

With *Ramapithecus*, *A. africanus*, and possibly *A. afarensis* acquiring doubtful reputations as missing link candidates, I feel that lay people are justified in taking a new look at the monkey puzzle.

A NEW LOOK AT THE MONKEY PUZZLE

In 1982, I attended a lecture at the University of California at Santa Barbara and listened to Vincent Sarich describe his work in molecular genetics. He and Alan Wilson have studied the DNA structure of modern humans and apes and found strikingly close similarities.

They have also developed a kind of molecular clock. According to their studies, they hypothesize that the line between apes and humans split about 4.5 to 5 million years ago. Before the recent discovery by David Pilbeam indicating that *Ramapithecus* is most likely the ancestor of the orangutan, the prevailing opinion of paleoanthropologists held that the split must have occurred between 10 and 20 million years ago. With *Ramapithecus* out of the picture, the molecular clock's more recent date begins to look more accurate.

John Gribbin and Jeremy Cherfas have grasped the importance of the work of Sarich and Wilson and present a cogent discussion of it in their book *The Monkey Puzzle*.¹² Gribbin and Cherfas hold the position that humans descended from a common ancestor with the apes, but they maintain that, based on the molecular genetic studies of Sarich and Wilson, the human family tree should be drastically revised. Their theory does not contradict the fossil evidence. They interpret the fossil evidence somewhat differently than others, and their interpretation solves some enigmas that have puzzled anthropologists.

BACK TO THE TREES

Let us review the evidence presented in this chapter. However, this time let us look at the evidence in a new way. Instead of looking for missing links to fill in the human family tree, let us look for missing links in the ape's family tree.

Recall the statement that there are no ape fossils from anywhere after 8 million years ago. The fossil record vanishes. Donald Johanson has stated, "modern gorillas, orangutans, and chimpanzees spring out of nowhere, as it were. They are here today; they have no