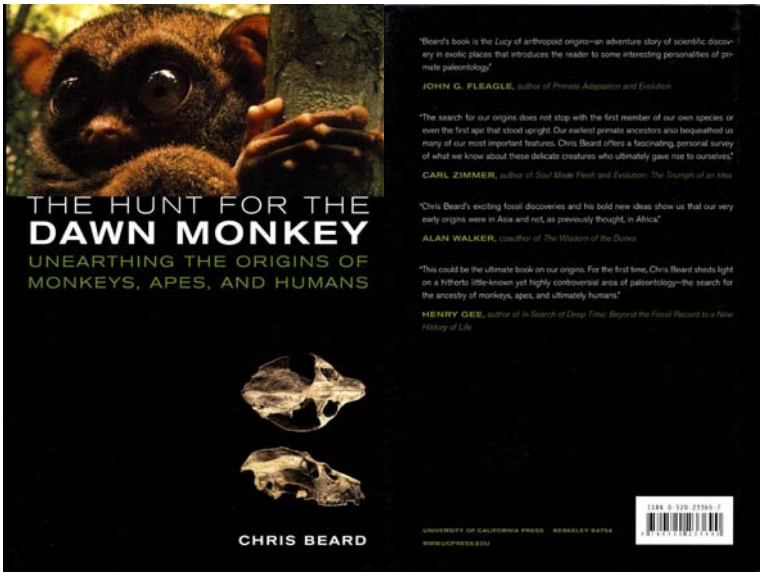
Beard, C. 2004. The hunt for the dawn monkey. Unearthing the origins of monkeys, apes, and humans. – Berkely/Los Angeles/London, University of California Press

Book review by P. Storm



The title of Chris Beard's book 'The hunt for the dawn monkey' sounds like an exciting Indiana Jones story, and luckily it reads like that. 'Dawn monkey' is a nicely written book that starts with Beard's excavations in China, where he found his dawn monkey, *Eosimias*. According to Beard (p. 10–11) *Eosimias* "occupies a critical position on the evolutionary tree of primates – one intermediate between living prosimians and anthropoids". Not an unimportant detail. When Beard is right, this implies that the established opinion that the anthropoid origin lies in Africa, is wrong. Our very early ancestors came from Asia, not Africa.
The subtitle 'Unearthing the origins of monkeys, apes, and humans' is somewhat misleading because the book is essentially about unearthing the origins of monkeys, much less about that of apes and humans. Likely, the origin of humans sells better that the origin of monkeys. Nevertheless, it is a pity, because in this way the subtitle hides partly a strong aspect of this book. Works written about the origin of monkeys are a minority compared with the ones written about human origins. Therefore this book is a welcome replenishment in the palaeontological library.

The book is full of interesting things and ideas. It is clearly written and illustrated with 47 figures and 14 colourful plates. The book is a nice mix of historical palaeontological aspects, Beard's chase in the field and examination of primate fossils, and his battle with settled ideas. The big question is of course, whether Beard is able to convince us that his dawn monkey takes indeed a critical position between prosimians and anthropoids.

Mainstream thinking about anthropoid origins in short is that they must have evolved about 34 million years ago, close to the Eocene–Oligocene boundary, in Africa. Anthropoids differ from their primate cousins by having morphological characteristic like eye sockets completely closed by bone. *Catopithecus* and *Aegyptopithecus*, both discovered by Elwyn Simons, and found in the Fayum region of Egypt, possess this feature. But according to Beard fossils like *Eosimias* point to another scenario. The origin of the anthropoids has to be sought in Asia and is much older, about 55 million years ago, close to another boundary, that of the paleocene–eocene. "In stark contrast to the Fayum anthropoids, *Eosimias* is a primitive anthropoid" (p. 21). This ancient primate possesses a combination of primitive and derived features. For instance: the two halves of the mandible are not fused, which is prosimian–like, but its deep lower jaw is anthropoid–like. It will not come as a surprise that Simons does not agree with Beard's Asian origin. But an interesting aspect of Beard's further reasoning for an Asian origin of anthropoids, is his broad perspective. He not only provides morphological arguments but he also places the migration of primates into Africa in a biogeographic context. The earliest members of many well–known mammalian groups in Africa, like artiodactyls, perrisodactyls, carnivores, rodents and lagomorphs, evolved in Laurasia. Thus, just like other mammals immigrating to Africa, anthropoids possibly joined the African melting pot.

Beard's book about the dawn monkey really gives a refreshing and interesting look at the evolution of prosimians and anthropoids. No longer are the conventional ideas stabilised. This work makes a difference. I can only come to one conclusion: Beard's book is a must for everyone interested in the evolution of primates.

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