

The mysterious hobbit

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This article follows the hobbit controversy from when the species *Homo floresiensis* was first announced up to recent developments. Various theories on the nature of the hobbit are considered, with the author taking the view that *Homo floresiensis* is not a new species, but rather that the skull of the hobbit most likely belonged to a human suffering a pathological condition called microcephaly.

When *Homo floresiensis* was announced as a new ‘hominid’ species in the prestigious journal *Nature* at the end of October 2004, it must have been a euphoric moment for the discoverers.¹ At the time the authors believed they were dealing with a dwarfed *Homo erectus* species, and because of the small size of the main fossil specimen (LB1) the species was dubbed ‘the hobbit’. Birthday suit pictures of this supposed ape-man, after a successful rat hunt, were splattered around the world, as newspapers and other media outlets announced that a lost race of human ‘hobbits’ had been unearthed on an Indonesian island.²

The discoverers were suddenly the stars of paleoanthropology, as their little hobbit took to the imagination of people the world over. Reconstructed using considerable artistic licence and imagination, the hobbit even made the cover of the February 2005 *Scientific American* and the April 2005 *National Geographic*. If only it could have ended on this romantic note, but alas—as the fanfare subsides, the hobbit looks decreasingly like a diminutive character in J.R.R. Tolkien’s novels and increasingly like a case study in human pathology.

Why not an australopithecine?

At a tiny stature of just over one metre high, and with a very small brain capacity of about 400 cm³, one would perhaps have expected evolutionists to push for the inclusion of the hobbit as a member of the australopithecines. Why didn’t they? Firstly, its supposed age of 18,000 years³ and location in Flores, Indonesia, are from an evolutionist standpoint outside the known australopithecine range, both temporally and spatially.⁴ Evolutionists currently believe that the last of the australopithecines died out over a million years ago, and so if the hobbit was an australopithecine it would be almost like finding a ‘living fossil’. A bigger problem is that the australopithecines are believed by evolutionists to have originated in Africa, and so for them get to Flores, Indonesia, means they would have had to build watercraft, a feat seemingly beyond their brainpower. However, there are also anatomical reasons for believing they were not australopithecines.

The discoverers describe the body proportions of LB1 as being the same as AL288-1 (Lucy) *Australopithecus afarensis*, but unlike all other supposed hominids (including *H. erectus*) ‘for which there are reliable data’.⁵ In the

original *Nature* paper the ilium of the LB1 pelvis was described as having a ‘marked lateral flare’ compared with modern humans.⁶ This is more a characteristic of the australopithecines, as deduced from the reconstructed pelvis of the *A. afarensis* specimen known as ‘Lucy’.⁷ In their follow-up paper, about a year later, the pelvis is described as ‘flared antero-laterally, consistent with an australopithecine-shaped thoracic region’.⁵ However, a more recent examination and reconstruction of the LB1 pelvis by William Jungers of Stony Brook found ‘the orientation of the pelvic blades’ to be similar to ‘modern’ humans.⁸ According to Indonesian paleoanthropologist Teuku Jacob of Gadjah Mada University in Jakarta, who examined some of the LB1 skeletal remains under controversial circumstances,^{9–11} the pelvis and the thigh bone were human, with the only abnormalities being in the skull.¹² He found that the ‘legs, arms and everything else were genetically normal’.¹²

Regarding similarity, it is stated about LB1 that in ‘the overall shape of its skull and its teeth, the creature most closely resembles *Homo erectus*’.¹³ According to the authors of the *H. floresiensis* paper, LB1 ‘does not have the great postcanine tooth size, deep and prognathic facial skeleton, and masticatory adaptations common to members’ of the genus *Australopithecus* (figure 1 illustrates the LB1 skull).¹⁴ They argue that:

‘Instead, the facial and dental proportions, postcranial anatomy consistent with human-like obligate bipedalism, and a masticatory apparatus most similar in relative size and function to modern humans all support assignment to the genus *Homo*—as does the inferred phylogenetic history, which includes endemic dwarfing of *H. erectus*’.¹⁵

Compared to modern humans, the arms of LB1 are long with respect to the legs.¹⁶ The limb proportions, as indicated by the humerofemoral index (ratio of humerus to femur length), have been measured to be the same as the AL288-1 *A. afarensis* skeleton and outside the range of variation normally attributed to humans.⁵ The estimated humerofemoral index in *A. afarensis*, although less than that of extant apes, is still significantly greater than that of humans.¹⁷ Hence, the limb proportions of LB1 are australopithecine-like. However, according to Leroi, ‘Careful measurements of pygmies (and thousands of them have been measured) show that compared to taller people, pygmies



Figure 1. The LB1 hobbit skull (left) compared to a normal modern human (right). (From Brown *et al.*¹).

have relatively short legs but relatively long arms.¹⁸ Hence, it may be that as the human body is ‘sized’ down the limbs do not scale down proportionally. According to evolutionist Gary Richards:

‘Morphological features of the skeleton (wide pelvis, long arms relative to legs, tibial cross-sectional shape, etc.) that are said to link *H. floresiensis* with early hominids are also found in modern human pygmy populations. Some of these features have been described as ‘primitive’ in pygmies and most are linked to body size reduction.’¹⁹

Interestingly, Carl Vogt, a prominent anthropologist and early evolutionist of the late Victorian era, who studied microcephaly (a pathological condition in which the brain fails to develop to its normal size) thinking it would help him understand supposed evolution in humans (figure 2), commented in his *Lectures On Man* that in certain microcephalics the ‘arms seem disproportionately long, the legs short and weak’.²⁰

According to anthropologist Alan Thorne, Australian National University in Canberra, dwarfism ‘goes with microcephaly, especially in hunter/gatherer populations’.¹² Dwarfism commonly results from a deficiency of growth hormone secretion from the anterior lobe of the pituitary gland in the brain. In this condition:

‘In general, all the physical parts of the body develop in appropriate proportion to one another, but the rate of development is greatly decreased. A child who has reached the age of 10 years may have the bodily development of a child aged 4 to 5 years, and the same person at age 20 years may have the bodily development of a child aged 7 to 10 years.’²¹

An example of someone who most likely had this condition was Joseph Boruwlaski (1739–1837). Portraits of this able person indicate he was ‘perfectly proportioned in his smallness’.²² He continued growing slowly until he



Figure 2. A Victorian era drawing of a microcephalic skull. Carl Vogt, a prominent anthropologist and early evolutionist of this period, studied microcephaly in the belief that it would help him understand the supposed evolution of humans. (From Vogt²⁰).

was thirty, after which his height remained fixed at 3 feet 3 inches (99 cm).²³ For comparison, the LB1 skeleton had a height estimated as 106 cm.¹⁴ Dwarfism and microcephaly occurring in the same individual may not be that unlikely, and it is possible that in some instances the two conditions are related. For example, Woods *et al* describe a 119.1 cm tall, 15.8 year old boy, whose condition included growth failure, mental retardation, long arms and microcephaly.²⁴ While microcephaly can occur in people with normal stature, it has been suggested ‘that microcephaly [*sensu lato* (*s.l.*)] could be linked to a reduction in stature’, and it has been observed ‘that the co-occurrence of primary microcephaly (*s.l.*) and normal stature is rare’.²⁵

If a microcephalic skull was placed on a postcranial skeleton like that of Boruwlaski, and the remains buried in the hobbit ‘pit’ in Flores at the same time as LB1, an interesting question would be whether the same discoverers would be claiming another hobbit. Charles Stratton (1838–1883), at 40 inches tall (101.5 cm), was another mentally capable person of small stature who was ‘well-proportioned throughout his body’.²⁶ According to Barnhart, a ‘profile view of his head indicates facial characteristics with many of the same allometric differences seen in LB1.’²⁷

What about microcephaly?

A few days after the hobbit announcement, paleopathologist²⁸ Maciej Henneberg of the University of Adelaide claimed in a newspaper article that the LB1 individual suffered from a pathological growth condition called secondary microcephaly, and that ‘the skull of the Flores hominid is very similar to a 4,000-year-old microcephalic modern human skull found on the island of Crete.’¹⁶ Henneberg, along with Alan Thorne, soon outlined their case in the journal *Before Farming*.²⁹ In the same issue, two of the authors of the *Nature* ‘hobbit’ paper, Peter Brown and Mike Morwood,

denounced the ‘research’ by Henneberg and Thorne as ‘extremely poorly informed, and ill designed’.³⁰ Not to be outdone, Thorne later commented that if ‘it’s a case of microcephaly, there are a lot of people in my field who cannot recognise a village idiot when they see one.’¹²

A couple of years later, another group of researchers compared measurements from the LB1 skull with measurements from two microcephalic skulls, including the same skull from Crete that Henneberg and Thorne earlier examined.³¹ Interestingly, they reported the LB1 skull to be ‘outside the range of *H. sapiens* and separated from the two microcephalics’, and concluded ‘that it is unlikely that LB1 is a microcephalic human, and it cannot be attributed to any known species’.³² That their analysis indicated the LB1 skull differed from the skull from Crete (the Minoan microcephalic),³³ when Henneberg and Thorne found the two skulls to be similar, shows how different researchers, examining measurements from the same bones, can come to opposite conclusions.

Also, Teuku Jacob joined the hobbit ‘bashers’ early on, claiming ‘the specimen was a diminutive modern human’.¹⁶ More specifically, Jacob also believes LB1 suffered from microcephaly, and as an explanation for the small size of the skeleton points out that there are pygmy people in the region today.¹² Jacob led an anthropology research team there and found a pygmy community in the village of Rampapasa, about 1 km from the village of Liang Bua, where the hobbit was found.³⁴ In this community ‘80 per cent of the Rampapasa villagers were small, with most male adults under 145 cm and female adults about 135 cm.’³⁴ Hence, it is possible that LB1 was just a very small member of such a pygmy population, but additionally suffered from microcephaly. According to paleoanthropologist John Hawks, Jacob’s conclusion that LB1 is a microcephalic pygmy ‘is supported by the observation that pygmies are common in the region today, may have been common in the past, and the possibly high frequency of secondary microcephaly, induced by nutritional deficiency or other non-genetic factors.’³⁵

To attempt to silence some of the critics, the brain of LB1 was assessed by comparing its virtual endocast with endocasts from *Homo sapiens*, *H. erectus*, a human microcephalic, a human pygmy, great apes, *Australopithecus africanus* (Sts 5), and *Australopithecus aethiopicus*³⁶ (WT 17000).³⁷ This study, led by anthropologist Dean Falk, concluded that LB1’s ‘well-convoluted brain’ was not a microcephalic or pygmy, but in shape resembled *H. erectus*, and additionally they estimated a 417 cm³ virtual cranial capacity for LB1.³⁸ But there was only one microcephalic sample, a plaster-based cast of a skull traced back to the original skull of a 10-year-old boy (Jakob Moegele) with a cranial capacity of 272 cm³.³⁹ Hence, from such a limited sample (one), it seemed premature to claim that LB1’s brain and skull was the wrong shape to be a microcephalic.⁴⁰

About six months later a brief paper was published by Weber *et al.*, detailing the analysis of 19 microcephalic

modern humans, where the finding of a microcephalic endocast comparable to LB1 was reported.⁴¹ The brain volume of the microcephalics varied between 290 and 591 cm³, with a mean of 404 cm³. Based on their study, the authors stated that:

‘Both skull and brain morphologies of microcephalics are extremely heterogeneous [varied, diverse] and grossly resemble the anatomy and proportions of *H. floresiensis*.’⁴¹

‘Widely differing index measurements’ were observed in the microcephalic brains, with the indices of one of them resembling *A. aethiopicus*.⁴¹ Unsurprisingly, the research team led by Falk disagreed with the above assessment by Weber *et al.*, citing lack of information about measurement indices as one of the main issues.⁴² More recently, Martin *et al.* entered the hobbit fray when they argued against LB1 being a dwarf derived from *H. erectus*, as they calculated LB1’s predicted body size when dwarfed, based on its small cranial capacity, to be much smaller than it actually was.³⁹ Instead, they also suggested that LB1 was a microcephalic modern human and cited two microcephalic skulls and endocasts (Indian Hunterian male and Lesotho woman specimens) said to be similar to LB1. As expected, Falk’s group disagreed with the Martin *et al.* assessment, this time citing lack of detail on line drawings of the endocasts as one of the main reasons.⁴³

One thing to come out of the Weber *et al.* study is that any notion that microcephalics have typically simplified gyral patterns or a certain brain shape is wrong, as the authors reported great variability in overall microcephalic brain shape and convolution patterns.⁴¹

The finding of fossils from non-microcephalic intelligent hobbit-size people with a cranial capacity of about 400 cm³ would question the notion of an arbitrary cerebral rubicon in the 600–800 cm³ brain size range⁴⁴ that must be passed in order to have a human mental faculty. The average brain size of chimpanzees is 383 cm³ orangutans 404 cm³, and gorillas 504 cm³.⁴⁵ Hence, the 400 cm³ brain size of *H. floresiensis* from the Indonesian island of Flores is very small if it is non-pathological, yet it possesses human-like intelligence, as adduced by the tools. However, when considering brain size one should also take into account body size. This is done by calculating a value known as the encephalization quotient (EQ).⁴⁶ According to the discoverers, if the body of *H. floresiensis* specimen LB1 is assumed to be lean and narrow, then the estimated EQ places LB1 easily within the *H. erectus* range.¹⁴

Do multiple hobbits disprove the microcephaly hypothesis?

Although a second skull has yet to be found, a second adult mandible has been discovered, as has postcranial material from other individuals.⁴⁷ The researchers think that their sample of hobbit bones is from at least nine individuals, with

the new mandible described as ‘extraordinarily similar to the first one’.⁴⁸ On the surface this would seem to rule out the microcephaly theory, but some types of microcephaly may run in families. For example, three of the ten siblings of the microcephalic boy Jakob Moegele were also microcephalics.³⁹ Another example is the tragic case of the three microcephalic brothers used as ‘hominid ancestor’ throw-back exhibits at an amusement park in Bangalore, India.⁴⁹ In the paper by Martin *et al.* the authors state:

‘In addition to genetic factors increasing the likelihood of microcephalics occurring together, it is conceivable that cultural factors might have enhanced this, as at a recent religious site to which microcephalics were brought.’³⁹

Also, in some rural consanguineous groups⁵⁰ expressing autosomal recessive primary microcephaly (MCPH), an approximate 20–45% occurrence rate of microcephaly has been documented.⁵¹ The finding of another lower jaw (LB6/1),⁵² estimated to be 15,000 years old,⁵³ as opposed to the 18,000 years old date for the LB1 skeleton (including its lower jaw), would make the argument of running in the family, if it was for thousands of years, difficult to swallow. However, this assumes that the datings are correct. Evolutionist Robert Martin, of The Field Museum, Chicago, an advocate of the microcephalic hypothesis, in response to two *H. floresiensis* lower jaws having been unearthed and supposedly dated thousands of years apart questions the degree of similarity of the jaws as well as ‘whether the dating of the remains is accurate’.⁵⁴ Martin has every right to question the accuracy of the dating—a privilege not usually extended to non-believers in evolution, of course.

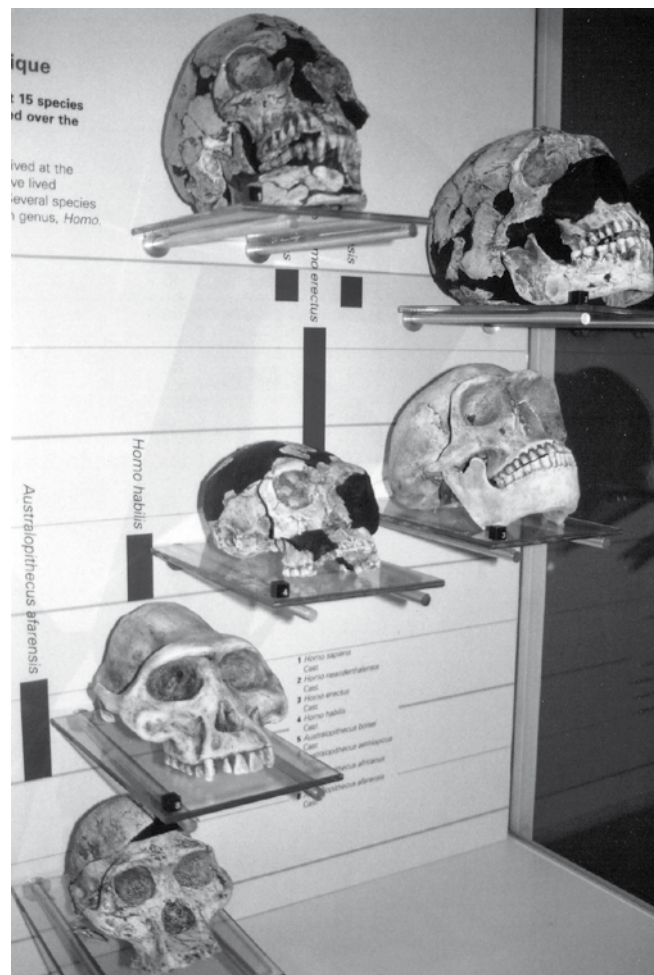
If the hobbit turns out to be a microcephalic modern human then one may legitimately ask what other supposed ‘hominids’ are simply microcephalic humans—particularly some of the smaller *H. erectus*/*Homo habilis* crania. Vogt commented that ‘if a fossil microcephalic skull were found, without a lower jaw and an upper row of teeth, every naturalist would at once declare it to be the cranium of an ape.’⁵⁵ Hence, with human-like jaws and dentition, some imagination and an agenda, it is not inconceivable that fossil microcephalic skulls have been mistakenly identified as ‘apemen’ by evolutionists.

According to its discoverers, the LB1 skull is most reminiscent of smaller *H. erectus* fossils, such as ‘the 1.77-million-year-old Dmanisi people from Georgia, in Western Asia’, with both the Dmanisi people and hobbit having skulls that are ‘pinched in at the temples’.⁵⁶ Hence, it is conceivable that the Dmanisi finds, including at least four skulls,⁵⁷ also represent microcephalics occurring together, whether for family, religious, cultural or other reasons. An ‘enormous’ lower jaw (D2600), unearthed at Dmanisi in 2000, and described as ‘far too large to fit comfortably with any of the crania yet discovered’,⁵⁸ indicates that people of ‘normal’ brain size (non-microcephalic) may also have

inhabited the region at the same time.

It should be emphasized that just because people are microcephalic does not necessarily imply that they are retarded mentally.⁵⁹ For example, evolutionists Skoyles and Sagan refer to a woman with an estimated brain volume of 760 cm³ who had an IQ of 112, which is certainly not retarded.⁶⁰ Microcephaly has been described in many conditions, being potentially present in many hundreds, but is simply ‘defined as an occipito-frontal head circumference (OFC) 2 or more standard deviations below the mean for age and sex’.⁶¹

There is enormous variation in skull size and shape in so-called ‘modern humans’, and there likely was even greater variation in the past. Add environmental and dietary factors, and many of the alleged ‘hominids’ in the genus *Homo*, such as Neandertals, *H. erectus* and other so-called ‘archaic *Homo sapiens*’, can be explained as simply variations within the human population that descended from



Casts of crania and skulls that have been attributed to various supposed hominid species by evolutionists. Top left: *Homo sapiens*; top right: *Homo neanderthalensis*; 2nd row left: *Homo habilis*; 2nd row right: *Homo erectus*; 2nd from bottom: *Australopithecus afarensis*; bottom: *Australopithecus africanus*. (Photo taken at the Evolution Gallery, Melbourne Museum).

Adam and Eve. Interestingly, Richards cites researchers who have ‘noted that a scaphoid-shaped skull, as described in *H. floresiensis*, has variously been regarded as a primitive character in *H. erectus* and a pathological or anomalous trait among microcephalics (*s.l.*)’, and he rejects any phylogenetic link between *H. floresiensis* and *H. erectus* because the association is ‘dependent on the degree of brain size reduction’.⁶² If brain size reduction in microcephalics is in some way correlated with *H. erectus* cranial vault similarity or mimicry, then it is unclear whether the LB1 hobbit was a microcephalic ‘modern’ or microcephalic ‘robust’ human,⁶³ but either way the hobbit remains belonged to someone fully human. Similar questions would surround the Dmanisi finds.

Susan Anton of New York University believes there is little difference between LB1 and *erectus*, at least not enough to warrant a new species, as ‘the difference in shape between LB1 and *Homo erectus* is less striking than that between a Great Dane and a Chihuahua’.⁶⁴ She is then quoted by Wong as observing that:

‘The possibility exists that the LB1 specimen is a *H. erectus* individual with a pathological growth condition stemming from microcephaly or nutritional deprivation.’⁶⁵

Concerning the remains of other individuals at Liang Bua, the estimated sizes of these individuals vary greatly. For example, Henneberg and Thorne estimated that a radius from the site corresponded to a stature of 151–162 cm, depending on how it was reconstructed, which ‘is by no means a dwarfed stature’.⁶⁶ On the other hand, Jungers notes that limb bones from other individuals ‘are even smaller—“they make LB1 look like the Hulk”, he says’.⁸

The toolmaker of Flores

In the same issue of *Nature* that first described the LB1 *H. floresiensis* fossil, a companion article included details of dating methods and tools associated with the fossil site in Liang Bua, on the island of Flores, Indonesia.⁶⁷ Stone artifacts were reported as occurring at the same stratigraphic levels as the LB1 skeleton, including in the same 2-by-2-metre sector where the skeleton was found.⁶⁸ In the words of Kate Wong, ‘a suite of sophisticated artifacts’ was found at the same level as the skeleton, ‘including awls, blades and points—exhibiting a level of complexity previously thought to be the sole purview of *H. sapiens*’.⁶⁴ Additionally, significant brainpower would be required to build the boats or watercraft needed to colonize Flores, which up to then evolutionists believed only humans were capable of.⁶⁹ Evidence indicates that the tool makers at Liang Bua were also able to use fire and hunt stegodonts,⁷⁰ indicating they were very intelligent. If the hobbit was *severely* microcephalic and hence retarded, which now seems likely, the tools probably belonged to non-microcephalic humans of the same human population.

The finding of stone tools on Flores has previously been reported (at Mata Menge), but they were dated to between 0.88 and 0.80 million years old, and on the basis of these ages the artefacts were attributed to being ‘produced by *Homo erectus* rather than *Homo sapiens*’.⁷¹ Such jumping to conclusions is striking, but being locked into the evolutionary viewpoint gives the authors little alternative.

Following more recent excavations in Mata Menge a paper was published claiming similarity in the stone artefacts from the alleged 0.88 and 0.80 million years old deposits at Mata Menge and those found in the supposed 95,000 to 12,000 years old deposits at Liang Bua cave (associated with *H. floresiensis*).⁷² Once again, although no ‘hominid’ remains have been recovered at the Mata Menge site, the authors concluded that ‘the age of the site clearly precludes modern humans’.⁷³ They suggested that the ‘most parsimonious explanation’ was that the stone artefacts from both sites (Mata Menge and Liang Bua) ‘represent a continuous technology made by the same hominin⁷⁴ lineage’.⁷³ Rather than admit the manifestly obvious and most logical conclusion, that humans had to be responsible for both sets of stone artefacts (and also that the huge alleged gap in age between the two tool sites is doubtful), and thus negating the idea of an evolutionary lineage of hominids, the authors state that the ‘Mata Menge evidence negates claims that stone artefacts associated with *H. floresiensis* are so complex that they must have been made by modern humans (*Homo sapiens*).’⁷⁵

Such bewildering ‘logic’ is perhaps best summed up by evolutionists John Gribbin and Jeremy Cherfas when, under different circumstances, they commented that ‘we must admit that the history of palaeontology does not read as a shining example of the pursuit of truth, especially where it was the truth of man’s origins that was at issue’.⁷⁶ Rather, it is a search for a purely naturalistic explanation, regardless of whether this is plausible. As indicated by evolutionist John Reader: ‘Preconceived notions have played a fundamental role in the study of fossil man.’⁷⁷ The above example is a good illustration of how the interpretation of artefacts and fossils is heavily biased according to the researchers’ framework. The reality is that scientists, both evolutionists and creationists, are biased when it comes to studying the origin of man and life, as they interpret the evidence through their own particular worldview or framework. The problem arises when the researcher erroneously believes their worldview is ‘science’, and hence objective, while alternative viewpoints are ‘religious’, and therefore biased.

What else could the hobbit be?

Rather than a dwarfed *H. erectus*, some researchers have proposed possible alternative ancestors to *H. floresiensis*, including *H. habilis*,⁷⁸ or even an ‘offshoot of *Australopithecus*’, as suggested by Milford Wolpoff.⁴ It has also been suggested that *H. floresiensis* may represent

a previously unknown early hominid or that it evolved from a ‘founder population of archaic *Homo*’.⁷⁹ However, such notions are purely speculative, being firmly based on the assumption of evolution, not on any evidence.

The team who unearthed the find originally suggested that *H. floresiensis* may have been the descendants of *H. erectus* from the nearby island of Java, believed to have been there as long as 1.6 million years ago.⁸⁰ They suggested that the first hominid immigrants to Flores ‘may have had a similar body size to *H. erectus* and early *Homo*, with subsequent dwarfing; or, an unknown small-bodied and small-brained hominin may have arrived on Flores from the Sunda Shelf.’¹⁴ However, even these researchers now believe *H. erectus* was too big to evolve into the diminutive hobbit.⁸¹ For example:

‘Michael Morwood of the University of New England in Armidale, Australia, says he believes the hobbits may instead descend from a smaller, as-yet-undiscovered hominid, resembling 1.8 million-year-old specimens found at Dmanisi in Georgia.’⁸¹

The principal author of the first hobbit article, Peter Brown of the University of New England, is quoted as leaning towards the idea that ‘there was some more australopithecine-like ancestor involved’.⁸² Interpreting and summarizing Richards’ recently published microcephalic model, he appears to consider the hobbits as a mostly healthy, conceivably non-mentally retarded, remnant of a human (*H. sapiens*) group that, through genetic mutations, first became dwarfed in an island environment, and later underwent brain size reduction, stating that:

‘I agree that these remains do not represent diseased, pathological or aberrant individuals. I consider these individuals to manifest physiological differences from other modern humans in similar ways to modern pygmies and additional modern humans possessing MCPH or GHRH-R mutations.’⁸³

‘Progressive creationists’, such as Fazale Rana and Hugh Ross, appear to accept that ‘*H. floresiensis*, like the Neanderthals, coexisted with modern humans’.⁸⁴ However, the only thing certain about their human origins concept (spirit-less quasi-humans created prior to Adam and Eve)⁸⁵ seems to be that no finding causes any difficulty for it, as illustrated by the following ‘hand waving’ statement:

‘This unusual and unexpected discovery causes little difficulty for the RTB human origins model. *H. floresiensis* is clearly distinct from modern humans, not only in morphology, but in behavior as well. Like *H. erectus*, *H. floresiensis* behaved in nonhuman ways. The RTB model considers these hominids in the same vein as the great apes—nonhuman creatures made by God (before He created human beings) that later became extinct.’⁸⁴

From the archaeological evidence they seem to accept ‘that these hominids hunted and scavenged the dwarf elephants on the island’.⁸⁴ Hunting some of these

larger dwarfed elephants (pygmy *Stegodon*) is thought to have required group activity and language, and some of the archaeological implements found suggest human-like intelligence of the maker.⁶⁴ Hence, it seems at odds with the evidence for Rana and Ross to claim that *H. floresiensis* is clearly distinct from modern humans in behaviour, being instead ‘in the same vein as the great apes’.⁸⁴

Despite their small size, the remains attributed to *H. floresiensis* were initially suggested by creationist Carl Wieland as likely to be descendants of Adam nonetheless.⁸⁶ In this alternative view *H. floresiensis* is ‘a miniature human being exhibiting part of the same range of post-Babel human variation as encompasses the larger so-called *Homo erectus*’.⁸⁷ This was also the argument of creationist Kurt Wise,⁸⁸ and has yet to be ruled out, but in both instances this view was based on the notion that the Flores skeleton was non-pathological, relying on the original researchers’ papers. As arguments to the contrary accumulate, it is probably more likely that the LB1 skeleton, while still human and hence a descendant of Adam, is a reflection of post-Babel human *pathological* variation. One thing seems certain; we have not heard the last of this hobbit tale.

Postscript

The most recent hobbit developments at the time of writing concerned a study of the original LB1 skeletal material by Teuku Jacob and other experts, including Thorne and Henneberg, as well as Robert Eckhardt, a professor of development genetics at Pennsylvania State University.⁸⁹ They reported finding 140 cranial features that placed LB1 ‘within modern human ranges of variation, resembling Australomelanesian populations’.⁹⁰

Importantly, their study also documented individuals with no chin in living Australomelanesian populations, and so evolutionists can no longer argue that fossils attributed to *H. floresiensis* or *H. erectus* and Neandertals for that matter, were primitive because they lacked a chin.⁹¹ Abnormal craniofacial and postcranial asymmetries were also reported, indicating that the LB1 individual had suffered from ‘abnormal growth and development’.⁹⁰ Indicators of weak muscle development in the limb bones of LB1 were also put forth as evidence of abnormal growth.⁹² From their study the authors proposed ‘that LB1 is drawn from an earlier pygmy *H. sapiens* population but individually shows signs of a developmental abnormality, including microcephaly.’⁹⁰

Indicating that no love has been lost between the two main warring hobbit camps, ‘complete nonsense’ was the response to the study from one of the hobbit’s discoverers, Peter Brown.⁹³ Brown has suggested that the asymmetry of the skull was brought about by the skeleton being ‘buried deep in sediment’.⁹⁴ However, according to Hawks, who now completely accepts ‘the argument that LB1 is pathological’, Brown’s argument about post-burial processes distorting the cranium, which is a distinct possibility, is

weakened by the knowledge that ‘the asymmetry clearly extends to morphological characters that should be relatively unaffected by such distortion’.⁹⁵

Interestingly, in the journal *Nature*, where the original *H. floresiensis* paper was published, the editorial welcomed the Jacobs *et al* study, citing debate as ‘something on which science thrives’.⁹⁶ However, one wonders whether their conciliatory tone is more a case of cold feet and pre-emptive damage control, as the ‘overturn’ of the hobbit would be a huge embarrassment to them. Summing up the effects of the Jacob *et al* study, Wieland concludes that ‘it is now even more likely that this is a diseased modern human, rather than a dwarfed *erectus*’, but he emphasizes that ‘either conclusion would make little difference to the obvious conclusion that the “hobbit” remains were those of a fully human descendant of Adam.’⁹⁷

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