



PALAEOANTHROPOLOGY – A MULTI- AND INTERDISCIPLINARY APPROACH

Palaeoanthropological research aims to explain the process of hominization as the product of straightforward adaptation within the evolution of Primates. It intends to shape and increase our perspective of who we are and where we came from. Numerous new fossils, the integration of all relevant disciplines and innovative theoretical concepts have grown up to a complex interdisciplinary approach to explain our origins. Despite an enormous conceptional progress in palaeoanthropology during the last decades, there are still many controversies within this science and a steady discussion is needed to bring up reliable models.

One of the foremost problems is, whether we can really identify species, living or extinct. Jeffrey SCHWARTZ's contribution tries to answer this essential taxonomical question. The colleagues working in the Hominid Corridor Research Project in Malawi (Ottmar KULLMER *et al.*) exemplarily demonstrate the necessity to expand the application of biological and, especially, ecological concepts to the study of early hominids.

Marcel OTTE's paper focuses on the description of trends and taxons in hominine evolution, while Martin FRIEß' contribution investigates the allometric relationships in later Pleistocene fossil humans by "geometric morphometrics"

Udo KRENZER's paper reports on a multivariate comparative analysis of fossil human mandibles based on digitized data. Kurt ALT *et al.* demonstrate that computer-tomographical studies and dental morphing programmes allow new approaches in anthropology, while the analysis of Lilian ULHAAS *et al.* focuses on the variation in enamel thickness in non-human Primates and its relevance for ecological adaptations in food processing.

The final short contribution on a special problem in Phylogenetic Systematics by Bernhard WIESEMÜLLER *et al.* intends to illustrate once more that primatological assumptions on living species underly much of the work in palaeoanthropology.

The present papers contribute only to a limited number of the subjects illustrated in *Figure 1*, but we hope very much that they clearly explain the integrative theory guided approach within palaeoanthropology.

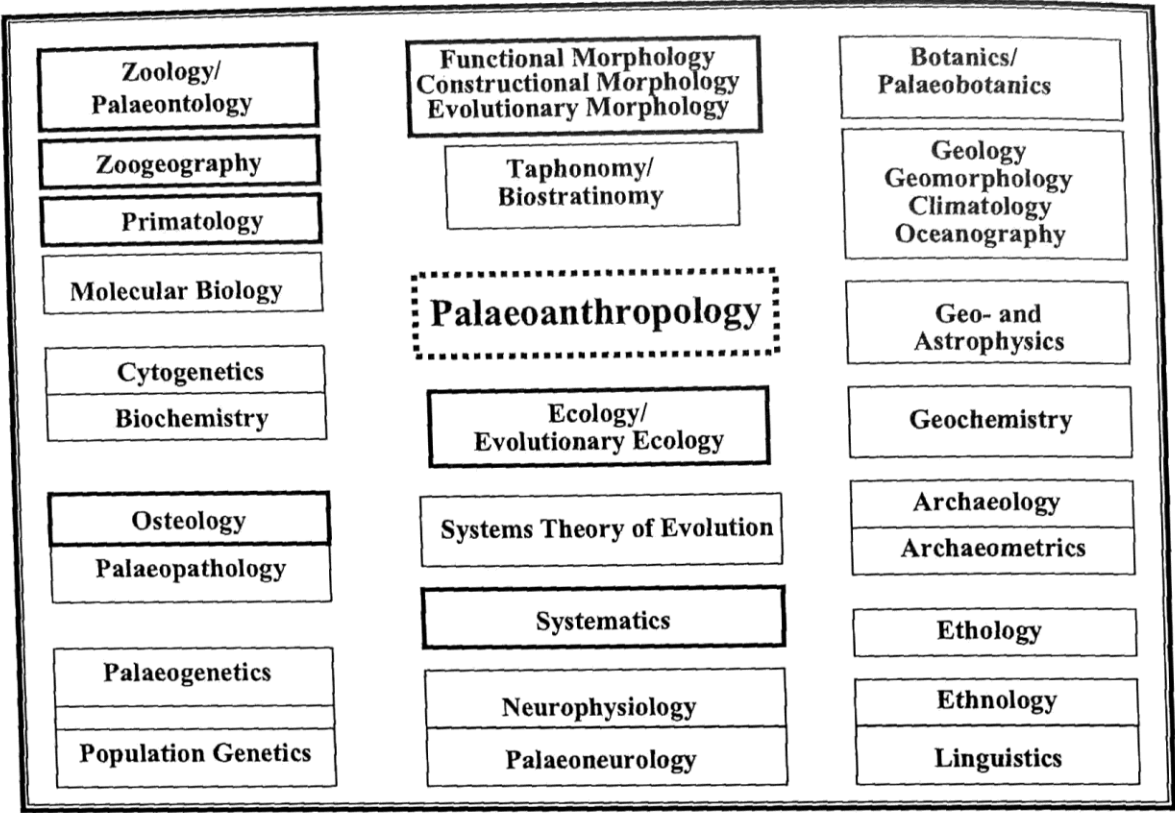


FIGURE 1. Disciplines which contribute to the reconstruction of the process of human evolution.

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