

THE EARLY UPPER PALEOLITHIC OF THE BANAT AND RECENT RESEARCH AT THE PALEOLITHIC SITE OF TINCOVA*

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1. Introduction

Research concerning modern human dispersals into Europe have proliferated in recent years thanks to ever improving genetic research. The amount of corresponding archaeological evidence concerning modern human dispersals and the Upper Paleolithic in Europe has also been augmented by new fieldwork. This increase of data has led to more complex narratives of cultural dispersals and demographic expansions. Previously, all available Early Upper Paleolithic evidence suggested that the arrival of the Aurignacian marked the first entry of *Homo sapiens* into Europe from the Levant, and that this arrival coincided with the rapid decline/replacement of local Neanderthal populations. However, it is clear now that this narrative is far too coarse. Different trajectories of regional cultural development show multiple, distinct dispersals and

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disparate interaction patterns with native hominins. This is particularly true in Southeastern Europe, a hypothesized geographic intermediary between Central Europe and the Middle East.

Because of the early Aurignacian finds in the Swabian Jura e.g. Hohle Fels, Willendorf II, Geißenklösterle, Keilberg-Kirche¹ and the slightly older Early Upper Paleolithic assemblages (Bachokirian/Kozarnikan) in the lower reaches of the Danube catchment e.g. Kozarnika, Temnata and Bacho Kiro, scholars have hypothesized an early migratory link through the Danube Valley; the so-called Danube Corridor Hypothesis². Plausible as that hypothesis may seem, in reality the Danube's role in early modern human movements is not well understood as the catchment's Early Upper Paleolithic sites have not been verified and tested alongside the more extensive surrounding archaeological record. Current archaeological research along the Danube is limited to the surrounding highlands, the Inner Carpathians and Lower Austria; little is known from the Basin itself³. Additionally, many findspots remain poorly understood while others with single and multiple layers are only just being identified/reexcavated, for instance, Beregovo I⁴. In addition, archaeologists have paid scant attention to the topography and paleoclimatic variability of the Middle Danube, which could have influenced modern human migration.

The Banat plays a key role in this discussion as it is a unique topographic region that comprises the intersection of both karstic cave and open air settlements⁵ that have yielded Europe's earliest modern human fossils at the Peștera cu Oase⁶ as well other early specimens at Peștera Muierii and Peștera Cioclovina⁷. Excavations have also reported smaller, possible early lithic traces in the karst at the Peștera Liliecilor⁸ and Tabula Traiana Cave (Serbia) where artifacts were recovered directly above a Campanian ignimbrite tephra and dated with associated cutmarked bones to between 41.3–34.5 ka cal BP⁹. However, these assemblages are small, poor in diagnostic artifacts, and in the case of Liliecilor, the provenience of the artifacts remain unclear¹⁰.

By contrast, the region also has a number of large open air early Aurignacian

¹ Conard, Bolus 2008; Higham *et alii* 2012; Nigst *et alii* 2014; Uthmeier 1996.

² Conard, Bolus 2003.

³ Anghelincu *et alii* 2012; Ioviță *et alii* 2014; Steguweit *et alii* 2009.

⁴ Usik 2008.

⁵ Tasić *et alii* 2011.

⁶ Moldovan 2003; Trinkaus *et alii* 2003, 2012.

⁷ Alexandrescu *et alii* 2010; Harvati *et alii* 2007; Soficaru *et alii* 2006, 2007; Trinkaus *et alii* 2009.

⁸ Dobrescu 2008, 409.

⁹ Borić *et alii* 2012; Mandić, Borić 2015.

¹⁰ Cărciumaru 2010, 145.

assemblages concentrated around the fringes of the Poiana Ruscă Mountains in the Romanian Banat such as at Românești, Coșava, Tincova and potentially at the newly discovered findspot at Temerești¹¹. There are also further Aurignacian artifacts found in the plains surrounding the city of Vršac (Vojvodina, Serbia) most notably at Crvenka-At where these have been recovered in good preservational contexts¹². Dates for the open air sites remain scarce, however, OSL and TL dates of sediments and heated artifacts both directly and indirectly bracket the Aurignacian levels at Românești to between 45–40 ka ago¹³. If correct, these would place the assemblage contemporaneous with the oldest Aurignacian assemblages in Europe.

Unfortunately, the human fossils and the lithic artifacts in the Banat, while both important to our understanding of early modern humans in Europe, are frustratingly found to the exclusion of the other. Except for a few scattered, unprovenienced pieces at both Peștera Muierii and Peștera Cioclovina in other parts of the cave, no lithics are associated with the modern human fossils. Likewise, no organic remains have yet been found in open air sites, a situation that is not likely to change due to high soil acidity¹⁴. Furthermore, as yet, there are no Aurignacian or contemporaneous finds in the Carpathian Basin loess where better preservation may be expected¹⁵.

It is with this in mind that the Collaborative Research Center–806 “Our Way to Europe” began fieldwork in the Banat, attempting to acquire and compare new comparative archaeological and sedimentological data with which to compare other Early Upper Paleolithic sites in the Levant and in Central Europe.

2. Background—Palaeolithic Research in the Romanian Banat

The history of Palaeolithic research in the Romanian Banat has been discussed extensively by I. Bălțean (2011). He relates that Pleistocene research in the Banat began at the end of the 19th Century with the discovery of Upper Pleistocene faunal remains (*Ursus spelaeus*, *Capra ibex*) in the Buhui Cave in Steierdorf-Anina¹⁶. Paleolithic artifacts were not found until the late 1930s when research was carried out at the Cerbului and Popovăț Caves in the Caraș Valley. While these artifacts were originally interpreted as bone and quartzite Palaeolithic artifacts, they were later shown to be geofacts¹⁷.

¹¹ Mogoșanu 1978; Kels *et alii* 2014; Sitlivy *et alii* 2014a; Micle *et alii* 2015.

¹² Chu *et alii* 2014; Mihailović 1992; Radovanović 1986.

¹³ Schmidt *et alii* 2013; Sitlivy *et alii* 2012.

¹⁴ Kels *et alii* 2014.

¹⁵ Händel *et alii* 2009.

¹⁶ Păunescu 2001.

¹⁷ Mogoșanu 1978, 14.

The first systematic Paleolithic excavation in the Banat took place in 1954 at the Peștera Hoților and was carried out by Nicolăescu-Plopșor¹⁸. These excavations yielded numerous Mousterian assemblages manufactured on quartzite (attributed to the Last Glacial cycle) along with a small number of possible Upper Paleolithic Aurignacian finds. Further collaboration with A. Păunescu, P. Roman and I. Stratan, resulted in the identification and investigation of the settlements of Tincova, Românești and Coșava¹⁹.

The impending flooding caused by the construction of the Iron Gates dam during the 1960s provided major stimulus for Banat Paleolithic research as archaeologists focused on rescuing at-risk archaeological heritage²⁰. During this time, four Paleolithic settlements were excavated: Băile Herculane (F. Mogoșanu, 1968–1970, 1972), Gornea–Căunița and Gornea–Păzăriște (F. Mogoșanu, 1969–1970 and V. Boroneanț, 1970) and Climente I (V. Boroneanț, 1965) culminating in the publication of several reports and articles²¹.

Paleolithic research was rejuvenated in 2002 with the discovery of modern human remains from the Peștera cu Oase. This finding initiated a large, international multidisciplinary research project²² during which archeological, sedimentological and paleontological research was carried out both within the chambers of the Peștera cu Oase but also in the multi-layered site from the Peștera La Hoțu and the Plopa Ponor rock shelter²³. Since then, Paleolithic research in the Banat has been steady and a number of exploratory excavations²⁴ have led to a synthetic publication of Paleolithic and Mesolithic research²⁵.

a) *The site of Tincova*

The archaeological site of Tincova is situated on a wide terrace structure southeast of the village of Tincova (Caraș-Severin, Romania) at the western edge of the Poiana Ruscă Mountains. The Paleolithic settlement of Tincova is composed of two distinct archaeological locations. The first, *Seliște I* is located approximately 400 m south of the village and 300 m East-southeast of the Orthodox cemetery. The second, *Seliște II* is approximately 100 m South-southwest of *Seliște I*, near the same cemetery.

The Aurignacian site was first discovered in 1958 in the eroding sediments

¹⁸ Jungbert 1978; Nicolăescu-Plopșor, Mateescu 1955.

¹⁹ Păunescu 1992.

²⁰ Bălțean 2011.

²¹ e.g. Mogoșanu 1978; Boroneanț 2000.

²² Trinkaus *et alii* 2012.

²³ Bălțean *et alii* 2008.

²⁴ e.g. Tuffreau *et alii* 2007.

²⁵ Tasić *et alii* 2011.

of a steep alluvial cone 60 m above the right bank of the Timiș River²⁶. Formal archaeological research began in 1958 under the supervision of C. S. Nicolăescu-Plopșor and I. Stratan²⁷. Later excavations were continued by F. Mogoșanu 1965–1966²⁸.

The majority of lithics at Tincova are manufactured from a local “Banat flint” of variable quality though it is not clear if this material is indeed flint. Petrochemical analyses indicate a probable local source likely from fluvial cobbles of the local rivers (Leonard in prep). Like the other Banat sites of Românești and Coșava, less than 5% of the Banat tools and other artifacts were made from other potentially semi-exotic raw materials. However, their small number and their unknown provenience suggests that they may be local, having been transported from unknown sources.

It is thought that the main aim at Tincova was to manufacture light, unretouched blades and elongated rectilinear bladelets possibly through a continuous core reduction sequence²⁹. Among bladelet forms, Krems points and Dufour bladelets (Dufour sub-type) are the most abundant. Simple endscrapers and retouched blades are present though carinated scrapers are rare and scaled retouch is absent³⁰.

Citing these typo-technological attributes, as well as temporal and spatial proximity, the original researchers suggested homologies between Tincova and the “classical” Krems-Dufour Aurignacian collections at Krems-Hundssteig in Lower Austria³¹. This connection has recently been resurrected placing Tincova (and the other Banat sites as well) within a specific Aurignacian facies, itself a part of a discrete European typo-technocomplex³².

However, the Tincova assemblage has also been used in the past as evidence that the earliest hominins reached the Banat during MIS 3. Both Teyssandier and Zilhão have suggested that the collection assemblage is “strongly suggestive of the Proto-aurignacian based on the targeted production of elongated rectilinear bladeforms.” They compare it to Geißenklösterle and other early Swabian Jura assemblages and have additionally encouraged comparisons with the Kozarnikian further east in Bulgaria³³, implying that its position might have served as an intermediary waypoint between Southeastern and Central

²⁶ Sitlivi *et alii* 2014b.

²⁷ Nicolăescu-Plopșor, Stratan 1961; Stratan 1962.

²⁸ Mogoșanu 1967.

²⁹ cf. Sitlivi *et alii* 2014b.

³⁰ Teyssandier 2008; cf. Sitlivi *et alii* 2014b.

³¹ Hahn 1977; Mogoșanu 1978.

³² Demidenko, Noiret 2012.

³³ Tsanova 2006.

Europe³⁴. Still, no direct comparative study between any of these sites has been made and the Tincova site remains undated. If correct however, these comparisons raise important questions as to Tincova's association with the other Banat sites and may be critical to unravelling the truth surrounding the validity of the Proto-aurignacian and other various Aurignacian subtypes.

Resolving the exact nature of the Tincova assemblages is therefore a main goal in understanding its relevance to the Danube Corridor Hypothesis. It is with this in mind that we posited the following questions:

1. What is the extent of the site of Tincova and;
2. Could the site represent multiple layers not observed by Mogoşanu and the other excavators?

b) Material and Methods

Small “keyhole” trenches were dug by a mechanical excavator in eight different locations predetermined by the excavation team (Table 1; Fig 1). After the topsoil was removed, trenches were dug in approximately 5 cm spits. Sediments in each spit was carefully examined for archaeological material but not sieved. When artifacts were found *in situ*, their depth was recorded; otherwise, depths recorded give an approximate depth and location within the trench. Trench profiles were manually trowel cleaned and described. Sediment samples were taken from stratigraphic levels integrating 5 cm intervals. Samples were taken using a trowel, and were stored in plastic bags.

Additionally, we were able to identify and interview Dănilă Gheorghişa from the village of Tincova who worked as one of approximately twenty other locals as an excavator in archaeological excavations of Selişte I for two months. Through her, we were able to confirm the exact position of the former excavations. Additionally, she alerted us to an eroding surface where she collected large quantities of lithic surface finds which she donated to the Lugoj Museum.

3. Results

More than 3 m (Trench 1) of sediment overlay coarse terrace sediments cropping out at the terrace edge. From eight trenches, seven were described in the field. Table 2 gives summarized descriptions from top to bottom.

Trenches 2–7 show similar build-ups (Table 1). We found a humic upper soil (Ah) of 12–25 cm thickness that gradually grades into a denser, grayer and less organic-rich horizon, interpreted as an Ae/Bv/Sd horizon that has been bleached by water stagnation. In all of the trenches, a compact and colorful (orangish, blackish, and ochre) horizon follows, which has a (sub)polyedric

³⁴ Teyssandier 2006; 2008; Zilhão 2006.

structure and black (Mn) coatings partly composed of fossil root channels (but not only of fossil root channels) and polyedric soil/sediment structures. It continues to the bottom of the profile with varying amounts of sand and fine pebbles, and with varying intensity in color and black stains and coatings. No clear differences in the sediment composition was visible.

The deeper trenches, 1 and 8, are somewhat different. Trench 1 was dug the deepest and the closest to the terrace edge; it shows less colorful redoximorphic features than Trenches 2–7. Trench 8 was excavated on the hillslope east of Trenches 2–7. Though its stratigraphy is similar, it has more and coarser sand and gravels are embedded in the fine sediment. The sediment itself is sandier and also more brown-gray, and shows less colorful redoximorphic features.

A total of five artifacts were found during the test trenches in Trenches 3 and 6. In Trench 3, a carinated core was found as well (Fig. 3–1) as an unambiguous quartzite endscraper (Fig. 3–4). These artifacts were found in the back dirt of the excavation so their depths were not recorded, however from our observations, they came from a depth of between 80–90 cm. In Trench 6, three artifacts were found: a single blade, a large flake, and a small debitage piece (Fig. 3). Again, the depths of the blade and flake were not recorded, however, the debitage piece was found *in situ* at a recorded depth of 75 cm (Fig. 4). Additionally, a number of surface finds including a carinated core (Fig. 3–2), were found in the dirt path near Trenches 3 and 4.

Discussion

Previous archaeological excavations by Mogoșanu (1978) have suggested a generalized ~3 m deep stratigraphy consisting of an upper yellowish grey vegetated soil (*sol vegetal gri-gălbui*), a yellowish white fine powder with iron oxide concretions (*praf fin gălbui-albicios cu concrețiuni de oxizi de fier*), a compact yellowish brown clay (*argilă brun-galbuie compactă*) and a reddish clay (*argilă de culoare roșcată*). The sediment profiles we found at Tincova are similar to the original descriptions by Mogoșanu (1978). Kels et al. (2014) described similar sediments and stratigraphies from Coșava and Românești, ca. 30–40 km further northeast and were described showing similar fragipan features, restricting water infiltration and root penetration.

We agree with the interpretation of Kels et al. (2014), that water infiltration is limited as the soil is extremely wet and shows colorful redoximorphic features from ~40 cm downward. Water stagnation is also visible in the landscape by the frequent occurrence of standing surface water puddles and of hydrophilic sedges (*sp. carex*). Similar sediments have been observed by the authors southeast of Vršac (Serbia), and it is posited that their continuous

distribution along the Banat hillslopes towards the Carpathians is likely, though more observations are required. Kels et al. (2014) also ‘assume a wider distribution of [these] fragic horizons in comparable altitudes and morphological positions along the Carpathian arc’. The observations at Tincova support this statement. The Tincova site seems quite similar in its sedimentary composition and geomorphologic position to the Românești site, where probably no or only minor erosion took place as opposed to Coșava where sediments were highly eroded³⁵. Less intense redoximorphic features in trenches one and eight may be associated with less stagnant water through better drainage at the hillslope and near the terrace edge.

The origins of the fine sediment and its several coarser components may be of aeolian or colluvial genesis; they may also represent a former flood plain of the Mureș River. We suggest a combination of aeolian loess deposition combined with colluvial sediment input from the adjacent upland hills accumulated during heavy rain events alongside carbonate dissolution to be responsible for the present soils. The coarser particles (in the sand fraction and the fine pebbles) support an alluvial or colluvial origin of parts of the deposits; an aeolian origin is at this point speculative. The absence of clear stratified sand and coarse material speaks against floodplain sediments and testifies to aeolian and colluvial deposition. Further evidence for a colluvial origin is in the abundance of coarse material in Trench 8 excavated at the hillslope. In summary, we suggest a combination of colluvial and aeolian sediment to be present at Tincova.

As loess covers wide parts of the Carpathian Basin and also the Banat³⁶, at least some aeolian loess deposition may be expected at Tincova. Where Kels et al. (2014) found three discrete sedimentological units at Coșava and Românești, Tincova does not show clear separations (however there are variations in coarse sediment fraction). Rather it shows different degrees of post-depositional alteration through soil formation and geochemical processes. At Coșava, fine sediments with a high proportion of coarser sediment from the underlying sediments are found³⁷. The trenches at Tincova did not reach the underlying coarser sediments, which crop out at the edge of the terrace-plateau-like landform where the archaeological site Tincova site is located. The sediments, including the high amount of clay and stanic features found at Tincova, Coșava and Românești are dissimilar from last glacial sedimentary deposits in the Carpathian Basin, which mainly consist of loess, sometimes including a sandy component³⁸.

³⁵ Kels et alii 2014.

³⁶ e.g. Haase et alii 2007; Kels et alii 2014; Lukić et alii 2014; Marković et alii 2014; Obreht et alii 2015; Schulte et alii 2014.

³⁷ Kels et alii 2014.

³⁸ Obreht et alii 2015.

The artifacts found at Tincova are identical to those found by previous excavations. Clearly the presence of *in situ* lithic artifacts confirm Bălțean's (2011) suspicion that the archaeological site at Tincova had not been exhaustively excavated as Mogoșanu (1978) posited. Although few artifacts were found in these test trenches, the cores confirm that the artifacts are unambiguously early Aurignacian in nature but are unable to add to the discussion as to whether Tincova is part of a Proto-aurignacian, or Krems-Dufour typo-technocomplex. Nevertheless, the addition of two cores to the small collection of carinated cores (n=9) from Tincova represents a gain of over 20% and eventually may be able to help sort out the "mixed" signal currently given by the collection³⁹.

4. Conclusions

From the initial results it appears that the Banat and the Paleolithic site of Tincova have a long history of human occupation, and still have much potential to help clarify the picture of the Late Pleistocene modern human dispersals into southeastern Europe. The generalized stratigraphy and Paleolithic findings devised by Mogoșanu for Tincova largely conforms that the occupied area was much wider than previously thought. A quarter of the trenches tested in this fieldwork yielded at least traces of Paleolithic occupation, and techno-typological observations confirm that the area was occupied in the Late Pleistocene. Sediments are probably the combined result of aeolian deposition and colluvial input; post-depositional disturbances of the archaeological layers were not observed. We were unable to recover enough artifacts to confirm Mogoșanu's archaeological stratigraphy however, all the artifacts we found were ~80 cm below the surface. It is unclear if this represented multiple layers, but understanding if the site is comprised of a single or multiple early Aurignacian occupations would be important to our understanding of the Tincova assemblage and modern human migrations in Europe and it is clear that this is an aim for future work. Due to the low find density excavations would require a large area for recovering a significant amount of in-situ archaeological material.

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ÎNCEPUTURILE PALEOLITICULUI SUPERIOR ÎN BANAT ȘI CERCETĂRI RECENTE ÎN SITUL PALEOLITIC DE LA TINCOVA

Rezumat

Pe măsură ce datele despre răspândirea urmelor umane moderne în Europa în timpul paleoliticului superior se acumulează, scenariile devin din ce în ce mai complicate. Banatul, integrat în Bazinul sud-vest Panonic, unde numeroasele fosile și dovezile arheologice indică o prezență timpurie a oamenilor moderni, a devenit o regiune-cheie în această discuție.

Unul dintre cele mai importante situri este cel de la Tincova, care reprezintă un sit aurignacian bogat, a cărui asociere cu paleoliticul superior de est și de vest a fost pe larg discutată. În ciuda acestui fapt, vârsta și formarea sitului sunt încă puțin înțelese.

Cu aceste idei la bază, în primăvara anului 2016, am inițiat un proiect de mică anvergură de diagnoză și excavare arheologică preliminară (1) menit să identifice întinderea spațială a sitului și (2) pentru a reexamina sedimentele din jur.

Aproape jumătate din sondajele efectuate în acest loc pe teren au dat cel puțin semnalul unor urme de ocupație antropică paleolitică și observațiile tehnolo-tipologice confirmă faptul că zona a fost ocupată în Pleistocenul Târziu.

Nu s-au observat tulburări post-depoziționale ale straturilor arheologice. Nu am reușit să recuperăm destule artefacte pentru a confirma stratigrafia arheologică propusă de Fl. Mogoșanu dar, cu toate acestea, toate artefactele au fost descoperite la -80 cm sub suprafață. Nu este clar dacă acest lucru a reprezentat mai multe nivele, dar înțelegerea în cazul în care situl este format dintr-o singură sau mai multe ocupații specifice aurignacianului timpuriu ar fi importantă pentru noi în ceea ce privește integrarea sitului de la Tincova în harta migrațiilor umane moderne în Europa și este clar că acesta este un obiectiv pentru munca noastră viitoare.

Sedimentele, inclusiv cantitatea mare de argilă cu caracteristici minerale prezente la

Tincova, dar și la Coșava și Românești, sunt deosebite de ultimele depozite sedimentare glaciare din Bazinul Carpatic, care constau în principal din loess, uneori, inclusiv o componentă de nisip.

Descrierea sedimentului este doar descriptivă aici și inițial se evită o interpretare științifică a solului. În plus, noi am fost capabili să identificăm și să interviewăm o persoană din satul Tincova care a lucrat cu alți aproximativ douăzeci de localnici la săpăturile arheologice din Seliște I timp de două luni în anii '70.

Astfel, am fost capabili de a localiza poziția fostelor săpături. În plus, persoana interviewată ne-a avertizat cu privire la o suprafață de erodare din islazul satului, zonă în care ea a colectat de-a lungul anilor de la suprafață cantități mari de piese litice din silex pe care le-a donat Muzeului din Lugoj. Descoperirile noastre confirmă prezența unui sit aparținând paleoliticului superior, aflat într-o stratigrafie similară cu cea găsită în context, de către Fl. Mogoșanu, stratigrafie și secvență sedimentară care sunt similare cu cele observate în alte situri aparținând aurignacianului timpuriu din regiune.

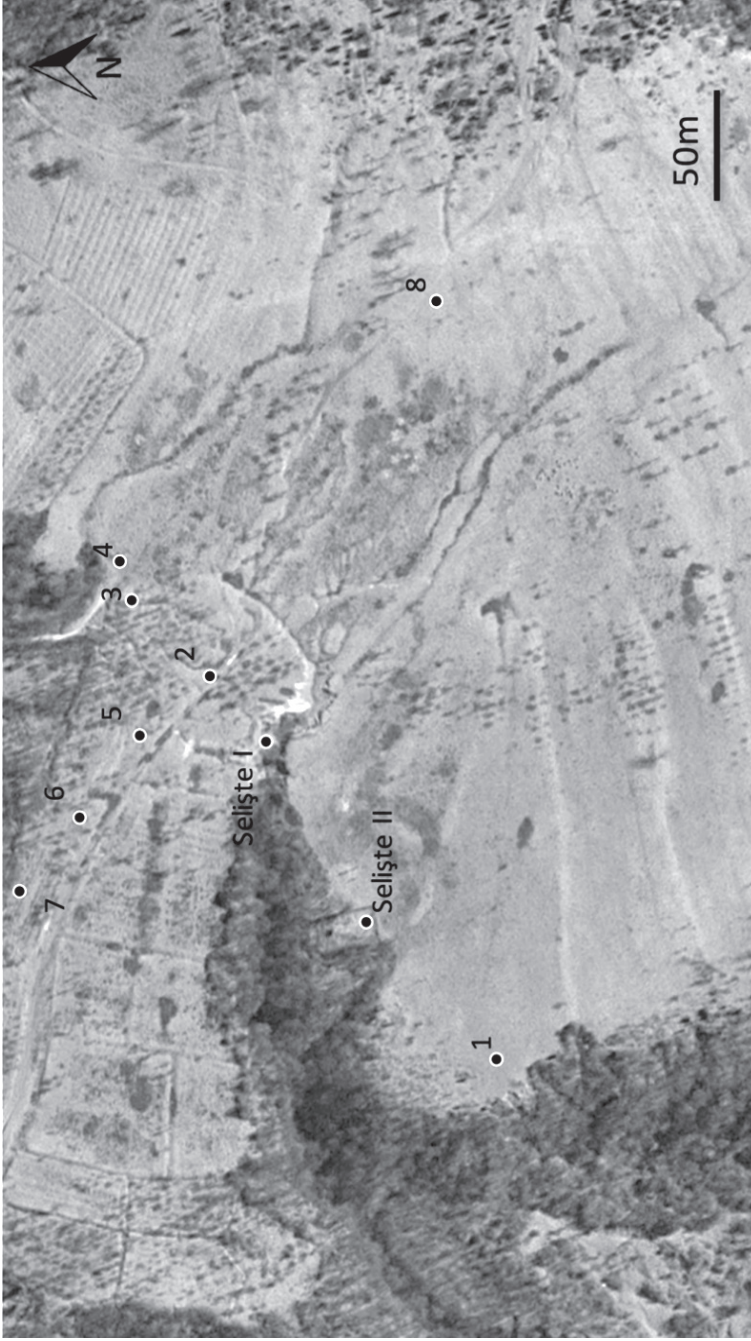


Figure 1: Location of the test trenches from the 2016 field campaign. Imagery ©2016 CNES/Astrium, DigitalGlobe, Map data ©2016 Google / Campania / Romania din 2016 – Amplasamentul secțiunii de examinare preliminară. Imagery ©2016 CNES/Astrium, DigitalGlobe, Map data ©2016 Google.

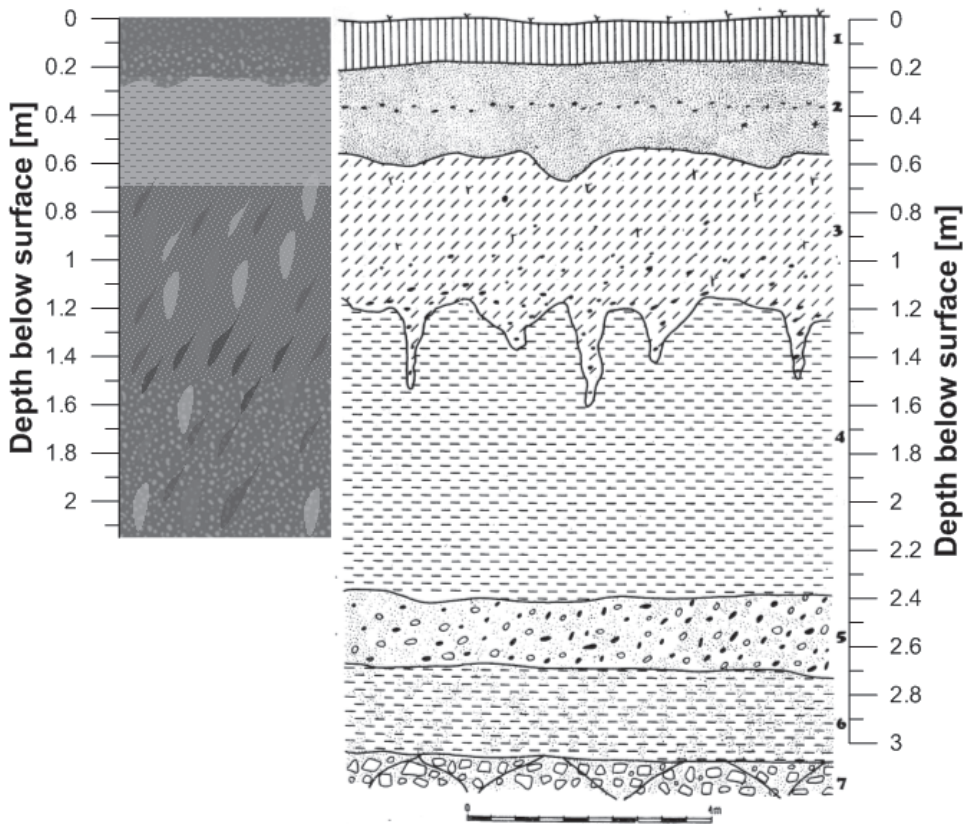


Figure 2: Simplified profile sketch of Trench 2, representative for Trenches 2–7, compared to the figure by Mogoşanu 1978 (right panel). In agreement with Mogoşanu's observations, we found a humic upper soil (Ah) of 12–25 cm thickness that gradually grades into a denser, grayer and less organic-rich horizon (here down to 70 cm). In all trenches a compact and more or less colorful (orangish, blackish, and ochre) horizon follows, which has a (sub) polyedric structure and black (Mn) coatings of fossil root channels and polyedric sediment structures. It continues to the bottom of the profile with varying amounts of sand and fine pebbles, and with varying intensity in color and black stains and coatings. Table 1 gives a simplified overview of the profiles found in trenches /

Schița simplificată a profilului secțiunii 2, reprezentativă pentru secțiunile 2–7, comparată cu imaginea dată de Mogoşanu 1978 (panoul din dreapta). În acord cu observațiile lui Moroşanu, am descoperit un strat superior de humus (Ah), de 12 – 25 cm, care se dezvoltă treptat într-un orizont mai dens, mai cenuşiu și mai puțin bogat în elemente organice (aici, la o adâncime de 70 cm). La nivelul tuturor secțiunilor urmează un orizont mai mult sau mai puțin colorat (portocaliu, negru și ocru), cu o structură subpoliedrică și straturi negre (Mn) de caneluri de rădăcină fosilă și structuri de sediment poliedric. Acesta continuă spre baza profilului cu diferite cantități de nisip și prundiș și, de asemenea, cu pete și straturi cu o intensitate diferită a culorii sau negre. Tabelul 1 oferă o prezentare generală simplificată a profilurilor descoperite în secțiuni.

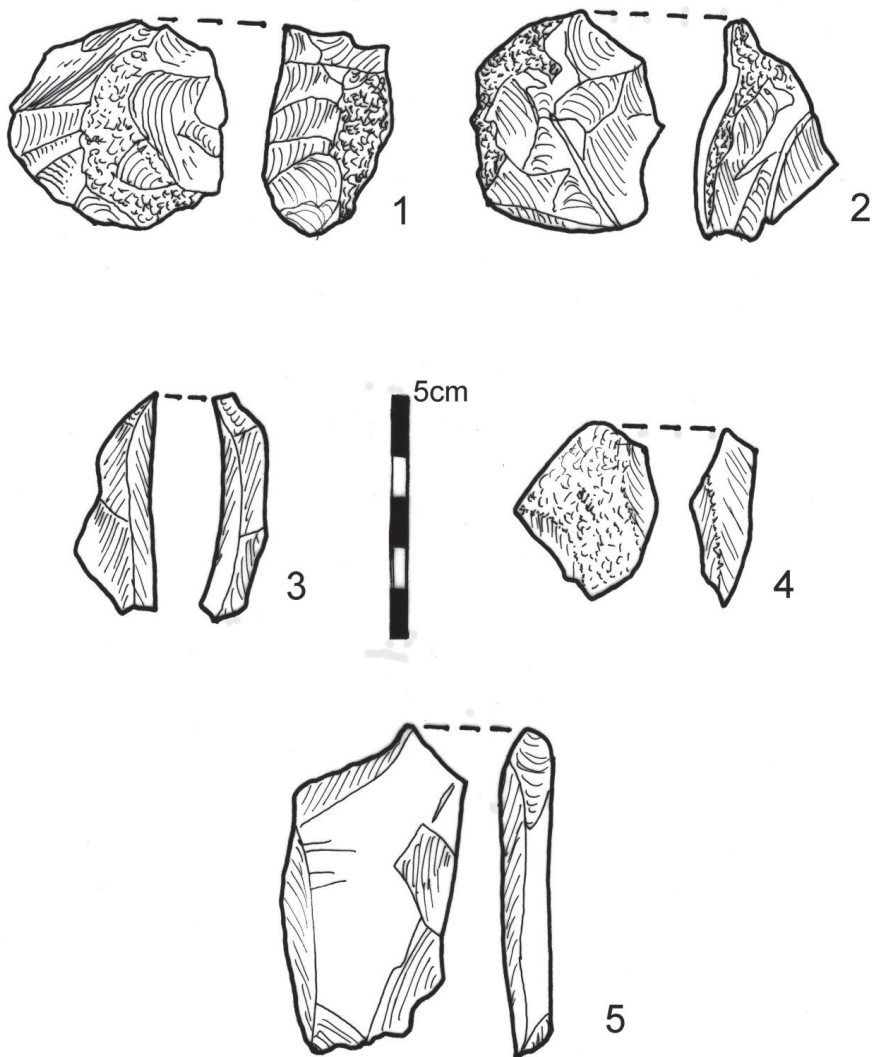


Figure 3: Artifacts recovered from Tincova 2016 / *Artefacte descoperite la Tincova 2016.*



Figure 4: South profile of Trench 6 with the position of an artifact recovered *in situ* indicated / Profilul sudic al secțiunii 6, cu indicarea poziției unui artefact *in situ*.

Table 1: Location and sizes of the trenches from the 2016 field campaign. Note that all points indicate the SW most corner of the trench. All trenches were 60 cm wide / *Amplasamentul și dimensiunile secțiunilor din campania 2016. A se observa că toate punctele indică cel mai sud-vestic colț al secțiunii. Toate secțiunile au avut lățimea de 60 cm.*

Location	Depth [m]	Length [m]	Orientation	Findings
Trench 1	3	4	SSW	1 sediment sample taken
Trench 2	2.15	10	SW	
Trench 3	.83	4	N	core, quartzite retouched flake
Trench 4	1	4	SSE	
Trench 5	.95	4	N	
Trench 6	1.15	T-shaped 7X4	N	blade, flake, debitage, sediment samples taken
Trench 7	1.2	4	N	
Trench 8	1.9	4	SSW	

Table 2: Simplified stratigraphy of the eight investigated trenches from Tincova / *Stratigrafia simplificată a celor opt secțiuni cercetate la Tincova.*

Description	Depth Trench 1 [cm]	Depth Trench 2 [cm]	Depth Trench 3 [cm]	Depth Trench 4 [cm]	Depth Trench 5 [cm]	Depth Trench 6 [cm]	Depth Trench 7 [cm]	Depth Trench 8 [cm]
Topsoil with many roots and organic material, light brown in color, crumble structure	0–15/20	0–25	0–12	0–20	0–15	0–15	As 6, (not described in detail)	0–18
Gradual change towards lighter (bleached) and more clay rich horizon, few roots. Crumble to subangular structure; clearly more compact and clay-rich.	20–70	25–70	12–33	20–40	15–19	15–27		18–49, including small pebble up to ca. 4 mm
Very compact and colorful (orangish, blackish, and ochre) horizon. Very clay rich with black spots and a (sub)polyedreic structure. Black (Mn) precipitates along polyedric structures, partly following paleo-root structures.	20–230	70–130	33–83	40–100	19–95	27–115		49–102, less colorful than in profiles 2–7; more brown

Description	Depth Trench 1 [cm]	Depth Trench 2 [cm]	Depth Trench 3 [cm]	Depth Trench 4 [cm]	Depth Trench 5 [cm]	Depth Trench 6 [cm]	Depth Trench 7 [cm]	Depth Trench 8 [cm]
As above, but more coarse sand and small pebbles in the clay matrix	-	130–215	-	-	-	-		102–190, including pebble up to ca. 6 cm in diameter
Some quartz as coarse sand (and small pebbles)	110–150		54					