## Paleoanthropology of the Balkans and Anatolia: Human Evolution and its Context

Katerina Harvati and Mirjana Roksandic (eds.)

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Paleoanthropology of the Balkans and Anatolia is a collection of 18 articles originating from a conference titled "Human evolution in the Southern Balkans" in 2012. The volume is divided into three parts. The first part reviews the human fossil record from six Southeastern European countries (Chapters 1–6). The second, (Chapters 7–14) develops the Paleolithic record of roughly the same territory, while the third part (Chapters 15–18) expands the paleoenvironmental, biogeographic and chronological backdrop for the region.

The volume aims to explore if Southeastern Europe was a potential gateway for archaic and early modern humans, bridging Africa, Western Asia, and Europe. Paleoanthropological research in the area has heretofore been sparse and bringing the region into a cohesive framework is no easy task as the fractured geopolitical nature of the region has created significant differences in research intensity, research traditions, and has limited the dissemination of data. Therefore, the goals of this publication are simple—the editors seek to bring together scholars working in the broader Balkan region to review the evidence from their respective regions and to present their work in a single volume.

The first chapter of the volume is by Harvati, who summarizes the relatively rich human fossil record from modern Greece, supplementing it with new data from the hominin fossils at Kalamakia and Megalopolis in an effort to elucidate their affinities to other human fossils. The chapter also highlights the temporal gaps in the Greek record and outlines future research plans to fill them. Roksandic (Chapter 2) then presents an overview of the sparser human fossil record from the Central Balkans, most of which appears to be lost or destroyed, highlighting the only excavated human remain, the partial mandible from Mala Balanica cave. Despite the dearth of Pleistocene fossils, Roksandic posits that the region may in the future turn out to be important for understanding human evolution in Europe, which currently is biased to the West. In Chapter 3, Janković et al. move west to the rich Late Pleistocene Croatian hominin record, reviewing the major hominin bearing sites and outlining their importance. They suggest that Eastern Central Europe was a major region for the biological interaction between late Neandertals and early modern humans. In the following chapter, Harvati and Roksandic summarize the fossil human record from Romania, providing a comparative geometric morphometric analysis of the early Upper Paleolithic Romanian mandibular remains from Oase 1 and Muierii 1. In doing so, they compare their results to paleogenetics and emphasize the difficulties in assessing admixture from skeletal morphologies. In Chapter 5, Strait et al. review the human fossil record from Bulgaria and propose biogeographic dispersal hypotheses for Early, Middle, and Late Pleistocene human dispersals into Eurasia that can be falsified primarily through new fieldwork. Aytek and Harvati (Chapter 6) then appraise the human fossil record from Turkey delivering a preliminary comparative 3D geometric morphometric analysis of the *Homo erectus* specimen from Kocabaş. Their results show affinities to early Eurasian *Homo* sp., as opposed to those of early African *Homo erectus*.

In Part II, Darlas and Psathi (Chapter 7) discuss cave sites in the western Mani Peninsula at a southern extreme of Europe. The authors summarize old and new results, and include two new radiometric dates from the Upper Paleolithic. The cultural sequences, though still enigmatic, are rich and Kolominitsa cave in particular could yield more results in the future. Chapter 8, (Galanidou et al.) presents the first results of fieldwork from Rodafnidia on the island of Lesbos, including a short description of some Acheulian material discovered at the site and preliminary dating results. The authors emphasize the site's potential to help understand Middle Pleistocene hominin migrations into Europe. Chapter 9 (Mihailović and Bogićević) summarizes the Earlier Paleolithic record of the Central Balkans, concentrating on the Lower to Middle Paleolithic transition in the region. The authors propose that the first appearance of the Charentian in Europe is in the Central Balkans and that lithic industries in the region are linked to demographic exchange with the Near East. An interesting contribution by Karavanić et al. (Chapter 10) discusses the controversial evidence for the Middle to Upper Paleolithic transition from Croatia. Karavanić et al. present the evidence from Vindija cave in detail as well as preliminary findings from new sites across Croatia contrasting the differences in the transitional record between its Adriatic Coast and continental interior. In Chapter 11, Dobos and Iovita summarize the evidence for Lower Paleolithic sites in Romania, ultimately rejecting most of the previous key sites. The authors then report on recent results of their Lower Danube Survey for Paleolithic Sites, and particularly on the Dealul Guran site dated to OIS 11. Ivanova in Chapter 12 summarizes the Lower Paleolithic assemblages from Bulgaria, reviewing the work at Kozarnika cave and introducing some new possible openair sites in the Rhodope Mountains, evaluating their dates and lithic technologies. Chapter 13 (Dinçer) summarizes the Lower Paleolithic in Eastern Turkey, positing that the sporadic and ephemeral early human presence in Anatolia before the late Middle Pleistocene was due to a challenging environment. However, he admits that it is still difficult to draw clear conclusions due to the small number of contextualized sites in the region. Sitlivy (Chapter 14) tackles the Middle to Upper Paleolithic transition in the Balkans and Central Europe on the basis of analyzing numerous lithic assemblages and tracking innovations and changes in lithic reduction sequences over time and space.

In Part III, Koufos and Kostopoulos (Chapter 15) present their research on large mammal evolution in Greece. Based on the finding that during the late Early Pleistocene a shift in environmental conditions resulted in open grasslands, they suggest that it is more probable that humans entered Europe as part of an Asian faunal dispersal event. Spassov (Chapter 16) then examines the timing and the route of possible earlier human dispersals into Europe, focusing on faunal data from both Bulgaria and other sites to explain the push/pull climatic factors that led humans into Europe. In Chapter 17, Doukas and Papayianni review the micromamalian faunal record in Greece and the environmental and chronological information it provides and can provide for hominin-bearing sites. In the final chapter, Tourloukis provides a useful geoarcheological appraisal of Lower Paleolithic sites in the entire Mediterranean, suggesting that landscape evolution has biased the distribution and site formation processes of the Lower Paleolithic in the region. The author argues that this, rather than low research intensity, may account for the lack of sites in Greece. The theory put forth offers new survey techniques that might be used with good effect to locate new sites in the Balkans.

The volume is a welcome contribution to the field of European Paleoanthropology. Several of the most successful contributions are descriptive pieces that detail new archeological discoveries, which, as becomes increasingly apparent when reading the volume, are sorely needed. In this context, I found Tourloukis' observations on site distributions in basins particularly useful and I was pleased to see him acknowledge that landscape dynamics are integral to explaining site distributions of Paleolithic industries. The articles dealing with the Middle to Upper Paleolithic transition are also of excellent quality.

Nearly all the articles have several high-quality illustrations and the volume is generally well produced and edited. Overall, it provides a much-needed review of the Pleistocene hominin and Paleolithic record of the Balkans and serves as a valuable overview on what is known from the region. Unfortunately, there is little discussion of many areas in the Balkan Peninsula. Notably absent from this volume are contributions dealing with the Western Balkans (e.g., Albania, Kosovo, Macedonia, Montenegro, and Bosnia and Herzegovina), which may be seen as a reflection of geopolitical conditions and/or the poor state of research in those countries. The volume also makes clear that Paleolithic research in the various Balkan countries is in different stages and that the fractured geopolitical nature of the region has had serious consequences on cross-border research.

If there is one take-home message of this volume, it is that, despite archeologists' assessment of the high potential of the region as the "bridge" between the African, Asian, and European hominin Pleistocene records, the region still is far from providing robust data from well-excavated sites. As a result, many of the arguments are tentative, largely because of the small number of contextualized fossils and artifacts. While the region may continue to lag behind Western Europe for some time, it is wonderful to see that, because of the ambition and hard work of the editors and authors, this trend many not continue for long.