

Ministère de l'Éducation Nationale  
L'Université Valahia Târgoviște  
Faculté de Sciences Humaines

# ANNALES



## D'UNIVERSITÉ VALAHIA TARGOVISTE

SECTION  
d'Archéologie et d'Histoire

TOME XIV  
Numéro 2  
2012

*Valahia University Press*  
Târgoviște

*Annales d'Université Valahia Targoviste Section d'Archéologie et d'Histoire* publie des mémoires originaux, des nouvelles et des comptes-rendus dans le domaine de l'archéologie préhistorique, de l'histoire du moyen âge, de l'environnement de l'homme fossile, de l'archéologie interdisciplinaire et de patrimoine culturel.

**Rédacteur en chef:**

Prof. dr. Marin Cârciumaru

**Secrétaire général de rédaction:**

Conf. dr. Corneliu Beldiman

**Secrétariat de rédaction:**

Prof. dr. Ioan Opriș, dr. Denis Căprăroiu, dr. Radu Cârciumaru, dr. Monica Mărgărit, dr. Marian Cosac, dr. Roxana Dobrescu, dr. Ovidiu Cîrstina, dr. Elena-Cristina Nițu, dr. Daniela Iamandi, dr. Adina Elena Boroneanț.

**Comité de rédaction:**

Prof. dr. Eric Boëda, prof. Marcel Otte, prof. dr. Răzvan Theodorescu, prof. dr. Alexandru Vulpe, prof. dr. Victor Spinei, prof. dr. Sabin Adrian Luca, prof. dr. Gheorghe Lazarovici, dr. Marylène Patou-Mathis, dr. Marie-Hélène Moncel, dr. Alexandru Suceveanu, dr. Cristian Schuster, dr. Dragomir Nicolae Popovici, dr. Adrian Bălășescu, dr. Radu Ștefănescu

**Correspondants:**

Prof. Jacques Jaubert, prof. Jean-Philippe Rigaud, prof. Árpád Ringer, prof. Alain Tuffreau, dr. Aline Averbouh, dr. Alain Turq, prof. Ivor Iancovič, prof. Ivor Karavanič, prof. dr. Ștefan Trâmbaciu, dr. Eugen Nicolae, dr. Emilian Alexandrescu, dr. Sergiu Iosipescu

**Technorédacteurs:**

Dr. Elena-Cristina Nițu, Marius Alexandru Florică

**Revue indexée B+ par CNCSIS et B par CNCS - Roumanie**

**Indexée dans:**



**AWOL, FRANTIQ,  
LAMPEA, SCRIBD,  
DAPHNE**

Tout ce qui concerne la Rédaction des *Annales d'Université Valahia Targoviste Section d'Archéologie et d'Histoire* doit être envoyé à: [mcarciumaru@yahoo.com](mailto:mcarciumaru@yahoo.com), [www.annalesfsu.ro](http://www.annalesfsu.ro)

**ISSN: 1584-1855; ISSN (online): 2285 – 3669**

## **Considerations on the discovery of a Bronze Age stone ax in the karst basin of Ciclova (Oravița Town, Caraș- Severin County)**

*\*Rogozea Octavian Cristian \*\*Dincă Remus*

\* Valahia University Târgoviște, Doctoral School, Lt. Stancu Ion Street, nr. 34-36, Târgoviște, 130018, Dâmbovița County, e-mail: rogozeaoctavian@yahoo.com

\*\* Western University Timișoara, Blvd. V. Pârvan 4, Timișoara 300223, Timiș County, România, e-mail: [remusdinca@gmail.com](mailto:remusdinca@gmail.com)

**Key words:** cave, field research, stone ax, bronze age

**Abstract:** **Considerations on the discovery of a Bronze Age stone ax in the karst basin of Ciclova (Oravița Town, Caraș- Severin County).** During the field research done in 2010 and 2011, we have discovered a relatively well-preserved stone ax, which appears to belong to the Early Bronze Age, in the Cave from Claușul Burcului, Ciclova Montana region, located in Banat. In this article, we describe the context of discovery and its implications. The new discovery could represent a start in the identification of new prehistoric settlements related to the exploitation of the natural resources from this area

### **Introduction**

Among the karst zones of Romania inhabited during the prehistory, there are the caves of the karst basin Ciclova Montană, located in Banat. Unfortunately, despite of its very significant archeological potential, the region of Ciclova Montană has not yet been sufficiently researched. This has determined us to carry out several systematic researches out in the field during the period 2010-2011. On this occasion, in the Cave from Claușul Burcului, we have discovered a relatively well-preserved stone ax, which appears to belong to the Early Bronze Age.

### **The context of our discovery**

From the perspective of its endokarstic environment, this region belongs to the Anina Mountains (A. Roșu, 1980; R. R. Rusu, 2007; \*\*). The Cave is situated on the left slope of Ciclova Valley (Fig. 1, 2), its relative altitude in relation to

the valley of the Ciclova River being of 81 m (GPS coordinates: 45. 025399 N; 21. 730242 E). The cave is 21 m long and it is 4.8 m wide, the deposit in its main room presenting a level difference of 1.2 m. Right after the entrance, there is the main room; and after having walked on 6 more meters, one can reach a gallery that is 1 m high and 70 cm wide, containing blocks of stone. To enter this cave, one has to go down 1.5 m. This cave has functioned as landfill in our times, mostly animal carcasses having been thrown in it. The layer of recent bones generally measures 40 cm, yet, here and there, it may even reach a thickness of 50 cm.

The stone ax was discovered at the basis of the layer of contemporary bones, on the cave floor, in a secondary position, so having no definite archeological context, as in this cave no archaeological surveys had been carried out before.

Rogozea Octavian, Cristian Dincă Remus



Fig. 1- Satellite image of Ciclova Montană.

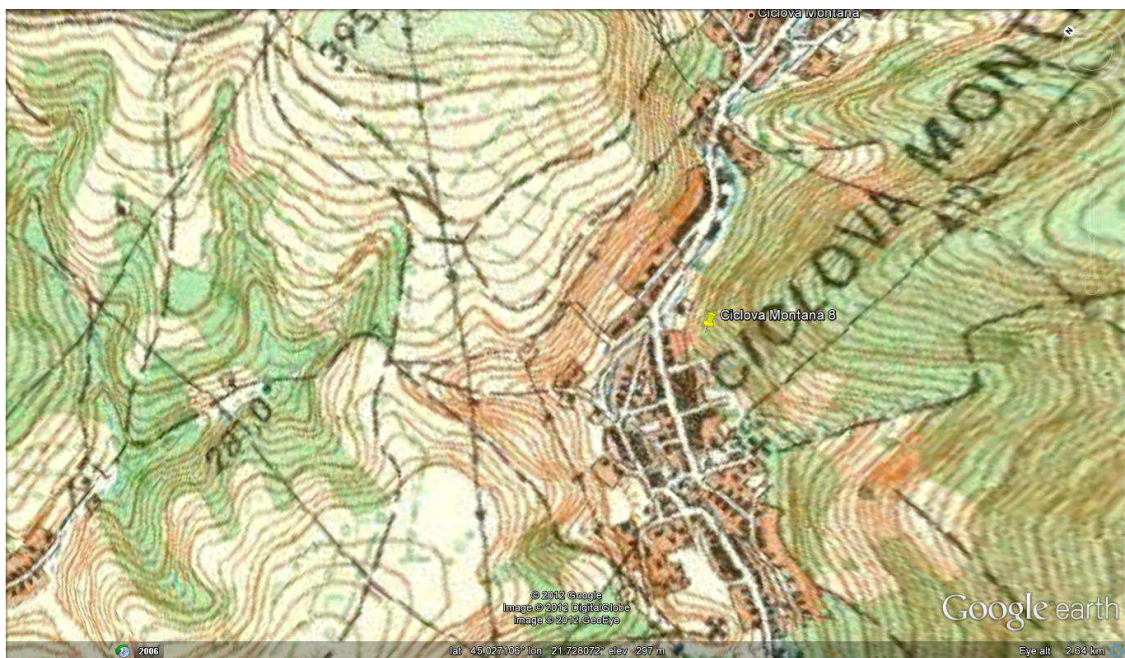


Fig. 2- Topographic map of Ciclova Montană.

## Considerations on the discovery of a Bronze Age stone ax in the karst basin of Ciclova (Oravița Town, Caraș-Severin County)

Its discovery on the cave floor, so under the layer of recent bones, allows us to hypothesize about the existence of a prehistoric cultural level in this cave, because it is hard to believe that the ax was accidentally thrown in this recent landfill. From this perspective, we consider that, in the future, archeological researches would be needed in this cave.

### Morphological and technological considerations on the ax discovered

The ax is well preserved, the active side being slightly affected by separation splinters. The longitudinal profile is straight. As the realization of a perforation would have weakened the mechanical

resistance of the item (E. Comșa, 1972), the lateral sides of the hole were left as a circular band wider than the outline of the item in order to increase its resistance during its use (Fig. 3, 4). Sure, this band may have had not just a functional character, but also an aesthetic one.

The length of the ax is 9 cm, the diameter of its side is 3.3 cm, the diameter around its hafting hole measures 5.5 cm, the diameter of its hafting hole measuring 2.9 cm in the lower area and 3.1 cm in the upper area, the current length of the cutting edge is 4 cm, and the total weight of this object is 220 g (Fig. 3/1, 2).

As a raw material, the artisan used basalt to



Fig. 3. The stone axe: 1. Drawing, 2. Photography, 3. Microscopic image from inside the hafting hole

make the ax, as this was a familiar rock in the area of Ciclova Montană. The use of local raw materials is a phenomenon frequently encountered during the Bronze Age.

The observations on the perforation, based on its microscopic study, indicate a perforation realized using a tube made of bone, reed or wood (E. Comșa, 1972; D. Ignat, 1989; M. S. Petrescu 2000; \*\*). The use of a "drill" made from a softer material is certain, as inside the perforation one can see a series of very fine grooves, which look like a straw thread, which are probably the result of the fact that the "drill" was worn out and in its active head there appeared a burr which increased its

diameter. The return to its initial diameter was realized through the removal of the part affected by the wear and the re-dimensioning or the replacement of the "drill" (fig. 3/3).

The hafting realized through the introduction of a wooden handle in a perforation appears by the end of the Mesolithic, being used for the items made of bone and horn; it then became, beginning with the Neolithic and until the Bronze Age, the main hafting method (E. Comșa, 1972). The truncated cone shape of the perforation suggests the use of a wooden wedge to haft the handle (T. I. Lipovan, 1982; T. I. Lipovan, 1985). As far as the length of the handle is concerned, in the case of the

stone axes used for fighting during the Bronze Age, it was about 30-40 cm (M. Blăjan, E. Petrescu, 2009).

### Considerations on the role of the Bronze Age stone axes

From a functional perspective, the axes described above are considered symbols or signs/emblems of power (M. Munteanu, 1991; C. Schuster, M. Munteanu, 1995) or just tools (A. Ilie *et al.*, 2010; V. Leahu, *f. a.*). The hypothesis according to which the stone ax may have had the role of symbol of power is supported by a series of indirect conclusions. The presence of perforated and polished stone axes and of miniature items made of clay in funeral contexts or in settlements (H. Ciugudean, 1996; A. Gligor, 2001; E. Tudor, 1973; I. Vasiliu, 1996) also indicates another status of the ax, beside that of tool and weapon.

The polishing of the stone does not become a must, it does not appear as a necessary progress from a technical perspective. The polishing is much more difficult from the viewpoint of the effort required than the carving (C. Lévi-Strauss, 2011), which contributes to the creation of a certain "status" for the polished items, which are only rarely abandoned, precisely because of this supplementary effort (C. Schuster, M. Munteanu, 1999).

The battle ax belonging to the Bronze Age discovered in the inhumation tomb no. 17 from the cemetery of Poiana-Piroboridava, attributed to a fighter, had a handle decorated with cylindrical bone ornaments, decorated in its turn with "grooved wolf teeth" and a bronze target (M. Blăjan, E. Petrescu, 2009). Despite the fact that this ax belongs to the B-category of battle axes, it provides a theoretical model for the handle, viable and possible as well for the A-type battle axes made of stone. This concern for the decoration of the handle indicates a good meant to bring prestige, namely a symbol of status and indirectly of power, and not just a simple utilitarian item.

As far as the second hypothesis is concerned, the one supporting the strictly functional role of these items, it seems valid if we look at the usage marks that appear on most axes in the A-category (A. Ilie *et al.*, 2010; V. Leahu *f. a.*), including on the stone ax from Ciclova Montană. A certain fact is that these items correspond to the ideal formula

for this type of tools. The polished stone axes, just like those made of metal, have a short rectilinear edge, longitudinally supported by a handle which allows the user to obtain a significant acceleration and a sufficiently heavy and sharp point for the speed of the impact to correspond to a mass able to plant the tip in the wood, and to an efficient orientation of the cutting edge (in the case of stone axes) to avoid blocking it (A. Leroi-Gourhan, 1983). To all of these, one can also add the fact that each element of an ax can have a definite functional role. Beside the cutting edge considered as the main and defining element of the ax, the side can also facilitate the understanding of the way it was used. Their different shapes might indicate different ways of using them, and a broken edge may indicate that the ax was used to break bones in order to extract their marrow or animal brains to extract the brain, to fix poles, to break nuts, etc. The conical-pointed edge may have been used for fighting or hunting, while the rounded edge might indicate a possible holding of the tool (M. Meşter 2000).

Battle axes with cylindrical back made of stone appear on the Romanian territory at the beginning of the period of transition towards the Bronze Age, afterwards becoming characteristic for the Bronze Age (E. Comşa, 1972; M. Munteanu, 1991; R. Vulpe, 1959). The different studies dedicated to these items divide these tools/arms into two distinct typological categories (A. Ilie *et al.*, 2010; I Vasiliu, 1996; R. Vulpe, 1959):

- Category A, which includes battle axes with a cylindrical back made of stone or copper with a straight longitudinal profile.

- Category B, which comprises battle axes with a cylindrical back made of stone or copper with a curved longitudinal profile.

The stone ax from Ciclova belongs to category A, which appears at the end of the Eneolithic Age (A. Ilie *et al.*, 2010; C. Schuster, 1997) and has analogies in the early Bronze Age in the Coţofeni culture (P. Roman 1976; H. Ciughudean 2000) but also in the middle Bronze Age in the Tei culture (A. Ilie *et al.*, 2010; V. Leahu 2003)

### Conclusions

Considering the numerous indications of prehistoric discoveries (P. Rogozea, 1987; V.

## Considerations on the discovery of a Bronze Age stone ax in the karst basin of Ciclova (Oravița Town, Caraș-Severin County)

Boroneanț 2000; S. A. Luca, 2004; S. A. Luca, 2004a; S. A. Luca, 2005; M. S. Petrescu, 2004; M. S. Petrescu, 2010) in the caves from Ciclova Montană, and the intense inhabitation of the karst of Banat, in a proportion of 20-25% (M. S. Petrescu 1996), the discovery of the ax in the Cave from Cleanțul Burcului could represent a start in the identification of new prehistoric settlements related to the exploitation of the natural resources from this area, most probably of the bronze (V. Boroneanț 2000; S. A. Luca 2005). From this perspective, the above-mentioned cave would require an archeological research in the future, able to highlight the existence of cultural levels and to redefine it as a prehistoric settlement.

### Acknowledgments

The microscopic observations were made using an optic fiber Keyence VHX 100 digital microscope. We would like to use this opportunity to thank once again to prof. univ. dr. M. Cârțumaru and our colleague dr. E.-C. Nițu for their support and the pieces of advice they were willing to give us.

### BIBLIOGRAPHY

\*, *Caraș-Severin. Monografie*, 1981 Editura Sport-Turism, București, 341p.

\*\*, *Istoria gândirii științifice și tehnice românești, I, Din antichitate până la formarea științei moderne*, 1982, Editura Academiei R. S. R., București.

Blăjan M., Petrescu E., 2009, *Secura de luptă din piatră descoperită la Mrenești, comuna Crețeni, jud Vâlcea*, Buridava, Numărul VII, p. 36-39.

Boroneanț V., 2000, *Arheologia peșterilor și minelor din România*, Editura Cimec, București, 327 p., ISBN 973-99088-0-2.

Ciugudean H., 1996, *Epoca timpurie a bronzului în centrul și sud-vestul Transilvaniei*, Editura Vavila Edinf SRL, București, 292 p., ISBN 973-97-97996-1-2.

Ciugudean H., 2000, *Eneoliticul final în Transilvania și Banat: Cultura Coțofeni*, Editura Mirton, Timișoara, 284 p., ISBN 973-585-178-4.

Comșa E., 1972, *Date despre unelte de piatră șlefuită din epoca neolitică și din epoca bronzului pe teritoriul României*, Studii și cercetări de istorie veche și arheologie, Numărul 23, Volum 2, p. 245-262.

Gligor A., 2001, *Sondaje arheologice în așezarea aparținând bronzului timpuriu de la Livezile-"Dealul Sârbului"(jud. Alba)*, Apulum, p. 85-106.

Ignat D., 1989, *Metode și tehnici de prelucrare a uneltelor de piatră șlefuită în epoca neolitică*, Crisia, Numărul XIX, p. 29-47.

Ilie A., Mecu L., Frânculeasa M., 2010 *Topoare preistorice din cadrul Complexului Muzeal "Curtea Domnească" Târgoviște (I)*, Buridava, Numărul VIII, p. 29-47.

Leahu V., 1966, *Cultura Tei*, București, 177p.

Leahu, V., 2003, *Cultura Tei. Grupul cultural Fundenii-Doamnei. Probleme ale epocii bronzului în Muntenia*, Editura Vavila Edinf, București, 343p, ISBN 978-973-8155-17-6.

Leroi-Gourhan, A., 1983, *Gestul și cuvântul*, vol. II, Editura Meridiane, București, 256p.

Lévi-Strauss C., 2011, *Antropologia și problemele lumii contemporane*, Editura Polirom, București, 200 p., ISBN 978-973-46-2131-6.

Lipovan T. I., 1982, *Așezările purtătorilor culturii Coțofeni în Bazinul Ampoiului, (I)*, Apulum, Numărul XX, p. 9-32.

Lipovan T. I., 1985, *Topoare de piatră descoperite în satul Galați (oraș Zlatna, jud. Alba)*, Apulum, Numărul XXII, p. 17-22.

Luca S. A., 2004, *Repertoriul arheologic al județului Caraș-Severin*, Editura Economică, București, 263 p, ISBN 973-709-066-7.

Luca S. A., 2004, *Arheologie și istorie. Descoperiri din județul Caraș-Severin*, Editura Economică, București, 240 p., ISBN 973-709-067-5.

Luca S. A., 2005, *Arheologie și istorie (II), Descoperiri din Banat*, Editura Economică, București, 526 p., ISBN 973-709-121-3.

Meșter M., 2000, *Analiza statistică a topoarelor de la Turdaș*, Tibiscus, Numărul X, p. 269-276.

Munteanu M., 1991, *Topoare și alte piese de piatră și însemne ale puterii din epoca bronzului*

**Rogozea Octavian, Cristian Dincă Remus**

*din sud-estul României*, Pontica, Numărul XXIV, p. 407-418.

Petrescu S. M., 1995-1996, *Peștera-un tip aparte de habitat uman, Viață privată, mentalități colective și imaginar social în Transilvania*, Studii de istorie a Transilvaniei, p. 24-29.

Petrescu S. M., 2000, *Din nou despre tehnica de perforarea a topoarelor din piatră*, Banatica, Numărul 15, Volum I, p. 73-78.

Petrescu S. M., 2010, *Repertoriul arheologic al Peșterilor din Banat*, Editura Dalami, Caransebeș, 206 p., ISBN 978-973-1717-35-7.

Petrescu S. M., 2004, *Locuirea umană a peșterilor din Banat din epoca romană până în sec. XXI*, Editura Presa Universitară Clujeană, Cluj-Napoca, 162 p., ISBN 973-610-276-9.

Rogozea P., 1987, *Cercetări arheologice în endocarstul din sud-vestul României*, Banatica, Numărul VII, p. 347-362.

Roman P., 1976, *Cultura Coțofeni*, Editura Academiei Române, București, 217p.

Roșu A., 1980, *Geografia fizică a României*, Editura didactică și pedagogică, București, 484p.

Rusu R., 2007, *Organizarea spațiului geografic în Banat*, 2007, Editura Mirton, Timișoara, 607 p., ISBN 978-973-52-0201-9.

Schuster C., 1997, *Perioada timpurie a Epocii Bronzului între bazinele Argeșului și Ialomiței Superioare*, Editura Vavila Edinf, București, 428 p., ISBN 973-98334-2-X.

Schuster C., 1998, *Despre obiectele litice descoperite în aria culturii Glina*, Drobeta, Numărul VIII, p. 11-24.

Schuster C., Munteanu M., 1995, *Considerații privind unele topoare din epoca bronzului găsite la sud de Carpați*, Memoria Antiquitatis, Numărul XX, p. 79-84.

Tudor E., 1973, *Un mormânt de la începutul epocii bronzului descoperit la Răcăciuni (jud. Bacău)*, Studii și cercetări de istorie veche, Numărul 24, Volum 2, p. 283-287.

Vasilie I., 1996 *Topoare de piatră din epoca bronzului aflate în colecțiile Muzeului de Arheologie din Tulcea*, Peuce, Numărul XII, p. 9-26.

Vulpe Al., 1959, *Depozitul de la Tuța și topoarele cu ceafă cilindrică*, Studii și cercetări de istorie veche, Numărul X, Volum 2, p. 265-276.