# WAS RAMAPITHECUS THE FIRST HOMINID?

## CHRIS C. HUMMER\*

### Received April 18, 1978

Ramapithecus is frequently put forth by evolutionists as the first hominid or first member of the family of man. The evidence for this position is extremely fragmentary and the scenario is fraught with problems. This paper argues that the evidence does not warrant the taxonomic status of "hominid" for Ramapithecus. Man appears in the fossil record suddenly and without ancestral form.

The fossil ape *Ramapithecus* is the only candidate for being the first member of the family of man. Yale's David Pilbeam said of him, "I think *Ramapithecus* species of Africa and India are hominids."<sup>1</sup> There are at least six problems, however, for the hominid status of *Ramapithecus*.

(1) There is a huge gap in the fossil record between the latest ramapithecine and the earliest australopithecine. Current evidence places the australopithecines between 1 and 5 million years ago.† The most recent date for ramapithecine finds is 8 million years.<sup>2</sup> Richard Leakey recently wrote,

Ramapithecus (was) tentatively exploring the forest fringes some nine to twelve million years ago. There then opens up an enormous fossil void until round about four million years ago... This yawning void is particularly frustrating because on one side of it there is just one creature, Ramapithecus, while milling about on the other side is a menagerie of hominids...<sup>3</sup>

Elwyn J. Simons admits that this "large gap in time" is "the only evolutionary room available in the fossil record for such a postulated form" that would demonstrate the resemblance of *Ramapithecus* to "hominid stock ancestral both to primitive *Homo* and to *Australopithecus*."<sup>4</sup> Filling in the 4 to 5 million year gap is a major project now under way by paleoanthropologists.

(2) The fossil record contains a possible biological surprise. If *Ramapithecus* begat *Australopithecus* it is surprising that such a cosmopolitan ape (see the list below) as *Ramapithecus* gave rise to *Australopithecus* only in Africa. So far *Australopithecus* fossils have been found exclusively in Africa.

(3) All of the major ramapithecine finds consist only of a collection of teeth and fragments of jaws that would scarcely fill a cigar box. Perhaps thirty individuals are represented. There are no postcranial bones. The major finds are listed here.

- 1932 G. E. Lewis, Siwalik Hills, northern India: upper jaw fragment (Ramapithecus punjabicus)
- 1961 L. S. B. Leakey, Fort Ternan, Kenya: parts of both sides of the upper jaw (Kenyapithecus wickeri)

- 1969 Miklos Kretzoi, Rudabanya Mountains,
- Hungary: upper and lower jaw fragments
  Bruno von Freyburg, Greece, during World War II; formal description 1972:
- tooth bearing part of lower jaw (Graecopithecus freyburg)
- 1973 İbrahim Tekkaya, Çandir, Turkey: lower jaw fragment
- 1975-77 D. R. Pilbeam, Pakistan: jaw fragments (the most recent date of 8 million years is associated with these finds)

The scarcity of finds is further complicated by the fact that isolated tooth finds are often insufficient in providing information about adaptation or taxonomy.

Data obtained from these specimens have often led to a variety of conflicting interpretations. Morphological analysis of occlusal surfaces, especially when isolated teeth are evaluated, may not provide definitive answers regarding either adaptation or phylogeny.<sup>5</sup>

Quite recent micrographic studies of tooth enamel prism patterns in *Homo sapiens*, living apes and *Ramapithecus punjabicus* seem to indicate a greater similarity between *Ramapithecus* and *Homo sapiens* than between *Ramapithecus* and living apes.<sup>6</sup> *Science News* reports David Gantt, one of the researchers, as saying that the study represents "the first quantified evidence" that *Ramapithecus* is a human ancestor.<sup>7</sup> In the research report, however, Gantt, together with David Pilbeam and Gregory Steward, was more conservative:

Interpretation of these structural differences is at present conjectural . . . before drawing any conclusions about phylogeny (that is, whether *Ramapithecus* is ancestral to later hominids), it will be necessary both to examine a full range of extinct Neogene hominoids and to analyze the functional significance of prism packing and enamel thickness.<sup>8</sup>

Five months before this study was published David Pilbeam is reported as saying that it is impossible to point to either *Sivapithecus*, *Ramapithecus* or *Gigantopithecus* as being the human ancestor.<sup>9</sup>

(4) The dental fragment of the type specimen from India permits at least two reconstructions, one of which is clearly not that of a hominid (Fig. 1). The dental arcade of man is parabolic or perhaps semicircular in outline. Modern apes have a U-shaped jaw with parallel rows of molars. Apes have large canines, while in man and *Australopithecus* the canines are reduced.

The usual published reconstruction of *Ramapithecus* shows a man-like dental arcade. In his original descrip-

<sup>\*</sup>Mr. Chris C. Hummer teaches Anthropology at the Plymouth-Whitemarsh Senior High School, Plymouth Meeting, Pennsylvania; and Prehistoric Archaeology at the Schuylkill Valley Nature Center, Philadelphia. His address is 1211 Rose Lane, Berwyn, Pennsylvania 19312.

<sup>†</sup>In reporting the great ages assigned to these fossils, I am not necessarily subscribing to them.

#### VOLUME 15, SEPTEMBER, 1978



Figure 1. Reconstruction of the palatal arcade of *Ramapithecus*, showing (A) humanlike pattern, the usual published reconstruction; and (B) an apelike arrangement with parallel rows of molars and precanine diastemas.

tion in 1934 G. E. Lewis spoke of a parabolic shape for the jaw. More than one evolutionist has taken issue with Lewis', and, later, Simons' reconstruction. Christian Vogel is one:

In 1961, Simons, for the first time, published a reconstruction drawing of the dental arcade on the basis of the maxillary fragment YPM 13799, which showed a nearly parabolic form with the postcanine rows of teeth strongly diverging posteriorly. This reconstruction was accepted and reproduced unchanged by numerous authors as proof of the similarity of *Ramapithecus* to the hominids.

Finally, in 1969, Genet-Varcin, using the same outline drawing of YPM 13799 produced by Simons in his reconstruction, demonstrated that a completely different reconstruction indicating similarity with the typical U-shaped dental arcade of the pongids and other non-human primates was also possible.<sup>10</sup>

Vogel concludes that the dental fragments

are not sufficient to warrant the inclusion of *Ramapithecus* in the Hominidae. Furthermore, it should not be overlooked that there are some features in the dentition of YPM 13799 which are far from being typically hominid  $\dots^{11}$ 

Grover Krantz is another who questions the reconstruction and the scenario based upon it.

*Ramapithecus* fossils are limited to jaws and teeth. Compared with other Miocene "apes", they are short muzzled and their canine teeth do not project very far. Claims of a rounded, humanlike palate are based on a dubious reconstruction. Because no complete palate has been reported, one could just as easily orient the maxillary fragments with parallel molar rows. Such a reconstruction would also allow for larger, more apelike incisors.

A precanine diastema (canine gap) is evident in the photographs of two Indian specimens of *Ramapithecus* (Simons 1969:329), yet this is ignored in the published reconstructions.<sup>12</sup>

Simons  $\hat{h}as$  since admitted the existence of the diastema in the upper jaw of *Ramapithecus*, but says also that the

teeth of the lower jaw are closely packed with no apparent diastema. This is based, no doubt, on the Çandir mandible from Turkey.<sup>13</sup> Krantz suggests in his article that *Ramapithecus* fossils are merely female specimens of certain dryopithecine apes.

It may also be pointed out that a living monkey, the gelada baboon of Ethiopia, has teeth quite similar to *Ramapithecus* and is believed to occupy a similar primate niche.<sup>14</sup>

(5) The fossil ape *Gigantopithecus* presents a paradox related to the *Ramapithecus* case. Anatomist Alan Walker says that "*Gigantopithecus* has been amply demonstrated to be a pongid (ape)", and hence has no place in the scheme of the hominid evolution.<sup>15</sup> Yet this extinct gorilla-like Miocene ape reportedly had numerous dental characteristics that later reappeared in early hominids (australopithecines). How can the disappearance from and later reappearance in two different lines be explained?

Size seems to be the criterion by which the quite diminutive *Ramapithecus* is accorded the status denied to his much larger relative. In reality *Ramapithecus* is not necessarily any more an ancestor than was *Gigantopithecus*. Robert Eckhardt, geneticist and anthropologist, has expressed the view that *Ramapithecus*, too, was an ape:

Neither is there compelling evidence for the existence of any distinct hominid species during this interval (Miocene and early Pliocene times), unless the designation 'hominid' means simply any individual ape that happens to have small teeth and a correspondingly small face. Fossil hominoids such as *Ramapithecus*... seem to have been apes—morphologically, ecologically and behaviorally.<sup>16</sup>

(6) There is a problem in the scenario involving the timing of the generic splits or the separation of the apes and hominids from the ancestral stock. The usual accepted scenario based on fossils and radiometric dating suggests that the dryopithecines gave rise to apes and hominids, the former splitting off some 15 to 20 million years ago, the latter emerging about 12 million years ago. However, recent work by Allen Wilson and Vincent Sarich on comparisons of protein molecules in the blood of living primates suggests that the splits occurred much more recently: gorillas, chimpanzees and hominids all separated from ancestral stock only about 4 million years ago!<sup>17</sup> The time difference in the appearance of the first hominid (presumably Ramapithecus) is therefore about 8 million years. Richard Leakey says "so gross a discrepancy in the apparent timing is more than a little disconcerting. The question still remains to be resolved."18

#### Comments

At the present time only *Homo* and *Australopithecus* are indisputably recognized by evolutionists as true hominids.<sup>19</sup> The claim for *Ramapithecus* as the first hominid is practically untenable with such meager and controversial evidence. Leakey says that "the case for *Ramapithecus* as a hominid is not substantial, and the fragmentary material leaves many questions open . . . the arguments for the hominid status of this genus are

severely limited."20 And F. Clark Howell's admission is to the point:

We still do not know the source of the hominids, but it is possible that their origin may lie between 7 and 15 million years ago, and perhaps not only in Africa. This time range is still not well known. Anyone who feels that we already have the problem solved is surely deluding himself.<sup>21</sup>

The importance to the evolutionist of the hominid status of Ramapithecus cannot be overestimated. If Ramapithecus is not the first hominid then the already remarkable "sudden appearance" of Homo in the fossil record becomes overwhelming. It means that for more than 20 million years of supposed primate evolution there are no known ancestral forms for man. Elwyn Simons admits: "Ramapithecus is ideally structured to be an ancestor of hominids. If he isn't, we don't have anything else that is."22

#### References

- <sup>1</sup>In Edey, Maitland A., 1972. The missing link. Time-Life Books, New York, p. 146. P1977. "Pakistan fossils: New origins for man," *Science News*
- ²1977. 111(16):244. (April 16)
- <sup>3</sup>Leakey, Richard E. and Roger Lewin, 1977. Origins. E. P. Dutton, New York, p. 81.
- \*Simons, E. L., 236(5):28-35. (May) 1977. Ramapithecus, Scientific American
- <sup>8</sup>Gantt, David G., David Pilbeam, Gregory P. Steward, 1977. Hominoid enamel prism patterns, *Science* 198(4322):1155-1157.
- <sup>o</sup>*Ibid.*, p. 1156. <sup>'1977.</sup> "Tooth patterns and the human-ape split," *Science News* 112(25):405. (December 17)

- <sup>6</sup>Gantt, David G., *et al.*, *op. cit.*, p. 1157. <sup>8</sup>Kolata, Gina Bari, 1977. "Human evolution: hominoids of the Miocene," Science 197(4300):244-245 & 294.
- <sup>10</sup>Vogel, Christian, 1975. Remarks on the reconstruction of the dental arcade of Ramapithecus. Paleoanthropology, morphology and paleoecology. Edited by Russell H. Tuttle. Mouton Publishers, The Hague, p. 88.
- <sup>11</sup>Ibid., p. 96.
- <sup>12</sup>Krantz, Grover, 1975. The double descent of man. Paleoanthropology, morphology and paleoecology. Edited by Russell H. Tuttle. Mouton Publishers, The Hague, p. 147.
- <sup>13</sup>Simons, E. L., op. cit.
- <sup>14</sup>Leakey, Richard E. and Roger Lewin, op. cit., pp. 69, 71.
- <sup>15</sup>Walker, Alan, 1976. Remains attributable to Australopithecus in the East Rudolf succession, Earliest man and environments in the Lake Rudolf basin. Edited by Yves Coppens, F. Clark Howell, Glynn Ll. Isaac and Richard E. F. Leakey. University of Chicago Press,
- Chicago, p. 484. <sup>19</sup>Eckhardt, Robert B., 1972. "Population genetics and human origins," *Scientific American* 226(1):94-103. (January) See especially p. 101.
- "Leakey, Richard E. and Roger Lewin, op. cit., p. 56.

'\*Ibid.

- <sup>19</sup>It should be made clear that Australopithecus cannot be called a hominid by creationists. "Hominid" in the evolutionary biological taxonomy is the family name for man. The name implies both morphological similarities and common evolutionary, and, therefore, biological origin. Both Homo and Australopithecus appear suddenly in the fossil record. Common biological origin has not been demonstrated. If we must use the term, then we believe that only members of genus *Homo* are "hominid". Australopithecines are extinct apes who happened to have a few morphological features in common with man.
- <sup>20</sup>Leakey, Richard E., 1976. "Hominids in Africa," American Scientist 64(2):174-178.
- <sup>21</sup>In Edey, Maitland A., op. cit.
  <sup>22</sup>1977. "Puzzling Out Man's Ascent," *Time*, Nov. 7:67.

# THE CEPHALOPODS IN THE CREATION AND THE UNIVERSAL DELUGE

**JOHN WOODMORAPPE\*** 

#### Received October 24, 1977

"Then God said, 'Let the waters teem with swarms of living creatures' (For He commanded and they were created: Psalm 148:5b . . . calls into being that which does not exist: Romans 4:17d) . . . with which the waters swarmed after their kind: and God saw that it was good . . . And there was evening and there was morning, a fifth day – Genesis 1:20-23 (NASB)

The study of claims of Cephalopod evolution reveals many fossil-gaps, but the outstanding result is the discrediting of the Biogenic Law and the discovery of the large degree of similarity in forms considered to be unrelated by evolution

Much of the stratigraphic order (generic, specific) ascribed to ammonoids is actually due to time-stratigraphic concepts and to taxonomic manipulations. Indeed, "condensed" sequences demonstrate rather mixing with cataclysmic burial.

The known ecological positions of cephalopods independently fit together into a mutually contemporaneous ecologically zones coexistence. The actual stratigraphic order (ordinal, familial) owes its existence to the burial of these ecological zones in the Flood, while physical sorting during burial gave rise to interfamilial stratigraphic order.

## Introduction

- I. Creation Versus Evolution of the Cephalopods
  - A. Origin of Phylum Mollusca and its class Cephalopoda

Outline

- Β. The Genesis of Orders and Lower Taxons
- Fallacies of Recapitulation as Illustrated by Cephalopods
- D. "Convergence" in Cephalopods as Evidence for Creation

- II. Explaining Ammonoid Biochronological Horizons: a Challenge for Diluviology
  - A. The Substantial Subjectivity of Fossil "Species" and "Genera"
  - B. Procedures Which Eliminate Successional Discrepancies
  - The Scattered-Not Worldwide-Distribution of Fossil Zones
  - D. Biochronologic Ammonoid Zones as Taxonomic Concoctions
  - "Condensed" Ammonitiferous Deposits Indicate Rapid E. Burial

<sup>\*</sup>John Woodmorappe, B.A., has studied both Geology and Biology.