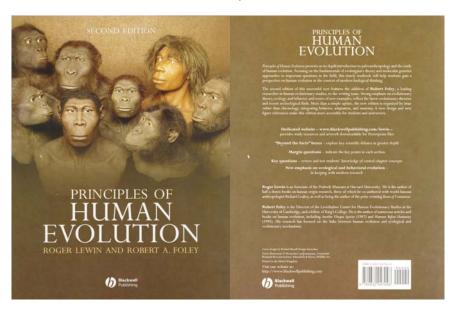
Lewin, R. & R.A. Foley. 2005. Principles of human evolution. - Oxford, Blackwell Publishing

Book review by P. Storm



What does one expect from a volume about the 'Principles of human evolution'? The answer seems obvious: the principles, like basic ideas about evolution, genetics, geology (fossils, dating) and archaeology. Of course it must also become clear what a human being is in relation to its relatives the primates. One expects that the book will deal with important human evolutionary aspects like bipedalism, encephalization and changes of the teeth. The above-mentioned topics, like well-known species, sites and people with their ideas, are included in this voluminous work. The book is ideally built for students. It is clearly and well-written, and contains many nice figures and photographs. These can be found at the website <a href="www.blackwellpublishing.com/lewin">www.blackwellpublishing.com/lewin</a>, and are downloadable to PowerPoint files. So far so good, but what do I miss? Writing about the principles, personally I would have liked to read something about the methods used by palaeoanthropologists to study their subject. The study of metrical and non-metrical characters of bones: the basis for judging fossils.

Although this book offers nuances and discussions, the way the authors deal with the story of Dubois is somewhat of a big surprise too. At page 333 Roger Lewin and Robert Foley remark "Within four years, Dubois had achieved his goal, although he did not immediately recognize his success." What is the basis for this remark? When Dubois reported his find of the skullcap (he had not found the femur yet!) in his fourth quarterly report of 1891 (the skullcap was found in October 1891) he gives a relatively seen extensive discussion of his find, and remarked: "As far as the species is considered, the skull can be distinguished from the living chimpanzees: first because it is larger, second because of its higher vault...." Dubois continues to discuss his find with other fossils like Neanderthals (Spy), *Anthropopithecus sivalensis*, *Dryopithecus*, *Oreopithecus*, and *Pliopithecus*. From this, one can deduce that Dubois knew he had something. In August 1892 the femur is found. In his third quarterly report of 1892, Dubois gives again a relatively seen extensive discussion of his finds and ends with the conclusion: "And so the actual evidence has been delivered, what by some had already been suspected, that Indonesia has been the cradle of the human genus."

At page 334 Roger Lewin and Robert Foley remark about Dubois "The Trinil fossils eventually became accepted as those of a human ancestor, even though Dubois's doubts about his find persisted (he believed the creature to be a giant gibbon, on the basis of calculations of brain size, a subject that fascinated him)." Possibly, the most notorious 'Dubois story' is that of the giant gibbon, also adopted by these two authors. The origin of the story lays in 1930's when Dubois's (1935) paper was published: "On the gibbon-like appearance of *Pithecanthropus erectus*." In the title Dubois does not say that *Pithecanthropus* is a gibbon, neither does he in the contents of his article. Dubois (1935: 580) remarked, in the context of cephalisation, about the position of *Pithecanthropus*: "The only real void space in the series is between Man and the anthropomorphous Apes (incl. Gibbons). This void space marks the place of *Pithecanthropus* according to the following computation." In other words, Dubois considered *Pithecanthropus* still as a link between apes (gibbons) and humans.

I am not pleased by the way Roger Lewin and Robert Foley deal with Dubois. It leaves me with a feeling of quickly writing down mainstream thinking, without checking facts or dealing with nuances, and this is not what I expect from these two respected authors. It makes me wonder, is Dubois just one accident or are there

more? This incident does not remove the fact that this book offers a lot of interesting useful views and discussions that are certainly worthwhile reading.

Lewin, R. & R.A. Foley. 2005. Principles of human evolution. - Londen, Blackwell Publishing. 555 pp. ISBN-0632-04704-6. Price £33.99/\$98.95 (paperback).

## **Cited literature**

**Dubois, E. 1935.** On the gibbon-like appearance of *Pithecanthropus erectus*. - Proceedings Vol. XXXVIII, N°. 6, Koninklijke Akademie van Wetenschappen te Amsterdam: 578-585.