

Preface

The timing, route, and origin of the earliest human dispersal into Europe, the number of Eurasian hominin taxa during the Pleistocene, the evolution and possible late survival of the Neanderthal lineage, and the Late Pleistocene arrival of modern humans in Europe continue to be central themes of discussion and research in paleoanthropology. However, in these discussions there is a glaring lack of primary data from one of the most relevant geographic regions of Europe: the Balkans. This area, together with neighboring Anatolia, is at the geographic center of the hypothesized dispersals and is often considered the most likely migration route into the continent. Furthermore, together with the Italian and Iberian peninsulae, it is one of the main refugia where fauna and flora, as well as, presumably, human populations, would have been able to survive during glacial times. This region, therefore, has been crucial in shaping the course of human evolution in Europe. Nevertheless, despite its geographic significance, it does not enjoy a strong paleoanthropological tradition, and, with a few exceptions, paleolithic research was neglected there until recent years.

This lack of past research and promise for future findings are recurring themes throughout this volume, whose goals are to present a comprehensive review of the paleoanthropological records in the Balkans and Anatolia, report recent results, provide information on the paleoenvironmental and geological background, and, where possible, attempt a regional synthesis. The volume is based on the lectures presented during the conference “*Human Evolution in the Southern Balkans*,” organized by Katerina Harvati and Vangelis Tourloukis in Tübingen on December 6–8, 2012, as part of the ERC Starting Grant project “Paleoanthropology at the Gates of Europe: Human Evolution in the Southern Balkans” (PaGE). PaGE, directed by K. Harvati, is a 5-year research program aiming to increase, through systematic fieldwork, the number of paleoanthropological findings from Greece and to help reassess the human fossil record from the region. The ultimate goal of PaGE is to help shed light on open questions in European paleoanthropology by providing new primary data and to develop a research network among scholars working in these fields in South Eastern Europe. First and foremost, this network comprises the close collaborating partners of PaGE: Drs. E. Panagopoulou and A. Darlas from the Ephoreia of Paleoanthropology and Speleology (Greek Ministry of Culture), Profs. C. Doukas and G. Koutessi-Philippaki from the National and Kapodistrian University of Athens, Profs. G. Koufos and D. Kostopoulos from the Aristotle University of Thessaloniki, and Dr. P. Karkanis from the Wiener Laboratory, American School of Classical Studies at Athens. The PaGE 2012 conference, organized at the end of the first year of the project, brought together several research teams from across the region to present the state of the art of paleoanthropological research in their countries, showcase their most recent work, and discuss their future plans. Scholars representing various institutions from Greece, Turkey, Bulgaria, Serbia, Croatia, and Romania and their collaborating partners from Canada, the USA, UK, France, and Germany all gathered in snowy Tübingen at the imposing medieval setting of the Fürstenzimmer, Castle Hohentübingen, for 2 days of talks and lively discussion. Most of the articles presented during the conference, as well as some additions to the original program, are collected here as chapters of this volume.

The volume is organized into three parts. The first part (The Human Fossil Record: Chaps. 1–6) deals with this record from Greece, the Central Balkans, Croatia, Romania, Bulgaria, and Turkey. The second part (The Archaeological Record: Chaps. 7–14) presents the paleolithic record from the same countries, following the same order. Two chapters are devoted to new paleolithic research in Greece, while one presents a synthesis of the record of the region. Part 3 (Paleoenvironments, Biogeography, Chronology: Chaps. 15–18) provides the paleoenvironmental, geological, and biogeographic background to the regional Paleolithic.

In the first part, Chap. 1 (Harvati 2016) presents an overview of the Greek human fossil record, incorporating some recent work on material from Kalamakia and Megalopolis and placing it within the broad framework of the European record. Although Greek human paleontology is better known than that of many of the other Balkan countries, most of it samples different phases of the Neanderthal lineage. Earlier hominins, as well as Upper Paleolithic humans, are not known, with a few possible exceptions. Chapter 2 (Roksandic 2016) presents the fossil record from the Central Balkans, highlighting the recent fossil human find from Mala Balanica. Roksandic puts forth the possibility for an alternative course for human evolution in this part of Europe, different from the one proposed by the accretion hypothesis for the Western part of the continent. Chapter 3 (Janković et al. 2016) presents the Croatian hominin record. Croatia is the only country in the region with a strong paleoanthropological tradition, and Janković et al. present the material from Krapina and Vindija and outline the contributions of Croatian paleoanthropology to the development of the discipline, including the significance of the Vindija remains to the Neanderthal genome project. Chapter 4 (Harvati and Roksandic 2016) presents an overview of the fossil human record from Romania, as well as a new comparative geometric morphometric analysis of the Upper Paleolithic Romanian mandibular remains (Oase 1 and Muierii 1), in light of the new findings of recent Neanderthal ancestry for the former specimen. The results highlight the difficulties in assessing admixture from skeletal morphology. Chapter 5 (Strait et al. 2016) reviews the scant fossil human record from Bulgaria, most of which appears to have been lost. Strait et al. develop testable hypotheses for human dispersals into Eurasia, to be assessed against future discoveries. Chapter 6 (Aytekin and Harvati 2016) is a review of the human fossil record from Turkey, including a preliminary comparative 3D geometric morphometric analysis of the Kocabaş *Homo erectus* specimen. Results show affinities with Eurasian *H. erectus* and *H. heidelbergensis*, but no particular similarities with early African *H. erectus*.

Part 2 starts with two chapters on the Greek paleolithic record. In Chap. 7, Darlas and Psathi (2016) present their new work at Upper Paleolithic cave sites in Mani, Southern Greece, where excavations are currently under way. These new sites are all the more important because of an extreme scarcity of evidence dating from this period in Greece. The authors present a summary of new results, including radiometric dates for two of the caves. Chapter 8 (Galanidou et al. 2016) is a report on the newly discovered Lower Paleolithic site Rodafnidia on Lesbos. Galanidou et al. present the results of their first field seasons at Rodafnidia, including a short description of the Acheulian material discovered at the site and preliminary dating results. Acheulian lithics are extremely rare in Greece and elsewhere in the region, and the authors find parallels for the Rodafnidia material in the Near East and Africa. Chapter 9 (Mihailović and Bogićević 2016) describes the 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 in the Middle Pleistocene could be linked to demographic factors, migrations, and cultural transmission with the Near East. Chapter 10 (Karavanić et al. 2016) discusses the evidence for the Middle to Upper Paleolithic transition from Croatia. Karavanić et al. present the evidence from Vindija in particular detail, discussing alternative hypotheses about the transition in this site. Chapter 11 (Dobos and Iovita 2016) critically addresses the evidence for Lower Paleolithic sites in Romania, most of which is deemed to be unreliable. The authors further report on the recent results of their Lower Danube Survey for Paleolithic Sites, and particularly on the Dealul Guran site, dated to OIS11. Chapter 12 (Ivanova 2016) presents evidence for the Lower Paleolithic in Bulgaria by summarizing the Lower Paleolithic assemblages from Kozarnika cave and critically evaluating their dating. Furthermore, the chapter draws attention to possible Lower

Paleolithic assemblages from open-air sites in the Rhodope Mountains. Chapter 13 (Dinçer 2016) summarizes the evidence for the Lower Paleolithic in Turkey. Dinçer insists on reconceptualizing Anatolia as a challenging environment that required substantial behavioral adaptations from the migrating hominins, and not just as a transit route, and suggests that the early human presence in Anatolia was sporadic and ephemeral, leading to continuous occupation only in later phases of the Middle Pleistocene. Chapter 14 (Sitlivy 2016) synthesizes the current debate on the Middle to Early Upper Paleolithic transition in the Balkans and the surrounding areas on the basis of technological variability, innovations, and changes in lithic technologies. These issues are examined from the point of view of understanding the reduction sequence as a key insight into technological changes that underpin this important transition.

In the third part, the authors provide a synthesis of current paleoenvironmental evidence for the Balkans. In Chap. 15, Koufos and Kostopoulos (2016) present their research on large mammal evolution in Greece. They posit a shift in environmental conditions leading to open grasslands during the late Early Pleistocene and suggest that humans may have entered Europe at this time as part of an Asian, rather than African, faunal dispersal event. Chapter 16 (Spasov 2016) continues in the same vein, also examining the evidence for the timing and the route of possible early human dispersals into Europe, focusing on recently published faunal data from Bulgaria and the Balkans. Chapter 17 (Doukas and Papayianni 2016) provides an overview of micro-mammalian fauna in Greece and its potential for providing relevant environmental and chronological information for hominin-bearing sites. The authors call for establishing a Balkan-specific biochronology of micro-mammals. Chapter 18 (Tourloukis 2016), the final paper in the volume, examines the spatiotemporal distribution of Lower Paleolithic sites in the Mediterranean as a function of landscape dynamics which influence both the distribution of desirable site locations and their potential for preservation and visibility in the archaeological record, in an effort to assess whether the extremely small number of known Lower Paleolithic sites in Greece might be due not only to past research priorities but also to geological factors. The geological perspective put forth by Tourloukis offers a new tool in efforts to locate such sites in the Balkans.

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