Book Review


This collection of 30 papers was assembled to mark Clark Howell's retirement from Berkeley in 1991 after nearly 40 years in palaeoanthropology, although everyone concerned recognized that this event would surely make little difference to the continuation of Clark's research and influence on the field. The contributors are mainly a selection of Clark's many long-standing colleagues and collaborators, with the addition of some of his students (past and present). The papers cover one area which has not been a special focus of attention by Clark (early primates) but otherwise reflect his wide fieldwork and research interests.

Pope opens the volume with a wide-ranging review of aspects of human evolution from a "Howellian" (integrated multidisciplinary) point of view, although it seems unlikely that Clark would agree with Pope's conclusion that "where truly pan-geographic and interdisciplinary approaches have been employed, workers are in agreement that the replacement model for the origin of human complexity is untenable." Fleagle reviews anthropoid origins and emphasizes that new material from the Fayum indicates that early anthropoid radiations were complex ("bushy"). He is not the only author to quote the Howell dictum, "The more you know, the harder it is." Ciochon and Etler look at past primate diversity, using Axl's cladistic terminology, and conclude that Miocene African "protohominoids" became extinct through competition from radiating cercopithecoids, and that it is only the Miocene apes of Eurasia that represent the stem lineage for extant hominoids. Hartwig reviews the problems of platyrrhine origins and argues for an early appearance of platyrrhines in Africa, followed closely by their dispersal to South America. McCrossin and Benefit examine old and new material from Maboko Island and conclude that the supposed extant hominoid dentognathic features of Kenyapithecus are due to homoplasy caused...
by seed and nut predation. Hill advances discussion of the African hominoid evidence to the late Miocene and early Pliocene, highlighting its paucity and the problems of both interpretation and simplistic evolutionary models linked to ecological change. Wood provides an excellent review of hominid palaeobiology which looks at progress and prospects in the field since Howell’s encyclopaedic 1978 review of Hominidae. In the first of his contributions, Corruccini argues that the essential “bushiness” of hominid evolution mitigates against the successful application of cladistic dichotomies, instead advocating the application of confidence limits to phylogenetic reconstruction in order to reveal virtual polychotomies. Tobias discusses the craniocerebral interface and argues that the human specialization of encephalization was paradoxically the means to maintain a generalized adaptability. Clarke explains how, virtually from the beginning, mistakes and misinterpretations have served to obstruct our understanding of the southern African early hominids. Rak provides a short note on the middle ear of Paranthropus robustus, arguing that developmental pleiotropy may have been responsible for the very distinctive shape of the incus, while Kyauka contributes a rather negative assessment of recent work on reconstructing the developmental patterns of early hominids. McHenry also takes Howell’s 1978 magnum opus as a starting point in evaluating early hominid postcranial evidence and provides a detailed list of assignments of material to different taxa. Tuttle reiterates his views about the Laetoli Site G footprints not being the product of A. afarensis and, also, revives a hylobatian model for the early stages of hominid bipedalism. Brown provides an interesting historical review of chronometric dating in the Turkana Basin, inevitably focusing on the problems of the KBS Tuff, while de Heinzelin looks at East African rifting and its effects on early hominid habitats. However, there is a sting in the tail as he dismisses the claimed Pliocene artifacts of Senga-5 as deriving from a Holocene slope wash. I combed Boaz’s succeeding chapter on the Western Rift for further comment on this statement but could find nothing of relevance. Vrba provides a wide-ranging review of heterochrony in relation to climatic change and early hominid evolution, arguing that hypermorphosis (enlargement) may have been coupled with paedomorphosis (juvenilization) in the evolution of the genus Homo as a response to late Pliocene cooling. Dechant Boaz describes examples of taphonomic analyses of Shungura Formation sites, while Bonnefille examines East African palaeoenvironments, emphasizing that mosaic environments are the general rule in known early hominid sites. Schick and Toth discuss the continuing puzzle of spheroids and subspheroids in the Early Palaeolithic of Africa and, via modern experiments, support the view that they represent heavily battered hammerstones. Clark looks at the Acheulian in general and argues that environment and landscape factors played an im-