Buchbesprechungen

 Hull D. L. Science as a process. An evolutionary account of the social and conceptual development of science. — The University of Chicago Press, Chicago, USA, 1988. 586 S., ISBN 0-226-36050-4.

In this book, the author tries to demonstrate that scientific ideas change by Darwinian selection. To support his hypothesis, Hull has studied as a "type case" the evolution of different taxonomic schools, reporting in detail the imbroglios between cladists, pheneticists and evolutionnary taxonomists, and analyzing the contents of "Systematic Zoology". This constitute the first part of the book and the detailed account of all these individuals behaviours will probably make it the most interesting part for many taxonomists (the battles between the factions resemble a soap opera! those who behave the "worst" seem to be the most successful). In the second part, Hull discusses in detail (and in a style not always easy to follow) selection of scientific thought and selection of species or individuals. Although it is quite marginal to the logic of the book, I am not convinced that the behaviours that Hull describes as a normal scientific behaviours are universal; on the contrary I think that many are mainly Western (or more restrictively) North American behaviour. For example, Hull states that contrary to other self-policing professions (e. g. politicans, judges, etc.) misconduct is rare among scientists and that "long after they have received tenure, long after they have gained a position in the scientific hierarchy sufficiently secure so that they could coast into retirement, they keep working" (p. 302); the last statement is not a generality in many European institutions while both are regretably often wrong in many other countries, showing the importance of tradition, "culture" (or political systems) on individual behaviours and scientific research. M. Kottelat

15. Eccles, D. H. & Ethelwynn Trewavas. Malawian cichlid fishes – The classification of some haplochromine genera. – Lake Fish Movies, Herten, Germany 1989, 355 S., no ISBN number.

Eccles & Trewavas present a review of 36 genera and some 200 species of haplochromine cichlids from Lake Malawi. 22 genera and 3 species are described as new. This work consists mainly in full describtions, illustrations and lectotype designations (which for various reasons could not have been published earlier) of species originally described in 1935 in Trewavas' "Synopsis of the cichlid fishes of Lake Nyasa". The descriptions are supplemented with colour notes and information on distribution. Keys are given for all genera. Names for species described in an unpublished thesis by M. K. Oliver are also made nomenclaturally available.

The book is abundantly illustrated by 196 black and white photographs. The editing for publication and the setting could have been made more carefully. Several references cited in text are missing from the "References" section. M. Kottelat

 Groves, C. P. A theory of human and primate evolution. – Clarendon Press, Oxford, U. K., 1989, 375 S. ISBN 0-19-857629.

Primates, and especially hominines, are one of the best studied animal lineage. Very few groups have seen their taxonomy investigated with so much details, with a few hundreds of researchers working on the evolution and potential ancestors of almost a single species. Surprisingly, very few have tried to look at their systematics in the light of modern taxonomic thinking. Groves' book is doing it and the results are therfore interesting for two reasons. First it provides a new view at primate systematics and especially of fossils Hominidae. Secondly, it is interesting to see how classification theories behave when tasted with a group for which fossil taxa are not mere working hypothesis or an isolated specimen somewhere, sometime. On the contrary, in hominids, we have an almost continuous sequence, both in time and in space. A discussion of systematics and evolution of humans could, of course, not avoid the problem to know if the modern man consist of a single or of several taxonomic lineages. Groves reviews the answers but has apparently nothing to add (p. 292), but he discusses the separate problem of the origin of "racial" features (are the races of Homo sapiens independently descended from those of H. erectus? or did H. erectus evolve into H. sapiens on an broad front, such that regional characteristics were likely to have survived? or had Homo sapiens an unique origin, spread out and differentiated into geographic variants, with or without interbreeding with its precursor?). Groves argues that most of the characters used to support a polygenic origin of *H. sapiens* actually are plesiomorphic for Homo (like Mongoloid incisor shovelling or Caucasoid hairiness) and therefore says nothing about phylogeny, Groves sees the ancestor of modern H. sapiens in some of the neglected contemporaries of M. erectus (p. 296). He then goes on pointing (and this is where the Homo case is of potential interest to all systematists) that it would be an unwarranted logical jump to assume reproductive isolation from the demonstration of cladistic validity. M. Kottelat

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