

Sorting 'early' *Homo*

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In the 9 August 2012 edition of the journal *Nature*, a group of researchers, led by Meave Leakey (wife of Richard Leakey), reported on three recently discovered fossils, of assigned geological ages between 1.78 and 1.95 million years ago (Ma), from Koobi Fora, Northern Kenya, that they said

“... confirm the presence of two contemporary species of early *Homo*, in addition to *Homo erectus*, in the early Pleistocene of eastern Africa.”¹

In order to avoid confusion it should be noted that Leakey *et al.* appear to consider the start of the Pleistocene to have occurred at about 2.58 Ma, not the often stated value of 1.8 Ma, in line with a decision in 2009 by the International Union of Geological Sciences to redefine the Plio-Pleistocene boundary.² The newly described fossils are a nearly complete mandible (KNM-ER 60000), a well preserved face of a late juvenile (KNM-ER 62000: figure 2), and a relatively small mandible fragment (KNM-ER 62003).³

New fossils linked with KNM-ER 1470

Although notably smaller, the face of KNM-ER 62000 is said to closely resemble *Homo habilis* (*sensu lato*) specimen KNM-ER 1470 (figure 1),⁴ the latter dated to approximately 2 Ma,⁵ and the lower dental arcade of mandible KNM-ER 60000 is suggested as being a suitable match for the upper dental arcades of both KNM-ER 62000 and KNM-ER 1470.⁶ What is essentially claimed is that the newly discovered face and nearly complete jaw are associated with whatever species

KNM-ER 1470 belongs to, but also that there is at least one other species of early *Homo* with distinct craniofacial/mandibular morphs.⁷ As such, apart from adding a few more fossil fragments to a group of fossils collectively known as early *Homo*, the real significance of the fossil finds by Leakey *et al.* is that it re-ignites the debate by evolutionists over how many species of early *Homo* there were. The definition of the term ‘early *Homo*’ used here is the same as that used by Leakey *et al.* in their paper, and refers to

“... specimens conventionally assigned to *Homo habilis* and *H. rudolfensis*, and not to partly contemporary specimens attributed to early *H. erectus*.”⁸

It should be pointed out that not all evolutionists consider *Homo rudolfensis* as a valid taxon, preferring instead to incorporate specimens in it into a more encompassing definition

of *Homo habilis* (*Homo habilis sensu lato*). When *Homo rudolfensis* is referred to as a valid separate species, then *Homo habilis* is technically called *Homo habilis sensu stricto*.

Where do *Homo habilis* specimens fit?

For those not buying into the evolutionary point of view on human origins, the fossil finds by Leakey *et al.* bring to the surface the issue of how specimens assigned to *Homo habilis sensu stricto* and *Homo rudolfensis* fit within a creation view of human origins. As troublesome as classifying these fossil specimens has been for evolutionists, so it has been for creationists. For example, with regards to a *Homo habilis* cranium designated KNM-ER 1813, prominent paleoanthropologists have described it as being similar to early *Homo*



Figure 1. The enigmatic KNM-ER 1470 cranium has in the past been a problem to classify, at least in part because it appears to have been faultily reconstructed (photo taken at the Spitzer Hall of Human Origins, American Museum of Natural History).



Figure 2. Face of the newly discovered late juvenile KNM-ER 62000 (from Leakey *et al.*).

sapiens or *Homo erectus*,⁹ leading one to entertain the possibility that it may have belonged to some pathological human, in a similar manner that, for example, *Homo floresiensis* specimen LB1 (better known as the ‘hobbit’) was most likely a pathological human. However, subsequent assessment indicates KNM-ER 1813 belongs with the australopithecines.

Faulty reconstruction of KNM-ER 1470

Similarly, with respect to KNM-ER 1470, with its flat face and large brain size of 752 cubic centimetres (cc) (figure 1), it was once considered a possible human.⁹ Specimen KNM-ER 1470 has been one of the most problematic *Homo habilis* specimens to classify, as well as a favourite ‘apeman’ icon to evolutionists. However, one reason why KNM-ER 1470 is almost certainly an australopithecine is that the original reconstruction appears to have been faulty. Following an architecturally constrained reconstruction, a group of researchers, led by Timothy Bromage, concluded that KNM-ER 1470 was a relatively prognathic¹⁰

skull, having “a more prognathic midface than commonly appreciated”, as well as a smaller brain than commonly thought, with a downward estimate of cranial capacity “for this specimen, from 752 cc to ca. 700 cc.”¹¹ Actually, the estimate was 625 cc according to the formula used by Bromage *et al.*,¹² but they ended up suggesting 700 cc.¹³ Before this, from being quite large, at 752 cc, news reports in 2007 were quoting cranial capacity values as low as 526 cc.¹⁴ Why this initial low value was discarded is unclear,

although one suspects few evolutionists would have been happy with such a dramatic shrinking of the KNM-ER 1470 brain.

KNM-ER 1470 face is prognathic

Regardless of brain size, though, as a result of the reconstruction, 1470 man became a relatively more prognathic skull. Compared to the original reconstruction of 1470 man, with its flat/vertical face, the difference that Bromage’s computer simulated reconstruction makes is quite pronounced, making the face much more prognathic.¹⁴ If this new modelling by Bromage *et al.* is correct, then KNM-ER 1470 will not be out of place categorized with the australopithecines. If the new well-preserved face of KNM-ER 62000 (figure 2) resembles the face of KNM-ER 1470 in shape, if not in size (the KNM-ER 62000 face being notably smaller and described as belonging to a late juvenile), then this would indicate that these new fossils (at least the face) also belong with the australopithecines.¹ Since KNM-ER 62000 is described as a late juvenile, it is unclear whether

its subnasal morphology would have changed much (e.g. become more prognathic) if it had been allowed to complete its growth. Leakey *et al.* believe

“... it is unlikely that its subnasal morphology would have changed substantially, had the individual lived.”¹⁵

New fossils compared with *Australopithecus sediba*

Lee Berger, who led the team that discovered *Australopithecus sediba*, criticized the Leakey team for not comparing the new Koobi Fora fossils to *Australopithecus africanus* and *Australopithecus sediba* fossils from South Africa, and argues there is not enough evidence that the Koobi Fora mandible goes with the maxilla.¹⁶ Interestingly, when the late juvenile KNM-ER 62000 face is superimposed on the juvenile male (MH1) face of *Australopithecus sediba* they appear almost identical in shape and size in frontal view, although some differences are apparent from a lateral (side) view.¹⁷ Given the similarity of the KNM-ER 62000 face with *Australopithecus sediba* MH1 face, this is further evidence that these new fossils belong with the australopithecines. If, as suggested in the study by Leakey *et al.*, that KNM-ER 1470 and these new Koobi Fora fossils belong to the same species,^{7,18} then that is yet more evidence KNM-ER 1470 also was an australopithecine. Intriguingly, in lateral view, apart from the obvious size difference, there is similarity in the faces between KNM-ER1470 (the larger face) and *Australopithecus sediba*.¹⁷

KNM-ER 1470 an australopithecine after all

One of the paleoanthropologists involved in the original reconstruction of KNM-ER 1470, Alan Walker,

thought it looked “like a big-brained australopithecine” at the time, disagreeing with the original more human-like facial reconstruction.¹⁹ This was also the opinion of the late creationist Bill Mehlert.²⁰ This latest evidence, as well as the reconstruction by the Bromage group, adds support to Walker’s (and Mehlert’s) original belief that KNM-ER 1470 was an australopithecine.

Sinking *Homo habilis* into the australopithecines

As KNM-ER 1470 is the lectotype (the effective or functional type specimen, as none was originally designated) of *Homo rudolfensis*, sinking KNM-ER 1470 into the australopithecines effectively sinks the species *Homo rudolfensis* into the genus *Australopithecus* as well. Some evolutionists (Bernard Wood and Mark Collard) have suggested that “for the time being” *Homo habilis* and *Homo rudolfensis* should be removed from the genus *Homo*, and transferred to the genus *Australopithecus* instead.²¹ There are no postcranial remains reliably linked to *Homo rudolfensis*,²² although attempts have been made to link it with some human-like bones, in particular a hip bone (KNM-ER 3228) and two femora (KNM-ER 1472 and KNM-ER 1481a), in order to make it a viable evolutionary ancestor of *Homo erectus*.²³ However, maybe they resemble human bones because that is what they are, as they have all at one time or another been (and still are) also affiliated with *Homo erectus* (considered human by most creationists).²⁴ As for *Homo habilis sensu stricto*, the only postcranial remains linked with it that are associated with “taxonomically diagnostic cranial elements” is OH 62, and its estimated limb-length proportions are as ape-like as *Australopithecus afarensis*.²⁵ In fact, one evolutionist has argued that although

“... living nearly a million and a half years after Lucy, the OH62 animal was more ape-like in form than she.”²⁶

Not exactly a convincing argument for *Homo habilis* being transitional between *Homo erectus* and the australopithecines, when it is even more ape-like than the australopithecine ancestor it supposedly evolved from.

Conclusion

In the traditional human evolutionary story the australopithecines evolve into *Homo habilis*, and then *Homo habilis* evolves into *Homo erectus*. Hence, *Homo habilis* is important as a stopgap or makeshift missing link between the australopithecines and *Homo erectus*.

However, it is a phantom species, being described as a ‘garbage bag’ or ‘wastebasket’ even by some evolutionists;²⁷ basically a dumping ground for difficult to classify fossils. It is a composite species, consisting mostly of australopithecines, but with a few *Homo erectus* specimens also wrongly categorized. Maybe it serves a purpose for this very reason, as a mixture of human and extinct ape bones gives the illusion of a missing link species.

References

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