BOOK Reviews

# A fusillade of shots in the Hobbit Wars

A review of The Hobbit Trap: Money, Fame, Science and the Discovery of a 'New Species': by Maciej Henneberg and John Schofield Wakefield Press, Kent Town, South Australia, 2008

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controversy is raging among A evolutionists around the 2003 discovery of tiny human remains in the cave of Ling Bua on the Indonesian island of Flores. Dubbed the 'Hobbit', after J.R.R. Tolkien's little fantasy people, the specimen's discoverers have graced it with the scientific name Homo floresiensis. By placing it in the genus Homo, they indicate their belief that it is human-but not fully human in the sense of our own species (Homo sapiens). Rather, the discoverers feel that it is a separate, quasi-human product of the evolutionary process, a side-branch of human evolution.

Its diminutive size was just over one metre fully grown. Its grapefruitsized brain was extremely tiny even for its small body size. These items lent credibility to the belief that here was something different from us—human, but not quite. This was in spite of the evidence suggested by the associated tool use that these persons were fully human.

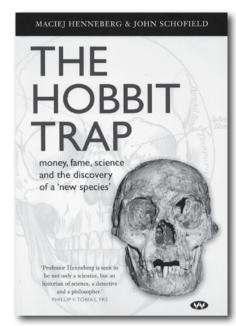
To those such as paleoanthropologist and Australian sceptic Colin Groves, evidence of a new human species was a delightful piece of fuel with which to stoke their anti-creationist fires. It must have been distinctly annoying when voices were soon raised from *within the evolutionary establishment* casting doubt upon the notion of a new human species. One of the prominent dissenters was Groves' old foe in the Out of Africa versus the Multiregional controversy, Alan Thorne, recently retired from the Australian National University. Another one was the principal author of this book, evolutionist Maciej Henneberg, who has long believed that the Hobbit was a pathological (diseased) individual of our own species, *Homo sapiens*.

#### Views on the Hobbit

Henneberg claims the Hobbit's characteristics are consistent with those of a modern human suffering from microcephaly—a condition in which the brain is underdeveloped. This is often associated with a general retardation of body growth. Many different causes of microcephaly are known. This view is also favoured by creationist neuroscientist Peter Line, both on the CMI website and in *Journal of Creation.*<sup>1</sup>

My earlier writings on the Hobbit fossils<sup>2</sup> favoured the idea that a population of Homo erectus might have experienced the phenomenon known as 'island dwarfing'.3 This view also gives little comfort to the anticreationists since *H. erectus* as well as H. neanderthalensis could well be regarded as one portion of the spectrum of variation within Homo sapiens. (The idea that erectus and Neandertals can be seen as forms of *sapiens* is shared not only by most creationists but also by several evolutionists, including the aforementioned Alan Thorne.) A difficulty for the idea that the Hobbit is merely a dwarf erectus is the disproportionately small brain of the Hobbit, unlike any pygmy island population found today.

Despite the slander heaped upon Henneberg for his advocacy of the concept of microcephaly, his views cannot be lightly dismissed. He is holder of the full professorial chair of Biological Anthropology and Comparative Anatomy at the University of Adelaide, South Australia. And as a full-fledged evolutionist, his opposition to the claims of the Hobbit's finders can scarcely be motivated by creationist



sympathies. Moreover, he is not alone. The opponents of the 'new species' claim include the respected Indonesian paleoanthropologist, the late Teuku Jacob. Henneberg had known Jacob and had collaborated with him in the field well before the Hobbit find. Jacob, Henneberg, Alan Thorne, and paleoanthropologists Bob Eckhardt and Etty Indriati, Jacob's Indonesian colleague and successor, had formed a loose association known as the Pathology Group. All share a similar view as to the cause of the Hobbit's characteristics.

No matter how well-credentialled this group was, they faced difficulties. Henneberg quotes as follows (p. 57):

'Criticism levelled at [the group] before visiting Yogyakarta was that they had not studied the bones themselves. Now they had, but they stood accused of studying them illegally. In addition, having expressed a professional scientific opinion after studying the bones closely, Maciej's comments had been derided [in print] as graffiti 'on a toilet wall'.'

The foreword to *The Hobbit Trap* by the renowned South African evolutionary paleoanthropologist, Philip Tobias, adds further credibility to both Henneberg and his views on the Hobbit, views that Tobias apparently shares. Unfortunately, the book itself is disappointingly mediocre. Given the authority of Henneberg and the use of the journalist-writer John Schofield, one would expect a better quality of writing. Rather than a carefully drafted treatise, it seems more like a hastily-cobbled-together work to vent Henneberg's frustration with the way he and his views have been received by other paleoanthropologists. This book will not help that reception.

That said, Henneberg's book is an interesting read, and vital in giving an insider's understanding of the controversy regarding the fossil, LB1 (the technical label for this specimen). Perhaps it was the only way he could bypass what he documents as the stranglehold of a bandwagon mindset in evaluating this discovery.

Creationists will sympathize with his problems, which include the unreasonable rejection of papers written by those not dancing to the 'new species' tune. One such rejection, by a well-known journal, involves a paper pointing out blatant errors in the original Hobbit report. In that report, the left femur had been presented as the right one; the upper right wisdom tooth was said to be absent, although it really was there, but rotten; the cranial vault was said to be 'long' when measurements cited indicated that it was short; and a photograph was turned a few degrees with the effect of disguising asymmetry in the skull. Henneberg suggests that these errors were intended to play down evidence that would cast doubt on the original authors' 'new species' interpretation.

Henneberg feels that the scientific evidence strongly favours his view of the Hobbit's status. The conflict has now moved, he believes, far beyond scientific issues. Matters of money, fame and pride have clouded scientific objectivity.

However, to be fair to the opposition, things may not be quite that one-sided. Henneberg does not mention LB1's prominent brow ridges, consistent with the pygmy *erectus* hypothesis. Nor does he mention the apparent grooves and crests in the Hobbit's palate and the ridge reinforcing the jaw—both items different from modern humans, but consistent with some more ancient alleged human ancestors.<sup>4</sup>

## The Hobbit sees the dentist

Henneberg's book raises an issue for the first time. Based on his photographs of the specimen's teeth, dental filling material seems to be present in the original specimen. By making this claim in his book rather than in a scientific paper, he indicates that this is not a firm conclusion since he no longer has access to the specimen. If confirmed, this 'filling' would show that the Hobbit was just a modern (albeit pathological) human. However, to Henneberg the evidence is already so overwhelming that even if some other explanation could be found for the dental appearances, it would matter little. In fact, members of Henneberg's group knew of this dental matter as far back as 2005. But since the rest of the evidence seemed so strong, and their position did not stand or fall on the 'dentist' claim, they decided not to muddy the waters of their pending scientific papers with this sensational item. Evidence of dental work, including the use of a drill and cement filling, would, as Henneberg indicates, bring the Hobbit's original persona into dramatically recent times. Also, Alan Thorne apparently believes that LB1's tooth wear and pattern of decay are consistent with people in agricultural, not hunter-gatherer, communities. This again is consistent with the idea of LB1's being a very recent human.

## The Hobbit gets younger

Henneberg mentions a vital element regarding the specimen's age. I referred to this soon after the Hobbit's discovery,<sup>5</sup> but I have not seen it mentioned anywhere since that time. It is that the skull, when found, was not totally permineralized or fossilized. The skull had the consistency of 'wet blotting paper'! One would not expect a soggy specimen like this to be thousands of years old. A few hundred years old at most would be consistent with this evidence. Henneberg is convinced that the Hobbit, rather than being 18,000 years old as claimed, is no more than 3 or 4 thousand years old, and could have died as little as 40 years ago-especially if that evidence of modern dental work stands up. He has offered to pay for radiocarbon dating of the LB1 remains. That offer still stands. He has had no response.

#### **How many Hobbits?**

Finding more specimens of similar individuals at the same site may make it harder to sustain the idea that this was a pathological individual. However, despite one of the original discoverers' statements to Henneberg that '5 to 7 individuals' had been found, and a later claim to the media increasing this number still further (which Henneberg labelled as a 'gross exaggeration') not much has been forthcoming in terms of published material. The other remains discovered thus far at the Ling Bua site are apparently too fragmentary to be of help in solving this controversy. Nevertheless, in a radio interview after Henneberg's book was published, Australian National University's Debbie Argue, a supporter of the 'new species' status for the Hobbit, savs:

'There are other skeletal parts of the same relative size throughout the excavation, some as old as 74,000 years, and some as young as 12,000 years. There are bones from arms, leg, feet, there are vertebrae, teeth, a pelvis, and another jaw. These remains appear to come from at least two other adults and one child. There are no bones of our stature [except for modern remains at higher levels].'<sup>4</sup>

'No bones of our stature'? According to Henneberg, a radius (forearm bone) was found deeper down in the same cave. A reconstruction from this bone would make its owner up to 1.62 m (5'3") tall—well within the range of modern women who are not pygmies or dwarfs. The Hobbit's published stature has shrunk over time due to media sensationalism—from 1.35 m in height down to 0.96 m.

If more skulls of similar appearance to LB1 were found at Ling Bua, the pathological view would not necessarily be dead in the water. A recent paper suggested that the region's low levels of naturally occurring iodine may have given rise to endemic cretinism<sup>6</sup> with associated dwarfing. This would mean that the original specimen was indeed pathological, but from generalized environmental, rather than genetic causes. It could have been a part of a population of similar individuals. Even a genetic cause might become fixed through inbreeding. An Israeli paper suggested that the Hobbit's characteristics were identical to sufferers from a mutationcaused defect involving response to growth hormones, and that this could affect an entire population.

Other points of interest, though not necessarily new, from *The Hobbit Trap*:

- The Hobbit's teeth were of the same size and characteristics as modern humans, and its face size was like modern humans; these facts give strong support to Henneberg's view and contradict a minority view that this creature should not be classified as *Homo*, but was more akin to the australopiths, like Lucy.
- The unusual features of the specimen's limb bones, sometimes put forward to bolster the australopith view, can also be explained as pathological. Slow brain growth and development also gives poor signalling to muscles, resulting in 'their partial paralysis and thus abnormal development of limb bones' (p. 45).7 The limb bones overall support this view in another way-the brain growth had apparently been asymmetric, producing an asymmetry not only of the enclosing skull, but of the limb bones as well.
- The original *Nature* article claimed the specimen was female. But Henneberg states that given the more male-like features of the skull, it is more likely that the pelvic features that led to the female identification were the result of the abovementioned growth abnormalities. Nevertheless, in her interview Argue persisted in referring to LB1 as 'she'.
- The Hobbit's receding chin, which has been cited as a primitive characteristic, is common among those who are microcephalic.

- A group of pygmies was recently found to be living about 1 km from the cave in which the Hobbit was found. Their dental characteristics are in many respects similar to those of the Hobbit, and some of them also have absent chins, like the Hobbit.
- One of the co-authors of the original *Nature* paper later changed his opinion to become a supporter of the Henneberg Pathology Group interpretation.<sup>8</sup>
- Dean Falk (Florida State University) studied endocasts of the Hobbit's brain from CT scans and claimed that these indicated that the Hobbit was a new species rather than a case of microcephaly. Her report in *Science* has been touted as definitive. But when the report was made available to attendees at a conference that included Henneberg and other prominent specialists, many came to agree with Henneberg's Pathology Group.
- Similarly, a paper by Michael Tocheri and colleagues from the Smithsonian on the Hobbit's wrist bones claimed to provide 'smoking gun proof' of a new species. It said the carpals were like australopithecines' and apes', and thus the Hobbit could not expand its hands as we can. Henneberg reveals that a wrist specialist and former supporter of the 'new species' concept, Esteban Sarmiento from New York's Museum of Natural History, now believes that the Tocheri paper was flawed and has offered to collaborate with Henneberg in its refutation.
- Germany's Max Planck Institute for Evolutionary Anthropology wrote that they had been unable to extract from the LB1 bone 'any DNA fragment different from those of modern humans' (p. 83).

Though Henneberg is convinced of his group's general thesis, he remains theoretically open to its falsification by further evidence from Ling Bua. But the likelihood of access to the cave or the fossils for those not supportive of the 'new species' conclusion is very small. However, Henneberg believes: (1) that he has presented a strong case for his view, (2) that there will be sufficient momentum among evolutionists who share his view that the present restrictive conditions will change, and (3) that the question of whether the Hobbit was a pathological modern human or a new human species will eventually be settled. From a creationist point of view, the Hobbit is a post-Babel descendant of Adam.

In conclusion, Henneberg issues a plea for scientific openness and evenhandedness. That plea will strike a chord with all creationists and IDers who have faced similar treatment by the evolutionary establishment and the media.

#### References

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- 4. See the interview of the Australian National University's Debbie Argue on Australian Radio National, broadcast 13 July 2008 and titled, 'Homo floresiensis—where are we now?' <www.abc.net.au/rn/ockhamsrazor/ stories/2008/2300885.htm#transcript>.
- Wieland, C., Soggy dwarf bones, 28 October 2004, <creationontheweb.com/dwarfbones>.
- 6. A cause of mental retardation from low levels of thyroid hormone during early childhood
- The Hobbit's arms were long in relation to other parameters, well outside the normal human range. Its foot to shinbone length ratio was greater than ours, and its feet were not arched.
- Professor Radjen Soejono, one of the coprincipal investigators and senior Indonesian archaeologist at the excavation site.