

AT THE EDGE OF EUROPE: LATE PLEISTOCENE HOMININ SETTLEMENT AND WORKSHOP ACTIVITY AT INKAYA CAVE, NORTHWESTERN ANATOLIA

*Ismail Ozer¹, Ece Eren Kural¹, Aysegul Ozdemir Basaran², Cagdas Erdem³ and
Basak Koca Ozer¹*

¹Ankara University, Faculty of Languages, History and Geography, Department of Anthropology, Sihhiye, Ankara, Türkiye; ²Hatay Mustafa Kemal University, Faculty of Arts and Sciences, Department of Anthropology, Antakya, Hatay, Türkiye; ³Mardin Artuklu University, Faculty of Letters, Department of Anthropology, Artuklu, Mardin, Türkiye

Background: The Balkan–Anatolian corridor is a key but understudied route of Late Pleistocene hominin dispersal. Inkaya Cave (Çanakkale, Türkiye), discovered in 2016, provides the first stratified and radiometrically dated occupation sequence from northwestern Anatolia, spanning approximately 86,000–22,000 years BP.

Objective: This study presents the preliminary findings of systematic excavations at Inkaya Cave, examining lithic technological organization, spatial site-use patterns, and the broader implications for Late Middle to Early Upper Palaeolithic hominin mobility across the Balkan-Anatolian corridor.

Subjects and methods: Excavations conducted between 2017 and 2025 exposed a stratified cultural deposit approximately 340 cm thick, yielding 17,925 lithic artifacts. Technological classifications followed Inizan et al. (1999) and Kuhn et al. (2009); typological attributions were based on Bordes (1961).

Results: The assemblage is dominated by flakes (70.45%), with a notable blade component (18.44%) indicative of a Late Middle/Early Upper Palaeolithic transitional industry. Side scrapers are the most common retouched tools and increasing Levallois elements support a Mousterian attribution. A lithic workshop was active between ~65,000 and 40,000 BP, while abundant local raw materials favoured a pragmatic flake-based technology.

Conclusions: Chronological, technological, and biogeographic evidence suggests an association with *Homo neanderthalensis*. Inkaya Cave, situated along the Balkan-Anatolian corridor, appears to have been a key Late Pleistocene hominin activity center, providing important insights into Neanderthal mobility and adaptation at Europe's southeastern edge.

Keywords: Late Middle Palaeolithic; Mousterian; Inkaya Cave; Northwestern Anatolia; Neanderthal; Lithic workshop; Balkan-Anatolian corridor.

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