

a human ancestor in that timeframe. Now that a supposedly better candidate has appeared, Lucy's large molars may be her undoing.

Evolutionists do not deserve the almost child-like faith that untold millions of people have placed in them. For twenty-five years evolutionists have confidently assured the public that Lucy, *Australopithecus afarensis*, was our ancestor. Yet, one new fossil discovery has revealed how tenuous evolutionary pronouncements are. Dr Meave Leakey states: 'It is impossible to tell whether we are more closely related to Lucy or *K. platyops*. There is simply too much missing from the fossil record since then'.³ With so much missing from the fossil record since then, is it not child-like faith to believe (even if evolution were true) that either one of these fossils represents our ancestor? An old geological proverb states: 'If I hadn't believed it, I wouldn't have seen it'. It works in paleoanthropology, too.

This new discovery should encourage paleoanthropologists to be more cautious in their assessments. One of the most honest statements made recently by a paleoanthropologist is by Daniel Lieberman (George Washington University, Washington, DC) in the same issue of *Nature*.⁴ He writes: 'The evolutionary history of humans is complex and unresolved'. He goes on to say:

'I suspect the chief role of *K. platyops* in the next few years will be to act as a sort of party spoiler, highlighting the confusion that confronts research into evolutionary relationships among hominins.'

Since paleoanthropologists are working on a false paradigm, it is not surprising that each major fossil discovery presents more questions than it does answers.

An interesting footnote to the discovery of this fossil is that one of the authors of the *Nature* article is Louise N. Leakey, age 29. She is completing doctoral studies at the University of London, is the daughter of Richard and Meave Leakey, and is the granddaughter of Louis and Mary Leakey. She thus represents the third generation of

this amazing fossil-hunting family.

References

1. **Hominin** = member of subfamily Homininae so relates to genera including true humans and excluding australopithecines. Often used interchangeably with hominid, the evolutionist term for a species more closely related to humans than to chimpanzees.
2. Leakey, M.G., Spoor, F., Brown, F.H., Gathogo, P.N., Klarie, C., Leakey, L.N. and McDougall, I., New hominin genus from eastern Africa shows diverse middle Pliocene lineages, *Nature* **410**:433–440, 2001.
3. Cohen, P., Who's the daddy, *New Scientist* p.5, 24 March 2001.
4. Lieberman, D.E., Another face in our family tree, *Nature* **410**:419–420, 2001.

What evolution really means

[Most Americans] believe that evolution was a means by which God carried out a plan to create humans. For tactical reasons, Darwinists don't rush to tell all these people that they are *missing the point*, but all in good time. Let people first learn that evolution is a fact. They can be told later *what evolution means* (emphases added).

Phillip E. Johnson
Los Angeles Times,
3 November, 1990.

Did Lucy walk upright?

Michael J. Oard

For over 20 years, Lucy or *Australopithecus afarensis* has been considered one of our first 'ancestors', mainly because it supposedly walked upright.¹ Donald Johanson, the discoverer of Lucy near Hadar, Ethiopia, reflects on the significance of walking upright:

'In 1973, when I was barely out of graduate school, I found a human-like knee joint that proved beyond doubt that our ancestors walked erect close to three and a half million years ago—long before they developed the big brains that had once been thought to be the hallmark of humanity.'²

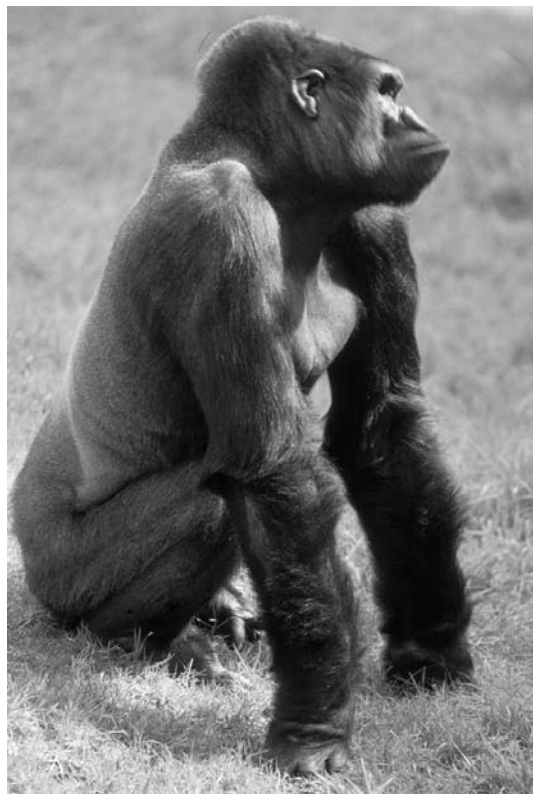
Evolutionists place great importance in walking upright and use it to define man's ancestors, although the origin of bipedalism is shrouded in mystery:

'Bipedalism has traditionally been regarded as the fundamental adaptation that sets hominids apart from other primates. Fossil evidence demonstrates that by 4.1 million years ago, and perhaps earlier, hominids exhibited adaptations to bipedal walking. At present, however, the fossil record offers little information about the origin of bipedalism ...'³

So it is important to know whether some fossil ape-like creature was bipedal or not.

Regardless of the status of Lucy's knee joint, new evidence has come forth that Lucy has the morphology of a **knuckle-walker**,⁴ which is a distinctly quadrupedal specialization characteristic of some living apes and is quite different than walking upright. Richmond and Strait identify four skeletal features of the distal radius of the living knuckle-walking apes, chimpanzees and gorillas. They also identify similar morphological features on two early 'hominids', including Lucy:

'A UPGMA clustering diagram ... illustrates the similarity be-



Structures in Lucy's distal radii are similar to knuckle-walkers like gorillas and chimpanzees. This casts doubt on whether Lucy truly walked upright.

tween the radii of *A. anamensis* and *A. afarensis* and those of the knuckle-walking African apes, indicating that these hominids retain the derived wrist morphology of knuckle-walkers.²⁵

In an interview, Richmond stated that after they analyzed the wrist characteristics of living knuckle-walkers, he and Strait walked across the hall to check plaster casts at the National Museum of Natural History: "I walked over to the cabinet, pulled out Lucy, and—shazam!—she had the morphology that was **classic** for knuckle walkers"[emphasis mine].²⁶

This seems like strong evidence that these supposed early ancestors, including Lucy, actually were knuckle-walkers and hence did not walk upright. But no, the authors assume that the previous evidence for bipedalism is sound, and that these ancestors only **retain** knuckle-walking features from a previous ancestor. It is true that there are some morphological features for knuckle walking that are missing in

Lucy,⁶ but these features are not always present in living knuckle-walkers either, so that researchers cannot rule out that Lucy was a knuckle-walker.⁵ The researchers are almost forced to reject that Lucy was a knuckle-walker, otherwise it would have adaptations for walking upright, climbing trees (based on the long arms and fingers) and knuckle walking. This presents an evolutionary difficulty in how Lucy can have three fairly distinct behavioural characteristics. Furthermore, it makes it difficult to determine which of these characteristics are related to its lifestyle and which are no longer functional but are carryovers from its previous ancestry.⁷

The authors use this new information to settle a fine point in cladistic analysis: whether knuckle-walking originated independently by **parallel evolution** in the chimpanzee and gorilla or was a shared-derived character from the putative ancestor of humans, chimps and gorillas. Richard and Strait now claim the latter hypothesis. Molecular DNA comparisons, previously contradictory, now support this new cladistic analysis.

However, the finding of the knuckle-walking morphology in Lucy has added confusion to the supposed hominid phylogeny. Lucy was thought to be the ancestor of *A. africanus* because Lucy's skull was more chimpanzee like, but now the foot bones and lower leg of a new *A. africanus* specimen unexpectedly are more apelike than Lucy.⁸ *A. africanus* also has more apelike limb proportions than Lucy.⁸ On the other hand *A. africanus* did not have the knuckle-walking morphology that Richmond and Strait discovered in Lucy. So it seems that different parts of the body tell a different evolutionary story:

'The work by Richmond and Strait

further complicates the picture: it suggests that *A. afarensis* retained some knuckle-walking features, whereas *A. africanus* did not. It is no longer a case of the skull pointing to one set of phylogenetic relationships, and the postcranial skeleton—everything but the skull—to another. Rather, different parts of the postcranium may not support the same phylogenetic hypothesis.⁸

Maybe there is no evolutionary relationship at all, and these are all unique, extinct apes?

One gets the impression that much subjective judgment goes into phylogenies. Reading between the lines, one also sees the subjective nature of choosing characters in determining evolutionary relationships. If a similar character cannot be related by evolution, it is simply assumed to be due to parallel or convergent evolution, in other words to a hypothetical similar environment.

References

1. Johanson, D.C. and Edey, M.A., *Lucy: The Beginnings of Humankind*, Simon and Schuster, New York, 1981.
2. Johanson, D. and Shreeve, J., *Lucy's Child: The Discovery of a Human Ancestor*, William Morrow and Company, Inc., New York, p. 19, 1989.
3. Richmond, B.G. and Strait, D.S., Evidence that humans evolved from a knuckle-walking ancestor, *Nature* **404**(6776):382, 2000.
4. Richmond and Strait, Ref. 3, pp. 382–385.
5. Richmond and Strait, Ref. 3, p. 383.
6. Stokstad, E., Hominid ancestors may have knuckle walked, *Science* **287**(5461):2131, 2000.
7. Collard, M. and Aiello, L.C., From forelimbs to two legs, *Nature* **404**(6776):340, 2000.
8. Collard and Aiello, Ref. 7, p. 339.