## Palaeoanthropology: What Is the Present Scientific Status?

Within the last decade several major discoveries challenge basic hypotheses concerning the origin of humans with respect to both the evolutionist and creationist interpretations. Ardipithecus challenges long held assumptions on the origin and anatomy of the last common ancestor of chimps and humans. Several extraordinary complete partial skeletons of australopithecines not only offer the opportunity to understand the anatomy of these species in a much more complete manner but also reveal combinations of body parts which point in different phylogenetic directions. This startles both evolutionist and creationist proponents.

During the last century numerous hypotheses on human phylogeny often were hampered by the scarcity of fossil material and poorly known morphology. However, the steadily increasing knowledge on hominin fossils does not automatically result in more conclusive hypotheses due to diverging morphologies within the fossil species.

Especially confusing is the Hobbit (Homo floresiensis) with a mixture of human- and early hominin (australopithecine?)-like features. Initially diagnosed by some scholars as a dwarfed pathological human, this "fitting" hypothesis does no longer hold and therefore challenges both the evolutionist and creationist position. As Aiello wrote in 2010, this species revolutionizes several assumptions about early and later human evolution.

Genetic discoveries point into a similar direction: the development of the genus Homo indicates that the interconnections between fossil species were much stronger than previously suggested. The morphologies of Dmanisi may even be interpreted as crossing the borderline between *Homo* and *Australopithecus*.

The famous Clark-Howell-Dictum still holds for the beginning of the 21st century: "The more you know the harder it is."

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#### Changing times: "Lucy"'s kin meets basic types

#### I. Looking back: we are almost there!...?

- 1. <u>The golden 80's</u>: everything is getting better!
  - A. Bipedal "Lucy"

- B. Brainy "Habilis"
- C. Basic Type biology

### II. Facing facts: increasing problems

- 1. Ancestors make trees and vice versa
  - A. Knuckle-walking LCA (last common ancestor)? Ardi spoils the show!
  - B. Associate skeletons dissociate phylogenies: no ancestor no tree
- 2. Enigmatic humans we are all one!?
  - A. The Hobbit a mind-boggling mix
  - B. The Dmanissis is this too much?

# III In need of new concepts

Reticulating ancestors, leaking types and mixed ideas?