

BRONZE HOARDS OF WEAPONS AND JEWELRY FROM THE MIDDLE DANUBE TO THE LOWER DANUBE IN LATE BRONZE AGE AND EARLY IRON AGE

BRATU Olimpia

Abstract. *The study covers the associated hoards of weaponry and jewelry the period Br D-Ha B3-C discovered in the Danube basin to the Middle and Lower Danube. Based on statistical and combinatorial analysis of items of the deposits consist of two functional categories, such as weapons associated with jewelers, four combinatorial types were distinguished for Br D, three for Ha A and three for Ha B_{1,2}. Associations items of the that hoards types have been deployed from this analysis are the expression of patterns of hoarding differ depending on the period of temporary lodging, and after the area they occupy.*

Keywords: *Hoards, weapons, jewelry, late Bronze Age, early Iron Age.*

The study was applied to the Br D to Ha B3-C bronze hoards located in a large space in Central and Eastern Europe from the Middle Danube to the Lower Danube (Slovakia, Hungary, Ukraine, Romania, former Yugoslavia, Bulgaria¹). The analysis was made on the composition of deposits, which, based on functional groups filing has generated several categories of hoard with different behavior depending on the time hoarding and cultural space in which it was made. A significant portion of the hoards is composed of two functional categories, notably associations weapons and jewelry, which we present below.

Hoards with combinations of two functional categories, type weapons and ornaments have Br D center weight after falling into a continuous decline with a slight recovery in Ha B3-C (Fig. 1). Such deposits occur in Br D northern space studied, with two mergers - one in Transcarpathian Ukraine, northeastern Hungary, with some infiltration in Maramures and another west of the Tisza between Hernadi and Sajó (map 1). Since the range of HA deposits weapon jewelry dissipates. They continue to be a specific area usually hoard in the north where, although their presence is much reduced, the two areas of concentration are maintained. To the west of the Tisza state that extends to the west of Sajó and to the east of the Tisza observe a small cluster of such discoveries in Maramures, in an area previously without such deposits (map 2). Compared with the great explosion of HA deposits, a phenomenon which reaches its development is overwhelmingly a southern areas of the workspace, we find that the habit of association ornaments and weapons make only appears sporadically in this part, perhaps with a slight concentration in Banat. All these lead us to suggest that the hoarding of weapons in combination with jewelry is characteristic of the area upper basin of the Tisza. In Ha B1-2 can hardly talk about this habit, he seems to have lost its meaning, at least for its area of occurrence and manifestation, the upper basin of the Tisza, where now we do not know of any discoveries. Association weaponry and jewelry are kept in this area since investigated the outskirts, to western and central Slovakia, on the Dalmatian coast in Moldavia over the Prut and partly in Banat (map 3).

To better understand the association hoards weaponry and jewelry custom, we analyzed the composition of deposits, i.e. we tried to see if there are rules on the hoarding of certain weapons or ornaments. Thus, we applied statistical and combinatorial approach to these discoveries for each period of time and got some combinatorial types that have distinct characteristics, but most say in the distribution area of the deposits wearable weapons, which entitles us to say that we were able to document the different customs in time and space to the association type hoards weapons and jewelry.

Hoards that stretch north Br D space is studied four combinatorial types well-defined chronological and typical (Fig. 2). Type 1 is characterized by combinatory devoid of bracelets that are associated with the disc axes, socketed axes and spear heads. For the weapon used in the formation of hoards falling within this combinatory type that never appears spearheads with disc axes. Noteworthy is that in addition to the main association, and rings can be found here, rarely present in other types distinguished. The second type associated combinatory bracelets, disc axes or socketed axes. We speak of two groups here, a bracelet-disc axes combinations type and other combinations bracelets-socketed axes. Combinatory Type 3 is the largest and is growing with it and the types of weapons and ornaments which are in combination. It combines parts of the jewelry bracelets plus protective arm rings now, but make their presence felt and needles, and from category weapons disc axes, socketed axes and spear heads. Also, we could probably talk for two subgroups - one with the protective arm rings to which they are associated pins or pendants, another without. We note the presence of fibulae, belt. The fourth type is characterized by replacing the combination bracelet-socketed axe with protective arm ring- sword. In those ornaments are added, pendants and, especially, spiral bracelets and weapons category also appear in two-arm axes.

¹ The study tackles 1351 hoards and over 300 isolated finds (swords and disc axes). We have taken into account only hoards with definite make-up and dating in order to allow as few probability factors in our analysis as possible. It is also worth mentioning that we have used the chronology dating submitted by researchers who published the findings.

Evoluția depozitelor de arme asociate cu piese de port

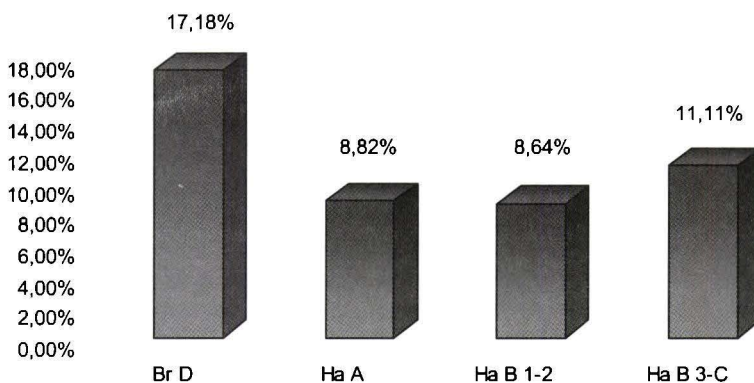


Fig.1. Evolution hoards weapons associated with jewelry.

In these types combinatorial space situation is quite clear (map 1). Combinatorial types 1 and 2 are found in deposits east of the Tisza in Transcarpathian Ukraine, Hungary and northeastern Maramures, while type 4 only north west of the Tisza in Hungary and south-western Slovakia. Combinatorial Type 3, the largest seems to be some sort of link between those whose distribution area is excluded, the trend to group general area on the outskirts of the spread of such hoards.

Hoarding associated jewelry with weapons HA A continues with new features, dispersal in space is one of them. It nonetheless remains a habit of filing space specifically for northern research. The new metal centers appear once this period is behaving more like a loan in the same region. Statistical and combinatorial analysis hoards of weapons and ornaments of HA results in three clearly distinguishable combinatorial types. Main association of hoards of this period is socketed axes-bracelet. It occurs in all types obtained, which distinguishes them as the rest of the items that are added or not the combination of the above. Type 1 is characterized by the main association bracelet with socketed axes, plus pendants, buttons (only found here), spiral bracelets and fibulae jewelry category and the category of weapons, arrowheads, defensive weapons (only in this type), and daggers. Type 2 is the main exponent of hoarding association with socketed axe-bracelets. Last combinatorial type, type 3, is aimed mainly associated socketed axes with bracelet, sword and spearhead, rarely all at once. Here is preserved axes disc or two arms. Rings, protective arm rings, especially necklaces and rings plus combinations that define this type of association (Fig. 3).

Spread the types defined in space allows us to conclude that the combinatorial type 3 is characteristic of such deposits in northern study area, especially west of the Tisza, even if it is intertwined with the discovery of type 1. Combinatorial findings that type 1 appear to be preferred especially to the south, while the small group represented by the findings of type 2 associated with the bracelets only socketed axes never meet west of the Tisza, they appear in the area east of river in Ukraine and Maramures (map 2).

The few finds of this type of Ha B1-2 can be divided as three parts associated with well-defined combinatorial. The first type is the main association socketed axe and sword (rarely together) with the bracelets. Also included are only found in this group items such as pendants, spiral bracelets and arrowheads. The second type is characterized by the combination of socketed axe and spearheads with bracelets and fibulae. In type 3 combinatorial witnessing an important change that is not appearing the bracelets which are replaced with other ornaments, fibulae and pins. Besides these, few, occur only in type 1 and 3, never 2. Winged axes characterize only the association of type 3 (Fig. 4). In this context we note that the combinatorial type 1 appears to mark the limits of such hoards in the period discussed, while type 2 and 3 were the center of this area was described by combinations of weapons jewelry at this time (map 3).

Clearly hoards functional combinations of two categories of weapon and jewelry type are characteristic patterns discussed tabling the northern area in the upper basin of the Tisza. This is the area where hoarding is concentrated representation of parts of individuality, the hoards of weapons, jewelry and the weapon and jewelry. In other words, the pattern of hoarding of bronzes in the upper basin of the Tisa aimed at representing individuality, male / warrior / ruling or female and use in expressing the intent of the categories analyzed hoards - hoards of weapons, jewelry hoards and associated hoards of weaponry and jewelry.

Besides clearly distinguished association of certain weapons and jewelry, have discussed bronze hoards and other elements leading to a better understanding of this phenomenon. We mean the integrity of the items made to their weight, but also the relationship with the environment in which the hoarding was made, and how the items were ordered / arranged when they arrived in the land.

Hoard with the association of two functional categories is characterized by the deposit of entire items, but mostly predominantly whole². It is noted that Br D and Ha B1-2 parts are hoarding in significant percentages, integers, while in HA, even this type of association is marked by major age tend to fragment or to affect parts integrity - weapons destruction is characterized by the active part of the piece the jewelry more deformed or badly finished.

Relationship with the environment where hoards have been discovered is very important for understanding the hoarding of bronze. The fact that many bronzes from certain places - heights, water, wetlands, confluences, terraces - speaks of an intentional action can not be linked only with the scope of the cult of the sacred. Hoarding³ involves numerous religious and historical knowledge, so for this particular area was not an ordinary, but places that have, by themselves, qualities - are wetland or implying that the environment was an area of waters and different destinations natural environments probably had religious significance.

If we refer only to the category of hoards discussed, we see that it is marked as a medium of choice for the hoarding of heights and wet environment. Regarding the relationship between the environment and during the parts have reached the ground, the hoard associated weapons with jewelry present interesting features. Thus, it is preferred Br D comparable proportions, both in the high deposit and wet deposition. The HA situation changes, for hoard in wet environment, while for Ha B1-2 note that these findings come from on high, never in a wetland.

Information about ordering parts from discovery suffers from poor documentation because most of the discoveries were made accidentally. From the few data we had available, we can say reserve that for the hoards of two functional categories in general and for the hoard associated weapons and jewelry, in particular, seems to have been the intention hoarding them in relation to a cliff and arranged in a certain way.

The study of bronze hoards in the research area has allowed us to note that, not all hoards evince the same characteristics, on the contrary, we can outline areas of specific practices, with a different time and space evolution. Moreover, certain items are found in some areas while they are absent in some others or, if they featured at some point in past, they disappear later on. All these elements noted in relation with bronze hoards in the area under study points to fact that hoards made up base on certain criteria related to the customs of one or another cultural area. These customs seem to be the outcome of some practices related to the cult area and, as recent considerations have it, they are perhaps religious manifestations of the late Bronze Age and beginning of the first Iron Age.

² More than 50% integrity unaffected parts of fragmentation or deformation. Chr. Sommerfeld, *Gerätegeld Siecheln. Studien zu monetären Struktur bronzzeitlicher Horte im nördlichen Mitteleuropa, Vorgesch. Forsch. 19*, Berlin-New York, 1994, p. 32, distinguishes five methods of acting on objects, which result in their various stages - I complete objects over which does not preserve the original shape and they are whole, used, unused or scrap; II fragments materials whose splitting leads to a decrease in shape and can not reconstruct the whole partial pieces in order to obtain a weight, III fragments ideal - deliberate action that leads to uncontrolled destruction of objects whose original form can recover full of fragments to be protected from the profane or as part of a casting process; IV functional or ideal deformation resulting deformation without fragmentation changing the original form objects leads to complete, but the shape changed, no longer function as intended or not cancel functional value, where no functional fragments, V functional fragments which are not intended to destroy, but what brings change original forms stage object fragments changed form without function.

³ D.R. Frontijn, *Sacrificial Landscapes, Cultural biographies of person, objects and natural places in the Bronze Age of the Southern Netherlands. 2300-600 B.C.*, 2002, p. 277.

Hoard	S	A	2A	SB	PA	P	D	Pn	BT	DW	BL	R	SH	J	D AX	SA	BR	AR	TCP	N	WA	TYPE
BEOGRAD-AUTOKOMANDA																	X			X	X	TYPE I
SZECSENY V														X			X			X	X	
ARDOV														X			X	X			X	
TÁRŠOLT															X	X	X			X		
TISZABECS															X		X		X			
DRAGOMIREȘTI															X	X	X		X			
REBRIȘOARA II															X	X	X		X			
UZGOROD V																X	X	X				
KOL'CINO													X				X	X				
BEREGSURANY													X				X	X				
TIBAVA													X			X	X	X				
ZALUZ'E																X	X					TYPE II
TISZALADANY																X	X					
LIVADA II																X	X					
IMSTICEVO																X	X					
GHEJA																X	X					
BOTPALAD																X	X					
CSEGOLD															X	X	X					
VELIKAJA															X		X					
PALAD I																						
OLESNIK IV															X		X					
NYIRBELTEK															X		X					TYPE III
DOBROCINA															X		X					
COMONIN II															X		X					
CĂIANU MIC															X		X					
BREB															X		X					
NERESNICA														X	X	X	X					TYPE III
SVALJAVA II													X			X	X					
OROSIEVO													X			X	X					
TISZASZENTMARTON									X				X			X	X	X				
IRSAVA													X		X		X					
HORNA STUBNA													X		X		X					
KISPALAD II														X	X							
BELOVEZA														X	X							
VOLOVEC					X										X	X	X	X				
AGRIȘ										X					X		X					
BELKI											X		X			X	X					TYPE III
PENESZLEK									X				X		X	X	X					
KOPRIVNICA												X	X				X					
MALAJA BEGAN' I												X			X							

COMONIN I					X										X	X	X				
SLAVKOVCE					X											X	X				
BANATSKI KARLOVAC					X											X	X				
ARKA					X												X	X			
PACIN I						X	X	X						X			X	X	X		
KONRADOVCE								X					X					X			
ERDOHORVATI								X					X					X			
SZECSENY III				X				X	X			X		X							X
CSONGRAD I					X	X							X			X	X	X			
NYIREGYHAZA IV				X												X		X			
BEREGOVO III								X								X					
LOCHOVO		X							X			X		X	X	X		X			
KURITYAN					X	X		X	X	X		X		X			X	X			
FELSODOBSZA I					X	X	X	X	X			X	X	X	X	X		X			
PETERVASARA II					X	X	X						X				X	X			
KRIVA					X					X						X					
VILYVITANY					X		X						X					X			
GEBERJEN				X	X											X		X			
VIS III					X		X	X						X				X			
ZATISNE			X	X	X										X			X	X		
DRAZICE	X							X							X			X			
RESICA					X	X							X								
FOIENI I							X	X													
SZOLNOK II	X					X	X										X	X			
CSEREPPALU					X			X													
RIMAVSKA SOBOTA I	X		X	X	X			X	X					X				X			
CUDLOVO	X				X	X											X				
SZECSENY IV	X				X								X								
VEL'KY BLH		X	X	X	X											X					
FORRO	X			X	X	X															
ABAUJKE II		X			X																
KRALOVA LEHOTA	X				X																

Fig. 2. **Combinatorial type hoards Br D.** S – sword, A – axe, 2 A – two arms axe, SB – spiral bracelet, PA – protective arm ring, P – pins, D – dagger, Pn – pendant, BT – buttons, DW – defensive weapons, BL – belt, R – ring, SH – spearhead, J – jewelry, DAX – disc axe, SA – socketed axe, BR – bracelet, AR – arm ring, N – necklace; WA – winged axe.

1. ABAUJKER II
2. AGRIEŞ
3. ARDOV
4. ARDUD
5. ARKA
6. BANATSKI KARLOVAC
7. BELKI
8. BELOVEZA
9. BEOGRAD-AUTOKOMANDA
10. BEREGOVO III
11. BEREGSURANY
12. BOTPALÁD
13. BREB
14. CĂIANU MIC
15. COMONIN I
16. COMONIN II
17. CSEGÖLD
18. CSERÉPFALU
19. CSONGRÁD I
20. CUDLOVO
21. DOBROCINA
22. DRAGOMIREŞTI
23. DRAZICE
24. ERDŐHORVÁTI
25. FELSŐDOBSZA I
26. FOIENI I
27. FORRÓ
28. GÉBERJÉN
29. GHEJA
30. HORNA STUBNA
31. IMSTICEVO
32. IRSAVA
33. KISPALÁD II
34. KOL'CINO
35. KONRADOVCE
36. KOPRIVNICA

37. KRALOVA LEHOTA
38. KRIVA
39. KURITYÁN
40. LIVADA II
41. LOCHOVO
42. MALAJA BEGAN' I
43. NERESNICA
44. NYIRBELTEK
45. NYÍREGYHÁZA IV
46. OLESNIK IV
47. OROSIEVO
48. PÁCIN I
49. PENÉSZLEK
50. PÉTERVÁSÁRA II
51. REBRIŞOARA II
52. RESICA
53. RIMAVSKA SOBOTA I
54. SLAVKOVCE
55. SVALJAVA II
56. SZÉCSÉNY III
57. SZÉCSÉNY IV
58. SZÉCSÉNY V
59. SZOLNOK II
60. TÂRŞOLŢ
61. TIBAVA
62. TISZABECS
63. TISZALADÁNY
64. TISZASZENTMÁRTON
65. UZGOROD V
66. VELIKAJA PALAD'
67. VEL'KY BLH
68. VILYVITANY
69. VISS III
70. VOLOVEC
71. ZALUZ'E
72. ZATISNE

HOARD	R	W	P	DA	WA	N	2A	AR	S	PA	SH	BR	SA	D	A	SB	FB	BL	J	AH	BT	P	DW	S	TYPE
ZALASZENTMIHALY POTRETE																					X	X	X	X	TYPE I
BODROGKOZ																				X		X		X	
HÁRÁU												X	X						X					X	
NEGYES													X								X				
AGGTELEK I								X		X							X			X	X				
HUMENNE									X				X						X				X		
DEBRECEN FANCSIKA I								X		X		X	X					X	X		X	X			
EDELENY II												X	X	X									X		
VISS I											X	X			X								X		
GORNJI MILANOVIC											X	X	X							X					
FIZEŞ													X					X							
BALASAGYARMAT									X			X	X							X					
TURT												X	X		X		X								
TAMASFALVA			X								X	X	X	X					X		X				
SZENDROLAD II												X	X						X						
OSOJ												X		X	X										
SVETI JANEZ					X								X						X						
MATIEVIC KULSKO BRDO						X			X		X	X	X			X	X		X						
KRNJAK											X	X	X				X								
KALINY I									X			X						X							
SOBUNAR DEBELO BRDO								X					X		X										
TEGLAS I												X	X												TYPE II
SEREDNEE												X	X												
PODMONASTYR I												X	X												
LUGOJ												X	X												
KAMENOVO												X	X												
BÂRSANA												X	X												TYPE III
HETIN									X		X	X	X	X		X									
SAROSPATAK II									X	X		X				X									
CÂMPULUNG LA TISA				X							X							X							
SÁLAJ											X	X	X												
NEGROVO I											X	X	X												
OLESNIK V					X							X	X	X											
BUKKARANYOS I									X	X	X	X	X	X											
GELENES I								X				X	X												
SZENDRO								X			X		X												

Fig. 3. **Combinatorial type hoards** Ha A. R – ring, W – weapons, P – pins, DA – disc axe, WA – winged axe, N – necklace, 2A – two arms axe, AR – armring, S – sword, PA – protective arm ring, SH – spear head, BR – bracelet, SA – socketed axe, D – dagger, A – axe, SB – spiral bracelet, FB – fibulae, BL – belt, J – jewelry, AH – arrowhead, BT – buttons, PN – pendant, DW – defensive weapons, S – spirals.

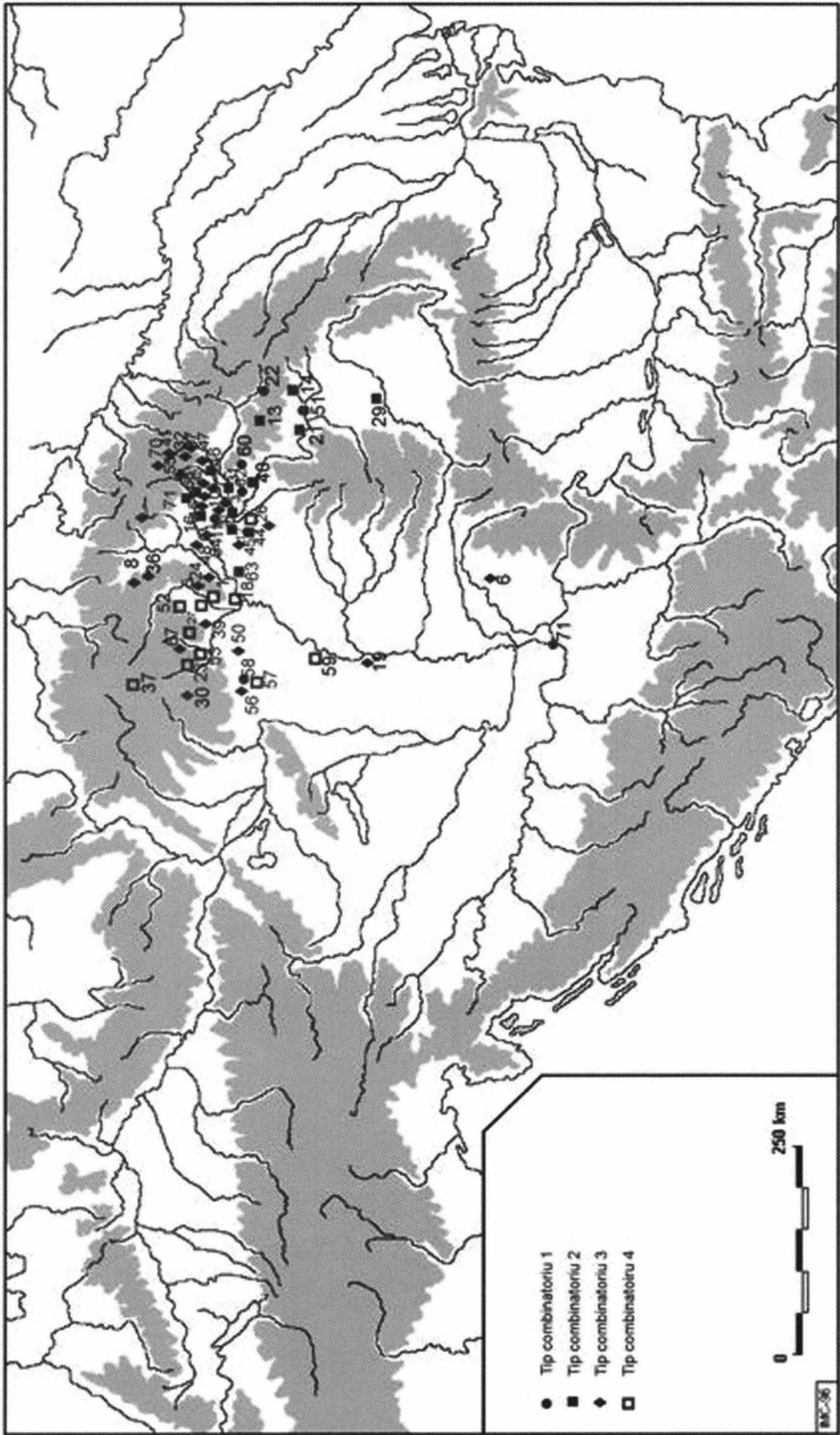
1. ABAÚJSZÁNTÓ II
2. AGGTELEK I
3. BALASSAGYARMAT
4. BÂRSANA
5. BODROGKŐZ
6. BŰKKARANYOS I
7. CÂMPULUNG LA TISA
8. COPOVKA
9. DEBRECEN FANCSIKA I
10. EDELÉNY II
11. EDELÉNY-FINKE
12. FIZEŞ
13. GELENES I
14. GLUBOKOE
15. GORNJI MILANOVIC
16. HAJDUKOVÓ
17. HÁRÁU
18. HETIN
19. HUMENNE

20. JÓŠZA
21. KALINY I
22. KAMENOVO
23. KRNJAK
24. LESKOVO
25. LUGOJ
26. MATIJEVICI-KULSKO BRDO
27. NEGROVO I
28. NÉGYES
29. NIZNA
30. OLESNIK V
31. OSOJ
32. PÉTERVÁSÁRA I
33. PODMONASTY'R I
34. RAGÁLY
35. RĂSCRUCI
36. RĂZBOIENI-CETATE
37. SĂROSPATAK I
38. SĂLAJ

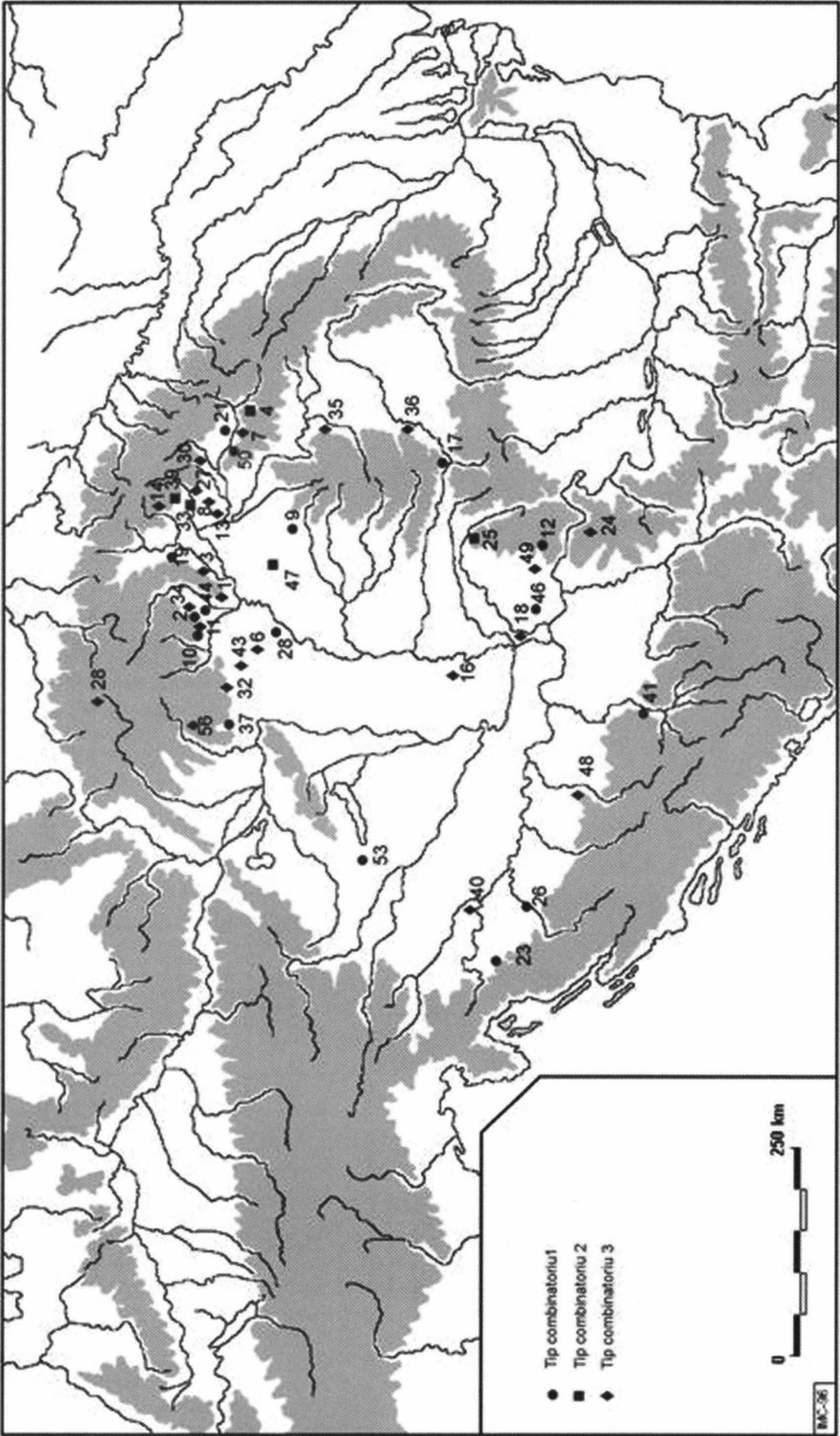
39. SEREDNEE
40. SISAK II
41. SOBUNAR-DEBELO BRDO
42. SVETI JANEZ
43. SZENDRŐ
44. SZENDRŐLAD II
45. SZUHAFŐ
46. TAMASFALVA
47. TÉGLÁS I
48. TESANJ III
49. TICVANIUL MARE
50. TURȚ
51. VELIKI OTOK II
52. VISS I
53. ZALASZENTMIHÁLY-POTRETE
54. ZALKOD
55. ZSUJTA
56. ZVOLEN B

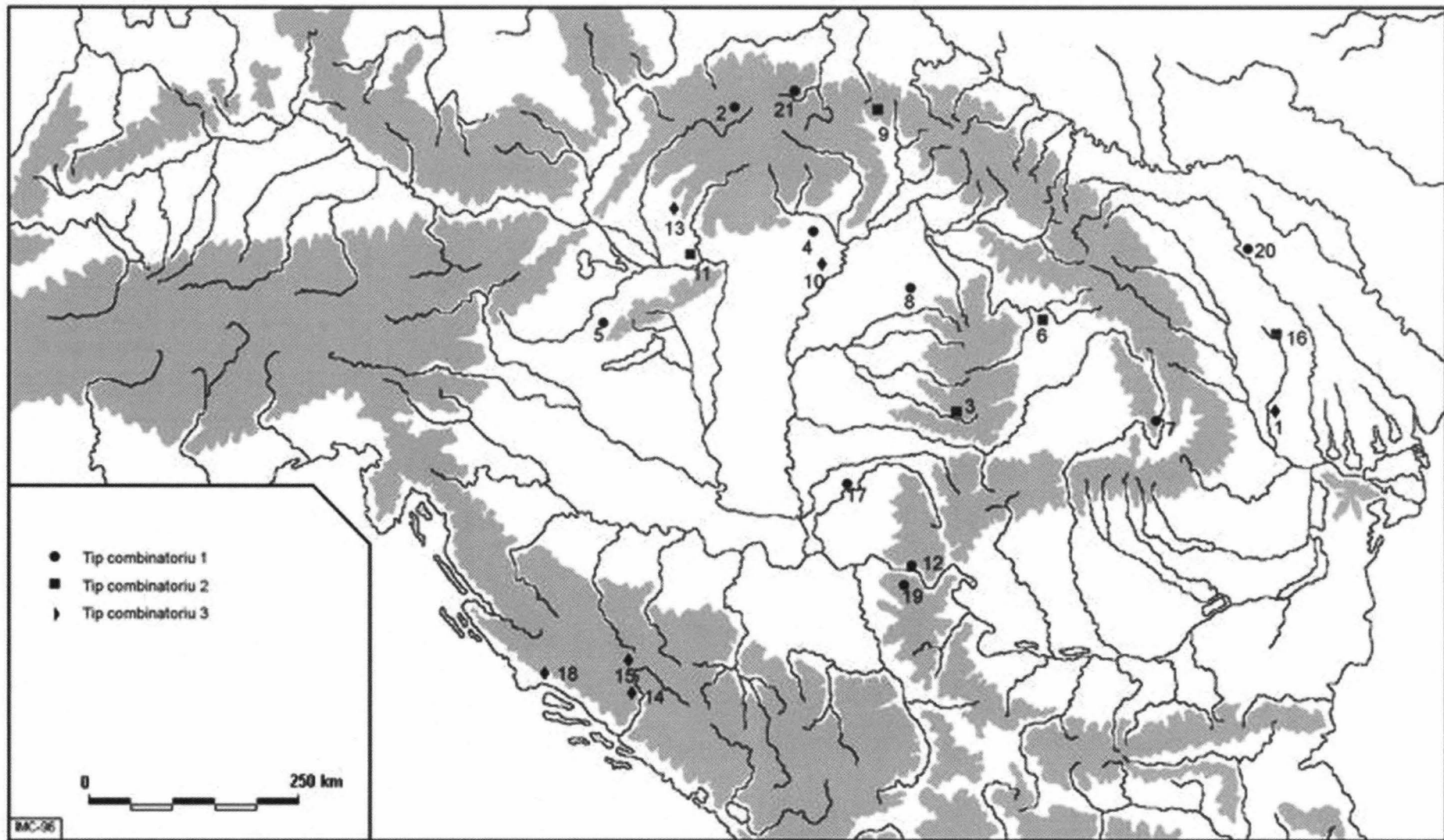
Hoard	AR	S	PA	SB	AH	PN	BR	N	FB	SH	P	SA	WA	J	D	TYPE
DEBRECEN JOSA	X	X		X			X	X								TYPE I
COBOR		X					X									
VELKA B		X							X							
LIBORAJDEA		X	X									X				
CELLDOMOLK IV	X				X	X	X				X	X				
TOPOLNICA		X	X			X	X				X	X				
BOBROVCEK		X							X	X						
BUKKSZENTLASZLO				X			X	X	X			X				
SECANJ I				X		X	X		X	X		X				
VALEA RUSULUI		X					X		X	X		X				
BRAD							X			X						TYPE II
CIREȘOAIA I							X					X				
KAMENY MOST							X		X	X		X				
HAZLIN							X			X		X				
RAFAILA									X	X		X				
BÂRLAD									X			X	X			TYPE III
OMETALA										X		X		X		
SITNO											X	X	X	X		
PROZOR												X		X		
NITRA A										X			X	X		
KACS												X		X	X	

Fig. 4. Combinatorial type hoards Ha B₁₋₂. AR – arm ring, S – sword, PA – protective arm ring, SB – spiral bracelet, AH – arrowhead, PN – pendant, BR – bracelet, N – necklace, FB – fibulae, SH – spear head, P – pins, SA – socketed axe, WA – winged axe, J – jewelry, D – dagger.



Map 1. Spreading Br D hoards associated weapons and jewellery





Map 3. Spreading Ha B 1-2 hoards associated weapons and jewellery

1. BĂRLAD, 2. BOBROVCEK, 3. BRAD, 4. BÜKKSZENTLASZLO I, 5. CELLDÖMÖLK IV, 6. CIREȘOAIA I, 7. COBOR, 8. DEBRECEN-JOSA, 9. HAZLIN, 10. KÁCS, 11. KAMENNY MOST, 12. LIBORAJDEA, 13. NITRA A, 14. OMETALA, 15. PROZOR, 16. RAFAILA, 17. SEČANJ I, 18. SITNO, 19. TOPOLNICA, 20. VALEA RUSULUI, 21. VEL'KA B