

"Modifications of the fossil human bones: current status of facts and interpretations"

INTRODUCTION

Modifications of fossil human bones have been intensively studied in recent years. There has been a lively discussion on it. New methods have been applied. Interpretations have been given, but very often with opposite and controversial results. Two main tendencies have become clearly apparent:

- to reject human activity in the origin of bone modifications on fossil human remains and to explain them as being caused by natural process and/or animal activity;
- to interpret bone modifications on human fossils mainly as being produced by Palaeolithic man with tools or other objects.

The question can be posed either *non-human* or *human* bone modifications, but we have to consider that non-human bone modifications may be caused by natural process as well as by animal activities or plants roots. In bone accumulations at Palaeolithic sites both kinds of bone modifications may occur on human and on animal remains. It has been well known that sometimes it is very difficult, even impossible to decide, if bones have been humanly modified or not. That is not only a question of experience, but also of the methods applied. In every case it is necessary to prove by authenticated comparative samples the real origins of bone modifications before giving far-reaching interpretations.

The identification of the presence of human activity on animal and human bones is of central importance for the study of human behaviour during Palaeolithic times. In general there is no doubt and palaeontologists and archaeologists agree that cutmarks and other butchering marks on animal bones - the oldest known cutmarks were done by *Homo habilis* about two million years ago - are indications of human activity in butchering, carcass-processing and animal hunting necessary for life and survival in the Palaeolithic. Cutmarks on fossil human bones - contrary to those on animal bones - have very often been doubted as being caused by human activity and explained as being produced by natural processes and/or animal actions. Striations on fossil human remains, if recognizable as the result of human activity and therefore as cutmarks, have to be interpreted as evidence of interferences on human corpses - interferences that were not linked to activities necessary for life and survival of Palaeolithic man, that did not correspond with our modern ethical and aesthetical conception of the human being and therefore can be explained neither sensibly nor economically. Cutmarks have very often been directly connected with cannibalism - a topic that most students have shied away from because of its controversial, but also sensational nature and because many past claims for cannibalism have not been adequately documented.

Bone modifications, mainly on animal remains, were first discussed at a conference on "Carnivores, human scavengers and predators: a question of bone technology" held by The Archaeological Association of the University of Calgary in 1982. The "First international conference on bone modifications" was organized by the Center for the Study of Early Man (Orono) in Carson City 1984. This conference for the most part focused on bone modifications in animal remains, experiments and technologies.

The symposium "Modifications of fossil human bones; current status of facts and interpretations" was organized by H. Ullrich, Berlin, and T. D. White, Berkeley, and held during the 12th International Congress of Anthropological and Ethnological Sciences 1988 in Zagreb (Croatia). Most of the papers presented at the symposium are included in the proceedings in a revised form, other papers have been added. I would like to thank the authors who have contributed to the symposium in Zagreb and to these proceedings.

In closing I would like to express my thanks to Dr. Jan Jelinek, editor of the journal "Anthropologie" (Brno) for making an issue available for publication of the symposium proceedings.

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