## **Preface**

The Republic of Georgia was recently brought into the paleanthropological limelight by the discovery of exceedingly ancient early hominids and stone tools at Dmanisi. Dating techniques such as paleomagnetism and Ar40/39Ar confirm preliminary observations that hominid remains date to about 1.8-1.7 Ma. In addition, the deposits at Dmanisi yielded a rich faunal assemblage, including sabretooth tigers, ostriches, giraffes, elephants and rhinos.

As part of the progress achieved in the excavations and study of Dmanisi, an International Symposium was organized. The goals of the symposium were to discuss the role of the Caucasus region in early human dispersals and to look at other possible routes taken by hominids during their migrations into Eurasia.

The first International Symposium, entitled "Early Humans at the Gates of Europe" was held on 13-16 September 1998, in Dmanisi and Tbilisi, Georgia. The Symposium was organized by the Dmanisi Regional Department of the Archaeological Center of the Georgian Academy of Sciences and the Georgian State Museum in cooperation with the Georgian National Committee of INQUA and the Römisch-Germanisches Zentralmuseum in Mainz. The Symposium was financially supported by special funds of President of Georgia Mr. Eduard Shevardnadze.

This volume includes the papers presented by many of the participants in the symposium, as well as some by those who for various reasons could not attend the meeting. Several of those who took an active part in the meeting did not submit their papers. Their oral contributions are mentioned here.

The papers presented in this volume concentrate mainly on Georgian sites. Dr. J. Kopaliani (Georgia) delivered a presentation on the medieval history of the Dmanisi region and the history of the discovery of the site. L. Gabunia and associates presented the results of current research in Dmanisi. The joint paper of L. Gabounia and M.A. de Lumley (France) was a detailed study of the human metatarsal from Dmanisi.

M. Gabunia (Georgia) summarized the results of her excavations in the Lower Paleolithic sites of Akhalkalaki in Southern Georgia, dated to ca. 0.8-1.0 Ma. V. Liubin and E. Beliaeva (Russia) gave an oral presentation on results from the excavations of the Acheulian cave sites of Kudaro in the Central Caucasus (dated to approximately 0.5-0.6 Ma).

Several contributions were made on the issue of early colonizations and adaptations to new environments. These included a paper by Bar-Yosef and Belfer-Cohen examining the environmental advantages for humans outside Africa.

An overview of the early Paleolithic in Asia by A. Derevianko (Russia) and M. Otte (Belgium) brought the issue of hominid adaptations in Siberia and Central Asia to the fore. In his paper, M. Otte presents a model of migration routes of early hominids into and from Asia. The Brunhes/Matuyama boundary (0.78 Ma) was identified within the sequence of the early sites. The archaeological horizons of the layers accumulated over a period estimated as 100-150 ka.

The volume benefits from an overall survey by D. Roe (UK) on Lower Paleolithic occupation of the Northern Caucasus. An additional overview is offered by P. Dolukhanov (UK), who summarized the microenvironments of the initial hominid settlements in Western Asia. The discussion of this region continues with the paper of V.B. Doronichev (Russia) on Lower Paleolithic occupation of the Northern Caucasus. L. Golovanova (Russia) describes the results of her excavations at Treugolnaia, a cave site on the northern slopes of the Caucasus, where layers dated to 0.5-0.6 Ma were uncovered.

R. Kahlke (Germany) summarizes his research in the Untermassfeld site (0.9-1.0 Ma). H. Hemmer (Germany) discusses the paleoecological scenario of human and carnivore guild interactions.

J. Rafiafar (Iran) contributed an oral presentation on the early appearence of humans in Iran. V. Ranov (Tadjikistan) delivered an oral contribution on the evolution of the Paleolithic industries in the long and complex sequence of loess deposits in Southern Tadjikistan. The earliest artifacts in this sequence are currently dated to 0.8 Ma.

Moving further west, J. Agusti and associates (Spain) describe and discuss the magneto-biochronological background of early human occupations in Spain. The age of Venta-Micena and Fuente-Nueva-3 (Orce, Spain) are now considered to be greater than 1 Ma.

The paper of O. Soffer (USA) discusses the adaptations of archaic hominids, focusing on the distribution of the most recent Neandertal remains in Europe.

The study of Dmanisi is a work in progress. In the summer of 1999, the same level that produced the mandible also yielded two hominid skulls. The first specimen (D-2280) represents an almost complete cranium vault, while the second (D-2282) is a cranium vault and a fragment of the maxilla. Preliminary studies clearly link these new specimens with the African *Homo erectus/Homo ergaster* group.

Other studies of Georgian prehistory are currently underway. Among these we would like to mention the joint Georgian, Israeli and American excavation projects in the caves of Western Georgia, aimed at clarifying the Middle-Upper Paleolithic transition. In Eastern Georgia (the Udabno area), a new field project with the goal of finding additional fossil primates is in progress.

Finally, we would like to dedicate this volume to Professor Leo Gabunia on the occasion of his 80<sup>th</sup> birthday and in appreciation of his many contributions to the discovery of the prehistoric past of Georgia.

D. Lordkipanidze, O. Bar-Yosef, M. Otte