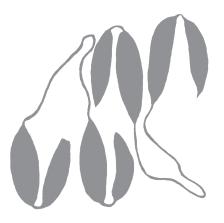
ZIRIDAVA STUDIA ARCHAEOLOGICA 35

2021

MUSEUM ARAD



ZIRIDAVA STUDIA ARCHAEOLOGICA

35 2021

Editura MEGA Cluj-Napoca 2021

MUSEUM ARAD

EDITORIAL BOARD

Editor-in-chief: Victor Sava, Florin Mărginean. Editorial Assistants: Norbert Kapcsos, Ioan Cristian Cireap.

EDITORIAL ADVISORY BOARD

Vitalie Bârcă (Institute of Archaeology and Art History, Cluj-Napoca, Romania) Adina Boroneant ("Vasile Pârvan" Institute of Archaeology, Bucharest, Romania) Marin Cârciumaru (Valahia University of Târgoviște, Romania) Sorin Cociş (Institute of Archaeology and Art History, Cluj-Napoca, Romania) Dragos Diaconescu (The National Museum of Banat, Timișoara, Romania) Daria Loznjak Dizdar (Institute of Archaeology, Zagreb, Croatia) Florin Drașovean (Romanian Academy, Timișoara branch, Timișoara, Romania) Alin Frînculeasa (Prahova County Museum of History and Archaeology, Ploiești, Romania) Erwin Gáll ("Vasile Pârvan" Institute of Archaeology, Bucharest, Romania) Florin Gogâltan (Institute of Archaeology and Art History, Cluj-Napoca, Romania) Adrian Ioniță ("Vasile Pârvan" Institute of Archaeology, Bucharest, Romania Hrvoje Kalafatić (Institute of Archaeology, Zagreb, Croatia) Aleksandar Kapuran (Institute of Archaeology, Belgrade, Serbia) Rüdiger Krause (Johann Wolfgang Goethe-Universität Frankfurt, Germany) Tobias Kienlin (Universität zu Köln, Germany) Valéria Kulcsár (University of Szeged, Hungary) Sabin Adrian Luca (Lucian Blaga University, Sibiu, Romania) Barry Molloy (University College Dublin, Irland) Sorin Nemeti (Babeş-Bolyai University, Romania) John O'Shea (University of Michigan, USA) Karl Zeno Pinter (Lucian Blaga University, Sibiu, Romania) Ioan Stanciu (Institute of Archaeology and Art History, Cluj-Napoca, Romania) Imre Szatmári (Munkácsy Mihály Museum, Békéscsaba, Hungary) Miklos Takács (Institute of Archaeology of the Hungarian Academy of Sciences, Budapest, Hungary) Ioan Marian Țipilic (Lucian Blaga University, Sibiu, Romania)

In Romania, the periodical can be obtained through subscription or exchange, sent as post shipment, from Museum Arad, Arad, Piata G. Enescu 1, 310131, Romania. Tel. 0040–257–281847.

ZIRIDAVA STUDIA ARCHAEOLOGICA

Any correspondence will be sent to the editor: Museum Arad Piata George Enescu 1, 310131 Arad, RO e-mail: ziridava2012@gmail.com

The content of the papers totally involve the responsibility of the authors.

Layout: Francisc Baja, Florin Mărginean, Victor Sava

ISSN 2392-8786



EDITURA MEGA | www.edituramega.ro e-mail: mega@edituramega.ro

Contents

Petru Ciocani Early Neolithic inter-settlement pattern in the northwestern corner of the Banat7
Astrid Vicas Seeking Opportunity: Mobility and Transmission of Innovation in the Chalcolithic
Alin Frînculeasa The Yamnaya mounds and the local cultural traditions of the first half of the 3rd millennium in Muntenia. The archaeological excavations of Moara Vlăsiei (Ilfov County)
Mihai Remus Feraru The cult of goddess Hekate in Miletus and the Milesian colonies
Ioan Stanciu Archaeological evidence on land farming in the Someș river Plain – north-western Romania (1 st century BC?)
Georgeta El Susi Animal management in the Latène settlement (2 nd century BC – 1 st century AD) at Săvârșin, Arad County
Sorin Cociș A new stamped <i>mortarium</i> from Napoca
Andrei-Cătălin Dîscă Roman Sites and Discoveries Around Potaissa (V). New Data and Clarifications Regarding the Cheia Settlement and the Stone Quarries of Roman Dacia
Vitalie Bârcă Roman bronze casseroles in the Sarmatae graves from the area between the Don and the Lower Danube179
Dorel Micle, Remus Dincă, Octavian Cristian Rogozea, Sergiu Gabriel Enache Preliminary report on the rescue archaeological excavations in Dudeștii Vechi – <i>54</i>
Florin Mărginean, Erwin Gáll Traces of an Early Avar Period Settlement. The Archaeological Findings from Pecica – Rovine / Căprăvanul Mic (Arad County)
Luminița Andreica-Szilagyi Anthropological analysis of the skeletons discovered at Pecica "Rovine" (Arad County). Identification of certain occupational stress markers specific to horseback riding practice
Dan Băcueț-Crișan On the early medieval fast wheel-thrown pottery (of late ancient tradition) (<i>Lazuri-Nușfalău type</i> <i>finds</i>) from north-western Romania. Relative and absolute chronological landmarks
Andrea Demjén Archaeological research of the Roman-Catholic church from Joseni (Harghita County)
Dan Băcueț-Crișan, Horea Pop, Timea Keresztes The Kaolin Clay Medieval Pottery of <i>Măgura Hill</i> Moigrad (Sălaj County). A Few Notes on Finds of the Type from Transylvania and the Banat

 Zoltán Rózsa, Viktória P. Horváth, György Kerekes, Rajmund Péter Zsikai At the Intersection of Border Areas. Traces of an Inn of the 17th and 18th centuries on the Border of Today's Kaszaper and Végegyháza (Békés County, Hungary)
Bogdan Ciupercă, Andrei-Cătălin Dîscă, Tudor Hila, Andrei Măgureanu The manufacture of lime on the Budureasca Valley (Prahova County) by late medieval and early modern period
Cristian Floca, Florin Gogâltan, Alexandru Hegyi, Patrick Chiroiu, Sorin Forțiu Using the water power in preindustrial Banat. A historical archaeology study on the Lower Timiș River371
REVIEWS
Florin Drașovean, Wolfram Schier (editors), in collaboration with Alex Bayliss, helmut Becker, Barbara Dammers, Bisserka Gaydarska, Christoph Menzler, Silviane Scharl, Stefan Suhrbier, Petru Urdea, Alasdait Whittle, Uivar "Gomilă". A Prehistoric Settlement in the Romanian Banat Vol. I. Site, Architecture, Stratigraphy and Dating. Prähistorische Archäologie in Südosteuropa 32. Verlag Marie Leidorf GmbH, Rahden/Westf. Leidorf 2020, (ISBN 978-3-8646-687-7), 585 pages (Victor Sava)
Valeriu Sîrbu, Aurora Pețan (editors), <i>Temples and Cult Places from the Second Iron Age in Europe</i> (Proceedings of the 2nd International Colloquium "Iron Age Sanctuaries and Cult Places at the Thracians and their Neighbours", Alun, Romania, 7th–9th May 2019, Dacica press, Alun 2020 (ISBN 978-606-8538-02-0), 352 pages (Ioan Cristian Cireap)
Radu Harhoiu, Nikolaus Boroffka, Rodica Borofkka, Erwin Gáll, Adrian Ioniță, Daniel Spânu, <i>Schäßburg</i> – <i>Weinberg (Sighișoara – Dealul Viilor) II Archäologische Grabungen bei der Fundstelle "Gräberfeld / Necropolă,</i> Cetatea de Scaun verlag, Târgoviște 2020 (ISBN 978-606-537-465-2), 577 Seiten, 75 Tafeln (Bianca

Abbreaviations

Archaeological evidence on land farming in the Someş river Plain – north-western Romania (1st century BC?)*

Ioan Stanciu

Abstract: We discuss here a ploughshare (iron-made) discovered in the settlement of Lazuri–Lubi-tag, a site inhabited over the course of different periods, the Middle and Late La Tène included. Accurate parallel cultural artefacts from the Celtic milieu of Western Europe yet also within the Celt-colonised territories of Central Europe were chronologically framed to LT D and particularly, LT D1. Connected to the Late La Tène horizon of Lazuri was also identified a silver Celtic coin, Simmering type, hence based on the short time span during which such coins were minted (more likely 70–40 BC) and the date when the Lazuri specimen might have been buried, the LT D inhabitancy may be reasonably established to mid 1st century BC, with a somewhat extension around such date. Unfortunately, the ploughshare cannot be directly associated with other materials, pottery or different artefacts, therefore its connection to one of the two stages of the La Tène inhabitancy remains problematical. The LT C1 dating cannot be excluded, yet if one bears in mind the chronological positions suggested for its parallels, the symmetrical plough metal component of the sort being better represented in the Late La Tène, the northern Carpathian area included, then it is more likely that such dating also suits the discussed exemplar, namely around the landmark provided by mid 1st century BC, somewhat extending bi-directionally.

Keywords: ploughshare / <pointe d'araire>; dating; symmetrical plough; the Celts; the Dacians.

The artefact discussed here originates from the multi-layered site of Lazuri–Lubi-tag, the Lazuri commune, Satu Mare County (Lázári, in Hungarian), a place in north-western Romania located in the Micula Plain (or Satu Mare–Micula), a sub-unit of the Lower Someş River Plain, according to the detailed classifications and more recent terms used by Romanian geographers. It is a microregion marked by former streambeds of the Someş river, with flat relief bordered southwards by the lower segment of mentioned river, while on south-western direction, delimited in the past by the spread Ecedea Marsh, today the namesake Plain. In fact, prior repeated drainage works, the landscape was dominated by wetlands, slightly more elevated areas, emerging as "islands" (Fig. 1)¹, being inhabited over the course of time.

Originally, sondages were performed in 1977–1978, with narrow trenches² being excavated, followed between 1993–2003 by systematic investigation of more extended areas, likely representative for the whole site (Fig. 2)³. On the same location there existed Bronze Age settlements, of the First Iron Age⁴, the same land being later used during the Middle (LT C1) and Late (LT D1) La Tène period⁵. The Late Roman imperial inhabitancy commenced towards the end of 2nd century AD, with a settlement that ceased to exist by late 3rd century AD, possibly early the following century⁶. After a less known chronological time frame in the lower Someş river basin, in fact similarly to the entire Upper

^{*} English translation: Gabriela Safta.

¹ Regarding the former Ecedea Marsh (Ecsedi-láp, Hungarian term), for instance see Farkas, Németh 1978.

² Gheorghe Lazin, the late archaeologist of the County Museum of Satu Mare. To my knowledge, the documentation of this research was lost in most part.

³ By constant cooperation between the County Museum of Satu Mare and the Institute of Archaeology and Art Histort of the Romanian Academy (Cluj-Napoca), in the 1995 and 1996 campaigns, with the involvement of the former Romanian Institute of Thracology as well, via dr. Németi János, who suggested the classification of the Middle La Tène date finds. In total, a 2288 m² area was investigated. For details see Stanciu 2016, 21–24.

⁴ Németi 1997, 78–80; Marta 2008, 5; Marta 2009, 8 note 10, 98, 102–103, 216; Marta 2010; Marta 2020.

⁵ Regarding the absolute chronology, for north-western Romania, the Middle La Tène period (La Tène C1) was proposed a long time ago to have started once with the last quarter of the 3rd century, evolving later for a good part over the course of the 2nd century BC (Németi 1986, 75–76; Németi1988, 108 Fig. 12). For the end of this horizon, references are made to landmarks located by the last half or third of the 2nd century BC, stage C2 being less known in the case of Transylvania and the north-western region of Romania (Berecki 2008, 59, with bibliographical references).

⁶ Stanciu 1995, 145–150; Matei, Stanciu 2000, 53–60, with references to the illustration; Gindele 2010, 35–41.

Tisza region (the 5th and first half of the 6th century AD), in the same site of Lazuri may be identified an inhabitancy horizon related to the presence of most ancient Slavs who reached the north-eastern edge of the Carpathian Basin, with a suggested dating to the second half of the 6th century and first third or half of the 7th century AD⁷. The area of the former settlements was re-occupied by a community whose remains surviving in the soil belong to the Early Medieval period, with more certain dating to the second half of the 8th century and first half of the 9th century AD, and a noted sequence that may be framed to the 10th century AD included⁸.

Just in the south-eastern vicinity of the settlements in the place at "Lubi-tag", at ca. 300–500 m distance, lies the site from the boundary point, which the locals name as "Nagy Béla-rét" / "Râtul lui Béla" (Fig. 2/B), investigated by sondages and more recently, by partial geo-physical measurements, where inhabitancy stages repeat most of those recorded in the neighbouring settlement ("Lubi-tag"), and the notable potter kilns used by late 4th century and early 5th century AD⁹. It remained unclear whether in the two neighbouring places we are dealing with traces of strictly contemporary settlements or - more likely, with short distance movements of the same community, a phenomenon much more difficult to identify. One should also specify that just in the westward vicinity of the settlements at "Lubi-tag", a barrow cemetery (cremation) of Late Roman imperial date (Fig. 2/A)¹⁰ was identified and partially investigated. Other settlements are known in the same microarea, mainly northwards yet also southwards the Somes river, archaeologically investigated to one extent or the other or only reported, with inhabitancies datable especially to the Bronze Age and the start period of the Iron Age, then over the course of the first millennium AD¹¹. Traces of 12th–13th century settlements are further documented as well¹². Previous specifications were necessary as they evidence the rather extensive inhabitancy of this Lower Somes River Plain segment, with settlements whose presence also entailed the use of the surrounding land.

The two La Tène inhabitancy horizons in the Lazuri–Lubi-tag settlement were only briefly reported, with a few references to the investigated archaeological structures and especially the collected items, pottery and other artefacts¹³. As far as the early stage, three or four houses were documented, together with a few storage pits, repurposed as domestic waste pits. Beside the wheel-thrown pottery, of Celtic specificity and that handmade, of local Hallstatt tradition, in one of the houses were discovered two LT C1 brooches (one fragmentary, in iron, the other made of bronze; Fig. 3/1–2) and sapropel-made bracelets (Fig. 3/3–4)¹⁴. Datable to the Late La Tène are also several storage pits, reused for domestic waste purposes, a sunken house being also mentioned¹⁵. Important for the chronological framing of this inhabitancy stage (La Tène D1) is a silver Celtic coin, referencing from the very beginning the first half of the 1st century BC (Fig. 3/5a–b)¹⁶. The exemplar was found in the filling earth of one of the two pits investigated by Gheorghe Lazin in 1977, on the occasion being also discovered an iron arrowhead

⁷ Stanciu 2011, 110–308 (with references to the illustration), 331–358.

⁸ Stanciu 2016.

⁹ Lazin 1981–82b and Stanciu 1996, 74, 77 (the Early Medieval inhabitancy). The potter kilns there are presented in Lazin 2011 and Gindele 2010, 42–63, 238–266. With respect to the LT C1 inhabitancy of the place see Lazin 1981–82a, 75–77, No. 8b. This is a house, related to which a bronze brooch, framed by the excavator to series Dux and dated to the Middle La Tène (Lazin 1981–82a, 76, Fig. 8, 77, with Fig. 9) was also discovered. The Lazuri specimen was assimilated to a certain type II4, chronologically positioned to the transition stage LT B2/C1 and sub-stage LT C1 (Măndescu 2000, 59–60). János Németi dated the piece to LT C1 (Németi 1997, 79).

¹⁰ Kotigoroshko 1997; Kotigoroshko 1998.

¹¹ Regardless the period, the distribution of the known sites in the plain lying westwards the Satu Mare city and northwards the Someş river to the Romanian-Hungarian border, was mentioned in Stanciu 2018, 123 Fig. 2. Subsequent such date, significant rescue archaeological investigations were initiated, supported particularly in connection with the construction of the Satu Mare city by-pass, new sites being identified and researched to the north and mainly to the south of said river.

¹² Stanciu 2016, 176, 177 Fig. 139/1–9; Stanciu 2018, 130.

¹³ Bader, Lazin 1980, 14, 67–69 Fig. 37–39 (LT D); Lazin 1981–82a, 74–75 (LT D); Lazin 1990 (LT D); Németi 1996 (LT C1, LT D); Németi 1997 (LT C1, LT D 1); Németi 2001, 58, No. 2 (LT D); Stanciu, Marta 2001, 125 (LT C); Stanciu *et al.* 2002, 185–186 (LT C).

¹⁴ Németi 1996; Németi 1997, 80–81, 83 Fig. 1.

 $^{^{\}rm 15}$ $\,$ The note regarding this house appears in Lazin 1990, 64.

¹⁶ The Simmering type, "mit Lorbeekranzallein"; diameters of 17.1 and 17.4 mm, weight 2.28 g (Lazin 1980, 127 No. 2, 129–130, Pl. LXVII/1–2). According to the determining and specifications of the author of the find, with bibliography references, such coins were minted in the environment of the Central European Celts in the first half of the 1st century BC. See also Lazin 1981–82a, 74–75 No. 8.a., also Bader, Lazin 1980, 14, 67 Fig. 37 above.

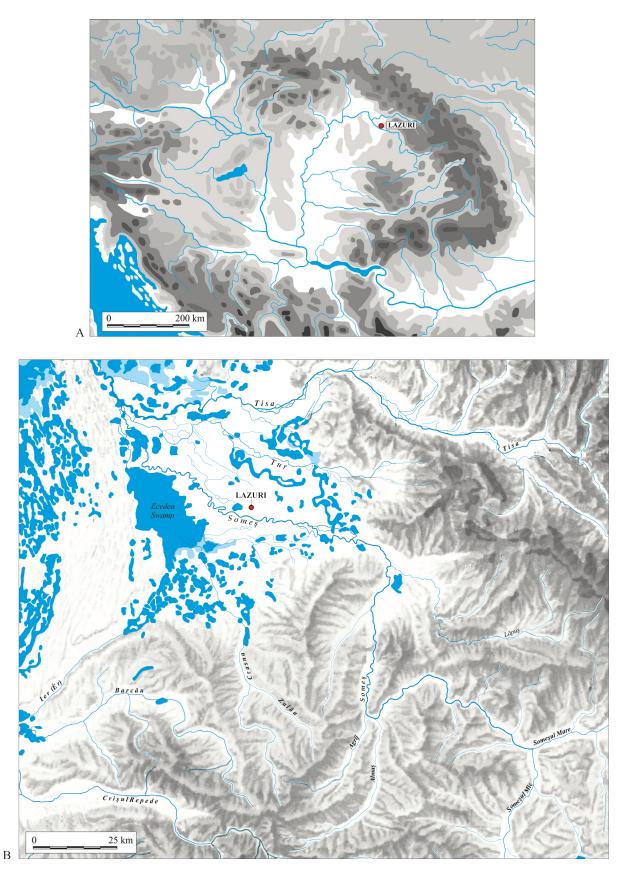


Fig. 1. Position of the Lazuri site within the Carpathian Basin (A) and the north-western segment of Romania (B, graphical editing after an older map, with the reconstruction of the past hydrographical network – http:// foldepites.wordpress.com/terkepek/). The marshy appearance of the Lower Someș Plain is notable.

with attachment socket (Fig. 3/6) and a supposed fragment of a silver mirror, together with handmade Dacian pottery (Fig. 3/7–8), yet also wheel-thrown, including painted fragmentary vessels (white-red), the latter illustrating a persisting Celtic fashion in the local pottery field (Fig. 3/9)¹⁷. Only a very small part of the collected archaeological items has been published so far, while comments concerning a more accurate dating of the Late La Tène inhabitancy in the site of Lazuri–Lubi-tag have not been convincingly supported, the already quoted bibliography mentioning the 2nd century (its end part) – 1st century BC, the 1st century BC, yet also the 1st century BC – 1st century AD. One may assume that the settlement of the time could not have evolved on long term, hence its more certain chronological framing would lie by mid third of the 1st century BC, with the landmark (*post quem* date) provided by the mentioned Celtic coin.

In the excavated area, the horizontal distribution of La Tène date structures suggests a few clustering areas, namely feature groups consisting of houses and storage pits. Without the possibility of more accurate horizontal delimiting, it seems that the more ancient stage inhabitancy (LT C1) extended south-eastwards on the direction of the neighbouring site of "Nagy Béla rét" (Fig. 2). There are no depositions in the layers corresponding to the two habitation stages, which stands as evidence of the shorter duration of both.

The artefact of interest here was discovered in 1978, trench III, by meters 2–3 and at 55 cm deep, therefore a strayfind, without the mention of any related archaeological feature¹⁸. Its shape is relatively conical and it was iron-made by forging¹⁹. Its preservation state is rather good, except for the tip (the active side), which is slightly chipped, most likely worn and torn as early as ancient times owing to repeated use. The surviving length is of 17.20 cm, with at most 1 cm addable, respectively the missing tip part. The maximum width is reached by the end of the attachment socket (5.60 cm), while by the tip base the width is of 4.04 cm. On the socket side, the iron plate has an average thickness of 0.85 cm, yet it increases towards the active part (notably, it is slightly tilted upwards), to 1.15 cm. The socket, modelled by the lengthwise bending of the iron plate, is open, less, near the tip, and more towards the opposite end (Fig. 5). The overall shape of the implement, its material and making technique, sizes and their ratio, evidence precise parallels with ploughshares in the western Celts' milieu, yet also identifiable in the territories they colonised in Central Europe, with the good example of today's Slovakia, a territory neighbouring the lower basin of the Somes river (located in the north-western part of Romania and north-eastern Hungary). In the case of the finds from France, items like that of Lazuri were divided into a group composed of shorter and narrower "ploughshares", biconical, made by rolling the iron plate towards nearby the tip, the latter slightly extended (group 1 in Antoine David). Some exhibit a hole towards the socket used for attachment to wood by a nail, and occasionally, a cutout on their back side, whose purpose is insufficiently clear (for instance Fig. 6/7)²⁰. Quasi-identical items to that in north-western Romania were also reported in Slovakia (Fig. $6/6)^{21}$, however there, and generally in the northern Carpathians and the Middle Danube area, ploughshares with tip reinforced by the sideway bending of the iron plate²² are more diffused²³.

¹⁷ Regarding the painted pottery, of Celtic tradition: Bader, Lazin 1980, 14; Lazin 1981–82a, 74–75; Lazin 1990, 64, No. 14; Florea 1998, 56; Németi 2001, 58, 62. Concerning its presence in the Upper Tisza region, see Kotigoroshko 1995, 87–88. A more recent discussion of the topic, with references to the north-western area of Romania too, including the material from the Lazuri settlement, in Drăgan 2014.

¹⁸ Missing a plan recording the horizontal planning of the trenches excavated by Gh. Lazin, from received information the location of trench I/1977 being more certain, traced on the southern edge of the drainage channel crossing the north-eastern periphery of the site (Fig. 2/A). More likely, its south-eastern end was identified during subsequent excavations (Stanciu 2011, 638 Pl. 29/1, 650 Pl. 40/1–2). Without a more accurate chronological framing (possibly the 6th – 7th century) or the functionality mention, the artefact was published a long time ago (Stanciu 1998–99, 238 Pl. XLVII/1). Later, it was identified as ploughshare, with the indication of possible parallels in the Celtic environment, with reference to Magdaléna Beranová (1993), yet without any further comments. See Stanciu 2016, 240 note 891, 241, Fig. 202/6.

¹⁹ The results of the metallographic analyses of certain items from the Gallo-Roman Belgium evidence cold forging (Marbach 2001, 99), while such examination evidences hot forging, at least for some of the many ploughshares in the deposit of Negri discovered in Moldova and re-dated to the 2nd-1st century BC (Babeş 1970, 608).

²⁰ David 2010, vol 1, 40–41, 41 Tab. 2, vol. 2, Pl. 1–5. Some of the items, fewer, have a very similar length to that of the specimen at Lazuri.

²¹ Pieta 2010, 230–231, 232, Fig. 103/1.6.

²² Pieta 2010, 231, 233, Fig. 104, 234, Fig. 105/A.

²³ Pieta 2010, 231, 233, Fig. 104, 234, Fig. 105/A.

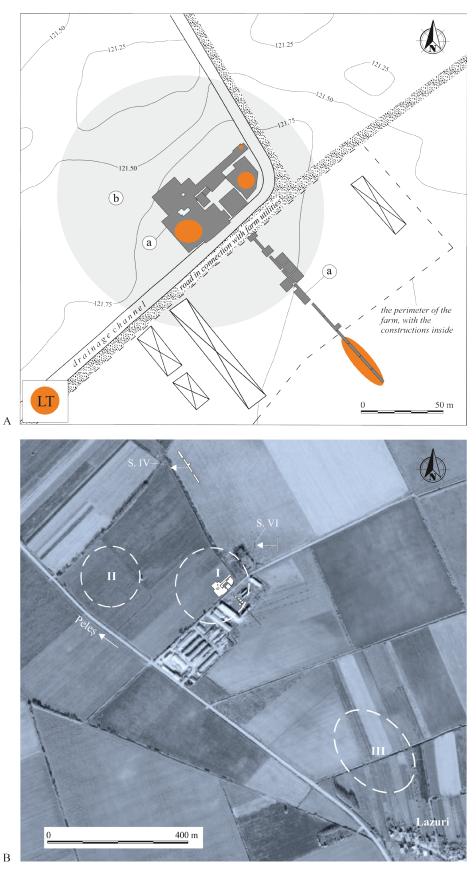


Fig. 2. The Lazuri–Lubit-tag settlement, with several date inhabitancies. A — With the mark of the archaeologically excavated area (a) and estimate of the 1^{st} millennium AD inhabitancies (b), and areas where La Tène C and D date features cluster (LT, in orange). B — Horizontal distribution of the known sites within the north-western boundary of the place: I – "Lubi-tag" (trenches IV and VI are also marked, by which the extension of inhabitancy north-westwards and north-eastwards was checked; II – "Lubi-tag" (Roman date barrow cemetery); III – "Nagy Béla-rét" (inhabitancies dated to various periods).

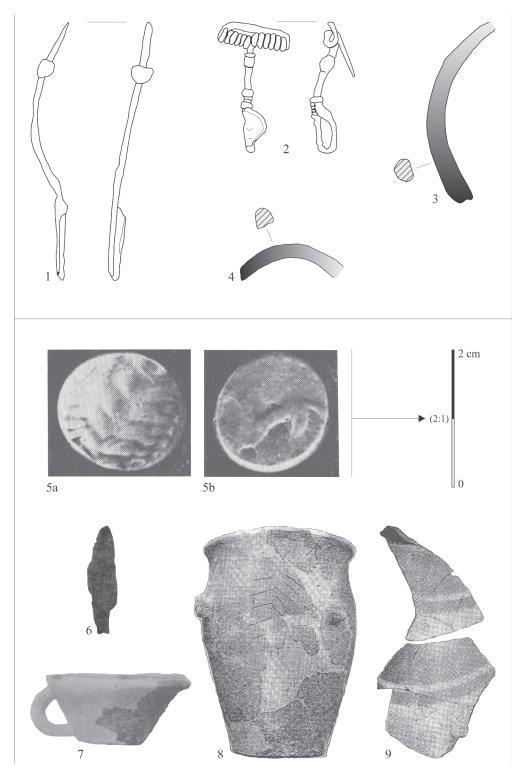


Fig. 3. Artefacts from the Lazuri–Lubi-tag settlement, representative for La Tène date inhabitancies: LT C1 (1–4) and LT D (5–9). Iron (1, 6), bronze (2), silver (5a–b), bracelet fragments made of sapropel (3–4), pottery (7–8: handmade, 9: wheel-thrown and painted). 1–4, with accurate sizes, yet preserving the proportions between the items, according to the original publication. 6–9, random sizes (original publication without graphic scale or any specifications in this respect). After Németi 1997 (1–4), Lazin 1980 (5a–b) and Lazin 1981–82a (6–9).

For items like that at Lazuri was suggested a more accurate term in French, namely instead of *le soc* (share), that of *pointe d'araire* (relative translation by "plough tip", referencing the active segment, iron-made and attached by the extremity of the wooden "shoe" or in direct extension of a symmetrical plough handle)²⁴. Such a metal component was used in relation with the more simple, symmetrical

²⁴ Marbach 2001, 113, 116; Marbach 2006-07, 5, 6 Fig. 2; David 2010, vol. 1, 40 (term adopted from André Marbach).

plough, animal drawn, functioning as an earth scarifying tool, without yet throwing the furrow to the side, being mainly used to prepare the soil for sowing and suitable for land deforesting too²⁵.

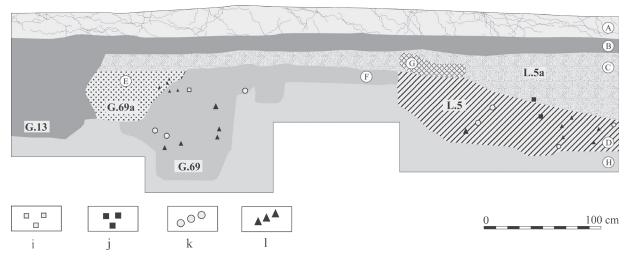


Fig. 4. Example of the Lazuri–Lubitag settlement stratigraphy, in segments with higher density of structures datable to various periods. A — Farming layer, extensively practiced over the course of time. B — Layer filling early medieval features, contains also previous date potshards. C — Layer corresponding to the Roman date inhabitancy. D — House LT C1. E — House from the First Iron Age. F — Layer and archaeological features datable to the Bronze Age. G — Dark earth mixed with yellow clay. H — archaeologically sterile soil. i — Animal bones. j — Iron slag. k — Pottery fragments. l — Burnt earth pieces (or adobe). After Stanciu 2016.

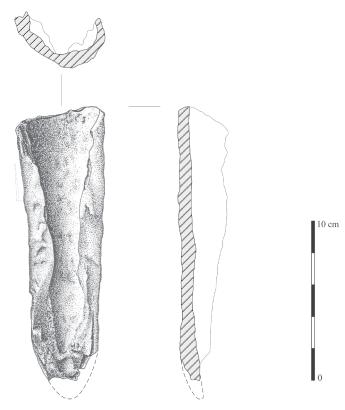


Fig. 5. The ploughshare / "pointe d'araire" discovered in the Lazuri–Lubi-tag settlement (iron).

Reconstruction suggestions of the making of such ploughs of La Tène date, together with the mention of variations: Beranová 1993, 98 Fig. 1 (after Z. Tempirs), 101; Marbach 2006-07; David 2010, vol. 1, 36–40. See also Faucher 1956 and Neamțu 1970. A critical examination of contributions regarding the Gallo-Roman plough, extending to Central and South-Eastern Europe, in Marbach 2001, 28–35.

Faucher 1956, 122; Marbach 2001, 4–5, 44; Nilllesse *et al.* 2015, 140, 142. Alike the French term (*araire*) for this precursor form of the proper plough, the Romanian term is *aratru*, both with origins in the Latin *aratrum*. For the discussion related to the Romanian term, together with bibliographical references, see Bilavschi 2016, 42–50.

134 🔹 Ioan Stanciu

The "ploughshare" or "pointe d'araire" documented in France (group 1 according to the classification taken from A. David) – with which the Lazuri item coincides – emerged during LT C (280–140 BC, according to the chronology there), their presence being more marked in stage LT D (140–30 BC) and LT D1 (140–80 BC) in particular, while similar specimens in group two ("small socketed ploughshares") were overall dated to LT D²⁶. In the Northern Carpathians area, such "Celtic type" ploughshares are framed to the Middle and Late La Tène, being also spread in the Púchov culture environment²⁷. Exemplars, also dated to the Middle and Late La Tène, exist in large numbers in Moldova, east the Carpathian Mountains, associated within deposits that also contain other iron objects and dated to the 2nd–1st century BC, their presence being related to exchange relations of the local communities with Celtic groups²⁸.

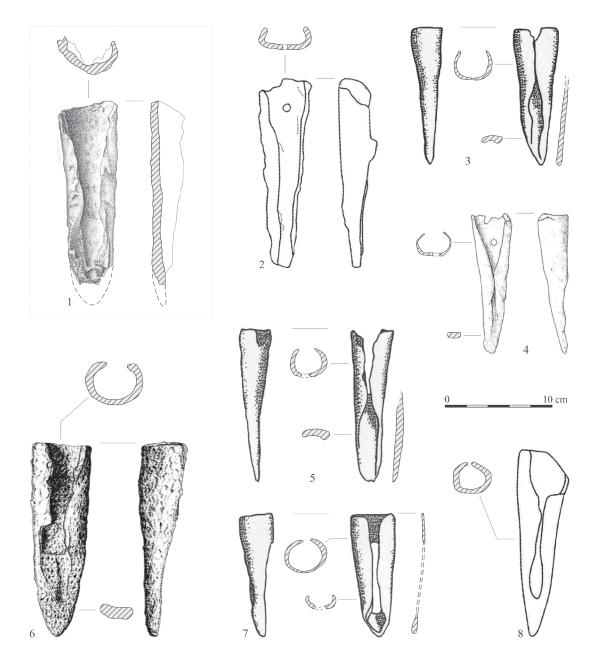


Fig. 6. Examples of parallels for the ploughshare of Lazuri, a settlement in north-western
Romania (1). France (after David 2010, vol. 2): Fleury-sur-Orne (2); Gournay-sur-Aronde (3, 5, 7); Fontenay-le-Comte (4); Cairon (8). Slovakia (after Pieta 2010): Hrochoť (6).

²⁶ David 2010, vol. 1, 48–49; Nilllesse *et al.* 2015, 142 (iron ploughshares are not recorded in western Gaul prior to the 2nd century BC).

²⁷ Pieta 2010, 230–231.

²⁸ Spânu 2020, 94, quoting the bibliography.

It would be fairer to assume that, overall, the La Tène horizon from the site at Lazuri-Lubi-tag did not evolve cursively on the rather long duration of approximately two centuries, possibly even longer (LT C1–D1), especially since in the case of the Celtic inhabitancy from north-western Romania it is seriously argued that settlements were abandoned towards late 2nd century BC²⁹. In fact, it is worth noting that in the Lazuri settlement, depositions in one or more layers corresponding to identified archaeological structures of La Tène date are missing, at least in the excavated area, thus pointing to short-lived inhabitancies. The more ancient stage was delimited to LT C1, in the case of north-western Romania, with its weight point by late 3rd century BC or the turn of the 3rd – 2nd century BC and the first half or the first two thirds of the 2nd century BC³⁰. The silver Celtic coin (Simmering type) cannot be other than a chronological marker of the more recent stage of La Tène inhabitancy, useful as terminus post quem, as it supposedly could have not reached the ground at much later date compared to its minting date. Such coins (smaller and lighter by contrast with other contemporary pieces, datable similarly in part) represent the latest phase of the Boian coinage (*Boii*, a Celtic tribal confederacy), issued in a rather short period of time, in approximately the second third of the 1st century BC, more likely between 70-40 BC, possibly even in the area of the current modern city of Bratislava from south-western Slovakia, as it is believed (hence not too far from the lower basin of the Someș river), until Burebista's raids on the same direction³¹. Therefore, it is reasonable to frame the Late La Tène inhabitancy from the Lazuri settlement to the same mid third of the 1st century BC, possibly with a somewhat extension to the end part of the same century.

Unfortunately, the ploughshare examined here cannot be directly associated to other materials, pottery or various artefacts, hence its framing to one of the two La Tène inhabitancy stages at Lazuri is challenging. The LT C1 dating cannot be excluded, however if we keep in mind the suggested chronological positions for its parallels, such a metal component of the symmetrical plough being better represented in the Late La Tène in the northern Carpathians area included, then it is more likely that such dating is also appropriate for the discussed artefact, namely around the landmark provided by the mid 1st century BC, somewhat extending to both directions.

Crossed by former streambeds of the Someș river and its northern tributaries, the landscape of the microarea where the settlement of Lazuri had evolved (situated in the south-western vicinity of the former Ecedea Marsh) is defined by low elevations, between 120–125 m, with much land that has preserved its marshy specificity until present, a marked aspect in the past, and the much more spread woodlands³². Hydromorphic soils, formed under ancient oak forests, whose natural fertility is low³³ were prevalent, however, likely until the exercise of extensive anthropogenic influences, the farming earth quality was satisfactory. In fact, areas with excessive humidity are related to most productive biological ecosystems, exploited over the course of time as pastures or farming lands (non-floodable areas), the offer of additional resources, food or of other nature, important for the sustenance of the ancient communities being worthy of note as well ³⁴.

The animal-drawn plough was necessary to work more spread land areas and the growth of cereal crops in particular. In a geographical area closer to the Someș Plain, the archaeobotanical studies indicate for the Celtic milieu of Slovakia the cultivation of several varieties of wheat mainly, then to a more limited extent barley, oat and rye³⁵. Concerning the entire north-western area of Romania, such investigations are missing. Preliminary approaches may be reported; however, their results are not mandatorily valid for the entire Someș Plain³⁶.

²⁹ Németi 1999, 127–128; Németi 2001, 62.

³⁰ Notes 5 and 14.

³¹ Dembski 1999; Horsnaes, Militký 2003-05, 16; Kolníková, Kovár 2010.

³² Details in Stanciu 2016, 19–21.

³³ For instance Posea 1997, 89, 147–148.

³⁴ Dinnin, Van de Noort 1999.

³⁵ Pieta 2010, 229.

³⁶ Pollen and charcoal samples coming from two former lakes formed in volcanic craters located on the western slope of the Gutâi Mountains, respectively at 80 km east the settlement of Lazuri, report clues of grain farming starting only with mid 1st millennium AD. On forest landscape, more marked anthropogenic influences were exercised between ca. AD 500–1500 (Feurdean, Astaloş 2005, 69–70, with Tab. 1). Paleoecological data obtained from the Iaz peat bog (Sălaj county, 80 km south the lower Someș line, in a hilly area), with AMS¹⁴C dating indicate for the La Tène period the isolate emergence of plant crops, notable being the high values for grapewine (Grindean *et al.* 2015, 116 Tab. 3, 122). It is worth

136 🔹 Ioan Stanciu

In the south-western vicinity of the microarea where the settlement of Lazuri is located lies the fertile plain of Carei, with a remarkable intensity of existent sites, settlements and cemeteries related to the Celts' presence in north-western Romania, with the weight point in the Middle La Tène period³⁷. Better known are cemeteries, settlements being less investigated, hence possibly explaining the lack of artefacts related to agriculture in general, however, it may be assumed that respective communities worked the soil according to their own patterns and with specific agricultural tools, while the ensemble of favourable natural conditions might even explain the choice to settle respective area³⁸. According to explanations insofar, these settlements were abandoned towards late 2nd century BC, inhabitancy datable to subsequent stage being much less consistent, at least in the light of available data insofar³⁹. Nevertheless, as evidenced by the ploughshare of Lazuri, together with the wheel-thrown painted pottery, certain elements of the Celtic civilisation were kept alive for a certain while.

Ioan Stanciu

Romanian Academy Cluj Branch Institute of Archaeology and Art History Cluj-Napoca Cluj-Napoca, RO istanciu2001@yahoo.fr

BIBLIOGRAPHY

Babeș 1970	M. Babeș, Récentes découvertes de dépôts de lingots en fer protohistoriques faites en Roumanie. ArchRozhledy 22, 1970, 5, 608.
Bader, Lazin 1980	T. Bader, Gh. Lazin, <i>Mărturii arheologice din județul Satu Mare</i> . Satu Mare 1980.
Beranová 1993	M. Beranová, <i>Versuche zur vorgeschichtlichen und frühmittelalterlichen Landwirtschaft.</i> Památky archeologické 84, 1993, 97–119.
Berecki 2008	S. Berecki, <i>The Chronology of the Celtic Discoveries from Transylvania</i> . In: V. Sârbu, D. L. Vaida (Eds.), Funerary Practices of the Bronze and Iron Ages in Central and Sounth-Eastern Europe. Proceedings of the 9 th International Colloquium of Funerary Archaeology, Bistrița, Romania, May 9 th – 11 th , 2008. Cluj-Napoca 2008, 47–65.
Bilavschi 2016	G. Bilavschi, Unelte agricole din Moldova medievală. Brăila 2016.
David 2010	A. David, Le développement de l'outillage agricole en fer en France (625–25 avant notre ère), Université de Paris I Panthéon Sorbonne U.F.R. 03 Histoire de l'Art et Archéologie, vol. 1–2. Paris 2010.
Dembski 1999	G. Dembski, Keltische Münzen in Ostösterreich – Boier und Burebista. AMN 36, I, 1999, 51–58.
Dinnin, Van de Noort 1999	M. Dinnin, R. Van de Noort, <i>Wetland habitats, their resource potential and exploita-</i> <i>tion. A case study from the Humber wetlands</i> . In: B. Coles, J. Coles, M. Schou Jørgensen (Eds.), Bog bodies, sacred sites and wetland archaeology. Exeter 1999, 69–78.

mention that a ploughshare was discovered (Lazin 1981–82b, 137–138, with Fig. 1; Stanciu 2016, 240, 241 Fig. 202/1) in the Early Medieval settlement of Lazuri–Nagy Béla rét (the 8th – 9th century AD).

³⁷ Németi 1999, 110–111, 127–128, 231, Fig. 49. From there also comes the well-known "Ciumești grave with helmet" (Rustoiu 2008, with complete bibliography).

³⁸ In the second half of the 1st millennium AD, the line joining the southern edge of the former Marsh of Ecedea with the southeastern neighbouring hills (crossing the current city of Carei), likely marked in ancient times by the diverging streambed of the Crasna river, who flowed into the mentioned marsh, represented a segment of the north-eastern "border" of the territory controlled by the Gepids, then by the Avars. During various periods, the Carei Plain was extensively inhabited, while the soil quality there provides an explanation, however the area's strategic position, determined geographically, cannot be overlooked, with possible control over the main route to Transylvania, namely on the Crasna River valley and further to the Meseş Gate (Fig. 1/B). On reversed direction, towards the north-west and the north, this route, bypassing the Ecedea Marsh, extended to the foothills of the Northern Carpathians, while through the known passes, even past them. At different dates, the north-south movement of the Przeworsk cultures bearers, then of the Early Slavs, who reached also the lower basin of the Someş river, provides adequate examples. The commercial importance of the sketched route cannot be neglected, implicitly the control exercised on it (Stanciu 2016, 263). Possibly, the intensity of the Celtic inhabitancy of the Carei Plain, rare northwards past the Someş river, could be explained from this view, as well.

³⁹ Németi 1999, 127128; Németi 2001, 62.

Drăgan 2014	A. Drăgan, <i>Production and Circulation of La Tène Painted Pottery North of the Lower Danube.</i> In: S. Berecki (Ed.), Iron Age Crafts and Craftsmen in the Carpathian Basin. Proceedings of the International Colloquium from Târgu Mureș, 10–13 October
	2013. Târgu Mureș 2014, 301–318.
Farkas, Németh 1978	J. Farkas, P. Németh, A <i>z Ecsedi-láptörténetéhez</i> , Szatmári Múzeum Közleményei 5. Mátészalka 1978.
Faucher 1956	D. Faucher, A propos de l'Araire. Pallas 4, 1956, 117–133.
Feurdean, Astaloș 2005	A. Feurdean, C. Astaloș, <i>The impact of human activities in the Gutâiului Mountains, Romania</i> . StudUBB-G 50, 1–2, 2005, 63–72.
Florea 1998	G. Florea, Ceramica pictată dacică. Artă, meșteșug și societate în Dacia preromană (sec. I a.Chr.–I p.Chr.). Cluj-Napoca 1998.
Gindele 2010	R. Gindele, Die Entwicklung der kaiserzeitlichen Siedlungen im Barbaricum im nord- westlichen Gebiet Rumäniens. Satu Mare 2010.
Grindean <i>et al</i> . 2015	R. Grindean, VA. Lăzărescu, AC. Diaconu, C. H. Opreanu, S. Fărcaș, I. Tanțău, <i>The Usefulness of Interdisciplinary Studies: Palaeoecological and Archaeological Aspects</i> <i>from NW Romania</i> . EphNap 25, 2015, 105–134.
Horsnaes, Militký 2003-05	H. W. Horsnaes, J. Militký, Boian coins in the numismatic collection of The National Museum in Copenhagen. NNA, 2003-05, 5–20.
Kolníková, Kovár 2010	E. Kolníková, B. Kovár, <i>Laténske mince v bratislavskom Podhradí</i> . ZborníkSlovNMA 104, 20, 2010, 69–73.
Kotigoroshko 1995	V. G. Kotigoroshko, <i>Ținuturile Tisei superioare în veacurile III î.e.n. – IV e.n. (perio-adele La Tène și romană).</i> Bibliotheca Thracologica 11. Bucharest 1995.
Kotigoroshko 1997	V. G. Kotigoroshko, <i>Tumulii din perioada romană târzie de lângă satul Lazuri (jud. Satu Mare)</i> . In: V. Sîrbu (Ed.), Cercetări arheologice în aria nord-tracă, vol. II. Bucharest 1997, 398-407.
Kotigoroshko 1998	V. G. Kotigoroshko, Kurgany pozdnerimskogo vremeni vozle s. Lazur' Satu– Marskogo nezda Rumynii. Karpatika 5, 1998, 129–140.
Lazin 1980	G. Lazin, <i>Monede antice din colecția Muzeului județean Satu Mare</i> . SatuMareSC 4, 1980, 127–131.
Lazin 1981–82a	G. Lazin, Descoperiri dacice din sec. III î.e.n. – I e.n. în județul Satu Mare – Catalog. SatuMareSC 6–7, 1981–82, 69–81.
Lazin 1981–82b	G. Lazin, Două piese de metal din sec. VIII–IX descoperite în localitatea Lazuri, jud. Satu Mare. SatuMareSC 5–6, 1981–82, 137–142.
Lazin 1990	G. Lazin, Civilizația dacică în sec. II î.e.n. – I e.n. în nord-vestul României. SympThrac 8, 1990, 62–67.
Lazin 2011	Gh. Lazin, Grupul de cuptoare pentru ceramică aparținând dacilor liberi descoperit în localitatea Lazuri (jud. Satu Mare). SatuMareSC 27, I, 2011, 177–180.
Marbach 2001	A. Marbach, Recherches sur les instruments aratoires et le travail du sol en Gaule Belgique. Catalogue des pieces métalliques d'instruments aratoires de la Gaule. Texte. Archéologie et Préhistoire, Université Paul Verlaine. Metz 2001.
Marbach 2006-07	A. Marbach, <i>Essai de classement typo-technologique des araires à partir des pieces métalliques découvertes en Gaule romaine en vue de leur reconstitution</i> . Revue archéologique du Centre de la France [en ligne], Tome 45–46, 2006–2007, mis en ligne le 08 avril 2008 [URL: http://journals.openedition.org/racf/734].
Marta 2008	L. Marta, Groapa 154 a așezării din epoca bronzului de la Lazuri. Depunere de obiecte aflate în legătură cu producerea berii preistorice? SatuMareSC, 23–24, I, 2008, 1–19.
Marta 2009	L. Marta, The Late Bronze Age Settlements of Petea–Csengersima. Satu Mare 2009.
Marta 2010	L. Marta, <i>Lăpuş II – Gáva I Discoveries in the Plain of Satu Mare</i> . In: L. Marta (Hrsg.), Das Ende des 2. Jahrtausends v. Chr. Auf Theiß-Ebene und Siebenbürgen [SatuMareSC 26–I]. Satu Mare 2010, 317–328.
Marta 2020	L. Marta, <i>Gáva Culture in the Someș Plain. The Settlements of Călinești-Oaș and Lazuri.</i> Nyíregyháza 2020.
Matei, Stanciu 2000	Al. V. Matei, I. Stanciu, Vestigii din epoca romană (sec. II – IV p.Chr.) în spațiul nord- vestic al României / Funde der römischen Kaiserzeit (2. – 4 Jh. n. Chr.) in Nordwestgebiet Rumäniens, Bibliotheca Musei Porolissensis 2. Zalău, Cluj-Napoca 2000.

Măndescu 2000	D. Măndescu, Fibulele de schemă Latène în perioada timpurie și mijlocie a celei de a doua epoci a fierului, pe teritoriul vechii Dacii. Crisia 20, 2000, 45–80.
Neamțu 1970	V. Neamțu, Aratrul fără plaz. Contribuții la cunoașterea vechilor unelte de arat pe teri- toriul României. MemAntiq 2, 1970, 423–442.
Németi 1986	J. Németi, Unele aspecte ale cronologiei Latène-ului în nord-vestul României. AMP 10, 1986, 71–82.
Németi 1988	J. Németi, Unele aspecte ale evoluției ceramicii din a doua epocă a fierului în nord-vestul R. S. România (Latène B–C). SCIVA 39, 1988, 2, 87–111.
Németi 1996	J. Németi, Lazuri, jud. Satu Mare. CCA. Campania 1995, 71 No. 80/I.
Németi 1997	J. Németi, Descoperirile arheologice de la Lazuri-"Lubi-tag" (jud. Satu Mare) din anii 1995 – 1996. In: V. Sîrbu (Ed.), Cercetări arheologice în aria nord-tracă, vol. II. Bucharest 1997, 78–86.
Németi 1999	J. Németi, <i>Repertoriul arheologic al zonei Careiului</i> , BibliothecaThracologica 28. Bucharest 1999.
Németi 2001	J. Németi, <i>Descoperiri din Latène-ul târziu din județul Satu Mare</i> . In: E. Iaroslavschi, V. Crișan, G. Florea, G. Gheorghiu (Eds.), Studii de istorie antică. Omagiu profeso- rului Ioan Glodariu, Bibliotheca Musei Napocensis 20. Cluj-Napoca 2001.
Nilllesse <i>et a</i> l. 2015	O. Nillesse, L. Julien, L. Roux, <i>Le paysan de l'ouest de la Gaule au second âge du Fer, l'araire, la faux et la faucille: questions</i> . In: C. Mougne, MY. Daire (Eds.), L'Homme, ses ressources et son environnement, dans l'Ouest de la France à l'âge du Fer: actualités de la recherche, Actes du Séminaire Archéologique de l'Ouest 24 mars 2014, Université de Nantes, Mémoire de Géosciences hors-série n° 9. Rennes 2015, 139–147.
Pieta 2010	K. Pieta, <i>Die keltische Besiedlung der Slowakei. Jüngere Latènzeit</i> , Archaeologica Slovaca Monographiae, Studia 12. Nitra 2010.
Posea 1997	Gr. Posea, Câmpia de Vest a României (Câmpia Banato-Crișană). Bucharest 1997.
Rustoiu 2008	A. Rustoiu, <i>Războinici și societate în aria celtică transilvăneană. Studii pe marginea mormântului cu coif de la Ciumești</i> , Interferențe etnice și culturale în mileniile I a.Chr. – I p.Chr. 13. Cluj-Napoca 2008.
Spânu 2020	D. Spânu, Practici depoziționale non-funerare La Tène târziu în sud-vestul României. Descoperirile de la Glogova și Desa. MCA S.N. 16, 2020, 87–117.
Stanciu 1995	I. Stanciu, Contribuții la cunoașterea epocii romane în bazinul mijlociu și inferior al râu- lui Someș. EphNap 5, 1995, 139–226.
Stanciu 1996	I. Stanciu, Vestigii medievale timpurii din județul Satu Mare. SatuMareSC 13, 1996, 71–91.
Stanciu 1998–99	I. Stanciu, Așezarea slavă timpurie de la Lazuri–"Lubitag", jud. Satu Mare (cercetările arheologice din anii 1977, 1993–1995). Contribuții la cunoașterea secolelor 6–7 în zona Tisei superioare. SatuMareSC 15-16, 1998–1999, 114–266.
Stanciu 2011	I. Stanciu, Locuirea teritoriului nord-vestic al României între antichitatea târzie și perioada de început a epocii medievale timpurii (mijlocul sec. V – sec. VII timpuriu) / The habitation of thenorth-western territory of Romania betweenthe Late Antiquity and the beginning period of the Early Middle ages (the middle of the 5 th century – early 7 th century) [abridged version], Patrimonium Archaeologicum Transylvanicum 4. Cluj-Napoca 2011.
Stanciu 2016	I. Stanciu, Așezarea de la Lazuri–Lubi tag (jud. Satu Mare). Aspecte ale locuirii medi- evale timpurii în nord-vestul României, Bibliotheca Ephemeris Napocensis 9. Cluj- Napoca 2016.
Stanciu 2018	I. Stanciu, <i>Egy újabb többkorszakú telep a Felsô-Szamos vidékérôl (Peles/Nagypeleske, Lazuri/Lázáriközség, Szatmár megye)</i> . In: L. Nagy Márta, L. Szőlősi Katalin (Eds.), "Vadrózsából tündérsípot csináltam" Tanulmányok Istvánovits Eszter 60. születés- napjára. Nyíregyháza 2018.
Stanciu, Marta 2001	I. Stanciu, L. Marta, <i>Lazuri, com. Lazuri, jud. Satu Mare. Punct: Lubitag.</i> CCA. Campania 2000, 125–126.
Stanciu <i>et al</i> . 2002	I. Stanciu, L. Marta, I. Stamati, Cr. Mitar, P. Tătar, CD. Crișan, D. Inclezan, A. Roșca, <i>Lazuri, com. Lazuri, jud. Satu Mare. Punct: Lubitag.</i> CCA. Campania 2001, 185–188.

Abbreaviations

AEM	Archäologisch-epigraphische Mitteilungen aus Österreich-Ungarn, Vienna.
AM	Arheologia Moldovei, Iași.
AMN	Acta Musei Napocensis, Cluj-Napoca.
AMP	Acta Musei Porolissensis, Zalău.
AMV	Acta Musei Varnaensis, Varna.
Angustia	Angustia. Revista Muzeului Național al Carpaților Răsăriteni, Sf. Gheorghe.
Anuarul MJIAP (S.N.)	Anuarul Muzeului de Istorie și Arheologie Prahova, Serie Nouă, Ploiești.
Antiquity	Antiquity. A review of world archaeology, Durham.
Archaeological Journal	Archaeological Journal. New Series. Chișinău.
ArchÉrt	Archaeologiai Értesitő, Budapest.
ArchPol	Archaeologia Polona, Warsaw.
ArchRozhledy	Archeologické Rozhledy, Praha.
ASM	Archaeologica Slovaca Monographiae, Bratislava.
BAR (Int. S.)	British Archaeological Reports (International Series), Oxford.
Biharea	Biharea. Culegere de studii și materiale de etnografie și artă, Oradea.
BMG	Bibliotheca Musei Giurgiuvensis, Giurgiu.
BMJT	Buletinul Muzeului Județean Teleorman. Seria Arheologie, Alexandria.
BMM	Bibliotheca Musei Marisiensis, Târgu Mureș.
Budapest Régiségei	Budapest Régiségei Régészeti és Történeti Évkönyv. Budapest.
CA București	Cercetări arheologice în București, București.
CCA	Cronica Cercetărilor Arheologice, București.
CIL	Corpus Inscriptionum Latinarum, Berlin.
CsSzMÉ	A Csíki Székely Múzeum Évkönyve. Csíkszereda.
Dacia (N.S.)	Dacia. Revue d'archéologie et d'histoire ancienne. Nouvelle serie. București.
Dolgozatok	Dolgozatok a Magyar Királyi Ferencz József Tudományegyetem Archaeológiai Intézetéből. Szeged.
EphNap	Ephemeris Napocensis, Cluj-Napoca.
Erdély	Erdély. Turistai, fürdőügyi és néprajzi folyóirat, Cluj-Napoca.
FontArchPrag	Fontes Archaeologici Pragenses, Prague.
Földtközl.	Földtani közlöny, Budapest.
HOMÉ	A Herman Ottó Muzeum Ėvkönyve, Miskolc.
ILD	C. C. Petolescu, Inscripții latine din Dacia, Bucharest 2005.
JAHA	Journal of Ancient History and Archaeology, Cluj-Napoca.
Jahrb. RGZM	Jahrbuch des Römisch Germanischen Zentralmuseums zu Mainz, Mainz.
JAMÉ	Jósa András Múzeum Évkönyve, Nyiregyháza.
Karpatika	Karpatika, Uzhorod.
LMI	List of Historic Monuments, updated 2015.
Marisia	Marisia. Studies and Materials. Archeology. Târgu-Mureș.
MCA (S.N.)	Materiale și Cercetări Arheologice Serie Nouă. București
MemAntiq	Memoria Antiquitatis, Piatra Neamț.
NNA	Nordisk Numismatisk Årsskrift, Stockholm.
PAS	Prähistorische Archäologie in Südosteuropa, Rahden/Westf.
PAT	Patrimonium Archaeologicum Transylvanicum, Cluj-Napoca.
Paléo	PALEO – Revue d'archéologie préhistorique, Les Eyzies-de-Tayac-Sireuil.
Pallas	Pallas. Revue d'études antiques, Toulouse.

426 • Abbreviations

PNAS	Proceedings of the National Academy of Sciences of the United States of America, Washington.
PZ	Prähistorische Zeitschrift. Berlin.
RAN	National Archaeological Repertory.
RM	Revista Muzeelor, București.
Sargetia	Sargetia. Acta Musei Devensis, Deva.
SatuMareSC	Satu Mare Studii și Comunicări, Satu Mare.
SCIV(A)	Studii și Cercetări de Istorie Veche și Arheologie, București.
SCŞMI	Studii și Comunicări Științifice ale Muzeelor de Istorie, București.
SIB	Studii de Istorie a Banatului, Timișoara.
SlovArch	Slovenská archeológia, Nitra.
SP	Studii de Preiostorie, București.
St.Cerc.Antropol.	Studii și Cercetări de Antropologie, București.
StudUBB-G	Studia Universitatis Babeș-Bolyai. Seria Geologia, Cluj-Napoca.
ZborníkSlovNMA	Zborník Slovenského Národného Múzea. Archeológia, Bratislava.
ZSA	Ziridava. Studia Archaeologica, Arad.
ИАИ	Известия на Археолигическия Институт при БАН, София.