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The Late Gravettian and Szeleta Cave, northeast Hungary

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ABSTRACT

The archaeological sequence of Szeleta Cave, northeast Hungary, had represented the development of a bifacial leaf-shaped point lithic industry between the late Middle Palaeolithic and the Upper Palaeolithic with the evolution of Early Szeletian into the Developed Szeletian culture. In the 1990s, a hypothesis emerged that reconsidered the Developed Szeletian and related the artifacts with a Gravettian that used bifacial leaf point technology in Eastern Central Europe. Unfortunately, details on artifact types remained unpublished, which could have supported the Gravettian thesis. To test this hypothesis, we undertook a typological analysis of the lithic assemblages from the lowermost to the uppermost stratigraphic occurrence of Gravettian tool types. Our analysis found the Gravettian thesis supportable. We argue for classifying Layers 5 and 6 of Szeleta Cave Late Gravettian, among which Layer 6 could represent a Late Gravettian with leaf points. We claim that the bifacial tool technology could have been an integral part in the Eastern Central European Late Gravettian archaeological record.

1. Introduction

Over several decades in the archaeological research of Eastern Central Europe, the sequence of Szeleta Cave represented the development of a bifacial leaf-shaped point lithic industry between the late Middle Palaeolithic and the Upper Palaeolithic (Kadić, 1916, 1934; Hillebrand, 1935; Mottl, 1938; Gábori, 1953; Vértes, 1968; Allsworth-Jones, 1986; Ringer, 1989).

Prior to the 1950s, the lithic industries of Szeleta represented the local development of the Solutrean (Kadić, 1916, 1934; Hillebrand, 1935; Mottl, 1938; Gábori, 1953). Červinka in the 1920s (Valoch, 1996), and later Prošek (1953) proposed to use the term Szeletian instead of Solutrean. Since the 1960s Szeleta Cave was widely known as the eponymous site of the Szeletian. The Szeletian culture, at Szeleta Cave, had two phases: the Early Szeletian and the Developed Szeletian (Vértes, 1968; Allsworth-Jones, 1986). Svoboda and Simán (1989) and Simán (1990) broke the traditional interpretation of the archaeological sequence and proposed to reclassify the Developed Szeletian industry into a special type of Gravettian that produced bifacial leaf points (BLP). Gravettian tool types, such as the Gravette point and the backed bladelet, were always noticed in the lithic inventories of Szeleta, but were never considered an integral part of the BLP industry before. Most probably the similarity to the lithic assemblage of Trenčianske Bohuslavice in Slovakia (Bárta, 1988), and Předmostí in the Czech Republic (Absolon and Klíma, 1977) supported the Gravettian thesis. Simán (1990, 1995), however, did not present the Gravettian tools in details, neither their frequency in the assemblages of Szeleta layers. This was due to that the exact stratigraphic and spatial position of the finds was hardly demonstrable until the years of 2000s. Difficulties in find positioning led Allsworth-Jones (1986) and Adams (1998) to simplify the archaeostratigraphy and study the artifacts by two broad stratigraphic units following Kadić (1916): "lower" and "upper" levels. Due to the same difficulty, the review of Svoboda and Simán (1989) relied on no more than 10% of the total 2000 items recovered by Kadić (1916). Likely, Simán (1990, 1995) based the Gravettian thesis on the same sample, too. Meanwhile, Adams (1998, 2009a) created a contradiction in the typological data by identifying only a single Gravettian tool, a backed blade, in the "upper levels" of Szeleta. Until now, the contradictions in interpreting the relation between the Gravettian tools and Szeletian finds remained uncovered in details. Due to a handwritten find inventory made by Kadić, which is currently stored at the Hungarian National Museum archives (Ringer and Mester, 2000; Mester, 2002), a detailed

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reconsideration of the Gravettian finds and their relation to the BLPs can be undertaken. Our aim with this paper was to test the integrity of the Gravettian thesis (Simán, 1990).

2. Setting

Szeleta Cave, 60 m long, is located in the eastern Bükk Mountains, 349 m asl (Fig. 1). The cave was divided into seven sections: Entrance (A), Hall (B), Main Corridor front (C), Main Corridor rear (D), Side Corridor front (E), Side Corridor rear (F), and the Stalagmite Cavity (G) (Fig. 2) (Kadić, 1916; Mester, 2002).

Kadić (1916) begun the first excavation in 1906 and conducted seven further seasons until 1913. After Kadić, a few short campaigns were carried out in 1928, 1936, 1947, 1966, 1989, 1999, 2004, 2007, and 2012 (Mester, 2002; Adams and Ringer, 2004; Lengyel et al., 2008–2009; Ringer, 2008–2009; Mester et al., 2013).

Kadić (1916) found the stratum thickest in the Hall (12.5 m) and distinguished six Pleistocene layers (Fig. 3). Arbitrary spits of 0.50 m divided further the layers. Spit numbering went from top to bottom with roman numerals, while layer numbering in revers with Arabic numerals (Kadić, 1916; Mester, 2002). Horizontally, Kadić applied a grid of 2 × 2 m squares to divide the area of the cave.

Layer 2, the lowermost with artifacts, was exposed in the Hall and the Main Corridor. Its greatest thickness was 5.0 m in the Hall. This layer covered the bedrock, except in the Hall, where an archaeologically sterile pebble layer lay underneath. Layer 2 contained two sublayers (2a and 2b) in the Hall, which yielded Mousterian finds (Vértes, 1965; Mester, 1994; Lengyel et al., 2008–2009). From the upper level of Layer 2, a few bifacial tools were designated with the Middle Palaeolithic Bábonyian (Ringer and Mester, 2000). Radiocarbon measurements on cave bear bones from the upper border of Layer 2 indicated that this layer is older than 40 ka BP (Adams and Ringer, 2004; Lengyel and Mester, 2008). Further bone samples of cave bear from deeper levels of Layer 2 inside the cave were measured older than 50 ka BP (Lengyel et al., 2008–2009).

Layer 3, exposed all over the cave, yielded the Early Szeletian finds. The maximum thickness of Layer 3 in the Hall was 3.50 m, while in the corridor 1.50 m. Eroded rock debris, animal bones, and lithics indicated admixture within the matrix (Kadić, 1916; Allsworth-Jones, 1978; Lengyel and Mester, 2008; Adams, 2009b). Later, radiocarbon dates from Layer 3 ranging from 26 to 11 ka BP in erratic chronological order also referred to post-depositional disturbance in Layer 3 (Adams and Ringer, 2004; Lengyel and Mester, 2008). Layer 3 included three sublayers in the Hall, 3a, 3b, and 3c, which Kadić (1916) identified hearth layers. Today Layer 3 is the uppermost sediment that still is available in the cave. All layers above, 4, 5, and 6, were completely removed.

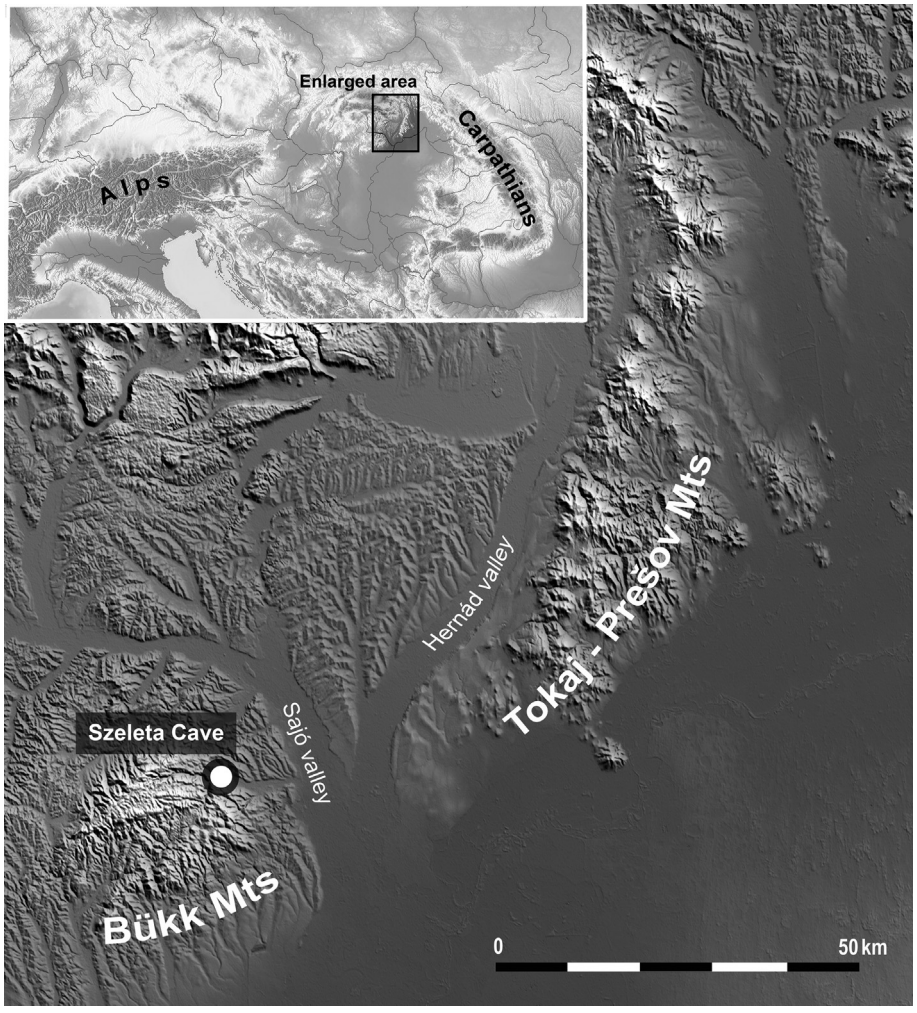

Fig. 1. Location of Szeleta Cave.