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Reviewing the Flores Hobbit Chronicles

Robert G. Bednarik

Two books[1] are of particular relevance to *Anthropos* because they both deal with the most recent continuation of the work begun by Dr. Theodor Verhoeven – nearly all of which has been published in this journal several decades ago. Verhoeven was the first to *report* Stegodon remains in Wallacea, and then, at Flores, their co-occurrence with Lower Palaeolithic stone tools (Bednarik 1997). He was not, however, the first to *discover* the bones of these pachyderms and other ancient animals; they had been recovered by local villagers for a long time, who had even created stories to explain their presence (Bednarik 2000). Nor did Verhoeven claim otherwise, although it would be true to say that he was the first to recognize the stone tools.

The same admirable scholarly restraint and humility are not evident in the first of these two books, the most recent continuation of the Flores saga. It presents a very well written account of Professor Mike Morwood's archaeological investigations on two Indonesian islands, but especially on Flores, including the discovery of the remains of very small humans dubbed "Hobbits," and the ensuing controversy. Presentation is thorough, comprehensive, and has the appearance of a factual, blow-by-blow account of events, but Morwood's memory is selective. The descriptions of incidents this reviewer has witnessed are so partial and the book so replete with errors of fact that the veracity of the rest of it must be questioned. Nevertheless, even Morwood's own version depicts him as distrustful, self-centred, and biased, and creates the impression that he himself prompted most of the problems now haunting him.

Essentially, he initially joined a project by a group of Dutch and Indonesian researchers led by the late Professor Paul Sondaar, after this reviewer criticized Australian archaeologists for being uniformly ignorant about Verhoeven's finds – presumably because they had been published almost exclusively in German. Morwood then took over the quest (the Dutch complained bitterly in a Dutch newspaper), convinced the Indonesian au-

1 Morwood, Mike J., and Penny van Oosterzee: A New Human. The Startling Discovery and Strange Story of the "Hobbits" of Flores, Indonesia. New York: HarperCollins, 2007. 256 pp. ISBN 978-0-06-089908-0. Price: $ 25.95.
Henneberg, Maciej, and John Schofield: The Hobbit Trap. Money, Fame, Science, and the Discovery of a "New Species." Kent Town: Wakefield Press, 2008. 159 pp. ISBN 978-1-86254-791-9. Price: $ 24.95.

thorities that he was their man, and began digging in the Soa Basin. He then created a collaborative project, involving his Australian university (University of New England) and the Indonesian agency ARKENAS. He named himself and the senior Indonesian archaeologist Raden Pandji Soejono chief investigators of the project and drew up a legal contract of extraordinary complexity. His Indonesian colleagues would have been apprehensive from the start. After the remains of small humans, apparently dating from the last 10,000 years of the Pleistocene, were excavated from the cave Liang Bua (first excavated by Verhoeven), the project gradually unravelled. Morwood promoted these humans as a new species, while Soejono wanted to seek the counsel of Indonesia's most celebrated palaeoanthropologist, Teuko Jacob. To this, Morwood not only objected vigorously ("The idea was galling", 89), but also in response brought in "his own expert" from his university. Needless to say, the Indonesians would have been stunned about this foreigner dictating what to do with fossils found in their own site, and Soejono invited Jacob to study the remains. Soejono was then removed as joint director of the project (presumably by Morwood, although that is not clarified in the book) and trench warfare began. Jacob was accused of stealing or "trophying" the bones, and he judged those of the most complete individual to be pathological remains of a modern human, thereby sharply clashing with Morwood. Others, including the Australians Henneberg and Thorne, agreed with Jacob, and the battle lines were drawn. The rest of this farce, including the accusations on both sides (e.g., that Morwood had worked without proper authorization), is of no scientific consequence.

It is difficult to avoid attributing these developments to Morwood's personality. Besides his obsessions with being in control, with vows of secrecy and his overt personal ambition, he simply does not understand the ways of science, or its purpose. He seems to think that the role of archaeology is to create and enhance scholarly careers, and the concept of scientific falsification seems foreign to him. He appears unable to appreciate that science demands the testing of highly controversial hypotheses such as his; and that Jacob, Henneberg, and others merely did what science expects of them. His own comment that "maybe the issue is largely about conflicting ideologies and egos rather than science" (240) seems particularly apt to sum up the resulting quagmire. It is ironic that Morwood conjures up the memories of Dubois (e.g., 90) and others whose finds of hominins were also rejected, yet he still belittles them. He emphasizes the tendency of his predecessors of falling out with their colleagues (e.g., van Heekeren, Verhoeven, Hooijer, Dubois, von Koenigswald, Weidenreich), yet does not notice how his own reports here, e.g., of his own acrimonious discussions (94), his falling out with various people, and his own ego prevent him from seeing how he is repeating these follies. For instance, he describes on page after page how he became as possessive of "his Hobbit" as Dubois is said to have been of "his Pithecanthropus."

One of the factors I find most disturbing in this book, and in others of its kind, is the belittling or neglect of previous researchers, especially those regarded as amateurs by archaeological authors. This is subtly expressed in many ways here (e.g., Verhoeven and Maringer are always titled "Father," even though both had doctorates), especially by the author's emphasis that it was his role to authenticate, for instance, the stone tools of Mata Mange (17). Henri Breuil had authenticated these as Lower Palaeolithic in the 1970s, and for all his strengths, Morwood is not a Breuil. He also avoids having to concede that Sondaar and colleagues had determined the approximate age of these tools before he did – in fact, Sondaar's work, the real impetus for Morwood's, is completely sidelined in this book. This unholy ambition to rewrite research history is sufficient reason to reject the volume.

And then there are the errors of fact. The Neander valley hominin was not found in 1850 (123) but in 1856, and was not the first Neanderthal found. Dart's first name was not Arthur (129); it was Raymond (his middle name was Arthur). Lombok Strait is not 25 km wide (5), but at the most narrow point almost 40 km, and was wider again in the Early Pleistocene. Sape Strait is not 9 km wide, but today about twice that. The seas of Nusa Tenggara are not the world's deepest (11), their depth is exceeded by several other trenches. The prior work by Aziz and colleagues was not in 1994 (18), it was in 1991–92. Piltdown was not "a brilliant fraud" (109), it was clumsily made, probably intentionally so, and Dawson is not the "chief suspect" nowadays; Hinton is. And if the Soa basin had risen by "a centimetre per century" (16), it would be only 100 m above sea level after a million years.

On p. 19, Verhoeven is incorrectly credited with attributing the right age to Mata Menge (he had no way of knowing it, the first rough estimate was made by von Koenigswald in 1973), and on p. 169 he credits him with finding giant tortoise and stone artefacts with Stegodon in Timor. Verhoeven has not found tortoise there, and the stone artefacts he mentions were collected from a large number of surface scatters (all examined since; Bednarik

2000), not with Stegodon remains. The appearance of the use of bone tools, stone blades, symbols, rock art, and personal adornments cannot "be used to plot the expansion of" anatomically modern humans (68). All these features appeared long before moderns.

And then there are the blatant self-contradictions. On p. ix, we read that "Bradshaw" figures (their correct name is Gwion Gwion) are more than 20,000 years old, yet in 1997 Morwood told us they are of the mid-Holocene (Watchman et al. 1997). On p. 63, Bali and Lombok may not have existed before 2 Ma, yet then the author espouses the notion that the "Hobbit's" ancestor must have reached Flores prior to the rise of *Homo erectus* (almost 2 Ma). Similarly, he states that "proto-hobbits cannot have been a large-bodied hominid species" (119, 207), yet he fills page after page with arguments that dwarfism is very common on islands. So which is it now: was the Flores population small bodied on arrival (at a time when the islands were just emerging from the sea) or did they become small later? Having correctly shown us (64) the many sea-level fluctuations of the Pleistocene, Morwood then spoils it two pages later by declaring that "throughout the Pleistocene," land animals could have walked to several of the islands. On p. 224 he claims that the reason for doing CT scans of the Liang Bua skull was to facilitate the production of copies. But he has earlier admitted (and confirms on p. 225) that his team had intended to do x-rays and the CT scans were obtained "by mistake." More consequential, we learn on p. 80 that the flowstone layer in sector I of Liang Bua is between 60,000 and 50,000 years old, and above it only modern humans and animals occur; Stegodon began immediately below the flowstone. How does he reconcile that with the claim that the proboscidean and "Hobbit" evidence in the cave continues up to 12,000 B.P.?

Indeed, Morwood claims repeatedly that Liang Bua was occupied by small people from 95,000 to 12,000 B.P., but he has presented no evidence that such people were there before 18,000 B.P. So how can he pretend to know? Similarly, he perceives a continuous hominin occupation of Flores extending back at least 840,000 years, undaunted by the complete lack of any evidence for most of this period.

In the end Morwood himself sums up the book neatly: "But I thought, what the hell, basically everything about the find was already wrong" (145). This reviewer agrees. On the plus side, the book is exceptionally well written, but one suspects this is largely to the credit of the co-author, Penny van Oosterzee. To be fair, it also presents some quite good moments. For instance, the alternative scenario of *H. erectus* or *ergaster* arising in Asia rather than Africa is not just interesting, it is not entirely without merit – although an original idea it is not.

The second volume is also the result of collaboration between an academic, Professor Maciej Henneberg, and a science writer, John Schofield. It is largely a response to the above book and the various academic publications about the Liang Bua remains. Reading the two volumes back to back provides a fascinating study of how two individuals can perceive the same events and "egofacts"' (Consens 2006) very differently. Despite being a highly regarded academic, Henneberg assumes the role of the truth-seeking underdog, but even he provides glimpses of academic arrogance. His book, however, is largely free of the factual errors and self-contradictions the Morwood volume suffers from. Henneberg is perhaps the most outspoken of those who regard the Liang Bua population as pathological modern humans, suffering from congenital or genetic conditions probably attributable to a combination of founder effects, genetic isolation and a high inbreeding coefficient, apparently manifested as microcephalic osteodysplastic primordial dwarfism.

The stakes in this contest are high, and Henneberg accuses *Nature* and *Science* of severe bias in connection with the Hobbit affair, and rightly so. These two journals have much to answer for, and are partly responsible for the greatest credibility crisis in the history of palaeoanthropology – at least since Piltdown. This is not because they published Morwood's opinions, but because they rejected contrary viewpoints. Henneberg thus takes the greatest gamble of his career with this book. As a principal protagonist of those claiming the "Hobbit" is not a new species, he and his side will also be rendered responsible for this credibility crisis, should they lose this contest.

Henneberg's boldest claim is that one of the specimen's molars shows signs of dental work, which would place it in the early 20th century. He demands, quite rightly, that the bones be radiocarbon dated and the tooth be analyzed by independent specialists. Assuming his audacious claim turns out to be false, it would still not prove the case of his opponents. Unless they can provide some solid fresh evidence their case is likely to suffer gradual fatigue, and their still continuing reluctance to permit access to the fossil remains is eroding their credibility. Henneberg does present some supporting evidence in favor of his extreme proposition (which implies the possibility of a hoax), but no smoking gun.

His contention that the "Hobbit" suffered from pathological conditions is significantly better supported. The cranial volume is abnormal for any hominin, the type specimen's skull is distinctively asymmetric, and its "archaic" features are typical of various pathologies. It is also true that the Hobbit camp was from the beginning inadequately familiar with Asian pygmy remains of both the Pleistocene and Holocene. Henneberg is much better informed but, ironically, even he has not, it appears, heard of research that shows there are other "Hobbit" populations to be found, with much the same characteristics as the controversial Liang Bua specimen. Lee R. Berger, a South African, excavated with his team Ucheliungs and Omedokel Caves (Chelechol ra Orrak) on the Rock Islands of Palau, where at least ten burial caves are known, finding the remains of dozens of tiny human skeletons. They are about the same size as the first Flores specimen, with adult body weight estimated as low as 28 kg, and they exhibit the same traits often interpreted as primitive. These include reduction of the absolute size of the face, pronounced supraorbital tori, nonprojecting chins, relative megadontia, expansion of the occlusal surface of the premolars, rotation of teeth within the maxilla and mandible, and dental agenesis. The brain size is not as low as that of the first Flores specimen but resembles that of *H. erectus*. The Palauan pygmies are said to date from between 2,900 and 1,400 years ago, and the recent objections by Fitzpatrick et al. (2008) are self-contradictory in that they both support and reject the notion of island dwarfing in humans. Berger's team has no hesitation defining the Palauan small-bodied people as fully modern *H. sapiens sapiens*, subjected to rapid reduction in body and craniofacial size through Laron Syndrome (Hershkovitz et al. 2007). This condition yields even lower body heights in adult females than that of the "Hobbit" (which apparently was between 1.06 and 1.35 m, i.e., not quite as low as Morwood et al. claim).

The Flores controversy documented in these two volumes demonstrates that palaeoanthropology and, by implication, Pleistocene archaeology remain epistemologically unsound disciplines. Morwood's "*Homo floresiensis*" has been variously defined as a gibbon-like creature (by Gert van den Bergh), dwarf *H. erectus*, as deriving from *H. dmanisi* or *H. habilis*, as an Asian australopithecine and as a modern human with genetic defects. Any intelligent person can see that it is a primate, and if the discipline of palaeoanthropology cannot resolve such a basic issue, it has not learnt much since those remains from the Kleine Feldhofer Cave were presented. If we compare this with the incredible developments in such fields as plate tectonics, ethology, or genetics, in just the last fifty years, it becomes clear that there are fundamental structural problems here. The Flores controversy is the archaeological equivalent of still arguing whether the Sun or the Earth rotates around the other.

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Indigenous Religions

A Review Essay

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