

## A Late Bronze Age Axe from Zagon/Zágon (Covasna County, Romania)

### ***Toporul din epoca bronzului târziu de la Zagon/Zágon (Covasna, Romania)***

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**Cuvinte cheie:** topor cu disc și spin, Nackenscheibenaxt, epoca bronzului târziu, sud-estul Transilvaniei, legături interregionale.

**Keywords:** axe with disc and spike, Nackenscheibenaxt, Late Bronze Age, south-eastern Transylvania, connectivity.

#### REZUMAT

Articolul prezintă un topor cu disc și spin de tip B3, varianta Dobrocina, descoperit probabil la începutul secolului 20 în comuna Zagon, județul Covasna. Piesa a ajuns, ca parte a colecției Löfkovics, în Muzeul Déri din Debrecen, Ungaria. Prima mențiune a obiectului a fost făcută în 1915, preluată de cercetătorii maghiari, însă neglijată de cei români (obiectul nu apare nici în monografia lui A. Vulpe sau M. Petrescu-Dîmbovița). Până în prezent nu a fost publicată nici o imagine a piesei. Obiectul aparține epocii bronzului târziu, perioadei Reinecke Br. D.

La finalul articolelor este un apendice în care sunt prezentate cele mai importante descoperiri de acest tip de topor, un mare număr de descoperiri izolate însă lipsind. Părere noastră este că această lipsă nu influențează semnificativ, de exemplu, cunoștințele noastre despre aria de răspândire a tipului, care este, în mare parte, aria de răspândire a culturilor Suciul de Sus și Lăpuș.

Zagon (Hu: Zágon) is located in the southern corner of the Târgu Secuiesc Depression (Hu: Felsőháromszék Depression), at the foot of the Eastern Carpathians. The first written mention of the village is from 1567.<sup>2</sup> In the archaeological literature the settlement is known for two major bronze hoards, discovered in 1877 at the place called "Cseremás"<sup>3</sup>, respectively in 1888 at

"Mete Mountain".<sup>4</sup> The composition of the hoards differs from one author to the other. More bronze discoveries are mentioned in the collection of the Déri Museum from Debrecen<sup>5</sup> and two other axes, never mentioned in the literature, appear in the journal of F. László from 1914. Other archaeological discoveries, belonging to different periods are mentioned in M. Roska's archaeological repertory of Transylvania,<sup>6</sup>

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<sup>2</sup> Szabó M. 2003, 1151.

<sup>3</sup> Gooss 1878, 98-99; SzNMÉ 1890, 47; Petrescu-Dîmbovița, 1977, 138.

<sup>4</sup> SzNMÉ 1890, 47; Petrescu-Dîmbovița, 1977, 138-139.

<sup>5</sup> Zoltai 1915, 124.

<sup>6</sup> Roska 1942, 309-310.

and later in the Archaeological Repertory of Covasna County.<sup>7</sup>

The aim of the present paper is to discuss the Late Bronze Age Axe from the collection of the Déri Museum from Debrecen, Hungary. It is an axe with disc and spike (*Nackenscheibenaxt*), a rare object in this part of Transylvania. The axe was acquired in 1904, as part of the Löfkovics collection.<sup>8</sup> The collection included another disc-butted axe from Zagon, belonging to the Middle Bronze Age (Type B,<sub>1</sub> Igghiel variant, after A. Vulpe), presented in a different paper.<sup>9</sup> The finding circumstances are unknown, very likely the two objects were found separately. The first mention of the objects was made by L. Zoltai, being cited by the forthcoming authors. The first image of the axes was published by A. Mozsolics, omitting the axe with disc and spike.<sup>10</sup> In the monography of the same author dedicated to the LBA axes (Forró and Ópályi horizons) the axe is not mentioned in the text, only possibly figured on a map.<sup>11</sup> The object is not mentioned by A. Vulpe, nor M. Petrescu-Dîmbovița.<sup>12</sup>

At the end of the paper there is a list with the Type B<sub>3</sub> axes, which doesn't include all of the known objects. Mostly the stray finds are missing,<sup>13</sup> but in my opinion this does not influence, for example, our knowledge on the distribution area of these type of axes.

<sup>7</sup> Rep-Covasna 1998, 159, nr. 647-652.

<sup>8</sup> Mozsolics 1967, 177. Mozsolics is presenting the Typ B1 axe and another shaft-hole axe with the location Zagon (Mozsolics 1967, 177-178, Taf. 44/4-5). A. Vulpe take over the information, and includes the shaft-hole axe in the Monteoro type (Vulpe 1970, 46, nr. 183). Based on the registry of the Déri Museum this object was discovered at Aștileu/Esküllő, Bihor County.

<sup>9</sup> Puskás 2017, forthcoming.

<sup>10</sup> Mozsolics 1967, 177-178, Taf. 44/4-5.

<sup>11</sup> Mozsolics 1973, 19, Abb. 2.

<sup>12</sup> Vulpe 1970; Petrescu-Dîmbovița, 1977, 138-139.

<sup>13</sup> For example in our list there is 24 stray finds, since Kacsó mentions 66 stray finds belonging to the Type B3 (Kacsó 2015a, 549).

## Description of the axe

Axe with disc and spike, Vulpe's "Typ B<sub>3</sub>", Dobrocina variant, "Typus D, Variante b" after Mozsolics. It has a relatively high spike, the disc placed asymmetric correlated to the long axis of the object. The section of the bar between the disc and the shaft-hole is rectangular, the shaft-holes are short, thickened at the endings. The cross section of the blade is hexagonal, slightly curved "inwards" correlated to the axis of the object (Plate 3/1a-b, 2a-b). The casting fins were removed. The cutting edge is chipped, small fragments are missing. On the sides of the blade particularly deep, oblique marks are visible, probably result of the finishing process (Plate 3/3a-b). Since the marks are covered with patina very likely they belong to the Bronze Age.<sup>14</sup> Dimensions: length: 21 cm; length of the cutting edge: 3,3 cm; length of the shaft-hole: 4,8 cm; diameter of the shaft-hole: 2,2 cm; diameter of the disc: 5 cm, weight: 436 g. Inv. nr.: IV.1904.39-1.

## Chronology and distribution

The axes with disc and spike (*Nackenscheibenaxt*) were recently debated by C. Kacsó,<sup>15</sup> A. László<sup>16</sup> and I. Bejinariu.<sup>17</sup> Most of the axes belonging to Type B<sub>3</sub> were included in the Late Bronze Age Reinecke Br D period,<sup>18</sup> for a possible beginning from the earlier C period. A few objects are known from Cincu-Suseni type hoards, belonging to the Ha A period.<sup>19</sup> C. Kacsó included the similar objects in the Uriu-Ópályi type hoards.<sup>20</sup> The deposits with

<sup>14</sup> The patina was already on the object when entered the collection of the Déri Museum.

<sup>15</sup> Kacsó 2015a, 546-550.

<sup>16</sup> László 2013, 251-264.

<sup>17</sup> Bejinariu-Sana 2016, 171-182.

<sup>18</sup> Vulpe 1970, 88-89; Kacsó 2009b, 68; László 2013, 253; Kacsó 2015b, 255.

<sup>19</sup> Vulpe 1970, 89; Kacsó 2015a, 548.

<sup>20</sup> Kacsó 1990, 245-247; Kacsó 1995, 6-7; Kacsó 2015a, 548; Kacsó 2015b, 255.

"clear" Type B<sub>3</sub> axes are considered older than the mixed ones (Type B<sub>3</sub> and B<sub>4</sub>).<sup>21</sup> The oldest objects of the Type B<sub>3</sub> axes are considered the objects belonging to the Lăpuş variant,<sup>22</sup> followed by the Cehăluş and Dobrocina variants.<sup>23</sup>

The main distribution area of the axes with disc and spike of Type B<sub>3</sub> is the north-western part of Romania, the Ukrainian part of the Maramureş and the northeastern part of Hungary, which corresponds to the upper Tisza Region and the valley of the two Someş rivers, just to mention the most important ones (Plate 1-2). The area was an important metallurgical center starting from the Middle Bronze Age, with a flourishing bronze production in the Late Bronze Age.<sup>24</sup> The main discovery area of the above mentioned axes also corresponds with the distribution area of the Suciu de Sus and Lăpuş cultures.<sup>25</sup> The Suciu de Sus contact with the neighbouring communities was documented mostly by the "imported/exported" ceramic vessels,<sup>26</sup> but the distribution of the Type B<sub>3</sub> axes also prove these contacts, even with the communities east of the Carpathians (see Plate 1-2).

### **Conclusions**

The axe from Zagon is a stray find or was a single-piece hoard. The lack of informations regarding the precise finding circumstances doesn't support any of these suppositions. In the Reinecke Br D period the southeastern part of Transylvania was

under the influence of the Noua culture and very likely the discovery of the axe can be linked somehow to this culture. In my opinion the object can be explained as import or prestige good from the north-western part of Transylvania, where the main distribution area of similar axes is.

The most plausible communication route between the upper Tisza region and the Târgu Secuiesc Depression is along the western side of the Eastern Carpathians, a region rich in salt springs and rock salt. This mineral was essential for animal husbandry. A similar route was already practiced in the Middle Bronze Age,<sup>27</sup> and probably before as well. After the appearance of the Noua populations in Transylvania the contacts between the two regions remained, connecting the outer regions of the Carpathians with the Great Hungarian Plain. Since transhumant pastoralism was very likely practiced by the Noua populations,<sup>28</sup> a northwestern route leading from the Târgu Secuiesc Depression to the upper Tisza region, along salt rich areas, must be considered.

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<sup>21</sup> Kacsó 2009b, 66.

<sup>22</sup> Bejinariu-Sana 2016, 175.

<sup>23</sup> Kacsó 2015b, 255.

<sup>24</sup> Kemenczei 2003, 168-169; Fischl et alii 2013, 363.

<sup>25</sup> Bejnariu 2007, 48.

<sup>26</sup> Kacsó 2007b, 43-62.

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<sup>27</sup> Puskás 2017, forthcoming.

<sup>28</sup> Boroffka 2005, 131.

## References / Bibliografie

- Bader 1999**  
BADER, T., *Bronzefunde von Surduc, Bez. Sălaj, Rumänien. Bemerkungen zu den bronzezeitlichen Paßfunden im Samosch-Engpaß*, in Boroffka, N.-Soroceanu T. (eds.), *Transsilvanica. Archäologische Untersuchungen zur älteren Geschichte des südöstlichen Mitteleuropa. Gedenkschrift für Kurt Horedt*, 1999, 133-141.
- Bejinariu 2007**  
BEJINARIU, I., *Depozitul de bronzuri de la Brâglez (comuna Surduc, județul Sălaj)*, Cluj-Napoca, 2007.
- Bejinariu-Sana 2016**  
BEJINARIU, I.-SANA, D., *The Bronze Axe Hoard of Fântânele-Rus (Rus Commune, Sălaj County, Romania)*, in *Analele Banatului, S. N., Arheologie-Istorie*, XXIV, Cluj-Napoca, 2016, 171-182.
- Boroffka 2005**  
BOROFFKA, N., *Siedlungsmuster im bronzezeitlichen Siebenbürgen – Am Beispiel des Gebietes um Aiud, jud. Alba*, in Horejs, B.-Jung, R.-Kaiser, E.-Teržan, B. (ed.), *Interpretationsraum Bronzezeit. Bernhard Hänsel von seinem Schülern gewidmet, Universitätforschungen zur Prähistorischen Archäologie*, 121, Bonn, 125-142.
- Fischl et alii 2013**  
FISCHL, K.-KISS, V.-KULCSÁR, G.-SZEVERÉNYI, V., *Transformations in the Carpathian Basin around 1600 B. C.*, in Meller, H.-Bertemes, F.-Bork, H. R.-Risch, R. (eds), *1600 – Kultureller Umbruch im Schatten des Thera-Ausbruch? 4. Mitteldeutscher Archäologentag vom 14. bis 16. Oktober 2011 in Halle (Saale) / 1600 – Cultural change in the shadow of the Thera-Eruption? 4<sup>th</sup> Archaeological Conference of Central Germany October 14-16, 2011 in Halle (Saale), Tagungen des Landesmuseums für Vorgeschichte Halle*, 9, Halle, 355-371.
- Gooss 1878**  
GOOSS, K., *Neuere archäologische Funde aus vorrömischer Zeit*, in *Korrespondenzblatt des Vereines für siebenbürgische Landeskunde*, Nr. 9, Hermannstadt, 1878, 98-99.
- Kacsó 1977**  
KACSÓ, C., *Descoperiri inedite de bronzuri din județul Maramureș*, in *Marmatia*, 3, Baia Mare, 1977, 27-36.
- Kacsó 1990**  
KACSÓ, C., *Piese inedite din depozitul de bronzuri de la Crăciunești*, in *SCIWA*, t. 41, nr. 3-4, București, 1990, 235-250.
- Kacsó 1995**  
KACSÓ, C., *Al patrulea depozit de bronzuri de la Sighetu Marmației*, in *Revista Bistriței*, IX, Bistrița, 1995, 5-48.
- Kacsó 2003**  
KACSÓ, C., *Der zweite depotfund von Ungureni*, in Kacsó, C. (ed.), *Bronzezeitliche Kulturscheinungen im Karpatischen Raum. Die Beziehungen zu den benahbarten Gebieten. Ehrensymposium für Alexandru Vulpe zum 70. Geburtstag*. Baia Mare 10.-13. Oktober 2001, Baia Mare, 2001, 267-300.
- Kacsó 2007a**  
KACSÓ, C., *Descoperiri de bronzuri din nordul Transilvaniei (I). Colecția Ferenc Floth*, Baia Mare, 2007.
- Kacsó 2007b**  
KACSÓ, C., *"Importuri" Suciu de Sus în culturile epocii bronzului din Transilvania*, in *Revista Bistriței*, XXI/1, Bistrița, 2007, 43-62.
- Kacsó 2009a**  
KACSÓ, C., *Depozitul de bronzuri de la Uriu (I)*, in *Revista Bistriței*, XXIII, Bistrița, 2009, 9-30.
- Kacsó 2009b**  
KACSÓ, C., *Descoperirile din epoca bronzului de la Sarasău (jud. Maramureș)*, in *Marmatia*, 9/1, Baia Mare, 2009, 59-100.
- Kacsó 2015a**  
KACSÓ, C., *Topoarele cu disc și spin de la Oarța de Sus și Odești (jud. Maramureș)*, in Spinei, V.-Urseescu, N.-Cotiugă, V. (eds.), *Orbis Praehistriae. Mircea Petrescu-Dimbovița – in memoriam, Honoria*, 11, Iași, 543-558.
- Kacsó 2015b**  
KACSÓ, C., *Bronzefunde vom Typ Uriu-Ópályi in der Maramuresch (Rumänien)*, in Szathmári,

I. (ed.), *An der Grenze der Bronze- und Eisenzeit. Festschrift für Tibor Kemenczei zum 75. Geburtstag*, Budapest, 2015, 253-272.

**Kemenczei 2003**

KEMENCZEI T., *A bronzkori fémművesség*, in Visy, Zs. (ed.), *Magyar régészeti az ezredfordulón*, 167-174.

**László 2013**

LÁSZLÓ, A., *Über die Verbreitung der Bronzenen Streitäxten mit Nackenscheibe in den aussenkarpatischen Gebieten. Eine neue in der Moldau entdeckte Nackenscheibenaxt*, in Berecki, S. (ed.), *Bronze Age Crafts and Craftsman in the Carpathian Basin. Proceedings of the International Colloquium from Târgu Mureş. 5-7 October 2012*, Târgu Mureş, 2013, 251-264.

**Mozsolics 1967**

MOZSOLICS, A., *Bronzefunde des Karpatenbeckens. Depotfundhorizonte von Hajdúsámson und Kosziderpadlás*, Budapest, 1967.

**Mozsolics 1973**

MOZSOLICS, A., *Bronze- und Goldfunde des Karpatenbeckens. Depotfundhorizonte von Forró und Ópályi*, Budapest, 1973.

**Petrescu-Dîmbovița 1977**

PETRESCU-DÎMBOVIȚA, M., *Depozitele de bronzuri din România*, in *Biblioteca de Arheologie*, XXX, București, 1977.

**Puskás 2017 forthcoming**

PUSKÁS, J., *Middle Bronze Age settlement patterns and metal discoveries in the valley of the Black River*, in Rezi, B.-Németh, R. (eds.), *Bronze Age Connectivity in the Carpathian Basin*, Târgu Mureş, 2017.

**Rep-Covasna 1998**

Cavruc, V. (ed.), *Repertoriul arheologic al județului Covasna*, in *Seria Monografii Arheologice*, I, Sfântu Gheorghe.

**Roska 1942**

ROSKA M., *Erdély régészeti repertórium I. Őskor*, Kolozsvár, 1942.

**Szabó M. 2003**

SZABÓ M. A., *Erdély, Bánság és Partium történeti és közigazgatási helységnévtára I-II*, Csíkszereda, 2003.

**SzNMÉ 1890**

A Székely Nemzeti Múzeum Értesítője, I, Sepszentgyörgy, 1890.

**Vulpe 1970**

VULPE, A., *Die Äxte und Beile in Rumänien*, in *Prähistorische Bronzefunde*, IX/2, München.

**Zoltai 1915**

ZOLTAI L., *Debreczen szab. kir. város múzeuma*, in *Archaeológiai Értesítő*, XXXV, Budapest, 115-134.

**Appendix 1 – List of Type B<sub>3</sub> axes**

Table made after Vulpe 1970, 79-90; Kacsó 1977, 27-36; Kacsó 1990, 79-98; Kacsó 2003, 267-300; Kacsó 2007a; Kacsó 2009a, 9-30; Kacsó 2009b, 70-78; László 2013, 251-264; Kacsó 2015a, 543-558; Kacsó 2015b, 256-269; Bejinariu-Sana 2016, 171-182 (D – Deposits; S – Stray finds; G – Grave goods).

Place of discovery	Type B <sub>3</sub>						Bibliography
	Lăpuş	Dobrocina	Cehăluť	Breb	Târgușor	Kriva	
1. Beregovo (UA) – D	X (2)						Kacsó 2009b, 70.
2. Csegöld (HU) – D	X (1)	X (2)	X (7)	X (1)	X (1)		Kacsó 2009b, 76.
3. Dumbrăvioara (RO) – S	X (1)						Vulpe 1970, 80.
4. Fântâ-nele-Rus (RO) – D	X (2-3?)						Kacsó 2009b, 71; Bejinariu-Sana 2016, 171.
5. Klynove II (UA) – D	X (2)						Kacsó 2009b, 72.
6. Lăpuş (RO) – G	X (2)						Vulpe 1970, 80.
7. Uriu de Sus (RO) – S	X (1)						Vulpe 1970, 80.
8. Căianu Mic (RO) – S		X (1)					Kacsó 2007a, 44.
9. Dobrocina II (RO) – D		X (1)	X (1)				Kacsó 2009b, 71.
10. Dragomireşti (RO) – D		X (1)					Kacsó 2015b, 258.
11. Halmeu (RO) – D		X (1)	X (1)				Kacsó 2009b, 71.
12. Kvasovo II (UA) – D		X? (1)			X (16)		Kacsó 2009b, 72.
13. Libotin (RO) – G		X (1)					Kacsó 1990, 81.
14. Lozna Mare (RO) – D		X (1)					Vulpe 1970, 81.
15. Maramureş (RO) – S		X (1)					Vulpe 1970, 81.
16. Oarţa de Sus (RO) – S		X (1)					Kacsó 2015a, 544.
17. Rebrişoara I (RO) – D		X (5)		X (1)			Kacsó 2009b, 78.
18. Rozavlea (UA) – D		X (1)	X (1)				Kacsó 2015b, 261.
19. Săliştea de Sus (RO) – S		X (1)					Kacsó 2015b, 268.

Place of discovery	Type B <sub>3</sub>						Bibliography
	Lăpuș	Dobrocina	Cehăluț	Breb	Târgușor	Kriva	
20. Şieu I (RO) – D		X (1)					Kacsó 2015b, 265.
21. Solotvino I (UA) – D		X	X				Kacsó 2009b, 78.
22. Șpălnaca (RO) – S		X (1)					Vulpe 1970, 81.
23. Suciu de Jos II (RO) – D		X (2)	X (1)				Kacsó 2009b, 75.
24. Târgușor (RO) – D		X (2)			X (2)		Kacsó 2009b, 78.
25. Uioara (RO) – D		X (1)		X (1)			Vulpe 1970, 86.
26. Ungureni II (RO) – D		X (3)	X (2)				Kacsó 2003, 270-271.
27. Uriu (RO) – D		X (4)	X (1)				Kacsó 2009a, 10-11.
28. Vima Mare (RO) – D		X (1)					Kacsó 2009b, 75.
29. Zagon (RO) – S		X (1)					
30. Ajak I (HU) – D			X		X		Kacsó 2009b, 76.
31. Beltiug (RO) – D			X (1)				Vulpe 1970, 83.
32. Budești (RO) – D			X (2)				Kacsó 2009b, 70.
33. Câmpulung la Tisa II (RO) – D			X (2)				Kacsó 2009b, 70-71.
34. Cășeiu (RO) – S			X (1)				Vulpe 1970, 83-84.
35. Căuaș III (RO) - D			X (2)				Vulpe 1970, 84.
36. Cehăluț II (RO) – D			X (3)				Kacsó 2009b, 70.
37. Cluj-Napoca (RO) – S			X (1)				Vulpe 1970, 85.
38. Coldău II (RO) – D			X (2)				Kacsó 2009b, 71.
39. Dragu (RO) – S			X (1)				Vulpe 1970, 84.
40. Glod (RO) – D			X (2)				Vulpe 1970, 85.
41. leud (RO) – D?			X (4)				Kacsó 2009b, 71.

Place of discovery	Type B <sub>3</sub>						Bibliography
	Lăpuș	Dobrocina	Cehăluț	Breb	Târgușor	Kriva	
42. Ilba (RO) – S			X (1)				Vulpe 1970, 85.
43. Jibou (RO) – D			X (1)				Kacsó 2009b, 76.
44. Bihor County (RO) – S			X (1)				Vulpe 1970, 83.
45. Căuaș V (RO) – D			X (3)	X (1)			Kacsó 2009b, 70.
46. Hajdú-hadház (HU) – D			X (3)		X (1)		Kacsó 2009b, 76.
47. Kalyny (UA) – D			X (2)				Kacsó 2009b, 72.
48. Karcsa (HU) – D			X (2)				Kacsó 2009b, 72.
49. Kispalád I (HU) – D			X (3)				Kacsó 2009b, 72.
50. Kispalád II (HU) – D			X (5)		X (3)		Kacsó 2009b, 76-77.
51. Koroviya (UA) – D?			X (3)				László 2013, 262, Taf. 1/6-7, 11.
52. Kryva (UA) – D			X (4)		X (3)	X (8)	Kacsó 2009b, 77.
53. Livada (RO) – D			X (1)	X (1)			Kacsó 2009b, 73.
54. Mali Hejevci (UA) – D			X (1)				Kacsó 2009b, 77.
55. Maramureş (RO) – S			X (1)				Vulpe 1970, 84.
56. Moigrad (RO) – S			X (1)				Vulpe 1970, 84.
57. Oarța de Sus (RO) – S			X (1)				Vulpe 1970, 84.
58. Odești (RO) – S			X (1)				Kacsó 2015a, 544-545.
59. Olešník IV (UA) – D			X (1)				Kacsó 2009b, 77.
60. Prilog (RO) – D			X (4)				Kacsó 2009b, 77.
61. Răducăneni (RO) – S			X (1)				László 2013, 251-253.
62. Rodna (RO) – S			X (1)				Vulpe 1970, 84.
63. Sarasău III <sup>29</sup> (RO) - D			X (11)	X (1)			Kacsó 2009b, 61.

<sup>29</sup> Sarasău II at Vulpe (compare Vulpe 1970, 85 with Kacsó 2009b, 60-62).

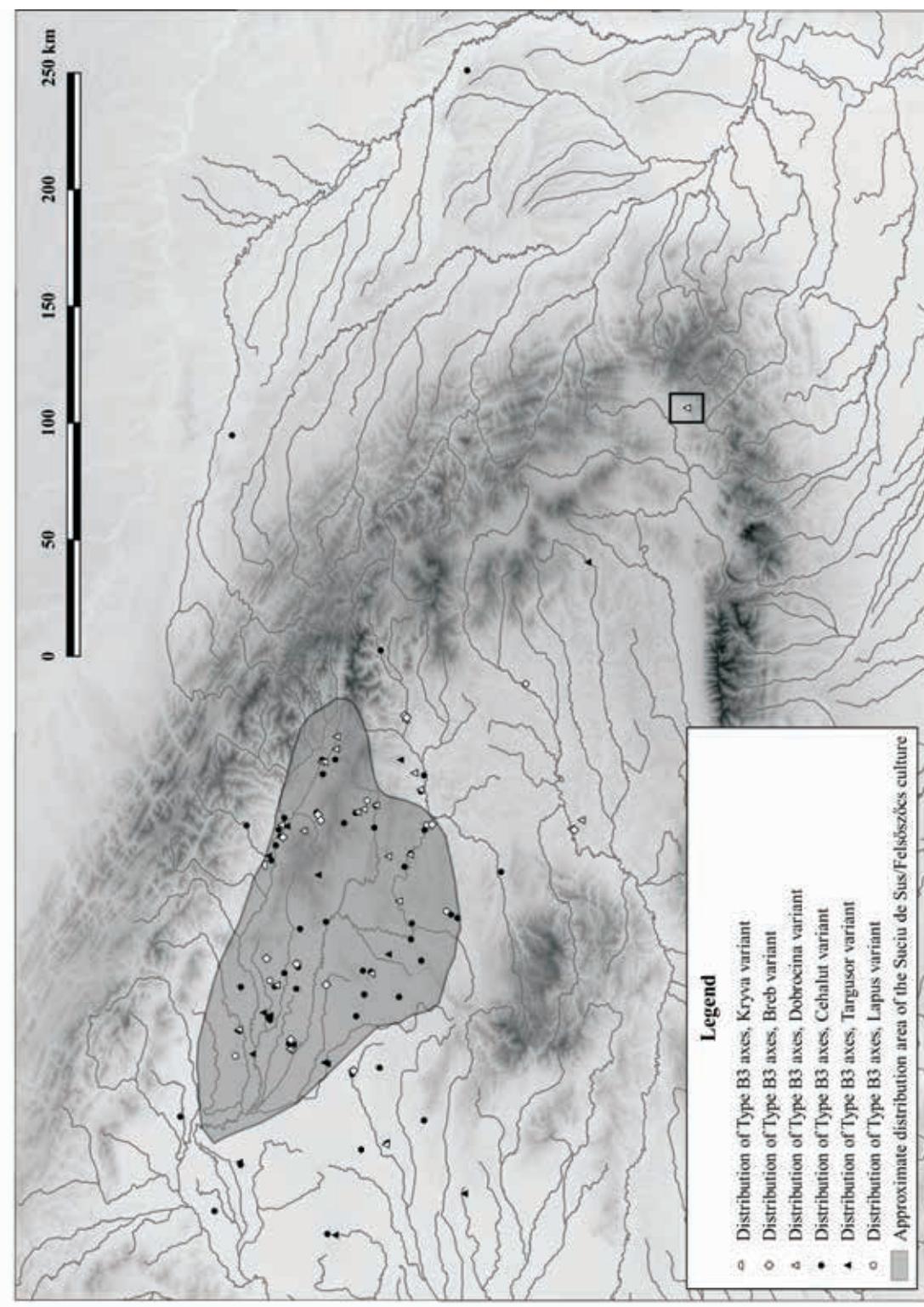
Place of discovery	Type B <sub>3</sub>						Bibliography
	Lăpuş	Dobrocina	Cehăluṭ	Breb	Târgușor	Kriva	
64. Satu Mare–Comitat II <sup>30</sup> (RO) – D			X (9)				Kacsó 2009b, 74.
65. Sârbi III (RO) – D			X (10)	X (1)			Kacsó 2009b, 74.
66. Sighetu Marmaṭiei IV (RO) - D			X (3)				Kacsó 2009b, 78.
67. Stâna (RO) – D			X (3)				Vulpe 1970, 85.
68. Surduc (RO) – D			X (2)				Kacsó 2009b, 75.
69. Târgu Lăpuş II (RO) – D			X (1)				Kacsó 2007a, 44.
70. Turulung (RO) – D			X (2)				Kacsó 2009b, 75.
71. Ugruṭiu (RO) – S			X (1)				Vulpe 1970, 84.
72. Valea lui Mihai (RO) – S			X (1)				Vulpe 1970, 85.
73. Valea Pomilor (RO) – S			X (1)				Vulpe 1970, 84.
74. Batarci (RO) – D				X (1)			Vulpe 1970, 86.
75. Breb (RO) – D				X (1)			Vulpe 1970, 86.
76. Dej ? (RO) – S				X (1)			Vulpe 1970, 86.
77. Rebrişoara II (RO) – D				X (1)			Vulpe 1970, 86.
78. Satu Mare–Comitat II <sup>31</sup> (RO) – D				X (1)			Vulpe 1970, 86.
79. Badalovo II (UA) – D					X (1)		Kacsó 2009b, 70.
80. Chişirid (RO) – D					X (1)		Vulpe 1970, 88.
81. Domăneştii I (RO) – D					X (19)		Vulpe 1970, 87-88.
82. Domăneştii II (RO) – D					X (3)		Vulpe 1970, 87.
83. Firiza (RO) – S					X (1)		Kacsó 1977, 27-28.
84. Magosliget (HU) – D					X (2)		Kacsó 2009b, 73.

<sup>30</sup> Comitat I at Vulpe (compare Vulpe 1970, 84 with Kacsó 2009b, 74).

<sup>31</sup> Not the same as at Kacsó 2009b, 74.

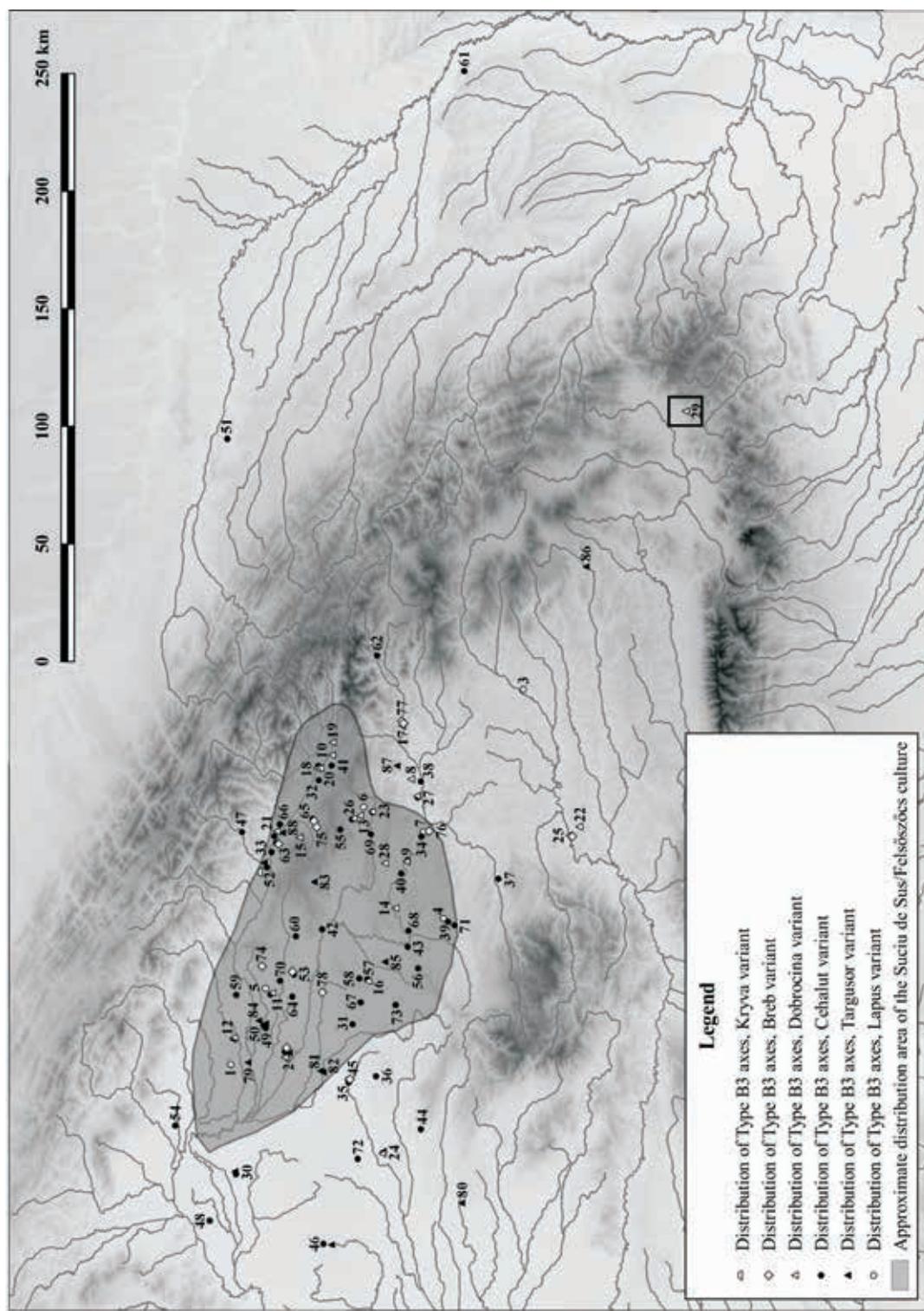
Place of discovery	Type B <sub>3</sub>						Bibliography
	Lăpuș	Dobrocina	Cehăluț	Breb	Târgușor	Kriva	
85. Nadiș (RO) – D					X? (3?)		Roska 1942, 273; Vulpe 1970, 88.
86. Odorheiu Secuiesc? <sup>32</sup> (RO) – S					X (1)		Vulpe 1970, 88.
87. Perișor II (RO) – D?					X (2)		Kacsó 2009b, 73-74.
88. Sighetu Mar- mației V (RO) – D					X (1)		Kacsó 2015b, 262.

<sup>32</sup> The axe can be found in the collection of the Haáz Rezső Museum from Odorheiu Secuiesc. In the registry appears as an object with unknown finding place.



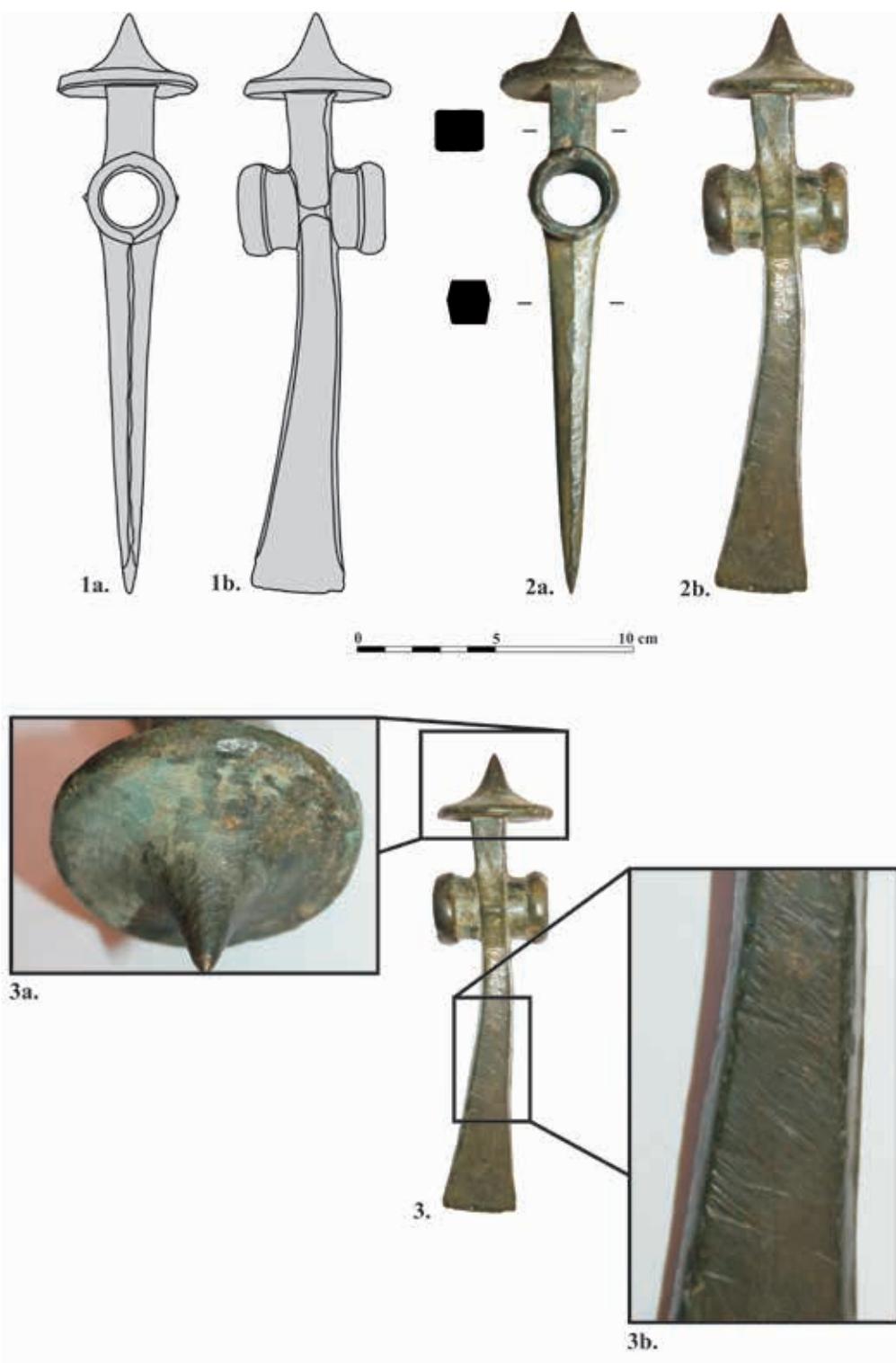
**Plate 1.**  
Distribution area of the Type B3 axes. The square represents the object from Zagon/Zágon.





**Plate 2.**  
Distribution area of the Type B3 axes. Numeration after Appendix 1.





**Plate 3.**  
The axe from Zagon/Zágon (1a-b, 2a-b) and surface details (3a-b).