

## THE EARLY UPPER PALEOLITHIC SETTLEMENT OF ROMÂNEȘTI-DUMBRĂVIȚA I, TIMIȘ COUNTY

Wei Chu\*, Alexandru Szentmiklosi\*\*

### Abstract

În anul 2016 au fost reluate cercetările arheologice sistematice de la Românești (jud. Timiș, România). Obiectivul acestor cercetări arheologice a fost locuirea aurignaciană din punctul Dumbrăvița I. Săpăturile arheologice s-au desfășurat în cursul lunii octombrie, finalizarea documentației de șantier având loc în cursul lunii februarie 2017. Banatul este una din puținele regiuni din bazinul mijlociu al Dunării unde au fost descoperite situri arheologice în care artefactele de factură aurignaciană sunt descoperite în depuneri succesive. Aceste situri aurignaciene din Banat sunt cele mai apropiate, din punct de vedere cronologic, de resturile fosile ale celui mai vechi om modern descoperit în Europa (Anina-Peștera cu Oase, jud. Caraș-Severin).

Situl arheologic de la Românești-Dumbrăvița este cel mai mare și mai bine cercetat dintre aceste situri însă, artefactele și contextul stratigrafic în care acestea au fost descoperite rămân mai puțin înțelese.

În cadrul campaniei arheologice din toamna anului 2016 a fost excavată o suprafață de 17 m<sup>2</sup>, în care au fost deschise carouri de 1 × 1 m. Obiectivul acestei campanii a fost descoperirea de artefacte arheologice în context stratigrafic sigur, context care, punându-se un accent puternic pe analizele geo-arheologice. Acestea ar putea contribui, în mod substanțial, la înțelegerea procesului tafonomic care au avut loc în cadrul acestui sit arheologic.

### Introduction

The chronological position of the Early Upper Paleolithic cultures is one of the most important problems of European Paleolithic archeology since it is related to the first appearance of *Homo sapiens*<sup>1</sup>. The Aurignacian, a widespread technocomplex of the Early Upper Paleolithic, is well-known from Western Europe, but its presence in Eastern Central Europe is sparser, possibly due to differences in research intensity and/or profound Late Quaternary sediment cover. As a result, the nature of the Early Upper Paleolithic in Eastern Central Europe remains unclear.

The site of Românești-Dumbrăvița I is one of the rare sites in Central Europe containing sediments with cultural remains from this critical period. Its stratigraphy has been reported to range from the Middle Paleolithic to the Upper Paleolithic containing Quarzitic Mousterian (a regional variant of the Mousterian), Early Aurignacian and Gravettian technocomplexes<sup>2</sup>.

\* Institute of Prehistoric Archaeology, University of Cologne, Weyertal 125, 50923 Cologne, Germany, Researcher (wchu@uni-koeln.de).

\*\* Muzeul Național al Banatului, Timisoara, Piata Huniade nr. 1, Timisoara 300.002, Romania, Head of the Archaeological Department (szentmiklosi@yahoo.com).

<sup>1</sup> Mellars 2006; Anikovitch *et alii*, 2007; Davies *et alii*, 2015.

<sup>2</sup> Mogoșanu 1978.

### Background

The site of Românești-Dumbrăvița I (Timiș County, Romania) is situated in the Bega River Valley, about 100 km east of Timișoara (Romania), at the confluence of the Bega Luncanilor (Bega Mare) and Bega Poieni (Bega Mică) rivers where they exit the Western Poiana Rusca Mountains and empty into the Banat Plain. The archaeological sites Dumbrăvița I and II are located in the north-eastern part of the village (Pl. I/1–3).

Românești-Dumbrăvița I belongs to a cluster of Early Upper Paleolithic sites in the area (Românești-Dumbrăvița I & II, Coșava and Temerești located less than 10 km away) and is close to a number of other important Banat Upper Paleolithic sites including Tincova (Caraș-Severin County) and the Crvenka-At site complex (Serbia)<sup>3</sup>.

Românești-Dumbrăvița I was first known as a Paleolithic site in the second half of the 20th century. The first scientific excavation at Românești-Dumbrăvița I was conducted in 1960 and subsequently in 1961–1964 and 1967–1972<sup>4</sup> (Pl. II/1). Between 2009–2010, geological and archeological fieldwork was led by V. Sitlivy who excavated 7m<sup>2</sup>

<sup>3</sup> Nicolaescu-Stratan 1961; Stratan 1962; Chu *et alii* 2014; Micle *et alii* 2015.

<sup>4</sup> Mogoșanu 1976; Mogoșanu 1978; Bălțean 2011.

in two separate trenches<sup>5</sup>. The collection from the Mogoșanu excavations yielded 5000 artifacts over 450 m<sup>2</sup> providing an artifact density of 11 artifacts/m<sup>2</sup>. The later excavation by V. Sitlivy, recovered some 7505 artifacts providing an artifact density of 1072 artifacts/m<sup>2</sup>. Sitlivy *et alii* attributed the higher density of their finds to the application of wet-sieving techniques to recover smaller artifacts.

The sediment deposits of Românești-Dumbrăvița I lie on top of a right bank Late Pleistocene terrace of the Bega Luncanilor. The archeological artifacts are found in the top 80 cm of 3 m thick deposits. These sediments are largely believed to be loess-derived sediments<sup>6</sup> however subsequent weathering and soil formations have made it difficult to clearly discern their exact parent material. The sediments containing the lithic artifacts have been dated with Thermoluminescence (TL) and Optically Stimulated Luminescence (OSL) to  $40.6 \pm 1.5$  ka<sup>7</sup>.

#### *Field Research 2016*

In October of 2016, a 17 m<sup>2</sup> trench adjacent to the 2009–2010 excavation's eastern profile was excavated further into the valley away from the original excavation from F. Mogoșanu. Directly connecting the excavation to previous fieldwork made it possible to make straightforward correlations of the geological deposits and datings. After the recent topsoil was removed and sieved from the surface (15 cm), the site was excavated using the *décapage* method with hand tools to a maximum depth of 80 cm.

Our methodology involved excavating in geological horizons (GH) previously established by the 2009–2010 field campaign. Geological horizons (e.g. GH3) were subdivided into 2 cm spits. All objects  $\geq 5$  mm were left in place and their 3-dimensional position was recorded using a Leica TS06 total station. A single point was measured in the center of each object before it was removed. Two points were recorded on elongated objects (i.e. where the artifact's length was twice as long as its width): one point at each end of the long axis to be later used for fabric analysis. All finds were assigned a unique ID number.

Within geological horizons, sediment was collected per quarter m<sup>2</sup> in the 2 cm spits. The collected sediment was wet-sieved (at least 5 mm mesh) to recover small-sized artifacts. Analysis of

stratigraphy, lithological record and pedosedimentary description of the excavated deposits was performed in the field by the geologist together with the archeologists.

The documentation process was primarily digital, supplemented with diaries, sketches and photographic evidence. All measured points (find locations, find categories, ground control points, spit levels, surfaces and outlines of features, sample locations, etc.) were coded and stored in the total station. All additional information (stratigraphic unit, artifact inclination, etc.) was recorded on paper. Photographic records of the excavation were systematically taken by m<sup>2</sup>. The surfaces of geological horizons were photographed as well as the profiles of each m<sup>2</sup> upon completion. At the end, photographs of the finished excavation were used to create an orthophotographic image of all of the profiles using Agisoft Photoscan software. Additionally, 12 new OSL samples were taken along with grain-size measurements every 5 cm, and micromorphological samples from the bottom to the top were taken. These were located near the sediment profiles of the last excavation and were described and their positions measured with the total station.

Approximately 3248 lithic artifacts were piece provenienced or which 1300 were recorded with double points. Artifacts were distributed throughout the stratigraphy of the site however, the majority of them were recovered in a discrete vertical horizon in GH3 with notable horizontal concentrations suggesting that many of the artifacts were recovered in minimally disturbed conditions (Figure 3). Of these, the majority were small fragmented blades and bladelets though many cores, tools, and manuports were also recovered. The majority (~95%) of the artifacts excavated at Românești-Dumbrăvița I were manufactured on a heterogeneous siliceous rock commonly referred to as "Banat flint", a raw material now thought to be mesolocally procured from various regional sources<sup>8</sup>. Small amounts of other materials such as flint, radiolarite, and jasper were also recovered. Sedimentological, dating and micromorphological samples are still being processed however the Geological Horizons appeared to be similar throughout the entire excavation profile with little horizontal deviation.

#### *Discussion & Conclusion*

The results of the 2016 field research at Românești-Dumbrăvița I combined with the

<sup>5</sup> Sitlivy *et alii*, 2012, Schmidt *et alii*, 2013; Kels *et alii*, 2014.

<sup>6</sup> Kels *et alii*, 2014.

<sup>7</sup> Schmidt *et alii*, 2013; Kels *et alii*, 2014.

<sup>8</sup> Léonard 2016.

previous excavations and assemblage reanalysis performed in earlier years, contribute to the developing picture of an Early Upper Paleolithic landscape in the area that provides important insights to a critical period in human prehistory. The open-air site at Românești-*Dumbrăvița* I offers a more complete view of Early Upper Paleolithic society and economy than from the rock shelters in the region (e.g. Peskö and Istállóskő) and those of Western Europe which are confined to habitation sites for this period and are highly curated. At Românești-*Dumbrăvița* I, the excavation area—probably representing a seasonal and repeated use camp—was likely a staging ground for hunting, possibly representing a retooling site, and/or one where large mammals were butchered.

The Early Upper Paleolithic sequence at Românești-*Dumbrăvița* I also yielded evidence for changes through time, however. This is especially evident in the contrast between the layers above and below the GH3 level. Many assemblages above the GH3 level appear similar to the contemporaneous Gravettian industry of Western and Central Europe, whereas the occupation levels in GH3 contain materials that are generally similar to sites in Western and Central Europe often described as Proto- or Early- Aurignacian. Nevertheless, the temporal integrity of these levels still requires further verification.

The large number of artifacts recovered from Românești-*Dumbrăvița* I during the 2016 field season along with previously excavated collections contribute to a growing body of work which may help us to understand the technological organization of the earliest modern humans in Europe. Moreover, comparative work may also help clarify their relationship with other Early Upper Paleolithic sites in Europe such as those in the Russian Plain (e.g. Kostenki) and others in the Middle/Upper Danube Basin (e.g. Willendorf II, Kozarnika, Temnata and Bacho Kiro). These in total, may contribute to our understanding of what technological adaptations may have allowed early *Homo sapiens* to enter Europe, how they moved westward across the continent, and what their relationship may have been with earlier pre-existing Pleistocene European hominids.

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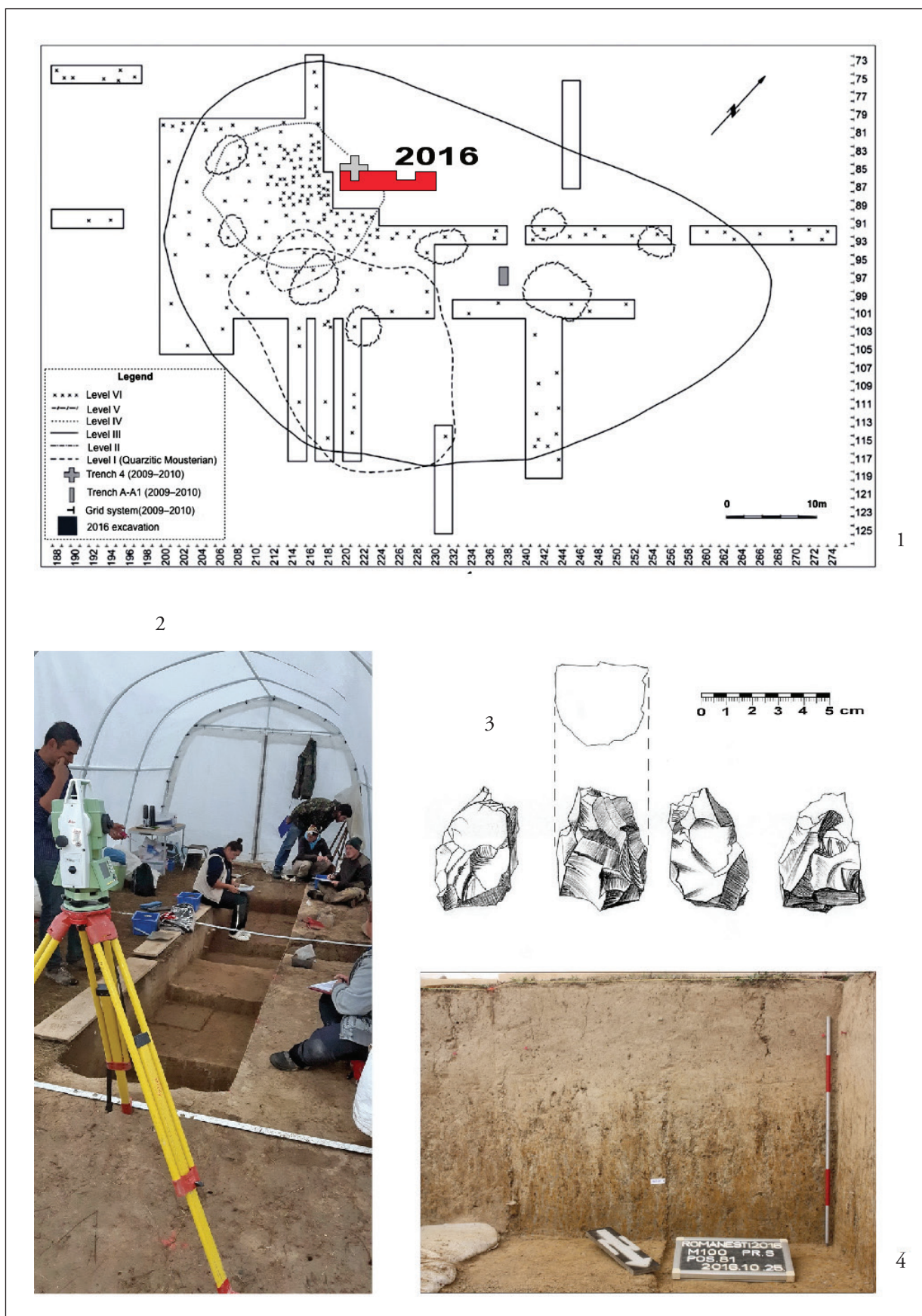
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**Pl. I:** 1–2 – The archaeological site of Românești-Dumbrăvița I (located in the northeastern part of the village); 3 – Image with the archaeological site, located on the eastern terrace of the Bega Luncanilor (Bega Mare) river.





**Pl. II:** 1 – The map of the excavations (after Sitlivy & Chabai 2012, Fig. 3; Mogoșanu 1978, Fig. 23); 2 – General view of the 2016 trench; 3 – Lithic artifacts from the 2016 excavations; 4 – Românești-Dumbrăvița I: south wall of 2016 excavations.