple burials and by graves placed next to each other at Sebeş: M49 (double), M38-M44, M3-M4-M5, M40-M41-M42, Gheorghieni: SD Cx5-Cx6 (double) and SD CX8 (triple) (Crișan et al. 2009, 304), Dumbrăvița: burial 14 (double) (Soroceanu-Retegan 1981, 199; Andrițoiu 1994, 148; Motzoi-Chicideanu 2011, 536; Berecki 2016, 51), Turia: burial 10 (triple), burials 14-15 (Székely 1995, 128-129, pl. I/4), Luduş: Gr. 3 (double), Gr. 10 (double), Gr. 13-Gr. 14, Gr. 19-Gr. 20, Gr. 29-Gr. 30 (Векескі 2016, 52-55), Bistriţa: burial 36 (double) (Скіşан 1970, 153; Векескі 2016, 52). If Wietenberg practices match Vatya practices, burial clusters would have started from 1-2 graves which develop in curved line, getting to a certain point to close an oval or boat- shaped area.

The presence of some artifacts with special character (bronze sword or gold lock-ring) and stone structures (cists and slabs that mark the grave) are suggestive of the existence of some sort of social hierarchy. The concentration of these structures only in certain burial clusters or isolated from the main group is another argument in favour of this affirmation. At the same time, Wietenberg burial was not as restrictive as seen in Early Bronze Age tumuli in the region in the preceeding time period, where only a few individuals were eligible for burial (see CIUGUDEAN 1995; 1996; 1997). While some social differences are attested, the use of cremation may also play a role in transforming the bodies and creating a collective identity that obscures emerging inequalities (Quinn ET AL. 2014). The internal Wietenberg cemeteries organization (the individual grave - collective graves - clusters and groups of graves), with differentiated burials through special structures or special inventory artifacts, is similar to Middle Bronze Age funerary customs seen elsewhere in neighboring regions (MOTZOI-CHICIDEANU 2011, 330–560).

Infant mortality in Bronze Age Europe was high (HARDING 2000, 377). "Life expectancy increase for individuals that reach adolescence or juvenile ages" (HARDING 2000, 377-378). In the Luduş and Sebeş cemeteries, osteological analyses lead to a similar conclusion. In establishing the limit between childhood and adulthood is a difficult proposition, as it can be divided according to physiological or biological age, chronological and social age. We prefer the term "sub-adult" for infants and children when using biological age (HALCROW-TAYLES 2011, 197). In Sintashta society, adolescents between 14-17 years old who have similar grave goods as adults, were likely considered adults by Bronze Age people (Berseneva 2010, 176). Taking the age of 14–15 years as the limit between adults and sub-adults, we observe a high number of sub-adults in Wietenberg culture cemeteries: 28 at Sebeş (47% of the individuals), 11 at Luduş (38%) (Berecki 2016, 52, fig. 19) and 12 at Bistrița (52%) (Crișan 1970, 159). When only looking at the adults, 18 individuals at Sebeş (56% of the adults) and 7 individuals at Luduş (54%) lived beyond the age of 30. Only four adults older than 45 years were identified at Sebeş (12% of the adults). In both cemeteries, in the cases where biological sex could be determined, there are more male adults than females, 14 from 22 at Sebeş (64% of individuals with identified sex) and 7 of 13 (54%) at Luduş (Berecki 2016, 52, fig. 19).

The chronology of the Middle Bronze Age in the Intra-Carpathian area has been characterized mainly by the Wietenberg culture's evolution. There are two periodization systems that archaeologists have used to anchor the evolution of the Wietenberg culture in time. The first chronological system was created by N. Chidioşan on the basis of Derşida stratigraphy. Chidioşan divided the Wietenberg culture into 4 phases: I with level 1 from Dersida, II with levels 2 and 3 from Dersida, III with levels 4-5 from Dersida,

IV based on ceramic forms and ornaments discovered in other sites, but not at Derşida (Chidioşan 1980, 68-84). In 1994, N. Boroffka published a monograph of Wietenberg culture, in which he proposed a new periodization system, divided into four main phases (named A-D), with phase A having two subphases, A1 and A2 (Boroffka 1994, 285-290).

The shapes and decoration of vessels from the cemetery at Sebeş correspond to the early phases of Wietenberg culture, lacking the elements which define phases III-IV (CHIDIOŞAN 1980, 77-84) or B-D (BOROFFKA 1994, 250-251). In the preliminary studies of Sebeș-Între răstoace, a date at the end of phase I and the beginning of phase II was proposed (Fântâneanu et al. 2013, 179; Fântâneanu et al. 2014,

N. Boroffka is the first scholar to propose that pottery from level 1 at Derşida was not from a separate phase (Boroffka 1994, 249). References to phase I have also been made recently by Rotea (2000) and POPA (2010, 129-134, 136). It has been stated that level I from Dersida does not describe a distinct phase in Wietenberg culture's evolution. The main arguments are: (a) there are only a limited quantity of forms and ornaments in level I when compared to the next two levels; (b) none of level 1 types are exclusive to phase I, they are also found in the overlaying levels; (c) there is no settlement nor cemetery in the whole cultural area that has been attributed to phase I; (d) in contemporary cultures, ceramic materials specific for phase I are not found as imports (BĂLAN ET AL. 2016).

Based on ceramics and analogues from within and beyond Transylvania, the cemetery from Sebeș-Între răstoace can be attributed to the first phase in the cultural evolution of the Wietenberg culture. Related to the two periodization systems, the ceramics in the cemetery are typical of phases Chidioşan I-II and Boroffka A.

There are many sites in the Wietenberg area that share common elements with levels 1-3 from Derşida settlement and the Sebeş cemetery. One problem in identifying the early sites has been that most archaeological material has been published without reference to the discovery context. Not all sites attributed to phase A by N. Boroffka belong to first phase, describing them by terms as "early elements" or "tendetial early elements" (Boroffka 1994, fig. 26). Some examples where elements specific to Chidioşan III phase and Boroffka B-C were discovered in greater numbers than phase A are Lechinţa-Livada intensivă (Boroffka 1994, Taf. 84/14-16; 85/1-4) and Poderei (Boroffka 1994, Taf. 85/5-13), Ocna Sibiului-Dealul Trestiei (Boroffka 1994, Taf. 102/13-14; 103; 104/1-6), Porumbenii Mici (Boroffka 1994, Taf. 112/5-10) or Uioara de Jos-Valea Orăzleci-Grui (Вокоffка 1994, Taf. 139/1-11). The early or tendetial early elements were brought into discussion for dating the cemeteries at Sibişeni and Bistriţa, starting from the early phase (Boroffka 1994, 251-252, fig. 26). The pottery shapes and elements considered early in these cemeteries by N. Boroffka are frequently present in sites attributed to the Chidioşan III phase (Bălan 2014, 28-29).

Sites that have materials specific to the early phase (attributed by researchers to phases Wietenberg I-II or A) are Sebeș-Podul Pripocului (Boroffka 1994, 72, pl. 117/1-7; Popa 2010, 151-152, pl. 42/3; 43-44), Suatu (Rotea 1994), Păuleni (Rotea 2000; Cavruc-Rotea 2000; Cavruc-Buzea 2002, 46-50, pl. X-XIX; XXVII-XXX; XXXII), Oarța de Sus-Ghiile Botii (KACSÓ 1987, fig. 22-28; KACSÓ 2013; 2015, 428-433, fig. 188-209), Oarța de Jos-Vîlceaua Rusului (KACSÓ 1987, fig. 16-19; KACSÓ 2004, 53-54), Bădeni II (LAZAROVICI-MILEA 1976, pl. VI-X: some of materials are specific for the early horizon), Țelna-Pe coastă (Andrițoiu 1992, 50, pl. 23/3-5; 24/4; 28/1, 10; 31/7; 32/4; 33/1; 35/8, 18, 21, 25, 31; Boroffka 1994, 83-84, pl. 135/6-10), Turia (Széкецу 1995), Bratei (Рора 2010, 156-159, pl. 45), Sfântu Gheorghe-Eprestető (Boroffka 1994, 74, pl. 118; 119/1-2), Stejeriş (Dumitrașcu et al. 2014), Romos (Bălan et AL. 2016, pl. 3/9, 13, 21), Cerişor (ROMAN ET AL. 2000, pl. XIX-XXVII), Braşov-Bartolomeu (BOROFFKA 1994, 26, Taf. 15/7-8; 16-17; 18/1), Lancrăm-Glod (Popa-Simina 2004, 17-31, pl. 2-6: pit 12), Stolna-Podurile Domnești (Daróczi-Ursuțiu 2015, 14-26), Băștioara (Daróczi-Ursuțiu 2015, 233-234), Rotbav-La pârâuț (Dietrich 2014a: levels 1 and 2), Plopiș-Cucleu (Bejinariu 2001, 100-101, 105, pl. II-III, IV/5-8; Bejinariu 2003, 31-32, 38, pl. II-VI), Albiş (Székely 2003), Fântânele (Marinescu 2008) and Şeuşa (Ciută 2009, 83-92). In the settlements at Stolna-Podurile Domnești and Băștioara, Rotbav, Lancrăm and Bădeni, material dated to the early horizon are also mentioned in later Wietenberg levels. These sites have provided important quantities of ceramic material, many of them from features, that makes an accurate analysis possible.

Some materials belonging to sites with at least two levels can also be attributed to the early phase, even if they were published without a known context: at Chintelnic (Boroffka 1994, 29–30, Taf. 26/7; 27/6–9; 28/9; 29/1, 3), Cicău (Boroffka 1994, 30, pl. 37/7; 38/21; 40/9-10; 42/4-6; 43/8; 47/9; 49/10; 50/8; 51/2), Feldioara (Boroffka 1994, 42, pl. 73/4; 74/1-6; 75/15; 76/4; 78/1, 13-14; 79/7, 9-10) and Sighişoara-Wietenberg (Boroffka 1994, 76–77, pl. 131/5, 11, 14–15; 132/8; 133/10; 134, 1–2, 4; Andritoiu-Rustoiu 1997, fig. 23/4).

The settlement at Boiu was attributed to Wietenberg II phase (ANDRIŢOIU 1992, 50, pl. 20; 23/13-14; 27/9; 28/8; 29/2, 6, 9; 30/1-2; 31/1, 4, 9, 13, 15; 32/2, 13; 35/4, 9, 20, 28; Boroffka 1994, 24-25, Taf. 13/8-10; 14/1-3), but it should be noted one fragment of later ceramics was among the published materials (Andritoiu 1992, pl. 35/28). The well-known sword from Boiu was attributed to this settlement (Andritoiu 1992, 82), but as an isolated find, the place of discovery is not certain (Nestor 1937, 158).

In many of the funerary sites without clearly chronologically diagnostic ceramics, it is more likely they are associated with the Chidioşan III phase: Sighişoara-Herţeş (Boroffka 1994, 77, pl. 129/1-3, 7-8), Oiejdea (CIUGUDEAN 1990, 71-72, fig. 2/5; 3/9-10, 12-13; BOROFFKA 1994, Taf. 107/8-11), the vessels from a supposed cemetery at Lancram-Glod (Popa-Simina 2004, 24–26, 31, pl. 17–18). The three burials at Sighişoara were attributed to phase II, while the vessels from Oiejdea and Lancram were dated to phase III. Also in the cemetery at Deva there are elements typical for phase III, as the lid-vessel in M8 (Andrijoiu 1978, fig. 3/6) was decorated with elements specific to the classical phase. In general, there are no typical elements for the early horizon. Additionally, two types of pots (Fig. 2/9; 5/1) and other ornaments (Fig. 2/6, 9; 3/8) were discovered in the cemetery at Sibişeni (Boroffka 1994, Taf. 122/3, 5, 7; 124/8).

The repertoire of ceramic shapes from Sebeş matches types of the early horizon encountered in other sites: pots with slender body and wide rim, close in form to vases, rarely decorated with spiral, grooves or row with small depressions (type V/18 Andritoiu): Turia (Székely 1995, pl. V/3; VI/3), Şeuşa (Ciută 2009, pl. XLVIII/6), Oarța de Sus (Kacsó 2013, fig. 13/4; 14/3); pots of vase type (type I Andrițoiu, TA1c Boroffka, Ia Chidioşan) at Derşida (CHIDIOŞAN 1980, 27–28, type Ia), Oarţa de Sus (KACSÓ 1987, fig. 25/1–2; KACSÓ 2013, fig. 14/2; KACSÓ 2015, fig. 199; 201), Rotbav (DIETRICH 2014a, pl. 107/1) and Lancrăm (POPA-SIMINA 2004, pl. 3/1); lobbed dish (type H4 Chidioşan, TE1a-b Boroffka, VIII/45 Andriţoiu) at Derşida (Chidiosan 1980, pl. 21/8-9; 30/17), Bădeni II (Lazarovici-Milea 1976, pl. X/3), Brașov-Bartolomeu (Boroffka 1994, Taf. 15/7-8), Stejeriş (Dumitraşcu et al., pl. XXI/15-16), Cerişor (Roman et al. 2000, pl. XIX/22; XXII/1-4), Lancrăm (POPA-SIMINA 2004, pl. 4/4), Păuleni (ROTEA 2000, pl. III/1, 3), Rotbav (DIETRICH 2014a, pl. 65/7), Sebeș-Podul Pripocului (Boroffka 1994, Taf. 117/6), Suatu (ROTEA 1994, pl. II/7), Stolna-Băștioara (DARÓCZI-URSUȚIU 2015, pl. 211/5049), Şeuşa (CIUTĂ 2009, pl. XLIV/3, 6, 12; XLVI/3; XLVIII/5; LIII/8; LIV/10), Telna (a variant of small dimentions) (BOROFFKA 1994, Taf. 135/7), Albiş (Székely 2003, pl. VIII/3-4), Fântânele (Marinescu 2008, pl. II/1; IV/1) and Plopiş (Bejinariu 2003, pl. V/6); dishes with truncated- cone shaped body (type VII/27 Andritoiu, TD1b Boroffka) at Oarta de Sus (Kacsó 2013, fig. 14/1 Kacsó 2015, fig. 198; 200), Țelna (Boroffka 1994, Taf. 135/10), Cerișor (ROMAN ET AL. 2000, pl. XXVII/4), Rotbav (DIETRICH 2014a, pl. 99/6; 100/13-14; 103/1; 133/11, 13), Stolna-Băştioara (DARÓCZI-URSUŢIU 2015, pl. 203/5210) and Turia (SZÉKELY 1995, pl. VI/4; VII/2); bowls with the rim vertically pinched or inverted, sometimes with handles applied under the rim at Rotbay (Dietrich 2014a, pl. 11/1; 57/5, 12; 79/12; 85/8; 86/1; 87/2; 99/11; 100/1; 103/5; 106/6; 108/6-7, 13; 110/1; 136/6; 137/8), Oarța de Sus (Kacsó 2013, fig. 13/3; Kacsó 2015, fig. 203), Cerișor (Roman ET AL. 2000, pl. XXII/7), Stolna-Podurile Domnești (DARÓCZI-URSUȚIU 2015, pl. 112/1873b), Şeuşa (CIUTĂ 2009, pl. XLVII/8), Fântânele (MARINESCU 2008, pl. III/1) and Plopiş (BEJINARIU 2003, pl. III/1); a bowl with lobes at Oarţa de Sus (KACsó 1987, fig. 24/12); cup with a high handle, sometimes with a spout on the opposite side (type Boroffka TB1) at Braşov-Bartolomeu (Boroffka 1994, Taf. 16/10; 17/2), Sfântu Gheorghe-Eprestető (Boroffka 1994, Taf. 118/6-10; 119/1-2), Şeuşa (CIUTĂ 2009, pl. XLVIII/3), Chintelnic (Boroffka 1994, Taf. 26/7; 27/6-9), Corvinești (Boroffka 1994, Taf. 65/3), Feldioara (Boroffka 1994, Taf. 73/4-7), Sighişoara-Wietenberg (Boroffka 1994, Taf. 131/15) and Noşlac-Şumughi (SOROCEANU 1984, pl. VI/3); cups with wide rim, and shape similar to bowls, with S-shaped profile and high handle (type Andrițoiu X, Boroffka TD3, Chidioșan F1-5) at Brașov-Bartolomeu (Boroffka 1994, Taf. 16/1-2; 17/1), Bratei (Popa 2010, pl. 45/19), Stejeriş (Dumitraşcu et al. 2014, pl. XXI/18), Lancrăm (POPA-SIMINA 2004, pl. 2/1, 3), Oarța de Sus (KACSÓ 1987, fig. 24/1-2; KACSÓ 2013, fig. 10; 11/2-3, 5, 8), Păuleni (ROTEA 2000, pl. IV/1), Rotbav (DIETRICH 2014a, pl. 103/9), Sfântu Gheorghe-Eprestető (Вогоffка 1994, Taf. 118/1), Ţelna (Вогоffка 1994, Taf. 135/8) and Albiş (Székely 2003, pl. VII/1-2); cup with two rims and a handle pinched from the rim on the body at Oarţa de Jos (type Boroffka TS1b) (Boroffka 1994, Taf. 102/11); pyxes of different shapes at Derşida (Chidioşan 1980, pl. 22/16), Turia (SZÉKELY 1995, pl. VII/3), Oarța de Sus (KACSÓ 1987, fig. 27/1) and Rotbav (DIETRICH 2014a, pl. 82/1;

104/1–2); incense burners (type Boroffka TO) at Oarţa de Sus, most of them having rich ornaments with motifs belonging to early horizon (KACSÓ 1998, fig. 1–6).

There are several decorations that can be considered part of the repertoire of early Wietenberg types: incised cross-hatching, in a double incised band (type Chidioşan 3f-g, Boroffka VD4) from Cerişor (ROMAN ET AL. 2000, pl. XIX/1-4, 6-7, 17), Oarța de Sus (KACSÓ 1987, fig. 24/1, 6, 11; 25/5; 27/4; 28/2; Kacsó 2013, fig. 11/3, 8; 12/1, 3-4; 13/2; Kacsó 2015, fig. 203; 205), Păuleni (Rotea 2000, pl. I/4, 6-7; II/3; V/2; IX/1; X/6), Rotbav (Dietrich 2014a, pl. 13/13; 65/7; 87/14; 95/29; 97/8-9; 100/11-12; 101/1; 103/11; 110/11; 128/7, 10), Sfântu Gheorghe-Eprestető (Вокоffка 1994, Taf. 118/5), Stolna-Băștioara (Daróczi-Ursuțiu 2015, pl. 211/5049), Albiş (Székely 2003, pl. VIII/5), Plopiş (Bejinariu 2001, pl. II/7; III/1, 5), Simoneşti (Székely 1971, fig. 8/8, 11); row of X-es in band (type Chidioşan 3i; Boroffka VD4) at Cerişor (ROMAN ET AL. 2000, pl. XXVII/2), Oarța de Sus (KACSÓ 1987, fig. 24/10; KACSÓ 2013, fig. 11/4; 13/2), Păuleni (Rotea 2000, pl. IX/4; X/4); several spiral motifs, simple - made from recumbent S-es, linked to each-other (Chidioşan 5g; Boroffka VD 24, VD30) or not linked (Chidioşan 5d; Boroffka VA17): Oarța de Sus (KACSÓ 1987, fig. 26/6; 28/2; KACSÓ 2013, fig. 5-6, 8-10; 11/5; 12/2-3; 13/1; KACSÓ 2015, fig. 204), Păuleni (Rotea 2000, pl. V/1), Bădeni (Lazarovici-Milea 1976, pl. VIII/5; XII/20), Sfântu Gheorghe-Eprestető (Boroffka 1994, Taf. 118/5), Cerişor (Roman et al. 2000, pl. XXV); complicated spirals (Chidioşan 5f; Boroffka VD26, VD30, VA18-19): Cluj-Napoca-Gura Baciului (Boroffka 1994, Taf. 60/1), Stejeriş (Dumitraşcu et al. 2014, pl. XVIII/1; XIX/1), Oarța de Sus (Kacsó 1987, fig. 27/3), Sebeș-Podul Pripocului (Popa 2010, pl. 44/12), Cerișor (Roman et al. 2000, pl. XIX/5, 9-10, 14; XX/8, 10, 13), Lancrăm (Popa-Simina 2004, pl. 4/10), Rotbav (Dietrich 2014a, pl. 5/7-8, 10, 13-14; 11/3, 5, 7; 86/13; 101/1; 102/1; 103/11; 106/5; 122/34; 123/2, 28, 31, 40-41). Another decoration which renders spiral-like elements or semi-spiral is type 5a at Derşida (Boroffka VD65), which includes the so-called "Wietenberg cross", made especially on lids: Oarţa de Sus (KACsó 2004, pl. XVI; KACsó 2013, fig. 11/4), Alba Iulia (Boroffka 1994, Taf. 1/8) and Derşida (Chidioşan 1980, pl. 22/9). Broom and comb strokes on the ceramics are present in a small number in Wietenberg culture sites, which have been used as evidence to potentially explain the origin of the Wietenberg culture as having continuity with the textile impressed and rusticated vessels present in Transylvania at the end of the Early Bronze Age. These sites include Derșida (Chidioșan 1968, fig. 6/8, 10; Chidioșan 1980, pl. 34/6, 9f, 10; 37/7), Păuleni (Rotea 2000, pl. VII/9), Şeuşa (CIUTĂ 2009, pl. L/7; LI/19), Turia (SZÉKELY 1995, pl. IX/5), Rotbav (DIETRICH 2014a, pl. 47/3; 57/6; 68/3, 10-11, 13; 86/15; 95/20; 99/13), Plopiş (Bejinariu 2003, pl. II/4, 6), Suatu (ROTEA 1994, pl. III/5), Sebeș-Podul Pripocului (POPA 2010, pl. 43/1) and Stolna-Podurile Domnești (Daróczi-Ursuțiu 2015, pl. 108/1819).

A wide range of other objects made of clay have been found at several Wietenberg sites: lids, sometimes decorated with specific motifs – Oarţa de Sus (Kacsó 1987, fig. 26/4; Kacsó 2004, pl. XVI–XVII, XXXVI; Kacsó 2013, fig. 11/4, 6), Rotbav (Dietrich 2014a, pl. 57/10; 126/19) and Albiş (Székely 2003, pl. IX/5, 7); the clay bearing blocks – Oarţa de Sus (Kacsó 2004, pl. XL; Kacsó 2013, fig. 15/3), Păuleni (Rotea 2000, pl. V/4–8), Rotbav (Dietrich 2014a, pl. 113/9), Şeuşa (Ciută 2009, pl. XLVIII/4), Albiş (Székely 2003, pl. IX/1) and Plopiş (Bejinariu 2003, pl. VI/3); miniature chariot – Oarţa de Sus (Kacsó 2015, fig. 206); miniature chariot wheels – Păuleni (Rotea 2000, pl. I/3), Rotbav (Dietrich 2014a, pl. 108/1–5, 18) and Plopiş (Bejinariu 2003, pl. VI/1); anthropomorphic figurines – Rotbav (Dietrich 2014a, pl. 115/2), Ţelna (Boroffka 1994, Taf. 135/6) and Turia (Székely 1995, 130, pl. VIII/4–5); loom weights – Oarţa de Sus (Kacsó 2013, fig. 16–19), Stejeriş (Dumitrașcu *et al.* 2014, pl. XVIII/6; XXI/21) and Rotbav (Dietrich 2014a, pl. 86/6); and a spinwhorle at Păuleni (Rotea 2000, pl. V/9).

Wietenberg ceramics have influences from several different cultural groups from the end of the Early Bronze Age (Nagyrév, Nyírség, Sanislău, Gornea-Foeni/Orlești, Odaia Turcului) (Bălan et al. 2016). Within Transylvania, the emergence of the Wietenberg ceramic styles at the beginning of the 20th century BC varied from region to region. For example, in south-eastern Transylvania, the Ciomortan-Costișa level at Păuleni–Ciuc, dated to 2031–1925 cal BC (95.4%), is directly overlapped by the early Wietenberg level, dated to 1877–1683 cal BC (95.4%) (Rotea 2000, 30; Cavruc–Rotea 2000, 157–158; Cavruc 2002, 191; Gogâltan 2015, 76–77, fig. 30–31). In other regions of Transylvania, the early Wietenberg phase may be contemporary with the Ciomortan-Costișa group. The early Wietenberg funerary rite of cremation is different from neighbouring cultures (Mureș, Otomani, Monteoru, Tei and Costișa). The adaptation of cremation from the Pannonian Plain, from Sanislău, Nagyrév and Nyírség groups, seems plausible. The Nagyrév group has a great contribution in shaping Vatya culture (Bóna 1975, 31–32; Kovács 1984, 220), in which the funerary rite (Bóna 1975, 32–44, 52, 59) is similar to the Wietenberg one.

Metal implements are rare in early Wietenberg sites (Fig. 11–13): a chisel in level 2 and a socketed-chisel mould in level 3 at Derşida (Chidioşan 1980, 60); bronze, silver, gold artifacts and moulds for casting objects of Apa and Ţufalău types at Oarța de Sus (Kacsó 1987, 70, fig. 22-23; Kacsó 2004, 60, pl. XXXVIII–XXXIX); bronze disc-head pin at Sebeș-Podul Pripocului (Boroffka 1994, 286; Popa 2010, 141-145, pl. 42/3), a heart-shaped pendant and a paddle-head pin at Păuleni (Popa 2010, 146, pl. 42/1-2); archaic type sickle and a spear-head at Sighişoara-Wietenberg (Boroffka 1994, 286; Andrițoiu-Rustoiu 1997, 32); and a bronze object at Plopiş (Bejinariu 2003, pl. VI/2).

In the Wietenberg culture area the hoards of Hajdúsámson-Apa, Ţufalău and Tolnanémedi types are present (KACSÓ 1993, 74; Kacsó 1998, 259; Gogâltan 1998, 198; Вогоffка 1999, 66-67; Рора 2010, 138-153). The first two types are considered local creations, covering the areas of the Wietenberg, Otomani and Suciu de Sus cultures. In general, it is accepted that Hajdúsámson-Apa type hoards belong to BrA2 (Mozsolics 1967, 122; Kacsó 1993, 74; Gogâltan 1998, 198), but there are other opinions which propose a dating to BrA2-B1 (Boroffka 1999, 67) or only in BrB1 (David 2002, 77, Appendix 1; PERNICKA ET AL. 2016, 65). At the beginning of the 2<sup>nd</sup> millennium BC, artifacts from these bronze types were spread across the area inhabited by Wietenberg, Otomani, Hatvan, Mureş, Vatya and Vatin communities (Fig. 13-14). Some items, such as the Apa-Hajdúsámson type swords, are traded over long distances as prestige objects (PERNICKA ET AL. 2016, 82)



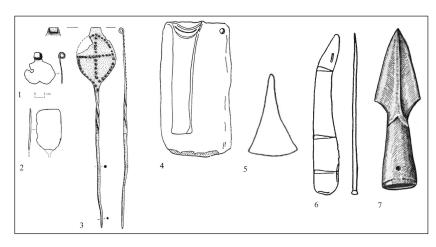
Fig. 11. Bronze objects and moulds found at Oarţa de Sus-Ghiile Botii (after KACSÓ 2004, pl. XXXVIII).



Fig. 12. Gold adornments found at Oarta de Sus-Ghiile Botii (after KACSÓ 2015, fig. 209).

(Fig. 15). The presence of ceramic imports and exports attest a close relationship between these cultures. The hoards from Deva and Sebes have bronze artifacts specific to Western Carpathian Basin, which are attributed to early Wietenberg phase (POPA 2010, 138-153).

Fig. 13. 1-3, 5-6. bronze objects discovered in early Wietenberg sites: 1-2 Păuleni (after POPA 2010, pl. 42/1-2); 3 Sebeş-Podul Pripocului (after Popa 2010, pl. 42/3); 5 Derșida (after Boroffka 1994, Taf. 130/2): 6 Sighișoara-*Wietenberg* Вогоffка 1994, Таб. 130/2); 7. Sighișoara-Wietenberg HOREDT 1960, fig. 13/3); 4. stone mould for casting socketed chisels: Derşida (after Dumitrașcu 1989, pl. XXIV/1a).



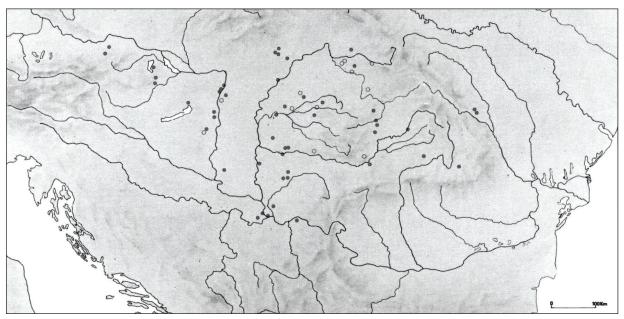
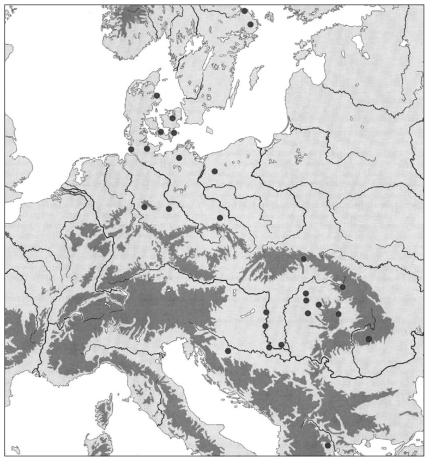


Fig. 14. The distribution of disc-butted axe type A and B1 in Carpathian Basin (after Vulpe 1970, Taf. 49/B).

Many ornamental elements on the metal objects of Hajdúsámson-Apa and Ţufalău types are also found on early Wietenberg ceramics: hatched triangles, spiral motif, herringbone motif or zigzag lines (Pl. 7-8). It is likely that Wietenberg communities deliberately matched the ceramic decoration to decoration on the metal objects that cover a large area of the Carpathian Basin.

Ceramic exchanges between Wietenberg culture and their neighbors makes it possible to determine synchrony between the different ceramic traditions. Based on these synchronies, it appears that early Wietenberg is contemporaneous with Otomani II (Chidioşan 1974, 157–159; Chidioşan 1980, 90–91;



Boroffka 1994, 287), Mureș/ Periam-Pecica Ib (CHIDIOŞAN 1980, 88; SOROCEANU 1991, 119, Taf. 49/15; Szabó 1999, 24-25, fig. 36/Gr. 102/5; 52/Gr. 127/3), Hatvan II (Boroffka 1994, 286) and Monteoru Ic2-1 (Chidioşan 1980, 85-86; Boroffka 286-287; 1994, Popescu-Băjenaru 2008, 15; Puskás 2015, 105). Based on the most used chronological systems, the early Weitenberg at Sebeş is contemporary with phases Reinecke BrA2, Bóna MB2, Mozsolics BIII and Gogâltan BMII.

In 2013, human bone samples were collected from the cemetery at Sebeş-Între răstoace for radiocarbon dating, during the Bronze Age

Fig. 15. The distribution of the Apa type swords in Europe (after Pernicka et AL. 2016, fig. 27).

Transylvania Survey project (Fig. 16; Pl. 9–10). This project was a partnership between the University of Michigan Museum of Anthropological Archaeology (C. Quinn and J. O'Shea) and the National Museum of Union from Alba Iulia (H. Ciugudean). Samples of calcined bone were processed as AMS dates at the University of Arizona (USA) AMS Laboratory, in a collaboration between G. Hodgins and C. Quinn.

The vessels discovered in Sebeș-Între răstoace cemetery are fairly uniform, in style and decoration, which suggested that the burials were relatively contemporaneous. The radiocarbon dates confirm this. The samples were intentionally selected to date the various funerary rites found within the cemetery: burials from group I (M32, M34, M36, M43, M44 and M45) and from group II (M2, M17 and M25), burials with faience beads (M25), burials that had stone structures (M32 and M44), burials from the center and the margin of the main group; burials in which there were placed the main vessel types. 14C dates from these burials confirm that the cemetery was used for a short time. The most probable time span the cemetery was used is between 1878-1771 cal BC. It is possible, however, that that the cemetery was formed more quickly, started slightly earlier, or was abandoned slightly later.

There has been a recent increase in the number of <sup>14</sup>C dates published from Wietenberg sites. The dates are mostly between the 20th and 15th centuries cal BC (Berecki 2016, fig. 32, 34, Table 26; Bălan et AL. 2016, fig. 5). From the sites attributed to early horizon (phase II Chidioşan/phase A Boroffka) we have the following <sup>14</sup>C dates:

- Bln-5626: 3507±37 BP, 1931-1701 cal BC (95.4%), Oarța de Sus-Ghiile Botii (Görsdorf 2005, 468; BĂLAN-QUINN 2014, 120; KACSÓ 2015, 432; GOGÂLTAN 2015, 75, fig. 25; BERECKI 2016, fig. 32, 34, Table 26);
- Ly-9190: 3265±30 BP, 1619-1458 BC (95.4%), Oarța de Sus-Ghiile Botii (KACSÓ 2004, 60; BĂLAN-Quinn 2014, 119-120; Kacsó 2015, 432; Gogâltan 2015, 75, fig. 24; Berecki 2016, fig. 32, 34, Table 26);
- Hd-28203: 3547±24 BP, 1954-1774 cal BC (95.4%), Rotbav-La pârâuţ (DIETRICH 2014a, 171; Dietrich 2014b, 60-61; Bălan-Quinn 2014, 120; Gogâltan 2015, 77; Berecki 2016, fig. 32, 34, Table 26);
- sample PAC-25: 3440±25 BP, 1877-1683 cal BC (95.4%), Păuleni-Ciuc (Whitlow Et Al. 2013, 38; GOGÂLTAN 2015, 77, fig. 31; BERECKI 2016, fig. 32, 34, Table 26).

The dates from early Wietenberg contexts across the Transylvanian Plateau are similar to the dates from Sebeș-Între răstoace (Fig. 16). At Oarța de Sus, two dates from pit 22 have been analyzed in different laboratories. The date run from Berlin matches other dates from Rotbay, Păuleni and Sebeş. Again, we draw attention to the 14C date from Costişa-Ciomortan level at Păuleni, which is directly covered by the Wietenberg level: 3620±16 BP, 2031-1926 cal BC (95.4%) (GOGÂLTAN 2015, 76-77, fig. 30). A <sup>14</sup>C date from level 2 at the Rotbay settlement appears to be contemporary with levels 1-3 from Dersida and the cemetery from Sebeş-Între răstoace. Taking into account the absolute dates proposed for Early Bronze Age III – 22<sup>nd</sup>–21<sup>st</sup> centuries BC (Gogâltan 2015, 62–70) and Chidioşan III and late Wietenberg phase (CIUGUDEAN-QUINN 2015, 148-152, Table 1, fig. 1; BĂLAN ET AL. 2016, pl. 5), the early Wietenberg phase, can be dated between the 20th-18th centuries cal BC. The transition to next subphase of the Wietenberg likely happened in the second half of the 18th century cal BC.

The absolute chronology for the Wietenberg is similar to the chronologies for neighbouring Middle Bronze Age cultures: Mureș (Uhnér 2010, 350-351; Nicodemus-O'Shea 2015; Gogâltan 2015, 70-72, fig. 16-17), Hatvan (Uhnér 2010, 348-350), Otomani (Uhnér 2010, 349-352; Gogâltan 2015, 73), Vatya (Uhnér 2010, 347-340, 350; Jaeger-Kulcsár 2013, 294-313), Monteoru (Motzoi-Chicideanu et al. 2012,

	Laboratory	Context	Sample	BP	cal BC (95.4%)	Software
	code					
1	AA-103611	burial M.2	calcined human bone	3445±41	1883-1660	Oxcal v4.2.4
2	AA-103613	burial M.17	calcined human bone	3517±41	1950-1700	Oxcal v4.2.4
3	AA-103614	burial M.25	calcined human bone	3533±41	2007-1746	Oxcal v4.2.4
4	AA-103615	burial M.32	calcined human bone	3555±41	2021-1746	Oxcal v4.2.4
5	AA-103616	burial M.34	calcined human bone	3562±42	2026-1771	Oxcal v4.2.4
6	AA-103617	burial M.36	calcined human bone	3425±41	1878-1629	Oxcal v4.2.4
7	AA-103618	burial M.43	calcined human bone	3520±41	1953-1701	Oxcal v4.2.4
8	AA-103619	burial M.44	calcined human bone	3495±40	1923-1695	Oxcal v4.2.4
9	AA-103620	burial M.45	calcined human bone	3501±40	1933-1697	Oxcal v4.2.4

Fig. 16. Radiocarbon data obtained from samples on calcined human bones found in burials at Sebeş-Între răstoace.

52–53; Popescu 2013, 185–187; Vasilescu 2013) and Costișa (Popescu 2013, 184–186; Popescu-Băjenaru 2015, 36; Bolohan et al. 2015, 136–140; Gogâltan 2015, 76–77).

The combination of shared metal types (Hajdúsámson-Apa and Ţufalău), as well as different funerary rites, suggests that there were social, political, economic, and ideological systems that integrated people with different identities and statuses. The co-occurance of different mortuary treatments, such as a small percent of cremated bodies in a community where the main rite is inhumation and vice-versa, reinforces the close connections between different cultural groups in the Carpathian Basin and Transylvania seen in other material realms, including metal and pottery. The presence of Transdanubian Encrusted Pottery and Vatya artifacts in western Transylvania is evidence of the close connections between Transylvania and the Carpathian Basin.

Political and economical structure in Transylvania can be compared with the one from the tell settlements, specific to stratified societies. Around a tell settlement there are attested other fortified or open settlements which are part of the same political entity (Uhnér 2010). In Wietenberg culture an outstanding role is occupied by fortified or hilltop settlements, situated on dominant positions that can controle the commercial routes (Boroffka 1994, 100–101, Map 6; Dietrich 2010). The presence of a few prestige goods (bronze sword or gold lock-ring) and stone structures (cists and slabs that mark the grave) found in cemeteries prove the presence of social differences in the Wietenberg culture.

The formation, evolution and fall of the cultures during Middle Bronze Age in the Carpathian Basin happend approximately in parallel (even the changes from a phase to another). This supports the idea of close social, political, and economic relations between different cultures in this area. Bronze, gold, faience and osseous artifacts (sometimes ornamented with specific symbols) are made and exchanged between different communities. Other resources, such as salt (Harding–Kavruk 2010) and horses (Nicodemus 2014) were likely traded across the Carpathian Basin and Transylvania. The raw materials are also exploited and exchanged in this area (gold, copper, salt, wood from Transylvania, copper and wood from the eastern Alps and Slovakian Ore Mountains). Artifacts with prestige role are exchanged as far as the Baltic Sea, from where amber is brought back. Luxury and prestige objects are obtained by different communities in exchange for domestic animals, agricultural products or raw materials as gold, copper and wood (Uhnér 2010, 295–298; Kiss 2011; Pernicka et al. 2016, 78–82).

Together, the cemetery at Sebeş-Între Răstoace contributes new insights into the evolution of the Wietenberg culture and connectivity between regions in the Carpathian Basin during the Middle Bronze Age. While diagnostic ceramic styles and mortuary practices suggest that each cultural group had its own distinct identity, the movement of people, raw materials, and finished goods between these cultural boundaries suggest increasing scales of connectivity helped fuel social transformations, including the development of social hierarchies, across Bronze Age Europe. The diversity of mortuary treatments within the Sebeş cemetery suggests that funerary rituals brought together different people – some of whom were related, some of whom were not – to create a shared community that transcended, but did not eliminate, important social differences.

### Acknowledgements

Raluca Burlacu-Timofte, Horia Ciugudean, Dan Anghel and Călin Adam.

#### References

Andrițoiu 1978	Andrițoiu, I., Cimitirul de incinerație din epoca bronzului de la Deva, <i>SCIVA</i> , 29, 2, 241–256.
Andrițoiu 1987	Andrițoiu, I., Contribuții la cunoașterea culturii Wietenberg în sud-vestul Transilvaniei (I), <i>Sargetia</i> , 20 (1986–1987), 45–63.
Andrițoiu 1992	Andrițoiu, I., Civilizația tracilor din sud-vestul Transilvaniei în epoca bronzului, BT, II, București.
Andrițoiu 1994	Andrițoiu, I., Câteva considerații privind descoperirile funerare din aria culturii Wietenberg, IN: Roman, P.–Alexianu, M. (eds.), Relations Thraco – Illyro – Helléniques. Actes du XIVe Symposium National de Thracologie (à participation international). Băile Herculane (14–19 septembre 1992), București, 147–169.

Andrițoiu-Rustoiu 1997 Andrițoiu, I.-Rustoiu, A., Sighișoara-Wietenberg. Descoperirile preistorice și așezarea dacică, BT, XXIII, București. Anghel 2014

Anghel, D., Prelevarea și restaurarea materialului arheologic din necropola de la Sebeș-Între răstoace, IN: Bălan, G.-Fântâneau, C.-Anghel, D., Necropola din epoca

bronzului de la Sebeș. Catalog de expoziție, Alba Iulia, 55-62.

Bălan 2014 Bălan, G., Necropolele culturii Wietenberg, IN: Bălan, G.-Fântâneau, C.-Anghel, D.,

Necropola din epoca bronzului de la Sebeş. Catalog de expoziție, Alba Iulia, 21–36.

Bălan, G.-Quinn, C. P., Radiocarbon Data of Funerary Discoveries from Mid-Bălan-Quinn 2014

dle Bronze Age Settlement at Micesti-Cigas (Alba County, Romania), IN: Gligor, M. (Ed.), Archaeothanatology: an Interdisciplinary Approach on Death from Prehistory

to the Middle Ages, Annales UA, Series Historica, 18/II, Alba Iulia, 119-126.

Bălan et al. 2016 Bălan, G.-Quinn, C. P.-Hodgins, G., The Wietenberg culture: Periodization and

Chronology, *Dacia N.S.*, 60, 67–92.

Bârzu 1989 Bârzu, L., La station de Sărata Monteoru: la nécropole no 4 de l'époque du bronze,

Dacia (N.S.), 33, 39-78.

Bejinariu, I., Considerații privind descoperirile culturii Wietenberg din județul Sălaj, Bejinariu 2001

> IN: Cosma, C.-Tamba, D.-Rustoiu, A. (eds.), Studia Archaeologica et Historica Nicolao Gudea dicata. Omagiu profesorului Nicolae Gudea la 60 de ani, Zalău, 95-117.

Bejinariu 2003 Bejinariu, I., Opinions on the Wietenberg type finds from Sălaj County, IN: Kacsó,

C. (Hrsg.), Bronzezeitliche Kulturscheinungen im Karpatischen Raum. Die Beziehungen zu den benachbarten Gebieten. Ehrensymposium für Alexandru Vulpe zum 70.

Geburstag, Baia Mare, 10.-13. Oktober 2001, Baia Mare, 25-68.

Beiinariu 2005 Bejinariu, I., Săpăturile arheologice de la Giurtelecu Şimleului-Coasta lui Damian (II).

Descoperirile culturii Wietenberg, IN: Popa, C. I.-Rustoiu, G. T. (eds.), Omagiu profesorului Ioan Andrițoiu cu prilejul împlinirii a 65 de ani. Studii și cercetări arheologice, Alba Iulia, 363-390.

Beldiman-Sztancz 2005 Beldiman, C.-Sztancz, D.-M., Piese preistorice de podoabă descoperite în peșteri

hunedorene, Corviniana, 9, 41-80.

Berecki 2016 Berecki, S., The Bronze Age Site from Ludus, BMM, X, Cluj-Napoca.

Berseneva 2010 Berseneva, N., Child Burials during the Middle Bronze Age of the South Urals

> (Sintashta culture), IN: Dommasnes, L. H.-Hjørungdal, T.-Montón-Subías, S.-Sánchez Romero, M.-Wicker, N. L. (eds.), Situating Gender in European Archaeologies,

Budapest, 161-180.

BOLOHAN ET AL. 2015 Bolohan, N., "All in One". Issues of Methodology, Paradigms and Radiocarbon Datings

> Concerning the Outer Eastern Carpathian Area, IN: Bolohan, N.-Mățău, F.-Tencariu, F. A. (eds.), Signa Praehistorica. Studia in honorem magistri Attlia Laszlo septuagesimo

anno, Iași, 229-244.

Bóna 1975 Bóna, I., Die Mittlere Bronzezeit Ungarns und ihre südöstliches Beziehungen, Arch-

Hung, Series Nova IL, Budapest.

Boroffka 1994 Boroffka, N. G. O., Die Wietenberg-Kultur. Ein Beitrag zur Erforschung der Bronzezeit

in Südosteuropa, UPA, 19, Bonn.

Boroffka 1999 Boroffka, N., Zu einem Axtfragment aus "Ungarn", IN: Boroffka, N.-Soroceanu,

> T. (Hrsg.), Transsilvanica. Archäologische Untersuchungen zur älteren Geschichte des südöstlichen Mitteleuropa. Gedenkschrift für Kurt Horedt, IA, Studia honoraria, 7, Rah-

den/Westf., 59-69.

Cavruc 2002 Cavruc, V., Noi considerații privind grupul Ciomortan, *Angustia*, 7, 89–98.

CAVRUC-BUZEA 2002 Cavruc, V.-Buzea, D., Noi cercetări privind epoca bronzului în așezarea Păuleni (Cio-

mortan). Campaniile din anii 2001–2002. Raport preliminar, Angustia, 7, 41–88.

CAVRUC-DUMITROAIA 2000 Cavruc, V.-Dumitroaia, G., Descoperirile aparţinând aspectului cultural Ciomortan

de la Păuleni (campaniile 1999-2000), Angustia, 5, 131-154.

Cavruc, V.-Rotea, M., Locuirea Wietenberg de la Păuleni (campaniile 1999-2000), CAVRUC-ROTEA 2000

Angustia, 5, 155–171.

Chidioşan, N., Beiträge zur Kenntnis der Wietenbergkultur im Lichte der neuen Chidioşan 1968

Funde von Derşida, *Dacia (N.S.)*, 12, 155–175.

Chidioşan 1974 Chidioşan, N., Sincronismele apusene ale culturii Wietenberg stabilite pe baza impor-

turilor ceramice, Crisia, 4, 153-170.

General Aspects, IN: Ciugudean, H.-Gogâltan, Fl. (eds.), The Early and Middle Bronze Age in the Carpathian Basin. Proceedings of the International Symposium in Alba Iulia,

24-28 September 1997, BM Apulensis, VIII, Alba Iulia, 191-212.

Gogâltan 2015 Gogâltan, Fl., The Early and Middle Bronze Age Chronology on the Eastern Frontier

> of the Carpathian Basin. Revisited after 15 Years, IN: Németh, E. R.-Rezi, B. (eds.), Bronze Age Chronology in the Carpathian Basin. Proceedings of the International Colloquium from Târgu Mureş, 2-4 October 2014, BMM, VIII, Târgu Mureş, 53-95.

Görsdorf 2005 Görsdorf, J., Datierungsergebnisse des Berliner <sup>14</sup>C-Labors, EA, 11, 463–469.

Harding 1984 Harding, A. F., The Mycenaeans and Europe, London.

Harding 2000 Harding, A. F., European Societies in the Bronze Age, Cambridge.

Harding-Kavruk 2010 Harding, A. F.-Kavruk, V., A prehistoric salt production site at Băile Figa, Romania,

*EA*, 16, 131–167.

Halcrow, S. E.-Tayles, N., The Bioarchaeological Investigation of Childhood and Social HALCROW-TAYLES 2008

Age: Problems and Prospects, *JAMT*, 15, 190–215.

**HOREDT 1960** Horedt, K., Die Wietenbergkultur, Dacia (N.S.), 4, 107–137.

Jaeger, M.-Kulcsár, G., Kakucs-Balla-domb a case study in the absolute and relative Jaeger-Kulcsár 2013

chronology of the Vatya culture, ActaArchHung, 64, 289-320.

Kacsó 1987 Kacsó, C., Beiträge zur Kenntnis des Verbreitungsgebietes und der Chronologie der

Suciu de Sus-Kultur, Dacia (N.S.), 31, 51-75.

Kacsó 1993 Kacsó, C., Depozitul de bronzuri de la Sebeş, *EphemNap*, 3, 69–76.

Kacsó 1998 Kacsó, C., Eine Sonderform der Wietenberg-Keramik: die geschlitzte Tonrörhe, IN:

> Ciugudean, H.-Gogâltan, Fl. (eds.), The Early and Middle Bronze Age in the Carpathian Basin. Proceedings of the International Symposium in Alba Iulia, 24-28 September 1997,

BM Apulensis, VIII, Alba Iulia, 255-266.

Kacsó 2004 Kacsó, C., Mărturii arheologice, Baia Mare.

Kacsó 2013 Kacsó, C., Contribuții la cunoașterea ceramicii epocii bronzului de la Oarța de Sus-

Ghiile Botii (I), Terra Sebus, 5, 111-139.

Kacsó 2015 Kacsó, C., Repertoriul arheologic al județului Maramureș, Baia Mare.

Kiss 2011 Kiss, V., The role of the Danube in the Early and Middle Bronze Age of the Carpathian

> Basin, IN: Kovács, G.-Kulcsár, G. (eds.), Ten Thousands Years along the Middle Danube. Life and Early Communities from Prehistory to History, Budapest, 212-350.

Kovács 1984 Kovács, T., Vatya-Kultur, IN: Tasić, N. (Hrsg.), Kulturen der Frühbronzezeit das Kar-

patenbeckens und Nordbalkans, Belgrad, 217-233.

Lazarovici, G.-Milea, Z., Săpături arheologice la Bădeni, ActaMN, 13, 7-35. Lazarovici-Milea 1976

Marinescu, G., La nécropole de crémation de Fântânele "Între Acăți" (dép. De Bistrița-Marinescu 2008

Năsăud, Roumanie), datée à l'âge du Bronze, IN: Sîrbu, V.-Vaida, D. L. (eds.), Funerary Practices of the Bronze and Iron Ages in Central and South-Eastern Europe. Proceedings of the 9th International Colloquium, Bistrița, Romania, May 9th-11th, 2008, Cluj-

Napoca, 151-160.

Motzoi-Chicideanu, I., Obiceiuri funerare în epoca bronzului la Dunărea Mijlocie și Motzoi-Chicideanu 2011

Inferioară, București.

Motzoi-Chicideanu

ET AL. 2012

Motzoi-Chicideanu, I.-Şandor-Chicideanu, M.-Constantinescu, M. I., Observații preliminare privind cercetările efectuate în anii 2008-2009, 2011-2012 la cimitirul

din epoca bronzului de la Cârlomănești, Mousaios, 17, 47-63.

Mozsolics 1967 Mozsolics, A., Bronzefunde des Karpatenbeckens. Depotfundhorizontes von Hajdúsám-

son und Kosziderpadlás, Budapest.

Mozsolics, A., Goldfunde des Depotfundhorizontes von Hajdúsámson, BerRGK, 46-47 Mozsolics 1968

(1965–1968), Berlin.

**NESTOR 1937** Nestor, I., Sabia de bronz dela Boiu. Contribuție la studiul primelor săbii cu limbă la

mâner din Europa Centrală, Sargetia, 1, 155-214.

NICODEMUS-O'SHEA 2015 Nicodemus, A. J.-O'Shea, J. M., From relative to absolute: the radiometric dating of

> Mureș culture ceramics at Pecica-Şanţul Mare, IN: Forţiu, S.-Stavilă, A. (eds.), In memoriam Florin Medelet (1943-2005), ArheoVest. Interdisciplinaritate în Arheolo-

gie, 3, Szeged, 691-699.

NICODEMUS 2014 Nicodemus, A. J., Bronze Age Economies of the Carpathian Basin: Trade, Craft Produc-

tion, and Agro-Pastoral Intensification, Unpublished PhD, University of Michigan, Ann

Arbor.

O'SHEA 1984 O'Shea, J. M., Mortuary Variability: An Archaeological Investigation, Orlando.

O'SHEA 2011 O'Shea, J. M., A River Runs Through It: Landscape and the Evolution of Bronze Age

Networks in the Carpathian Basin, JWP, 24, 161-174.

**PAUL 1995** Paul, I., Die Wietenberg-Nekropole und- Siedlung von Sibişeni (Kreis Alba), IN: Paul,

I. (Hrsg.), Vorgeschichtliche Untersuchungen in Siebenbürgen, Alba Iulia, 164–197.

Pernicka, E.-Nessel, B.-Mehofer, M.-Safta, E., Lead Isotope Analyses of Metal Objects PERNICKA ET AL. 2016

from the Apa Hoard and Other Early and Middle Bronze Age Items from Romania,

ArchAustr, 100, 57-86.

Popa, C. I., Modificări culturale la finalul Bronzului Timpuriu și începutul Bronzului **Popa 2010** 

Mijlociu în Transilvania, IN: Popa, C. I.-Totoianu, R., Aspecte ale epocii bronzului în

Transilvania (între vechile și noile cercetări), BMS, I, Sebeș, 11–170.

Popa–Simina 2004 Popescu 2013	Popa, C. I.–Simina, NM., <i>Cercetări arheologice la Lancrăm</i> –" <i>Glod</i> ", Alba Iulia. Popescu, AD., Contextele, cronologia și analogiile unor piese de os decorate din Mol-
Popescu–Băjenaru 2008	dova, <i>Danubius</i> , 31, Supliment, 179–202.  Popescu, ADBăjenaru, R., Rivalries and conflicts in the Bronze Age: two contem-
TOTESCO DAJENARO 2000	porary communities in the same space, <i>Dacia</i> ( <i>N.S.</i> ), 52, 5–22.
Popescu–Băjenaru 2015	Popescu, ADBăjenaru, R., From the Middle Danube to Anatolia: Contacts During the Second Millennium BC. A Case Study, IN: Militello, P. MÖniz, H. (eds.), Proceedings of the 15 <sup>th</sup> Symposium on Mediterrean Archaeology, held at the University of
Puskás 2015	Catania, 3–5 March 2011, BAR, 2695 (I), Oxford, 179–202.  Puskás, J., Contact Zone: Middle Bronze Age Cultural Connections in the Valley of the Black River (Covasna County, Romania), IN: Németh, E. R.–Rezi, B. (eds.), Bronze Age Chronology in the Carpathian Basin. Proceedings of the International Colloquium from
Quinn 2015	<i>Târgu Mureş</i> , 2–4 October 2014, BMM, VIII, Târgu Mureş, 97–129. Quinn, C. P., Returning and Reuse: Diachronic Perspectives on Multi-Component Cemeteries and Mortuary Politics at Middle Neolithic and Early Bronze Age Tara, Ireland, <i>JAA</i> , 37, 1–18.
Quinn et al. 2014	Quinn, C. PKuijt, ICooney, G., Introduction: Contextualizing Cremation, IN: Kuijt, IQuinn, C. PCooney, G., <i>Transformation by Fire: The Archaeology of Cremation in Cultural Context</i> , Tucson, 3–21.
Rezi 2016	Rezi, B., Metal Objects, IN: Berecki, S., <i>The Bronze Age Site from Luduş</i> , BMM, X, Cluj-Napoca, 122–127.
Roman et al. 2000	Roman, CDiaconescu, DLuca, S. A., Săpături arheologice în peștera nr. 1 (Peștera Mare) de la Cerișor (com. Lelese, jud. Hunedoara), <i>Corviniana</i> , 6, 7–59.
Rotea 1994	Rotea, M., Contribuția cercetărilor de la Suatu–Fâneața de Jos (1991–1993) la cunoașterea etapelor timpurii ale evoluției culturii Wietenberg, <i>ActaMN</i> , 31/1, 131–150.
Rotea 2000	Rotea, M., Beiträge zur Kenntnis der Phase I der Kultur Wietenberg. Die Bewohnung von Păuleni (Ciomortan), Kreis Harghita, <i>ActaMN</i> , 37/1, 21–41.
Rotea-Wittenberger	Rotea, MWittenberger, M., The Ritual Complex of the Wietenberg culture, Cluj-
1999	Napoca (Transylvania), <i>ActaMN</i> , 36/1, 7–28.
Rotea <i>et al.</i> 2008	Rotea, M.–Tecar, M.–Nagy, S.–Pupeză, P.–Tecar, T.–Săsăran, L., Florești–Polus Center. Preliminary observations, <i>ActaMN</i> , 43–44/1 (2006–2007), 47–88.
Saxe 1970	Saxe, A. A., <i>Social Dimensions of Mortuary Practices</i> , Unpublished PhD, University of Michigan, Ann Arbor.
Soroceanu 1984	Soroceanu, T., Materialen zur Bronze- und Hallstattzeit Siebenbürgens (II), <i>ActaMN</i> , 21, 433–458.
Soroceanu 1991	Soroceanu, T., Studien zur Mureș-Kultur, IA, 7, Buch am Erlbach.
Soroceanu–Retegan 1981	Soroceanu, TRetegan, A., Neue spätbronzezeitliche Funde im Norden Rumäniens, <i>Dacia (N.S.)</i> , 25, 195–229.
Soroceanu <i>et al.</i> 1976	Soroceanu, TBlăjan, MCerghi, T., Cimitirul de incinerație de la Aiton, FI, 4, 57-81.
Szabó 1999	Szabó, J. J., Früh- und mittelbronzezeitliche Gräberfelder von Battonya, Budapest.
Székely 1971	Székely, Z., Contributions à la connaissance du développement de la civilisation Wietenberg, <i>Dacia (N.S.)</i> , 15, 307–317.
Székely 1995	Székely, Z., Necropola de incinerație în urne de la Turia, județul Covasna, IN: <i>Cercetări arheologice în aria nord-tracă</i> I, București, 127–146.
Székely 2003	Székely, Z., New aspects of Wietenberg culture from southeastern Transylvania. The open settlement from Albiş (Cernat com., Covasna district), IN: Kacsó, C. (Hrsg.), Bronzezeitliche Kulturscheinungen im Karpatischen Raum. Die Beziehungen zu den benachbarten Gebieten. Ehrensymposium für Alexandru Vulpe zum 70. Geburstag, Baia Mare, 10.–13. Oktober 2001, Baia Mare, 469–482.
Uhnér 2010	Uhnér, C., <i>Makt och samhälle. Politisk ekonomi under bronsåldern i Karpaterbäckenet</i> , Gotarc. Series B, GAT, 54, Göteborg.
Vasilescu 2013	Vasilescu, T., O dată <sup>14</sup> C de la Năieni-Zănoaga, Cetatea 1, <i>Studii de Preistorie</i> , 10, 171-

VICZE 2011 Vicze, M., Bronze Age Cemetery at Dunaújváros-Duna-Dűlő, Budapest. VULPE 1970 Vulpe, A., Die Äxte und Beile in Rumänien I, PBF, IX, 2, München.

Whitlow et al. 2013

Whitlow, R.-Kavruk, V.-Buzea, D.-L.-Briewig, B., Radiocarbon data from the Cucuteni-Ariușd levels at Păuleni-Ciuc (Ciomortan) "Dâmbul Cetății", Harghita County, *ActaTS*, 12, 37–64.

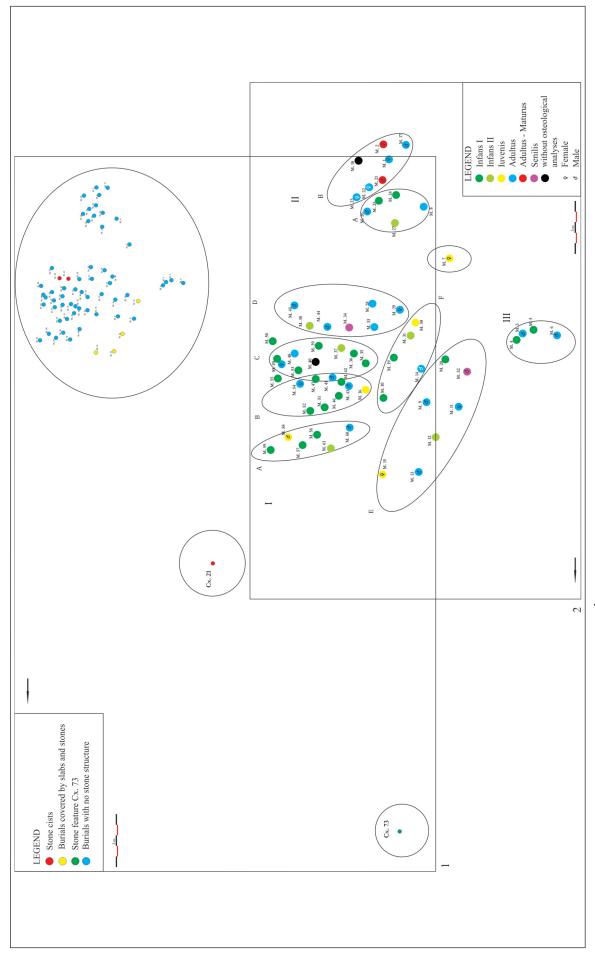
## List of figures

- Fig. 1. Location of Sebeş-Între răstoace site in the Carpathian Basin on a satellite image (Google Earth).
- Fig. 2. Delimitation of the site on the motorway project.
- Fig. 3. Plan of the excavations in Sebeș-Între răstoace site.
- Fig. 4. Burial types at Sebeș: 1. Urn, lid and addiacent vessel (M12); 2. Urn without lid (M27); 3. Double burial (M49); 4. Urn and lid (M25).
- Stone structures in Sebes cemetery: 1. two cists (M38 and M44) in the main group of burials; 2. Stones covering the burial (M32); 3. Stone slab covering the burial (M13); 4. Cist outside the cemetery (Cx. 21).
- Fig. 6. Pottery shapes at Sebeş-Între răstoace.
- Motifs and combinations of motifs (1–20) on the pottery at Sebeş–Între răstoace. Fig. 7.
- Fig. 8. Motifs and combinations of motifs (21–31) on the pottery at Sebeş-Între răstoace.
- Fig. 9. Types of vitrous paste beads: 1. Four-pointed; 2. Cylindrical; 3. Segmented.
- Fig. 10. 1. Cluster E in the Sebeş cemetery main group (I): different type of vessels (some of them having unique shape or decoration in the cemetery) found in burials; 2. M15; 3. M9; 4. M20; 5. M32; 6. M11; 7. M12; 8. M13.
- Fig. 11. Bronze objects and moulds found at Oarţa de Sus-Ghiile Botii (after Kacsó 2004, pl. XXXVIII).
- Fig. 12. Gold adornments found at Oarţa de Sus-Ghiile Botii (after KACSÓ 2015, fig. 209).
- Fig. 13. 1-3, 5-6. bronze objects discovered in early Wietenberg sites: 1-2 Păuleni (after Popa 2010, pl. 42/1-2); 3 Sebeș-Podul Pripocului (after Рора 2010, pl. 42/3); 5 Derșida (after Boroffka 1994, Taf. 130/2): 6 Sighișoara-Wietenberg (after Boroffka 1994, Taf. 130/2); 7. Sighișoara-Wietenberg (after Horedt 1960, fig. 13/3); 4. stone mould for casting socketed chisels: Derşida (after Dumitraşcu 1989, pl. XXIV/1a).
- Fig. 14. The distribution of disc-butted axe type A and B1 in Carpathian Basin (after VULPE 1970, pl. 49/B).
- Fig. 15. The distribution of the Apa type swords in Europe (after Pernicka et al. 2016, fig. 27).
- Fig. 16. Radiocarbon data obtained from samples on calcined human bones found in burials at Sebeş-Între răstoace.

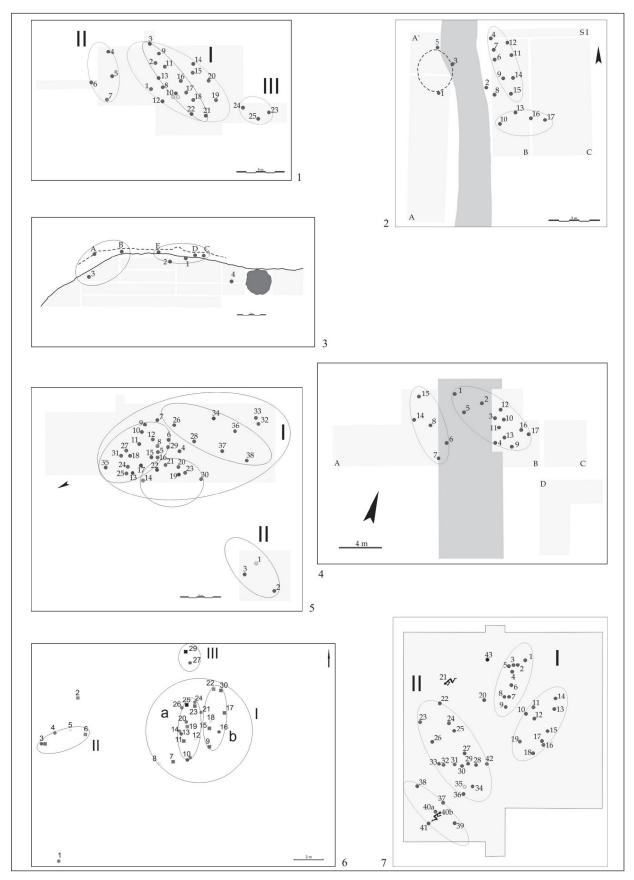
#### List of plates

- Pl. 1. Funerary area at Sebeş-Între răstoace: the burials with stone structures are marked; 2. Possible clusters in the cemetery at Sebeş: the burials are marked on groups of gender and age.
- Pl. 2. Possible groups and clusters in the Wietenberg cemeteries: 1. Turia (groups and clusters marked on a plan after Bălan 2014); 2. Dumbrăvița (groups and clusters marked on a plan after Bălan 2014); 3. Aiton (groups and clusters marked on a plan after BĂLAN 2014); 4. Deva (groups and clusters marked on a plan after Bălan 2014); 5. Bistrița (groups and clusters marked on a plan after Bălan 2014); 6. Luduș (groups and clusters marked digitaly on a plan after Berecki 2016); 7. Sibişeni (groups and clusters marked on a plan after Bălan 2014).
- Pl. 3. Early Wietenberg pots: 1. Oarța de Sus (after KACSÓ 2015, fig. 205); 2. Turia (after SZÉKELY 1995, pl. XI/3); 3. Turia (after Székely 1995, pl. V/5); 4. Păuleni (after ROTEA 2000, pl. I/1); 5. Oarța de Sus (after KACSÓ 2015, fig. 204); 6. Turia (after Székely 1995, pl. X); 7. Oarța de Sus (after KACSÓ 2013, fig. 12/3); 8. Stejeriș (after Dumitrașcu et al. 2014, pl. XIX/1); 9. Păuleni (after Rotea 2000, pl. V/1); 10. Oarța de Sus (after Kacsó 2015, fig. 197); 11. Bratei (after Рора 2010, pl. 45/13); 12. Lancrăm-Glod (after Рора-Sіміна 2004, pl. 3/1); 13. Oarța de Sus (after KACSÓ 1987, fig. 199); 14. Oarța de Sus (after KACSÓ 2015, fig. 27/2); 15. Oarța de Sus (after KACSÓ 1987, fig. 26/4-5).
- Pl. 4. Early Wietenberg bowls: 1. Şeuşa (after CIUTĂ 2009, pl. XLVIII/6); 2. Oarța de Sus (after KACSÓ 2013, fig. 13/5); 3. Lancrăm (after Рора-Simina 2004, pl. 3/2); 4. Turia (after Széкеly 1995, pl. VII/2); 5. Oarța de Sus (after Kacsó 2015, fig. 200); 6. Şeuşa (after Ciută 2009, pl. XLVIII/5); 7. Sebeş-Podul Pripocului (after Boroffka 1994, Taf. 117/6); 8. Braşov-Bartolomeu (after Boroffka 1994, Taf. 15/8); 9. Braşov-Bartolomeu (after Boroffka 1994, Taf. 15/7); 10. Fântânele (after Marinescu 2008, pl. IV/1); 11. Fântânele (after Marinescu 2008, pl. II/1); 12. Ţelna-Pe coastă (after Boroffka 1994, Taf. 135/10); 13. Ţelna-Pe coastă (after Boroffka 1994, Taf. 135/7).

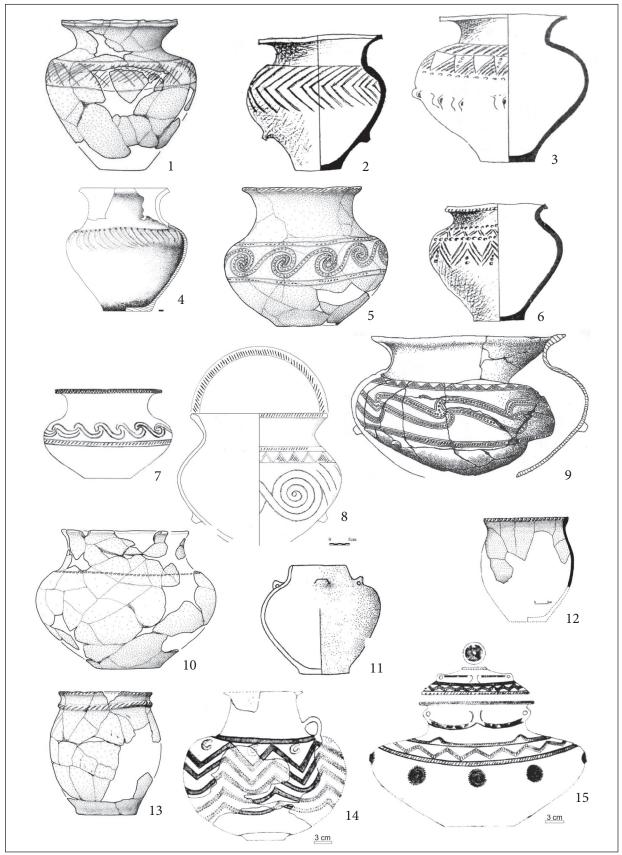
- Pl. 5. Early Wietenberg bowls, cups and mugs: 1. Boiu (after Boroffka 1994, Taf. 14/1); 2. Sfântu Gheorghe-Eprestető (after Boroffka 1994, Taf. 118/2); 3 Oarta de Sus-Ghiile Botii (after Kacsó 2015, fig. 203); 4. Braşov-Valea Răcădăului (after Boroffka 1994, Taf. 18/2); 5. Oarța de Sus-Ghiile Botii (after Kacsó 2013, fig. 13/3); 6. Oarța de Jos-Vilceaua Rusului (after Boroffka 1994, Taf. 102/8); 7. Oarța de Sus-Ghiile Botii (after KACSÓ 2013, fig. 13/2); 8. Oarța de Jos-Vîlceaua Rusului (after BOROFFKA 1994, Taf. 102/11; 9. Oarța de Sus-Ghiile Botii (after Kacsó 2013, fig. 11/8); 10. Sfântu Gheorghe-Eprestető (after Boroffka 1994, Taf. 118/3); 11. Lancrăm-Glod (after Popa-Simina 2004, pl. 2/3); 12. Oarța de Sus-Ghiile Botii (after Kacsó 2013, fig. 11/5); 13. Ţelna-Pe coastă (after Boroffka 1994, Taf. 135/8); 14. Lancrăm-Glod (after Popa-SIMINA 2004, pl. 2/1); 15. Oarța de Sus-Ghiile Botii (after KACSÓ 2013, fig. 11/2); 16. Păuleni (after ROTEA 2000, pl. IV/2); 17 Păuleni (after Rotea 2000, pl. IV/5); 18. Sfântu Gheorghe-Bedeháza (after Boroffka 1994, Taf. 116/5); 19. Sfântu Gheorghe-Ергеstető (after Вокобъка 1994, Taf. 118/6); 20. Sfântu Gheorghe-Eprestető (after Boroffka 1994, Taf. 118/4); 21. Oarța de Sus-Ghiile Botii (after Kacsó 2015, fig. 202); 22. Chintelnic (after Boroffka 1994, Taf. 27/7); 23 Săndulești (after Boroffka 1994, Taf. 118/8); 24. Sfântu Gheorghe-Eprestető (after Boroffka 1994, Taf. 118/10); 25. Braşov-Bartolomeu/Schottergrube (after Вогоffка 1994, Taf. 17/2).
- Pl. 6. Different types of clay objects in early Wietenberg sites: 1. Oarţa de Sus-Ghiile Botii (after Kacsó 1998, fig. 4); 2. Oarţa de Sus-Ghiile Botii (after Kacsó 1998, fig. 3); 3. Turia (after Székely 1995, pl. VII/3); 4. Derşida (after Снідіоşан 1980, pl. 22/16); 5. Rotbav (after Dietrich 2014b, pl. 104/1); 6. Rotbav (after Dietrich 2014b, pl. 104/2); 7. Păuleni (after Rotea 2000, pl. V/2); 8. Oarţa de Sus-Ghiile Botii (after Kacsó 2013, fig. 11/4); 10. Derşida (after Chidioşan 1980, pl. 22/9); 11. Derşida (after Chidioşan 1980, pl. 22/1); 12. Păuleni (after Rotea 2000, pl. I/3); 13. Păuleni (after Rotea 2000, pl. V/4); 14. Ţelna-Pe coastă (after Boroffka 1994, Taf. 135/6); 15. Păuleni (after Rotea 2000, pl. V/9); 16. Rotbav (after Dietrich 2014b, pl. 108/1); 17. Stejeriş (after Dumitrașcu et al. 2014, pl. XXI/21); 18. Rotbav (after Dietrich 2014b, pl. 86/6); 19–20. Oarţa de Sus-Ghiile Botii (after Kacsó 2013, fig. 15/1–2).
- Pl. 7. Different ornamentation types observed on Apa-Hajdúsámson and Ţufaläu metal objects and early Wietenberg ceramic vessels: 1. Derşida (after Chidioşan 1980, pl. 18/8); 2. Ţufaläu (after Mozsolics 1968, Taf. 17/1); 3. Oarţa de Sus (after Kacsó 1987, fig. 27/3); 4. Oarţa de Sus (after Kacsó 1987, fig. 24/1); 5. Grăniceri (after Mozsolics 1968, Taf. 24/2); 6. Braşov-*Zinne* (after Boroffka 1994, Taf. 19/11); 7. Ţufalău (after Vulpe 1970, Taf. 66/B/3, 9); 8. Oarţa de Sus (after Kacsó 2013, fig. 11/4); 9. Derşida (after Chidioşan 1980, pl. 22/9); 10. Şmig (after Mozsolics 1968, Taf. 14/1); 11. Apa (after Vulpe 1970, Taf. 20/299); 12. Gaura (after Vulpe 1970, Taf. 20/301); 13. Oarţa de Sus (after Kacsó 2013, fig. 11/1); 14. Oarţa de Sus (after Kacsó 2004, pl. XXI/2).
- Pl. 8. Different ornamentation types observed on Apa-Hajdúsámson and Ţufaläu metal objects and early Wietenberg ceramic vessels: 1. Păuliș (after Vulpe 1970, Taf. 19/293); 2. Oarța de Sus (after Kacsó 2013, fig. 12/3); 3. Derșida (after Boroffka 1994, Taf. 67/10); 4. Sighișoara–*Wietenberg* (after Boroffka 1994, Taf. 134/2); 5. Hernádkak (after Mozsolics 1968, Taf. 11/1); 6. Oarța de Sus (after Kacsó 2004, pl. XVII); 7. Oarța de Sus (after Kacsó 2004, pl. XXXI); 8. Vatin (after Mozsolics 1968, Taf. 26/2); 9. Biia (after Mozsolics 1968, Taf. 12/a).
- Pl. 9. Radiocarbon data obtained from samples on calcined human bones found in burials at Sebeş–Între răstoace: 1. M2; 2. M17; 3. M25; 4. M32; 5. M34; 6. M36; 7. M43; 8. M44; 9. M45.
- Pl. 10. Radiocarbon data obtained from samples on calcined human bones found in burials at Sebeş–Între răstoace: 1. M2; 2. M17; 3. M25; 4. M32; 5. M34; 6. M36; 7. M43; 8. M44; 9. M45; types of stone structures, containers and adornments found in these burials are illustrated.



Pl. 1. Funerary area at Sebeș-Între răstoace: the burials with stone structures are marked; 2. Possible clusters in the cemetery at Sebeş: the burials are marked on groups of gender and age.

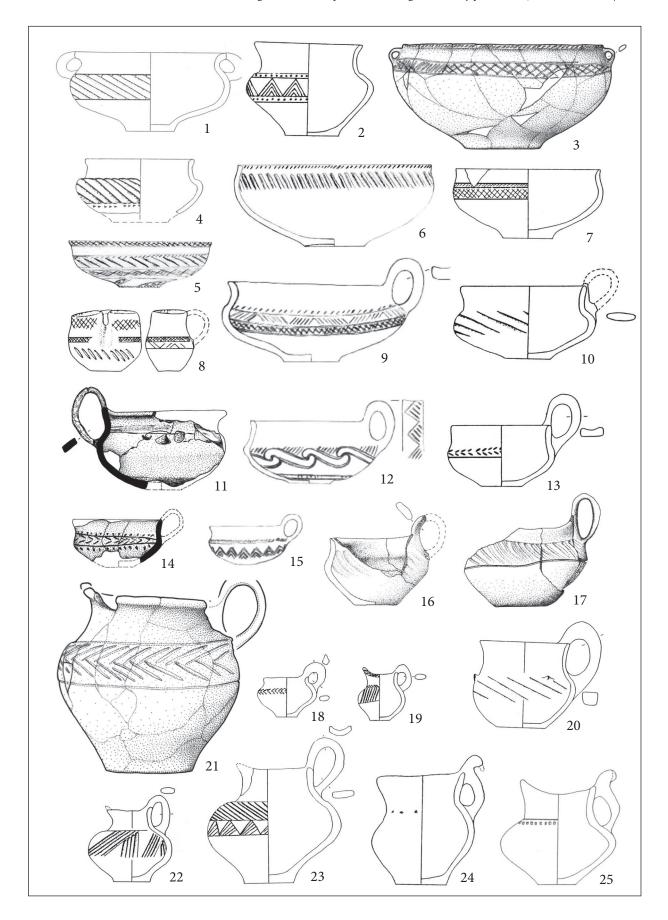


Pl. 2. Possible groups and clusters in the Wietenberg cemeteries: 1. Turia (groups and clusters marked on a plan after BĂLAN 2014); 2. Dumbrăvița (groups and clusters marked on a plan after BĂLAN 2014); 3. Aiton (groups and clusters marked on a plan after Bălan 2014); 4. Deva (groups and clusters marked on a plan after Bălan 2014); 5. Bistrița (groups and clusters marked on a plan after BĂLAN 2014); 6. Luduş (groups and clusters marked digitaly on a plan after Berecki 2016); 7. Sibişeni (groups and clusters marked on a plan after Bălan 2014).

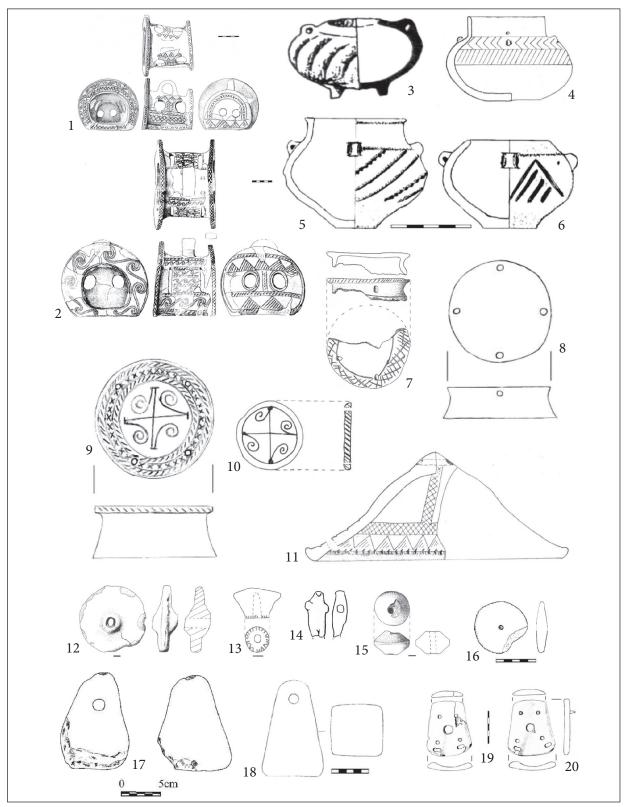


Pl. 3. Early Wietenberg pots: 1. Oarța de Sus (after KACSÓ 2015, fig. 205); 2. Turia (after Székely 1995, pl. XI/3); 3. Turia (after Székely 1995, pl. V/5); 4. Păuleni (after Rotea 2000, pl. I/1); 5. Oarța de Sus (after Kacsó 2015, fig. 204); 6. Turia (after Székely 1995, pl. X); 7. Oarța de Sus (after Kacsó 2013, fig. 12/3); 8. Stejeriș (after Dumitrașcu et AL. 2014, pl. XIX/1); 9. Păuleni (after Rotea 2000, pl. V/1); 10. Oarța de Sus (after Kacsó 2015, fig. 197); 11. Bratei (after Popa 2010, pl. 45/13); 12. Lancrăm-Glod (after Popa-Simina 2004, pl. 3/1); 13. Oarța de Sus (after Kacsó 1987, fig. 199); 14. Oarța de Sus (after KACSÓ 2015, fig. 27/2); 15. Oarța de Sus (after KACSÓ 1987, fig. 26/4-5).

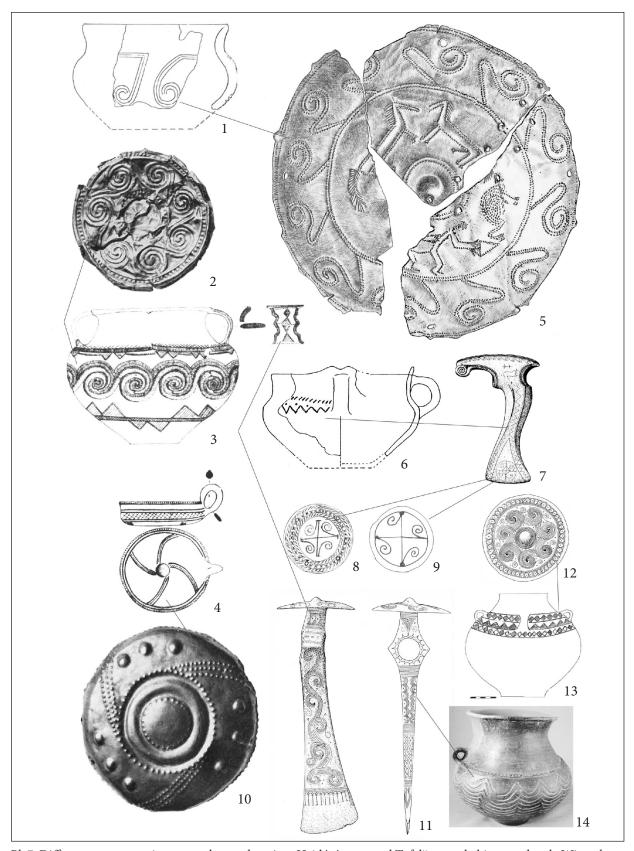
Pl. 4. Early Wietenberg bowls: 1. Şeuşa (after Сійт 2009, pl. XLVIII/6); 2. Oarţa de Sus (after Kacsó 2013, fig. 13/5); 3. Lancrăm (after Рора-Ѕіміла 2004, pl. 3/2); 4. Turia (after Székely 1995, pl. VII/2); 5. Oarţa de Sus (after Kacsó 2015, fig. 200); 6. Şeuşa (after Сійт 2009, pl. XLVIII/5); 7. Sebeş-*Podul Pripocului* (after Boroffka 1994, Taf. 117/6); 8. Braşov-*Bartolomeu* (after Boroffka 1994, Taf. 15/7); 10. Fântânele (after Marinescu 2008, pl. II/1); 11. Fântânele (after Marinescu 2008, pl. II/1); 12. Ţelna-*Pe coastă* (after Boroffka 1994, Taf. 135/7).



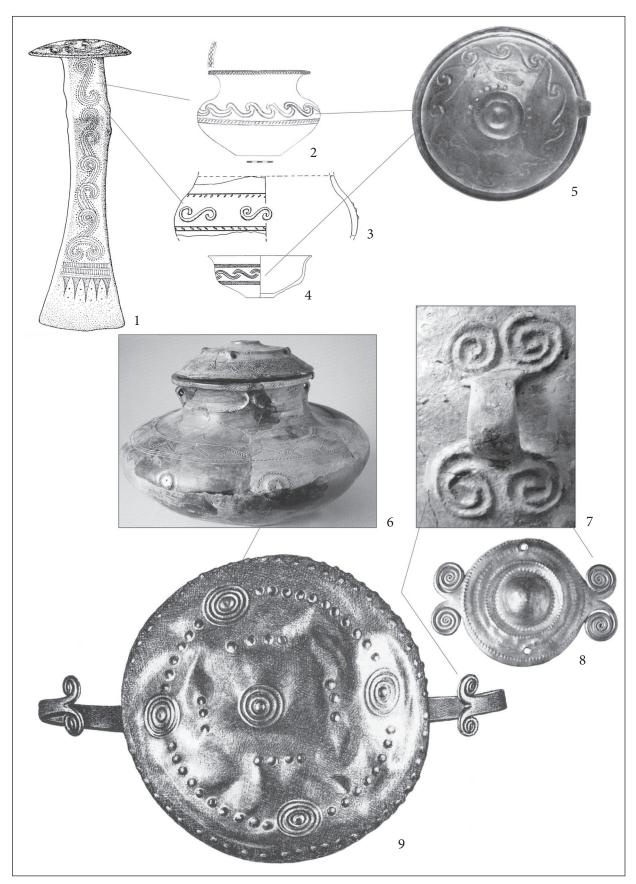
Pl. 5. Early Wietenberg bowls, cups and mugs.



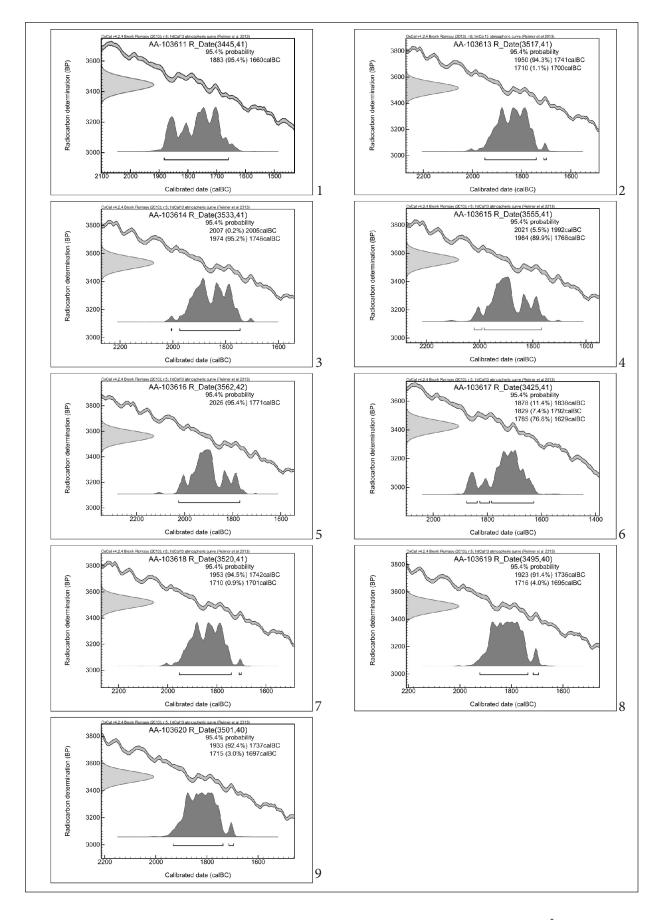
Pl. 6. Different types of clay objects in early Wietenberg sites: 1. Oarța de Sus-Ghiile Botii (after Kacsó 1998, fig. 4); 2. Oarța de Sus-Ghiile Botii (after Kacsó 1998, fig. 3); 3. Turia (after Székely 1995, pl. VII/3); 4. Derșida (after Снідіоșan 1980, pl. 22/16); 5. Rotbav (after Dietrich 2014b, pl. 104/1); 6. Rotbav (after Dietrich 2014b, pl. 104/2); 7. Păuleni (after Rotea 2000, pl. V/2); 8. Oarța de Sus-Ghiile Botii (after Kacsó 2013, fig. 11/6); 9. Oarța de Sus-Ghiile Botii (after Kacsó 2013, fig. 11/4); 10. Derșida (after Chidioșan 1980, pl. 22/9); 11. Derșida (after Chidioșan 1980, pl. 22/1); 12. Păuleni (after Rotea 2000, pl. I/3); 13. Păuleni (after Rotea 2000, pl. V/4); 14. Ţelna-Pe coastă (after Воробрека 1994, Таб. 135/6); 15. Păuleni (after Rotea 2000, pl. V/9); 16. Rotbav (after Dietrich 2014b, pl. 108/1); 17. Stejeriş (after Dumitrașcu et al. 2014, pl. XXI/21); 18. Rotbav (after Dietrich 2014b, pl. 86/6); 19–20. Oarța de Sus-Ghiile Botii (after Kacsó 2013, fig. 15/1–2).



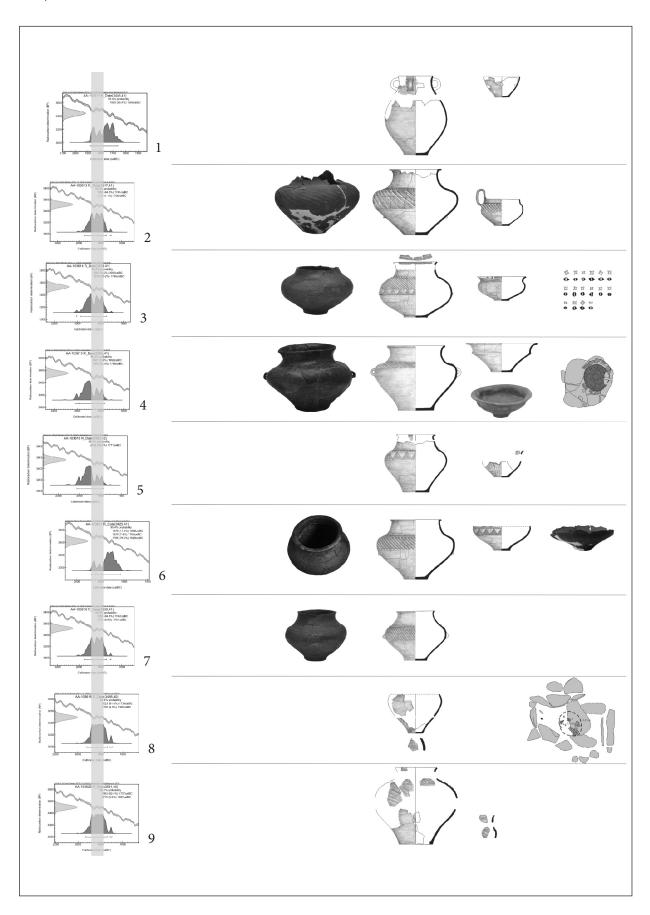
Pl. 7. Different ornamentation types observed on Apa-Hajdúsámson and Ţufalău metal objects and early Wietenberg ceramic vessels: 1. Derșida (after Chidioșan 1980, pl. 18/8); 2. Țufalău (after Mozsolics 1968, Taf. 17/1); 3. Oarța de Sus (after KACSÓ 1987, fig. 27/3); 4. Oarța de Sus (after KACSÓ 1987, fig. 24/1); 5. Grăniceri (after Mozsolics 1968, Taf. 24/2); 6. Braşov-Zinne (after Boroffka 1994, Taf. 19/11); 7. Ţufalău (after Vulpe 1970, Taf. 66/В/3, 9); 8. Oarţa de Sus (after Kacsó 2013, fig. 11/4); 9. Derşida (after Chidioşan 1980, pl. 22/9); 10. Şmig (after Mozsolics 1968, Taf. 14/1); 11. Apa (after Vulpe 1970, Taf. 20/299); 12. Gaura (after Vulpe 1970, Taf. 20/301); 13. Oarța de Sus (after KACSÓ 2013, fig. 11/1); 14. Oarța de Sus (after KACSÓ 2004, pl. XXI/2).



Pl. 8. Different ornamentation types observed on Apa-Hajdúsámson and Ţufalāu metal objects and early Wietenberg ceramic vessels: 1. Păuliș (after Vulpe 1970, Taf. 19/293); 2. Oarța de Sus (after Kacsó 2013, fig. 12/3); 3. Derșida (after Boroffka 1994, Taf. 67/10); 4. Sighișoara–*Wietenberg* (after Boroffka 1994, Taf. 134/2); 5. Hernádkak (after Mozsolics 1968, Taf. 11/1); 6. Oarța de Sus (after Kacsó 2004, pl. XVII); 7. Oarța de Sus (after Kacsó 2004, pl. XXXI); 8. Vatin (after Mozsolics 1968, Taf. 26/2); 9. Biia (after Mozsolics 1968, Taf. 12/a).



Pl. 9. Radiocarbon data obtained from samples on calcined human bones found in burials at Sebeş-Între răstoace: 1. M2; 2. M17; 3. M25; 4. M32; 5. M34; 6. M36; 7. M43; 8. M44; 9. M45.



Pl. 10. Radiocarbon data obtained from samples on calcined human bones found in burials at Sebeş–Între răstoace: 1. M2; 2. M17; 3. M25; 4. M32; 5. M34; 6. M36; 7. M43; 8. M44; 9. M45; types of stone structures, containers and adornments found in these burials are illustrated.