

subjected to research has its own log-book, in which all qualitative changes in his locomotion and behaviour are recorded, as demonstrated during 15 minute observation. The monkey population has been divided into four ontogenetic developmental phases — according to their sex and age, (basic phase — up to the age to six months, adaptation phase — six months to one year, specialization phase — one year of age to puberty, stabilization phase — adulthood). Photographic and cine documentation of the individual monkeys has also been realized. The results of the research project will be processed with the help of GUHA programmes (Mathematical Centre of Biological Institutes, Czechoslovak Academy of Sciences, Prague) and through BMDP programmes (University of California, Los Angeles) in the computer centres of the Czechoslovak Academy of Sciences.

The preliminary results of the projects show unequivocally that the ontogenetic development of locomotion and of the behaviour take place in all four phases (basic, adaptation, specialization and stabilization phase), for the first time qualitatively established when studying the locomotion and behaviour of chimpanzees (Vančata 1981 Ph.D thesis. ČSAV Praha, 1982 *Anthropos* 21: 41–46). Monkeys show certain characteristic patterns of locomotion and behaviour adaptations, typical of the individual species at the same time relatively strongly correlated with the given environment. In those monkey species which can be compared ecologically obviously occur certain characteristic changes in the composition of locomotion adaptations and in the structure of behaviour in connection with certain type of environment. It also appears a higher share of play behaviour reduces the share of agonistic reactions inside the social structure of the group due to the limited size of the territory, more exactly due to the limited freedom of migration. The share of manipulation, and probably also the share of primitive tool behaviour can substantially increase, especially in adult individuals. The comparison of the behaviour of various monkey species kept under various conditions shows that they are highly adaptive and thus their characteristic locomotion and behaviour patterns can vary a great deal. Nevertheless, to ensure good adaptability of primates in capture, directly reflected also by the results of the study of primates kept in these secluded areas, it is imperative to preserve some characteristic features of the environment, namely those inevitable for the normal development of locomotion and play behaviour of the young. From the viewpoint of studying the acclimatization of the primates it appears to be useful to follow the general characteristics of their behaviour under certain conditions, both within the framework of a single species and also on interspecies level. The comparison of the locomotion and its ontogenetic development in several species of monkeys under certain conditions enables us to understand the functioning of locomotion development mechanisms in hominids. It is also of great importance for the study of conditions and possibilities of the origin and development of bipedal gait in hominids, especially in the early phases of this process.

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TWO IMPORTANT PALAEOANTHROPOLOGICAL DISCOVERIES IN EAST AFRICA

Participants of the First Congress of Human Palaeontology held in Nice between October 16–21, 1982 were acquainted with two most important new finds of east-African fossil hominids.

In the region of central Awash in Ethiopia an international expedition headed by Professor D. Clark found in layers older than 4 000 000 years a proximal fragment of the body of a robust femur and well-preserved frontal part of a skull. The hitherto finds attributed to *Australopithecus afarensis* from Afar in Ethiopia and from Laetoli in Tanzania were dated at roughly 3,2 and 3,6 mil. years. Earlier finds or layers presumed to contain earlier finds are so far very rare, although it is the very period where we can ex-

pect the separation of the first hominids from the pongid branch of the primates. Finds from this period can also confirm or correct the views of molecular anthropologists, according to which (in contrast to the original palaeontological views) this evolutionary division occurred between 4–8 mil. years. Although discovered part of the femur represents less than 1/3 of the total length of this bone, its morphology, the shape of its cross section, the gluteal groove, the shape and position of the trochanter, trochanter tertius, etc. clearly indicate that it belonged to an erect stature of hominid type, with bipedal locomotion. In this connection the braincase of the skull was very short, as we can see it in chimpanzees, suggesting that its brain capacity was low. Only the direct horizontal course of the supraorbital ridge in vertical view differs from the broken shape of this feature in the chimpanzee. Realizing the evident pongid characters, e.g. on the upper jaw of *A. afarensis* AL. 200 it is quite obvious that in these early stages of hominid development bipedality appears very soon, obviously as one of the first hominid characters, long before the development of the brain which followed much later and only gradually. The middle Awash find was not accompanied by stone industry, the same as the later *A. afarensis* finds. The rare find from middle Awash is at present studied by Professor T. White from the University of California in Berkeley.

Other important find was presented by Professor van Noten, known among other things as the author of publications on the Saharan rock art. Professor van Noten from the Tervuren Museum in Belgium demonstrated to specialists gathered at the congress a find of a lower jaw coming from the Baringo in Tanzania. The body of the jaw is low but robust (more robust than the one found earlier in the same site); it shows sexual dimorphism or intraspecific variability. It has a strong planum alveolare with a deep mandibular fossa. In general the jaw body and the alveolar arch are almost V-shaped. Due to the missing canines the adjoining teeth were shifted into the free space. I.e. the gap which can be seen does not represent a diastema. The incisors show an interesting horizontal and labial attrition, evidently caused by some sort of repeated mechanical activity. The molars are of elongated Homo type. It is highly probable that the find belonged to an representative of *Homo erectus*.

J. Jelínek

THE FIRST CONGRESS OF HUMAN PALAEOANTHROPOLOGY IN NICE

The First Congress of Human Palaeontology, organized by Professor Henry de Lumley and Marie Antoinette de Lumley, and presided by Professor Jean Piveteau, was held in Nice, France between October 16–21, 1982.

The event took place in the new Exhibition Hall and was accompanied by a large exhibition called "The Origin and Evolution of Man". A special symposium on Tautavel Man and its position amongst the Hominids formed part of the congress. The congress covered all stages and periods of human evolution, namely:

- Non-human primates
 - Australopithecus* and *Homo habilis*
 - Homo erectus*, *Pithecanthropus*, *Sinanthropus*, *Anthropus*, *Anteanderthals*
 - Homo sapiens neanderthalensis*, *Neanderthals* and *Neanderthaloids*
 - Homo sapiens* of the Upper Palaeolithic and Mesolithic periods
 - Homo sapiens sapiens* in the Neolithic and metal ages
 - Subfossil and recent populations
- The rich programme was accompanied every evening by interesting public lectures.

The congress was attended by more than 800 specialists from 40 countries and more than 140 papers covering the whole field of human palaeontology were delivered. Some new discoveries and new ideas were also presented: In central Awash, Ethiopia, an international expedition headed by Professor D. Clark discovered a new femoral fragment and pieces of a cranial vault of a hominid slightly

earlier than 4,000,000 years. The early appearance of bipedal locomotion and its crucial role in hominid evolution were recognized. Local geographical evolutionary continuity between *Homo erectus* and *Homo sapiens* was reported and proved in several large geographical regions (e.g. in continental east Asia, north-west Africa, Europe). Several specialists held that the differences between *Homo erectus* and *Homo sapiens* are of the sub-species level only and thus the two groups do not belong to different species. On the other side a shift of the *Homo erectus* species in the early periods (in Europe) was also proposed. The classification of Tautavel Man as the European *Homo erectus* or *Homo sapiens erectus* was accepted by most scholars. At the same time these early European populations were recognized as the forefathers of the later classical west-European Neanderthals.

During the congress one afternoon was dedicated to the visit of the Grotte du Lazaret and of the Terra Amata site museum. On the last day of the congress during the closing session the foundation of a new Association of Human Palaeontology was announced; the association was founded by Henri and M. Antoinette de Lumley, Philip Tobias, D. Clark, C. Howell, J. Jelínek, L. Gabounia, Wu-Rukang, Y. Coppens and M. Day.

In conclusion we can say that the congress fully reflected the increasing activity of human palaeontologists in the recent decade, the introduction of new methods, new concepts, models and theories and also a number of new discoveries. The congress attracted scholars from all over the world. Unfortunately there was no time left for discussions during the scheduled programmes. Discussions were limited to the lobby, to lunch breaks and they continued in the evenings. With its rich programme and many side events the congress was a lively meeting covering palaeoanthropology and the adjacent scientific fields. The organizers of the event deserve our sincere congratulations for their tremendous efforts and for their superb achievements.

In the future, however, reasonable time should be reserved for discussions and it would be advisable to hold the congress in several parallel sections. This is the only way of securing a reasonable time for the presentation of scientific papers. The organizers intend to publish the results of the symposium on Tautavel Man in the form of a book.

Without doubt the First Congress of Human Palaeontology will be a milestone in the history of the science dealing with the origin and evolution of man.

J. Jelínek

3RD CONGRESS OF THE EUROPEAN ANTHROPOLOGICAL ASSOCIATION

The 3rd Congress of the European Anthropological Association took place between September 26 – October 1, 1982 in Chalkidiki, Greece. The congress was held in two places: in Berakina Beach Hotel and in the new building of the Petralona Museum, near Petralona Cave. Professor A. J. Poulianos acted as President of the Congress and more than 200 participants delivered scientific papers from various fields of anthropology. One of the highlights of the Congress was a visit to the Petralona Cave and its study, including its situation in general, the stratigraphy of the sediments as well as the rich remains found in them. The finds were displayed at a special exhibition in the new museum building. The rich collections of Palaeontological faunal and floral remains, stone tools, etc. documented the Middle Pleistocene age of the sediments.

The skull of Petralona man was available to the scholars at the Palaeontological Institute of the Thessaloniki University by courtesy of Professor Melentis. It was only natural that several contributions of the Congress focused on various questions concerning this important find, its locality and dating.

The 110 communications were concentrated in three sections: 1. Pre-sapiens stage of human evolution, 2. Biology of migrating populations, 3. Adaptive mechanisms in contemporary man.

The members of the European Anthropological Association met in the plenary session of their organization. The President of the EAA stressed in his address the need of a practical and simple organization structure, of a healthy financial policy and also the need to extend membership, in order to further the realization of a sound scientific programme. He presented the draft programme of the EAA for the coming two-years period and also mentioned the principles of the long-term programme. It has been decided that extra-European colleagues interested in European anthropology will be accepted as individual members, without having their national representative in the Council of the EAA. Professor de Stefano invited the 4th Congress to be held in 1984 to Florence, Italy.

The participants of the congress appreciated the good organization, and working character of the sessions and the friendly atmosphere of the meetings.

J. Jelínek

XI KONGRESS DER INTERNATIONALEN UNION FÜR QUARTÄRSTUDIEN INQUA, MOSKAU, 1.–9. AUGUST 1982

Zum zweiten Male fand der internationale INQUA-Kongress in Moskau statt; erstmals war es der III Kongress im Jahre 1932. Die Tagung verlief in den Gebäuden der Moskauer Universität, registriert waren etwa 1400 Teilnehmer, davon etwa 600 Ausländer aus 52 Ländern. An 24 Sektionen und 6 Symposien wurden etwa 800 Referate vorgetragen, in drei Bänden sind jedoch mehr als 1000 Kurzfassungen gedruckt.

Der Forschungsbereich der INQUA umfaßt alle Aspekte der Geologie, Geomorphologie und Paläontologie des Quartärs, darunter auch die Entwicklung des Menschen und seiner Kultur. Diesen Fragen wurden zwei Sektionen (Archaeology and Environment of the Stone Age, Problems of the Anthropogenesis and Palaeoanthropology) und ein Symposium (Environment and Hunting in the Stone Age) gewidmet, an denen etwa 130 Vorträge vorgebracht wurden. Im Rahmen des Kongresses tagte auch die INQUA-Subkommission "Ecology of Early Man", deren Präsident für die folgende Periode Prof. Dr. H. Müller-Beck, Tübingen, gewählt wurde.

Als besonders interessant seien von den paläoanthropologischen Vorträgen jene von I. McDougal über neue radiometrische Daten von Koobi Fora, von J. W. K. Harris vorgetragene Kollektivvorträge über paläolithische Funde von Koobi Fora und Chesowanja sowie ebenfalls ein von F. Semah vorgetragener Kollektivbericht über paläomagnetische Studien im Plio-Pleistozän von Java erwähnt. Eine überregionale Bedeutung hatten die archäologischen Vorträge über neue Fundstellen sowohl in Tadschikistan (von A. V. Ranov), wo es einen 100 m hohen Lößaufschuß (Kul Dar) mit vielen Fossilböden gibt, dessen Basis paläomagnetisch auf 2 Mil. Jahre datiert sein soll und in dem seit etwa 700 000 Jahren jeweils in Böden Artefakte auftreten, als auch in der Transkarpathischen Ukraine (von V. N. Gladilin), wo ein Lößaufschuß mit 6 Bodenkomplexen und 8 paläolithischen Horizonten (bei Korolevo unweit von Uzgorod) entdeckt wurde, an dessen Basis die paläomagnetische Inversion Matuyama/Brunhes festgestellt werden konnte.

An viele Vorträge knüpfte eine rege Diskussion an, die in Privatgesprächen meist noch fortgesetzt wurde. Dieser Moskauer INQUA-Kongress wird gewiß zu den erfolgreichen großen internationalen Treffen der um das Quartär interessierter Forscher gezählt werden.

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