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Hoarding practices in Central Transylvania in the Late Bronze Age

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Abstract

Abstract of PhD thesis submitted in 2016 to the Archaeology Doctoral Programme, Doctoral School of History, Eötvös Loránd University, Budapest under the supervision of Gábor V. Szabó.

The choice of topic for a doctoral thesis is supported by the outstanding importance of the source material from the studied area. Probably the most remarkable legacy of the Carpathian Basin and particularly Transylvania's Bronze Age is represented by the bronze hoards which stand out eminently from other archaeological records of the period due to their wealth and variety. Although Transylvania formed close relations with the neighbouring regions, throughout time, it had a separate and unique status.

The dissertation focuses on the analysis of a region which corresponds with today's Cluj, Bistrița-Năsăud, Mureș, Harghita, Covasna and Brașov Counties, including the north-eastern part of Sibiu County. We are well aware that the political-administrative repartition barely has any archaeological significance but the selected region is used purely out of methodological considerations. The importance of this territory stands out also because of its geographical position which allowed the fusion of influences coming from other regions as well as cultural backgrounds (*Fig. 1–2*).

The analysed period corresponds to the beginning and the advanced stages of the Transylvanian Late Bronze Age, namely the BzC–BzD–HaA phases. This period has a distinct chronological position that comprises the time span between the bronze hoards of the classical Middle Bronze Age and the Gáva culture.¹ The selected period is not accidental since the Romanian chronological repartition includes the HaB1 phase to the Early Iron Age, thus separating itself from the Middle European and Hungarian chronological systems as well.

In spite of the fact that several attempts were carried out in the study of the bronze hoards,² up until today not a single monograph has been published that deals exclusively with the bronze hoarding of the Late Bronze Age Central Transylvania. That is why the mentioned region is an overlooked territory in the literature from this point of view.

¹ For the most important chronological systems see: KACSÓ 2003, 276–277; GOGÂLTAN 2005, 376; CIUGUDEAN 2010, 172–173.

² Petrescu-Dîmboviţa 1977; Petrescu-Dîmboviţa 1978; Hansen 1994; Kacsó 1995, 81–130; Soroceanu 1995, 15–80; David 2002; Kacsó 2006, 76–123; Ciugudean – Luca – Georgescu 2008; Soroceanu 2008; Bratu 2009; Ciugudean – Luca – Georgescu 2010; Soroceanu 2012a.



Fig. 1. Geographical distribution of the analyzed finds in the BzC–D period: 1. Agrieş; 2. Aluniş; 3. Arcuş; 4. Augustin; 5. Bancu I; 6. Breaza; 7. Călăraşi; 8. Cara; 9. Cășeiu; 10. Cătina; 11. Cireșoaia III; 12. Corund; 13. Cristian; 14. Feldioara; 15. Fîntînele; 16. Gheja; 17. Ghinda; 18. Hălchiu; 19. Iara de Jos I; 20. Ilișua; 21. Jabenița; 22. Lepindea; 23. Malnaș; 24. Miercurea Ciuc; 25. Mociu; 26. Panticeu; 27. Perișor; 28. Rebrișoara I; 29. Rebrișoara II; 30. Rotbav; 31. Sângeorgiu de Mureș; 32. Sânnicoară de Gherla; 33. Sîmboieni; 34. Stejeriș; 35. Stupini; 36. Turia II; 37. Uriu; 38. Vădaș; 39. Valea Largă; 40. Vețca; 41. Viștea.



Fig. 2. Geographical distribution of the analyzed finds in the HaA period: 1. Alțina; 2. Bandul de Câmpie; 3. Bogata de Jos; 4. Bogata de Mureș; 5. Căianu Mic; 6. Călugăreni; 7. Cetatea de Baltă; 8. Cincu; 9. Dipșa; 10. Ghindari; 11. Giula; 12. Iernut; 13. Luduș; 14. Merești I; 15. Merești II; 16. Nou Săsesc; 17. Ormeniș; 18. Popești; 19. Răscruci; 20. Seleuș; 21. Socolu de Câmpie; 22. Suseni; 23. Țigău; 24. Tușnad; 25. Vâlcele II; 26. Zau de Câmpie.

The goals and the most important questions of the dissertation

During the analysis of the Late Bronze Age hoarding practices in Central Transylvania I had the possibility to rely on important and frequently quoted hoards. In spite of this, the information database regarding these finds is very poor and the seldom elaborated finds are published deficiently and incorrectly. The standards of such papers do not meet scientific requirements and they are not suitable for detailed observations either. That is why one of the basic goals of the present research was to collect all these Late Bronze Age hoards and process them according to the requirements of the modern day archaeological research standards. All in all 67 hoards were analysed, with a total of 4679 bronze items which was completed with 497 stray finds and 18 gold and bronze grave goods.

The most important question of the dissertation was the definition of the "character" of these hoards. This implies the chronological position of the bronze items, and the occurrence rate of artefact types related to each-other; in a few words their chronological and structural characteristics. Thus, based on the hoarding practices different depositional regions were expected to emerge. The already mentioned area is suitable for such an endeavour because the influences of different regions penetrated this area and certain overlaps can be expected in the hoarding practices.

The main purpose of the typological and chronological classification was the dating of the hoards and the determination of the accumulation period. Due to the fact that the hoards often cannot be linked exclusively to a narrow chronological horizon and frequently the boundary between the accumulation time and the hiding of the bronzes is more than obvious.

The uniqueness and the full-fledged character of the Central Transylvanian hoarding practices will also be outlined. In this sense the morphology of the hoards or the position of the bronze items within hoards will be investigated. Secondly, the structure of the finds can provide valuable information regarding the selected object category and type, and the occurrence rate of artefact types related to each-other. Combining these information different hoard types can be identified. For a better understanding these will be discussed together with the neighbouring hording regions.

Special attention will be given to the fragmentation patterns visible on the artefacts. I will try to answer the following question: was the practice of fragmentation determined by a geographical region, or was it the result of different customs from different chronological periods? If several hoarding patterns can be outlined, based on the selective deposition of different object categories and types, one can ask whether the tradition of fragmentation is suited for similar differentiations in the depositional practice.

For a complete picture regarding the hoarding phenomenon stray finds and metal grave goods were also examined. They were put through the same combinatory analysis. The thesis tries to answer the question whether the different forms of metal deposition existed beside one another, or they complemented each-other.

One of the most important controversies regarding the Late Bronze Age hoarding phenomenon is the delineation of the cultural background and the tracing of archaeological features related to the hoards. We wanted to observe how accurately the classification of the bronze material and the separation of the different bronze hoard types overlapped a specific ceramic style. Can it be stated that certain regional groups buried only specific bronze types? How did the hoarding phenomenon change in the contact areas, and can we expect anomalies?

The methodology of the research

The essential requirement of the study was to improve the documentation of the hoards, namely the photos, cross-section drawings, measurements, and the observation of the use and wear marks, according to the requirements of the newest research standards. Due to this process, several hoard finds had to be re-examined which were barely published or were even inexistent in the literature. Sometimes the exact finding spots of the hoards were identified and excavated.

The basic methodological starting point was to give a comparative analysis between the BzC–D and the HaA evolution phases. Although many bronze types overlap between the two periods, the structure of the finds and their state of preservation (intact or fragmented objects) point to a clear separation. Both periods were subjected to the same methods of analysis, thus trying to outline the alterations of the hoarding practices.

The tracing of the structural characteristics of the hoards is based on the typological and chronological examination of a large amount of bronze material. Hereby, the character, the chronology and the spatial distribution of the artefacts could be highlighted.³ The "character" of the hoards is given by the frequency of artefacts and by the occurrence rate of the artefact types related to each-other. Thus, beside the dominant types subsidiary bronzes existed as well, which contribute to the complete picture of the hoarding phenomenon in the same amount.

In the researched area two large-sized hoards were also discovered (Bandul de Câmpie (Mezőbánd)⁴ and Dipṣa (Dipse)⁵). During the analysis a setback was represented by these hoards. Due to their extremely large size with hundreds and thousands of bronze items (Bandul de Câmpie/2477 and Dipṣa/611 objects) the statistical analysis was heavily distorted. The two mentioned hoards are not suitable for frequency or common occurrence analysis. It is important to highlight that the combined analysis of such large hoards with the small and medium-sized ones is not advisable.

Also, the evaluation of a restricted area cannot offer extensive results. In this respect the selected region has its own limitations and the bronze hoards have a relatively low occurrence rate.

Results of the analysis of the Central Transylvanian hoarding practices

Regarding the find circumstances and find spots of the hoards discovered in the researched area only scarce data are available. Therefore, general conclusions cannot be drawn. An important aspect was the examination and classification of the hoard size. This was determined based on the number of the artefacts within the hoards. It is clearly visible that in the BzC–D evolution phase the small and medium-sized hoards are common, and in the upcoming period the large-sized hoards dominate. Since several artefacts could not be identified in the collections of the museums, the gathered data regarding the weight ratios of the two periods are irrelevant.⁶

³ Hansen 1991, 150–160; Hansen 1994, 326–363; Huth 1997, 115–149; Maraszek 1998; Hansen 2005, 213–227; Soroceanu 2005; Maraszek 2006, 158–248; Soroceanu 2012b.

⁴ The complete documentation of the hoard was carried out in the autumn of 2007. See SOROCEANU – REZI – NÉMETH 2016.

⁵ Ciugudean – Luca – Georgescu 2006.

⁶ Out of 67 assemblages only 35 could be weighed, representing a total of 52%. But if we set aside the two largest hoards, Bandul de Câmpie and Dipsa, the proportion of the weighed items barely reaches 20%.

One of the main goals of the dissertation was the analysis of the occurrence rate of artefact categories and types related to each-other, and the separation of different hoarding patterns. It is traceable that in the BzC-D period hoards consisting of one or two object categories are very frequent. The presence of clean hoards, which are exclusively represented by one artefact type, is also high.⁷ During the next evolution phase, in spite of the fact that the ratios between the object categories remain the same, the monotonous-structured hoards lose ground. Except for three small hoards clean assemblages disappear. Hoards dominated by one object category still occur in the highest number, but the three-four-five object category hoards gain more ground. In the BzC-D period the dominance of the tools is indisputable but due to their high occurrence it is difficult to outline specific patterns. Generally, the weapon-toolornament combination is dominant and other object categories play a secondary role. In the HaA period we can not only witness a significant increase in the number of the artefacts but also a typological diversification. Many new ornament types are produced in this time span and raw material is used in unprecedented proportions. Bronze vessels and sheet fragments are exclusive requirements for the weapon-tool-ornament combination. Based on the comparison of the artefact categories the difference between the two periods is more than obvious: firstly in the BzC-D phase monotonously structured hoards are dominating, while in the HaA period complex structured hoards play a decisive role.

	SIC	BRC	DBA	SPH	BRL	CHS	BAX	DAG	SWR	WAX	PIN
SAX	16	8	7	5	5	3	3	2	3!	2!	1
SIC		6	4	5	6!	4	2	2	2	1	1
BRC			4	4	2	1	1	2	1	1	1
DBA				3	3	1	2	2	3!	2!	0
SPH					3	3	0	1	2	2!	0
BRL						2	1	2	2	1	0
CHS							1	1	1	0	0
BAX								1	1	0	0
DAG									1	0	2
SWR										2!	0
WAX											0

Fig. 3. The combinatory table of the object types from the BzC–D period. (SAX socketed axe, SIC sickle, BRC bracelet, DBA disc butted axe, SPH spearhead, BRL bronze lumps, BAX battle axe, DAG dagger, CHS chisel, SWR sword, WAX winged axe, PIN pin).

The combination of the object categories is completed by the find association of the artefact types, namely the occurrence rate of object types and their relation to each-other. In the BzC–D period the sickles and the socketed axes appear in the highest number and in most of the hoards

7 In Central Transylvania such assemblages are dominated first of all by hooked sickles, followed by bracelets and battle axes.

they are used together with almost every other artefact types. They often appear near discbutted axes, spearheads, and bracelets. The only dominant ornament is the bracelet. Among the weapons disc-butted axes can be highlighted, mostly in the northern parts of the region. The spearheads play an important role as well. Their raw material has a low significance in this period, but they are totally dependent on sickles. This combination is one of the most obvious hoarding patterns of this period. This is completed by the popular socketed axe–disc-butted axe combination. These assumptions are confirmed in the next evolution phase as well, when these combinations appear in larger number in spite of the fact that we catalogued half the numbers of the hoards from the BzC–D period (*Fig. 3*).

The increase in size of the HaA hoards implies their typological diversity as well, although the number of the hoards decreases. One of the main features of this new evolution phase, in comparison with the previous period, is that the bronze quantity increases by nine times while only half the hoards were used. So the goal was not the repeated action of the hoarding practice but the burying of outstanding assemblages. As a result, the accumulation period of the objects expands, and the typological and chronological frameworks of the bronze items cannot be limited exclusively to one horizon. Thus the burying moment of the hoard does not necessarily overlap the accumulation period.

	BRC	SIC	BRL	SPH	PIN	PEN	BRB	SWR	KNF	BBE	DBA	SAW	RNG	VES	DAG	WAX	BUT	FIB
SAX	12	13	11	8	7	6	8	7!	5	6	6!	5	5	5	3	4!	3	3
BRC		11	10	10	9	8	9!	6	7!	6	6!	4	5	6!	4!	4!	5!	5!
SIC			12!	9	9	7	9!	7!	6	6	4	5	5	6!	4!	4!	4	4
BRL				7	8	7	8	6	6	6	4	5	3	6!	4!	4!	3	4
SPH					6	6	7	6	7!	6	3	4	4	6!	4!	4!	4	5!
PIN						5	6	4	5	5	3	4	2	5	3	3	4	4
PEN							7	2	5	5	4	2	4	4	4!	4!	2	3
BRB								5	5	5	4	4	4	5	4!	4!	2	3
SWR									5	5	2	4	3	5	4!	3	3	3
KNF										5	2	4	3	6!	4!	3	4	5!
BBE											3	3	2	5	3	4!	3	3
DBA												2	1	2	2	3	1	1
SAW													2	4	4!	3	2	2
RNG														2	2	2	3	2
VES															4!	3	3	4
DAG																3	2	4
WAX																	2	1
BUT																		3

Fig. 4. The combinatory table of the object types from the HaA period. (SAX socketed axe, BRC bracelet, SIC sickle, SPH spearhead, PIN pin, BRL bronze lump, PEN pendant, BRB bronze bar, SWR sword, KNF knife, BBE bronze belt, DBA disc butted axe, SAW saw, RNG ring, VES vessel, DAG dagger, WAX winged axe, BUT button, FIB fibula).

In this period, beside the two dominant artefact types, namely the sickles and socketed axes, an important role is given also to bracelets. Similarly to the previous period it is the main ornament type based mainly on its occurrence. Among the weapons spearheads are used in most of the combinations but they are uncommon in comparison to bracelets. The raw material is employed in an impressive amount. It represents 43% from all the HaA objects, and it is used with the dominant types. The appearance of small ornaments is an innovation of this period, which are present often in the most complex hoards of the time. The disc-butted axes

lose ground in favour of spearheads, swords, and daggers. In the category of tools we cannot observe any major alterations, and the basic representativeness remains the same. Several artefact types appear which were hardly used in the previous period but were employed in large numbers in specific hoards. However, their occurrence is generally low and play a secondary role among the other bronze types. Saws, pendants, belts, fibulae, and bronze vessels can be listed within this category (*Fig. 4*).

Based on the results of the combinatory analysis we can assert that the detailed examination of the so-called "tool hoards" of the BzC–D period reflects a slightly different picture. If we emphasize that beside the dominant socketed axes and sickles one can hardly find any other tool type the "tool hoard" phrase does not fully cover the hoarding practices of this evolution phase. Based on the artefact types it would be better to use the terms *sickle hoards, bracelet hoards*, or *socketed axes hoards*, which are more appropriate for the structure of the assemblages. Hereby, one can observe an alteration in the outline of the hoarding practices, because the bracelets represent the third most numerous artefact type, but after sickles they dominate most of the assemblages. This trend continues in the next evolution phase as well, and predominates even more, because it will become the most often used type of the period based on its occurrence. In spite of this, the sickle–socketed axe combination remains the most frequently used matching, barley exceeding the sickle–bracelet or the socketed axe–bracelet combinations.

The combinatory analysis of the artefact categories and types offered the possibility to separate different hoard types. The *clean hoards* are characteristic mainly for the BzC–D period while in the HaA period they are overshadowed by the complex type-spectrum of the assemblages. The *monotonously structured* or *one-sided hoards* are always defined by dominant artefact types. The *complex hoards* - due to the characteristics of the period - are more frequent in the HaA phase, but since several types are accumulated in large numbers, the one-sided character of some of the hoards is still visible. From this point of view the first period is dominated in a proportion of 73% by one-sided hoards, and 27% of the finds have complex structure, while in the HaA phase this ratio changes to 50–50%.

One of the main characteristics of the Late Bronze Age hoards is their fragmentation.⁸ It is undeniable that the damaged artefacts are mostly the result of a premeditated and intentional action. Broken objects are very often linked to different aspects of metallurgy. However, as the hoarding patterns show, the degree of fragmentation changes according to the chronological periods and geographical regions. Thus, the different stages of the bronze processing cannot be explained with the high volume of scrap material within the hoards. For a better understanding of this phenomenon we separated *damage, break* and *destroy* type fragmentations. A special practice could be outlined regarding the bending of the artefacts, however, it needs to be separated from the bending that breaks the objects. It is characteristic of the HaA period and it is used predominantly on bladed artefact types, such as sickles and saws.

The question of the fragments missing from the hoards, which never obtained a permanent place in the structure of these finds, was also analysed. Based on these observations, and corroborated with the fragmentation patterns, a clear separation of the hoarding phenomenon between the two evolution phases is more than obvious. According to the fragmentation customs two

8 Rezi 2011 (with earlier literature); Brück 2016; Hansen 2016.

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hoarding practices can be outlined: first in the BzC–D period there is the remaining visual of the hoard, and secondly, 'the 'missing hoard'. The missing hoard, as a specially and purposefully structured find, never occurs on its own (*Fig. 5/A–D*). In the upcoming evolution phase the general outline of the 'missing hoard' changes with the alteration of the fragmentation patterns. Due to the high typological variety and to the increased fragmentation the missing parts become more diverse as well. The similarity between the actual hoard and the missing one is clear. The missing parts correspond typologically and proportionally to the extant objects (*Fig. 5/E*). Thus, the missing parts fit organically in the hoarding patterns of the period without having the possibility to separate them.



Fig. 5. Missing fragments from the assemblages: A–D. BzC–D hoards; E. HaA hoard.

The Late Bronze Age hoarding practices of Central Transylvania are completed by stray finds and metal grave goods. From a typological point of view the hoards and stray finds show similarities, and most probably their selection and deposition was guided by the same principles. Within Central Transylvania the two depositional forms cannot be separated from each-other.

We get a totally different picture by analysing the bronze and gold grave goods.⁹ These finds are entirely different from the other hoarding forms and they constitute a different artefact category based on their quantity and quality. Among the metal grave goods a decisive role is played by the clothing items. Other object types are almost entirely ignored. Based on these observations it can be stated that the most important deposition form of the Late Bronze Age in Central Transylvania was represented by the bronze hoards, in contrast to which the grave goods had an insignificant role. The difference between the two archaeological categories of finds is not a unique Central Transylvanian characteristic. The same patterns were observed

9 Sava 2002; Motzoi-Chicideanu 2011.

in Northern Transdanubia, Southern Germany, North-Eastern Austria and Southern Moravia, where the scarcely occurring hoards were replaced by richly furnished graves.

During the typological analysis of the artefact types it could be observed that no rigid boundaries could be drawn between the evolutions of the different forms. The basic types can be inserted within a general BzD–HaA time span. One can rarely name exclusive BzD or HaA types. Such exceptions from the first period are Pecica-type daggers, trapezoid grip-tanged daggers, B3-type disc-butted axes, Sant-Dragomiresti-type battle axes, globe-headed battle axes, knobbed pins and the narrow belts.

Within the characteristic HaA types we can name Pecica-type swords, B4-type disc-butted axes – although they often appear beside B3-type axes, V-ribbed socketed axes, Sighet-type winged axes, razors with ring-like endings, engraved, ribbed and longitudinally ribbed bracelets, fibulae, large-sized anchor-shaped pendants, wide, richly decorated belts, Friedrichruhe cups and Satteldorf-type bowls.

Y-ribbed socketed axes represent an evolved typological feature, which are characteristic for the end of the HaA and HaB1 periods. These artefacts are the latest objects from the analysed period and region. The socketed axes with framed ribbings from the hoards of Rebrisoara I (Kisrebra I) and Călugăreni (Mikháza), and the socketed axe with pseudo-wings from Călugăreni point towards a later dating as well.

In the research of the Central Transylvanian hoarding phenomenon one of the most problematic issue is the relationship between the hoard finds and the different ceramic styles. Based on the vessels which contain the hoards, we can rarely name a particular ceramic style. Yet, the structure of the finds show a certain hoarding trend without any doubt. The most southern representatives of the Upper-Tisza region's metallurgical centres are the largest and most complete BzD hoards from the researched area, which do not appear south of the Somesul Mic and Somesul Mare Rivers. We are entitled to say that this micro-region is the southern peripheral region of the Uriu-Opályi-type hoards (*Fig. 6/1*).

Compared to the above mentioned territory the Upper course of the Mures and the Olt Rivers, and the Valley of the Târnava Rivers outline a different hoarding region. The structure of the finds is simplified, the complex-structured hoards disappear, and the hoards consist of one object category, at best of one or two artefact types. A predominant role is played by the Transylvanian-type socketed axes, hooked sickles, bracelets, pins, and spearheads. Based on the cultural situation of Central Transylvania these hoards can be linked most probably to the hoarding practices of the Noua culture. Thus, the structure of the hoards is determined by the system of values of a specific community because the dominant cultural agent leaves its mark on the metal deposition as well (*Fig. 6/2*).

Although the previously observed trends survive in some cases (*Fig. 6/3*), in the upcoming HaA evolution phase we can witness the uniformization of the hoard finds. Due to the increased number and variety of the artefact types the earlier described trends in the hoarding practices fade away almost totally (*Fig. 6/4*). Although there is still no common position regarding the cultural situation of the HaA period in Central Transylvania, some hoards from this period can be related to the so-called Band-Cugir communities, others to the Noua III groups. However, due to the varied structure of the hoard finds it is almost impossible to isolate different guidelines

concerning the bearing communities. Therefore, at the moment, the different hoarding patterns of the HaA period can be linked to specific cultural group or ceramic style with difficulties or great uncertainties.



Fig. 6. Differently structured hoards in distinct regions: 1. Uriu (Felőr); 2. Jabenița (Görgénysóakna); 3. Țigău (Cegőtelke); 4. Călugăreni (Mikháza).

Although it was not a main goal of the dissertation, the problem of the late HaA and the HaA2 hoards was also examined. This late period was related to a general HaA evolution phase based on the metal artefacts, but the analysis of the ceramic material outlines a different picture. In the latest chronological systems the classically defined HaA2 period loses its importance and from a chronological point of view it does not cover an entire century, like it was suggested earlier. The ribbed socketed axes which become more and more elaborate, the wide bladed sickles, the solid-hilted knives, and swords undoubtedly point towards the HaB1 period. As we have seen the hoarding practices are not defined exclusively based on typological considerations, and the structure, the degree of fragmentation plays a major role as well. From a typological point of view the HaA2 hoards become simpler, thus displaying similarities to the assemblages from the upcoming period. Taking all this into consideration I believe that the HaA2 hoards, which were defined exclusively based on metal, can be linked to the already outlined HaA2–B1 period and not to the HaA1 hoards. Thus, the uniformity of the HaA period is unfolding.

Summarizing the main topic, we can conclude that the Central Transylvanian bronze assemblages integrate organically into a wider Central European and Carpathian Basin hoarding practice. Since the deposition of the metal artefacts was determined by special principles and changed according to geographical regions, one cannot expect uniformly-built hoarding patterns on large territories. Due to the regional characteristics, Central Transylvania has a unique status and the treasures buried in this area are different from the surrounding territories. As exceptions, we can name the complex-structured BzD hoards from the valley of the Somes River which can be related to the hoarding area from North-Eastern Hungary and North-Western Romania. In the same period the hoards buried in the south-eastern corner of Transylvania show good similarities to assemblages from Moldavia.

The comparison of the two main evolution phases of the Late Bronze Age in Central Transylvania reflects the changes in hoarding practices between the two periods. Even though no rigid boundaries can be drawn between most of the artefact types, the hoarding customs of the BzC–D period on one hand, and the HaA period on the other hand, offer totally different pictures. The structure of the hoards, the condition of the objects, and the trends of the depositions clearly shows a line of conduct. Thus, we believe that it would be more appropriate for the future to use the terms "BzD character" and "HaA character" hoards which refer to all the periods' criteria (*Fig. 7*). It is highly probable that this differentiation is the result of a selective deposition. Taking all this into account we can assert that Central Transylvanian hoard finds are the results of the value system of the local communities and customs, and thus, they integrate organically into the general "place–structure–condition" hoarding phenomenon.



Fig. 7. The cultural evolution in Central Transylvania and the surrounding regions.

References

BRATU, O. 2009: Depuneri de bronzuri între Dunărea mijlocie și Nistru în secolele XIII-VII a. Chr. București.

- BRÜCK, J. 2016: Hoards, Fragmentation and Exchange in the European Bronze Age. In: HANSEN, S. –
 NEUMANN, D. VACHTA, T. (ed.): Raum, Gabe und Erinnerung. Weihgaben und Heiligtümer in prähistorischen und antiken Gesellschaften, Berlin Studies of the Ancient World 38. Berlin, 75–92.
- CIUGUDEAN, H. 2010: The Late Bronze Age in Transylvania (With primary focus on the central and Southern areas). In: MARTA, L. (ed.): Amurgul mileniului II a. Chr. În Câmpia Tisei și Transilvania. Das Ende des 2. Jahrtausendes v. Chr. Auf der Theiß-Ebene und Siebenbürgen. Simpozion / Symposium Satu Mare 18-19 iulie 2008. Satu Mare, 157–202.
- CIUGUDEAN, H. LUCA, S. A. GEORGESCU, A. 2006: Depozitul de bronzuri de la Dipşa. The Bronze Hoard from Dipşa. Cu o contribuție de/with a contribution of Tobias Kienlin și Ernst Pernicka. Bibliotheca Brukenthal V. Sibiu.
- CIUGUDEAN, H. LUCA, S. A. GEORGESCU, A. 2008, *Depozite de bronzuri preistorice din colecția Brukenthal I.* Bibliotheca Brukenthal XXXI. Sibiu.
- CIUGUDEAN, H. LUCA, S. A. GEORGESCU, A. 2010, *Depozite de bronzuri preistorice din colecția Brukenthal II*. Bibliotheca Brukenthal XLVII. Sibiu.
- DAVID, W. 2002: Studien zu Ornamentik und Datierung der bronzezeitlichsen Depotfundgruppe Hajdúsámson-Apa-Ighiel-Zajta. Bibliotheca Musei Apulensis XVIII. Alba Iulia.

- GOGÂLTAN, Fl. 2005: Zur Bronzeverarbeitung im Karpatenbecken. Die Tüllenhämmer und Tüllenambose aus Rumänien. In: SOROCEANU, T. (ed.): Bronzefunde aus Rumänien II. Beiträge zur Veröffentlichung und Deutung bronze- und älterhallstattzeitlicher Metallfunde in europäischem Zusammenhang. Descoperiri de bronzuri din România II. Contribuții la publicarea și interpretarea descoperirilor de metal din epoca bronzului și din prima vârstă a fierului în context european. Bistrița–Cluj-Napoca, 343–387.
- HANSEN, S. 1991: *Metalldeponierungen der Urnenfelderzeit im Rhein-Main-*Gebiet. Universitätsforschungen zur prähistorischen Archäologie 5. Bonn.
- HANSEN, S. 1994: Studien zu den Metalldeponierungen während der älteren Urnenfelderzeit zwischen Rhôhnetal und Karpatenbecken. Universitätsforschungen zur prähistorischen Archäologie 21. Bonn.
- HANSEN, S. 2005: Über bronzezeitliche Horte in Ungarn Horte als soziale Praxis. In: HOREJS, B. JUNG, R. – KAISER, E. – TERĽAN, B. (ed.): Interpretationsraum Bronzezeit. Bernhard Hänsel von seinen Schülern gewidmet. Universitätsforschungen zur prähistorischen Archäologie 121. Bonn, 211–230.
- HANSEN, S. 2016: A Short History of Fragments in Hoards of the Bronze Age. In: BAITINGER, H. (Hrsg.), Materielle Kultur und Identität im Spannungsfeld Zwischen mediterraner Welt und Mitteleuropa. Material Culture and Identity between the Mediterranean World and Central Europe. Mainz, 185– 208.
- Huтн, Ch. 1997: *Westeuropäische Horte der Spätbronzezeit. Fundbild und Funktion*. Regensburger Beiträge zur Prähistorischen Archäologie. Bonn.
- KACSÓ, C. 1995: Der Hortfund von Arpășel. In: SOROCEANU, T. (ed.): *Bronzefunde aus Rumänien*. Prähistorische Archäologie in Südosteuropa 10. Berlin, 81–130.
- KACSÓ, C. 2003: Der zweite Depotfund von Ungureni. In: KACSÓ, C. (ed.), Bronzezeitliche Kulturerscheinungen im Karpatischen Raum. Die Beziehungen zu den benachbarten Gebieten. Ehrensymposium für Alexandru Vulpe zum 70. Geburstag, Baia Mare 10–13 Oktober 2001. Baia Mare, 267–295.
- KACSÓ, C. 2006: Bronzefunde mit Goldgegenständen im Karpatenbecken. In: KOBAL' J. (ed.): Bronzezeitliche Depotfunde – Problem der Interpretation. Materialien der Festkonferenz für Tivodor Lehoczky zum 175. Geburtstag. Ushhorod, 5.-6. Oktober 2005. Uzgorod, 76–123.
- MARASZEK, R. 1998: *Spätbronzezeitliche Hortfunde entlang der Oder*. Universitätsforschungen zur prähistorischen Archäologie 49, Bonn.
- MARASZEK, R. 2006: Spätbronzezeitliche Hortfundlandschaften in atlantischer und nordischer Metalltradition. Veröffentlichungen des Landesamtes für Denkmalpflege und Archäologie Sachsen-Anhalt – Landesmuseum für Vorgeschichte 60, I. Halle (Saale).
- MOTZOI-CHICIDEANU, I. 2011: Obiceiuri funerare în Epoca Bronzului la Dunărea Mijlocie și Inferioară. Bronze Age burial customs in the Middle and Lower Danube Basin. București.
- Реткеscu-Dîмвоvița, M. 1977: Depozitele de bronzuri din România. București.
- Реткезси-Dîмвоvıţa, M. 1978: Die Sicheln in Rumänien, Prähistorische Bronzefunde XVIII/1. München.
- REZI, B. 2011: Voluntary destruction and fragmentation in Late Bronze Age hoards from Central Transylvania. In: BERECKI, S. – NÉMETH, R. E. – REZI, B. (eds.): Bronze Age Rites and Rituals in the Carpathian Basin. Proceedings of the International Colloquium from Târgu Mureş, 8-10 October 2010. Bibliotheca Musei Marisiensis IV. Cluj-Napoca, 303–334.

- SAVA, E. 2002: Die Bestattungen der Noua-Kultur. Ein Beitrag zur Erforschung spätbronzezeitlicher Bestattungriten zwischen Dnestr und Westkarpaten. Prähistorische Archäologie in Südosteuropa 19. Berlin.
- SOROCEANU, T. 1995: Die Fundumstände bronzezeitlicher Deponierungen Ein Beitrag zur Hortdeutung beiderseits der Karpaten. In: SOROCEANU, T. (ed.): *Bronzefunde aus Rumänien*. Prähistorische Archäologie in Südosteuropa 10. Berlin, 15–80.
- SOROCEANU, T. 2005: Zu den Fundumständen der europäichen Metallgefäße bis in das 8. Jh. v. Chr. Ein Beitrag zu deren religionsgeschichtlichen Deutung. In: SOROCEANU, T. (ed.): Bronzefunde aus Rumänien II. Beiträge zur Veröffentlichung und Deutung bronze- und älterhallstattzeitlicher Metallfunde in europäischem Zusammenhang. Descoperiri de bronzuri din România II. Contribuții la publicarea și interpretarea descoperirilor de metal din epoca bronzului și din prima vârstă a fierului în context European. Bistrița – Cluj-Napoca, 387–428.
- SOROCEANU, T. 2008: Die vorskythenzeitlichen Metallgefasse im Gebiet des heutigen Rumanien. Vasele de metal prescitice de pe actualul teritoriu al României. Bistrița Cluj-Napoca.
- SOROCEANU, T. 2012a: Die Kupfer- und Bronzedepots der frühen und mittleren Bronzezeit in Rumänien. Depozitele de obiecte din cupru și bronz din România. Epoca timpurie și mijlocie a bronzului. Archaeologica Romanica V. Cluj-Napoca – Bistrița.
- SOROCEANU, T. 2012b: Die Fundplätze bronzezeitlicher Horte im heutigen Rumänien. In: HANSEN, S. – NEUMANN, D. – VACHTA, T. (ed.): *Hort und Raum: Aktuelle Forschungen zu bronzezeitlichen* Deponierungen in Mitteleuropa. Berlin, 227–254.
- SOROCEANU, T. REZI, B. NÉMETH, E. R. 2016: Der Bronzedepotfund von Bandul de Câmpie, jud. Mureş/Mezőbánd, Maros-megye. Beiträge zur Erforschung der spätbronzezeitlichen Metallindustrie in Siebenbürgen. Prähistorische Konfliktforschung 1. Bonn – Târgu Mureş.