

SERBIA

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Over the past few years Palaeolithic studies in Serbia have made significant advances. In west central Serbia, a Gravettian/Epigravettian layer and several Middle Palaeolithic horizons have been explored at Hadži Prodanova cave (Mihailović & Mihailović, 2006). Rich layers containing Mousterian, Aurignacian and Gravettian industries have been attested at Šalitrena pećina near Mionica (Mihailović, 2008), while the Middle Palaeolithic has been documented on the site of Samaila near Kraljevo (Mihailović & Bogosavljević-Petrović, 2010). The Middle Palaeolithic has also been investigated at the Petrovaradin Fortress in Vojvodina (Mihailović, 2009a), while in east central Serbia several Middle and Upper Palaeolithic sites have been explored. The Early Upper Palaeolithic has been attested in the Cave above the Tabula Traiana cave and in Baranica cave near Knjaževac (Borić & Jevtić, 2008); in the Balanica cave complex near Niš layers with abundant Charentian finds and hominin remains have been explored (Mihailović, 2009b; Roksandić *et al.*, 2011), and in Pešturina cave near Niš Middle and Upper Palaeolithic remains have been attested. Apart from providing an initial insight into the Upper Palaeolithic in the region, these investigations have raised a few important questions concerning cultural changes and population movements in the Palaeolithic in South-East Europe.

Excavations

Šalitrena pećina

Upper Palaeolithic remains have been attested at Šalitrena pećina (Mihailović, 2008). The cave has been intermittently explored since the 1980s, but a decisive breakthrough was made in 2004 when the Belgrade National Museum assumed responsibility for the excavation and a rich Gravettian industry was discovered. The following year, 2005, the Aurignacian horizon began to be explored, reaching, in 2007, the level containing Middle Palaeolithic finds. The excavation covered an area of 50 sq m in the entrance, front and rear areas of the cave. The cultural layer has been investigated to a depth of 1.30 m.

The finds from the Aurignacian layer (layer 5), dated to 32,000-31,000 BP, have not been published in detail. Nonetheless, it is already clear that this particular Aurignacian industry is

somewhat different from those in the adjacent regions. Typical of it, for example, are carinated scrapers and burins which are difficult to differentiate even formally from the cores, and there have also been found bladelets and points with semi-steep marginal retouch. The same layer yielded two fossil *Dentalium* beads.

The finds recovered from the Gravettian layer (Layer 4), dated to 24,000 BP, have been published in a few preliminary reports (Mihailović & Mihailović, 2007; Mihailović, 2008). They constitute a very rich collection of several thousand artefacts of various raw materials. The cores include massive single-platform cores, atypical double-platform cores, burin-type cores and cores for microblades. The assemblage includes various burins (dihedral, angular, carinated) and scrapers on flakes and blades, pointed blades, combined tools (scrapers-points, scrapers-burins and burins-scrapers) and steep-retouched artefacts. Prominent among the backed tools are larger-sized steep-retouched points with retouched bases, unilaterally and bilaterally retouched bladelets and microblades with thinned tips and bases, and double tools resembling rectangles at the break. It is interesting that the structure of the industry attested in Layer 3, only a thousand years younger, is fundamentally different. The assemblage includes no geometric microliths, but only points, backed bladelets, scrapers on flakes, and other atypical tools. It is not until the ongoing analysis of the recovered material is completed, however, that a more meaningful account of this industry will be possible.

Baranica

The excavation at Baranica Cave near Knjaževac was carried out intermittently between 1994 and 2004. The Upper Palaeolithic character of the industry from the upper (2) and lower (4a/4b) layers was obvious from the outset, but the absence of diagnostic implements made it impossible to establish the date and cultural affinities of the assemblages (Mihailović *et al.*, 1997). The date of 35,780 ± 320 BP (OxA-13828) recently obtained for the lower layer, however, assigns the artefacts to the Early Upper Palaeolithic (Dimitrijević, forthcoming). The layer yielded three flakes and three blades (one of them rejuvenated), a scraper on thick retouched blade and an atypical carinated scraper. Layer

2, dated to $23,520 \pm 110$ BP (OxA-13827), yielded ample and diverse faunal remains: *Dicerorhinus* sp., *Bos/Bison*, *Megaloceros*, *Capra ibex*, *Equus caballus*, *Panthera spelaea*, *Crocuta spelaea*; the microfauna corresponding to the Last Glacial Maximum (Bogićević, 2008) and only three chipped artefacts: a laterally retouched side-scraper, a blade and a bladelet. It should be noted that the lowest layer (5c) on the site yielded quartz artefacts and a fragment of an irregular blade. At this point, cultural affinities of the finds cannot be established.

Tabula Traiana Cave

Tabula Traiana Cave in Djerdap (Iron Gate Gorge) began to be explored in 2005 (Borić, 2008; Borić & Jevtić, 2008). At the interface between loose and compacted sediment layers a thick bilaterally retouched blade was found, classified as Aurignacian by the excavation leader. Beneath this level a hearth was discovered, as well as the remains of ibex, hyena, cave bear, cave lion and migratory fish (*Acipenseridae*). Two dates have been obtained for the layer: $35,530 \pm 360$ BP (OxA-16419) and $31,200 \pm 1,200$ BP (AA-63887).

Field surveys

Apart from excavations, field surveys were undertaken in different parts of Serbia and Montenegro. In east central Serbia, detailed survey of the caves in Negotinska Krajina and in the Timok and Nišava river valleys was carried out, while in Montenegro about one hundred caves were registered which may be presumed to have been habitable in the past. On some of these cave sites, both in Serbia and in Montenegro, trial and systematic excavation will soon begin.

Conferences and publications

The collection of papers on the Palaeolithic of the Balkans submitted at the 20th UISPP Congress held in Lisbon in 2006 was published (Darlas & Mihailović, 2008), with some of the contributions presenting fresh information about the Upper Palaeolithic in the Central Balkans. A conference on the Palaeolithic Banat was held at Vršac in 2009 (Mihailović & Filipović, 2009), and the first volume on the prehistory of the Banat, offers a detailed description of the Upper Palaeolithic sites in north Serbia and southeast Romania is in preparation. A monograph on the Upper Palaeolithic and Mesolithic industry from the site of Crvena stijena in Montenegro also appeared (Mihailović, 2009c), as well as an article presenting the results of more recent investigations on this site (Baković *et al.*, 2009).

Implications of recent investigations

Recent investigations have shown that early Upper Palaeolithic sites occur in the north but not in the central (mountainous) areas of the Balkan Peninsula. They have also shown that absolute dates marking the end of the Middle and beginning of the Upper Palaeolithic gradually drop east to west. It all corroborates the earlier assumption that the Danube corridor played a significant role in the spread of Upper Palaeolithic techno-complexes (Conard & Bolus, 2003). As for the Gravettian, the news is that the Gravettian of the central-European type has been attested at Šalitrena Cave. It remains to be established whether its occurrence resulted from a southward migration of Gravettian communities at the beginning of the Last Glacial Maximum (Ginter *et al.*, 1994) or from cultural and social connectedness of the bearers of the Gravettian techno-complex in south Pannonia and in the north of the Balkans.

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