

Preface

There are some issues in human paleontology that seem to be timeless. Most deal with the origin and early evolution of our own genus – something about which we should care. Some of these issues pertain to taxonomy and systematics. How many species of *Homo* were there in the Pliocene and Pleistocene? How do we identify the earliest members the genus *Homo*? If there is more than one Plio-Pleistocene species, how do they relate to one another, and where and when did they evolve? Other issues relate to questions about body size, proportions and the functional adaptations of the locomotor skeleton. When did the human postcranial “Bauplan” evolve, and for what reasons? What behaviors (and what behavioral limitations) can be inferred from the postcranial bones that have been attributed to *Homo habilis* and *Homo erectus*?

Still other issues relate to growth, development and life history strategies, and the biological and archeological evidence for diet and behavior in early *Homo*. It is often argued that dietary change played an important role in the origin and early evolution of our genus, with stone tools opening up scavenging and hunting opportunities that would have added meat protein to the diet of *Homo*. Still other issues relate to the environmental and climatic context in which this genus evolved. Were there global or pan-African climatic events that relate to the appearance and/or extinction of *Homo* species, and if so, can they be tied to the appearance or disappearance of these species in any meaningful way? Did *Homo* species live in environments that differed from those inhabited by earlier hominins, and can any general trends through time be inferred from paleontological and isotopic evidence?

The announcement, over 4 decades ago, of the fossil remains of *Homo habilis* from Olduvai Gorge by Louis Leakey, Phillip Tobias, and John Napier marked a number of major changes in our knowledge and interpretation of human evolution. We have certainly come a long way since the early 1960s towards appreciating the origin of our genus. New finds and analyses have provided some critical information, and have, at the same time, led to new questions. Still, there remain a significant number of unresolved issues. This is the way it should be, and what one expects. Although some of the questions appear to be the same as before, new techniques and interpretations have opened up other avenues of enquiry and have led to new questions for which answers can hopefully be found.

In an effort to update, address and hopefully synthesize our current understanding of this preeminently significant development in human evolution, we organized the Third Stony Brook Human Evolution Symposium and Workshop in 2006. An international group of acknowledged experts in their respective fields assembled for 5 days of discussion and debate on a wide range of topics related to the origin of the genus *Homo*. This volume is the result of those activities. The chapters they have contributed to it represent what we know, and what knowledge we still wish for in the quest to understand the evolution of the first humans.

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