

(thinness of cranial vault, lack of prominent brow ridges); and in spite of its owner's bipedalism; Alan Walker and Richard Leakey in an article ("The Hominids of East Turkana") published in *Scientific American* (August 1978), state that "We ourselves cannot agree on a generic assignment for KNM-ER 1470. One of us (Leakey) prefers to place the species in the genus *Homo* the other (Walker) in *Australopithecus*."

What about *Homo erectus*? Was this creature a human being? Although his average cranial capacity was smaller than that of *Homo sapiens* (930 cc, as compared with 1361 cc for modern man), his ability to make and use tools is undoubted. *Homo erectus* made a variety of stone tools, hunted large animals, cooked his food, and made clothing. *Homo erectus* and *Homo sapiens* are both human.

However, this raises another question: Why two species of *Homo*: *erectus* and *sapiens*? Are they, to use Ernst Mayr's definition of a species ("a group of interbreeding natural populations that are reproductively isolated from other such groups") so reproductively isolated from each other as to warrant specific distinction?

Donald C. Johanson observes that "It would be interesting to know if a modern man and a million-year-old *Homo erectus* woman could together produce a fertile child. The strong hunch is that they could; such evolution as has taken place is probably not of the kind that would prevent a successful mating. But that does not flaw the validity of the species definition given above, because the two cannot mate. They are reproductively isolated by time." (*Lucy* p. 144)

But by the same logic a twentieth-century man would be reproductively isolated from a first-century woman (or a sixteenth or even nineteenth)! Mere isolation by time is a poor basis on which to set up species distinctions!

it would seem that the distinction between *Homo erectus* and *Homo sapiens* is a relative one. Both are bipedal; both are thinking creatures; both make and use tools, cook food, make and use clothing, etc. Certain physical Characteristics (such as height, average cranial capacity, size of Jaw, etc.) differ somewhat, and levels of cultural complexity differ somewhat, but these are relative, not absolute differences.

What, then, counts as "man"? *Australopithecus* does not count as man. Only *Homo* counts as man. *Homo habilis* may be an australopithecine; at least there is no evidence clearly identifying him as man. *Homo erectus* and *Homo sapiens* both count as man, and probably do not warrant specific distinction.

(b) How far back can the history of man be traced?

Modern man (*Homo sapiens sapiens*) is viewed as first making his appearance about 50,000 years ago. if the skull found in 1965 in Vertesszöllös, Hungary continues to withstand the scrutiny of paleontologists, then