The First Pan-African Congress on Prehistory

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THE FIRST PAN-AFRICAN CONGRESS ON Prehistory was formally opened in the Town Hall of Nairobi on January 14, 1947, by the Governor of Kenya, Sir Philip Mitchell.

Speaking in French, Prof. L'Abbé Breuil replied in part as follows:

> It is barely a century ago that English and French scientists including inspired men like John Frere and Boucher de Perthes, soon to be helped by those grandfathers of geology, Lyell and Prestwich, and by biologists like Darwin and Huxley, discovered that humanity went back to times far more remote than those of man's ancient history. Both in this organic development and in this material civilization, the species to which we belong has taken innumerable aeons to reach the present Parnassus of spirit, leaving behind forms today extinct, while passing through a series of glacial and interglacial ages. The importance of this discovery in the story of man's history equals the discoveries of Copernicus and Galileo in the field of astronomy. Our old nations are now becoming grandfathers, and we, the workers of yesterday, must realize that from the Nile to Cape Town and in Kenya which is like the very heart of this continent our work is developing beyond all hopes.

Following addresses by several other delegates the Abbé Breuil was unanimously elected president and Robert Broom, vice-president, of the Congress.

All of the scientific papers and discussions of the Congress were encompassed in three sections: Prehistoric Archeology, L. S. B. Leakey (chairman); Human Paleontology, Raymond Dart (chairman); and Geology, General Paleontology, and Climatology, Alex du Toit (chairman).

The Congress was conceived, organized, and directed in all of its aspects by L. S. B. Leakey, curator of the Coryendon Museum, whose untiring efforts were largely responsible for its great success.

An interesting feature of the Congress was that, of the 55 official delegates representing 26 different countries, 25 were not prehistorians: 5 were paleontologists; 5, anatomists; and 15, geologists. Those in attendance agreed on the importance of this collaboration from a group of specialists in different fields of science who could bring their specialized knowledge and mutual interest to bear on the problems of research in prehistory.

Although the main theme was prehistory, the organizing secretary wisely broadened the scope of the discussions to include such relevant subjects as climatic changes, pluvials, and glacials in relation to prehistory; Quaternary geology in relation to prehistory; and those aspects of paleontology which intimately concern prehistory, such as the use of fossils for dating deposits and the question of African ape remains and their relation to the problem of the origin of man.

As a member of the Subcommittee on Human Paleontology my interest was focused mainly on the fossil, australopithecine man apes from South Africa, and the lower Miocene primates from Kenya. Following Prof. Dart's epoch-making discovery of the Taungs child in 1924, it remained for the genius of Robert Broom to unfold new types of *Australopithecus*.

At the close of the Congress Dr. Broom took me to the Kromdraai and Sterkfontein deposits. These have one important feature in common: all the fossils recovered from them, including the types of *Plesianthropus* and *Paranthropus*, were in travertine breccia in old limestone caves which have so far revealed no traces of fire and artifacts. A possible exception to this may be the Cave of the Hearths in Makapan Valley, where C. van Reit Lowe has discovered hand axes in a bone breccia with an associated fauna similar to Sterkfontein and Kromdraai. Further work is required in this region to ascertain whether or not australopithecines are present.

At the Congress Le Gros Clark presented a summary of the important intermediate characters of these man apes which was strongly reminiscent of the prior conclusions of W. K. Gregory and Milo Helman, who studied these forms during their South African visit in 1938. If Dr. Broom is correct in placing the australopithecine forms in the early Pleistocene or even the late Pliocene, this might exclude them from the direct ancestral stock of the Hominidae. This does not remove them from a position of prime importance, however, for they are regarded by many as slightly modified survivals of the ancestral stock from which man arose.

Recent discoveries of lower Miocene primates by L. S. B. Leakey and D. G. MacInnes at Rusinga Island in Lake Victoria are of great interest. The new find of an almost complete jaw of *Proconsul* shows characteristics which point to a close relationship with the dryopithecine apes of Europe and India.

Although *Proconsul* may not be on the human line, it has a number of characteristics which suggest man as well as the simian forms. Thus, *Proconsul*, with the recent associated discoveries of the jaws and teeth of *Limnopithecus*, which may be an early member of the gibbon group, and *Xenopithecus*, which probably belongs to the same stem as the orangutan, helps to bridge the great gap between the Fayum of Egypt, where we find

Propliopithecus and *Parapithecus* in the Oligocene, to the dryopithecine apes of the upper and lower Pliocene and Miocene of Europe and India.

The first formal resolution of the Congress was that the continuity of the work should be insured by holding such a congress every four years. This brought about an immediate invitation from Field Marshal Smuts to hold the next meeting in the Union in 1951.

Confusion which has arisen in attempting to date events in Africa has been due largely to the fact that European Pleistocene stages have been applied to Africa. These are not suitable because of the great difference in conditions in Africa and Europe. Thus, a resolution was passed that European terms for that portion of the geological record which covers the period of man's development in Africa should be dropped and that a purely African nomenclature based on the stratigraphic sequences in Africa, should be employed.

A permanent consultative committee was established at the close of the Congress to advise on the use and application of terms to describe the different ages and stone cultures in Africa. This committee has five members, South Africa, East Africa, West and Central Africa, Northeast Africa, and Northwest Africa and the Sahara, each being represented by one member. African terminology has always been difficult for foreign students, and the creation of this new committee will contribute to a better understanding by eliminating ambiguous names.

Finally, a number of resolutions were passed which are to be submitted to the governments of the various African territories where prehistory has not yet been officially recognized and where it is hoped archaeological surveys will be established along the lines of those in Egypt and the Union.

To many of the delegates the excursions undertaken during their stay in East Africa were of even greater interest than the meetings. The first of these was made to the Great Rift Valley, where the delegates visited the controversial Cartwright site containing the cultural remains called Pseudo-Stillbay; the Kariandusi site, developed as a "museum on the spot," where an Acheulean living site has been preserved; and the Enderit Drift, which includes the type section of the Makalian wet phases. A visit was then made to Gambles Cave on the Mau escarpment, which is the type section for the upper Kenya Aurignacian cultures and where remains of Aurignacian man had been found. The third trip took us to the scene of the spectacular discoveries at Olorgesaillie. Here, some 43 miles from Nairobi, on the road between Lake Magadi and the extinct volcano, Suswa, Mrs. Mary Leakey in 1942 discovered, scattered over the erosion slopes below a cliff of ancient lake beds, literally hundreds of perfect hand axes and cleavers which were being washed out from a series of old land surfaces interbedded in Pleistocene lacustrine deposits. Trial trenches had been cut, uncovering the actual living floors of the Acheulean hunters. These beds were formed in a fluctuating lake and between each successive rise Acheulean man camped on the shore close to the water.

At least 10 ancient camp sites, each covered in turn by the periodic flooding of the area, have been discovered. In direct association with the hand axes and cleavers, there are numerous fossilized remains of the extinct giant baboon (*Simopithecus*); the straight-tusked elephant (*Elephas antiquus*); and giant pigs and horses, all with the majority of their bones split open for purposes of marrow extraction and with the skulls broken in order to obtain the brains.

A protective shelter has been constructed over each excavated site. Kenya, with a white population numbering only a few thousand, is far ahead of most countries in the development of such unique educational features. On this excursion, the Olorgesaillie Museum was formally opened to the public by Sir Gilbert Rennie, Chief Secretary of Kenya.

The second excursion was made to the prehistoric obsidian mines in the Njorowa Gorge, south of Lake Naivasha, which had once been the overflow channel of a large lake. After the lake had dried up and the channel had been abandoned, Stone Age man discovered an exposure of particularly fine obsidian, ideally suited for making tools. Many tons were mined with primitive stone implements, resulting in a tunnel through a hundred feet of solid rock.

The delegates assembled on January 24, 1947, for the final excursion, which took them over nearly 1,000 miles of southern Kenya and Tanganyika. One of the sites visited was Olduvai Gorge, where, over a distance of some 30 miles, there is an exposure of 300 feet of stratified human history contained in the numerous layers of lake sediments in both sides of the canyon. The total length of the exposure is over 135 miles. Of the five major deposits at Olduvai, the first four belong to the Kamasian Pluvial. In East Africa there are two major pluvials—the Kamasian and the Gamblian—followed by two minor wet phases, the Makalian and the Nakura. The lower part of the Kamasian is regarded as lower Pleistocene and the upper part as middle Pleistocene, while the Gamblian Pluvial represents the last third of the Pleistocene.

Bed I contains a fauna which includes *Dinotherium*, *Chalicotherium*, *Sivatherium*, and true elephants. Associated with the Oldavian Culture, there is a rapid evolution of the stone hammer technique which is continued through the 40-foot deposits of Bed III. Between Beds III and IV there occurs a 10-foot gravel band containing fine ovates with an "S" twist. Bed IV is the equivalent to Olorgesaillie and has a faunal assemblage containing many antelopes, as well as Hipparion, which is found throughout Kamasian Beds I–IV. Bed V is unconformable to the whole series.

In Serenje Hills the delegates were given an opportunity to study the cave paintings at Kisese Giraffe Shelter, Kisese Main Shelter, and the Cheke Rock Shelter. These paintings, preserved by penetration of the color through the rock, were superimposed, each period being revealed by its own distinctive style. According to the Abbé Breuil, the splendid line drawings of rhinoceroses giraffes, ostriches, and elephants were apparently related to paintings in European caves of an earlier period. Human figures with large, round heads and with bodies and limbs elongated out of all proportion, although not as artistic, demonstrated excellent movement in hunting scenes. The Abbé Breuil believes that the Tanganyika art is earlier than a large part of the Rhodesian and Southwest and Southeast African paintings and perhaps provides a key to the origin of art in other parts of the continent.

The collaboration of anatomists, paleontologists, and geologists with the prehistorians and the development of harmony and understanding between men in various scientific fields and of different nationalities seemed to be the most important single achievement of the Congress. The majority of delegates were sympathetic toward Darwin's view that Africa was the probable cradle of man. Whether or not this view is correct, within Africa there are still great possibilities for far-reaching contributions to the study of man's beginnings.

Obituary

Wilhelm Caspari
1872–1944

Wilhelm Caspari, for many years head of the Cancer Department of the Institute for Experimental Therapy Frankfurt am Main, Germany, died in 1944 in a ghetto concentration camp at Lodz, Poland. While there, he was conducted to give medical aid daily under guard to a German Army Hospital for infectious diseases and returned nightly to the ghetto. He died shortly before the liberation of Lodz by the Russians. His wife, exiled with him, was taken from the camp in 1942 and since then has not been heard of, in spite of extended searches made by the Joint Refugee Committee. A tragic feature was that Prof. Caspari's oldest son, who had been in this country since 1938, had obtained, in 1941, an American visa and funds for his parents. The visa arrived at the American Consulate in Frankfurt only two days after the Nazi deportation to Poland.

Prof. Caspari was born February 4, 1872, in Berlin, where his family had been established for generations. He studied chemistry and medicine at the Universities of Freiburg and Berlin and obtained his Doctor's degree at Leipzig in 1895. He joined the Department of Physiology, then under the direction of Nathan Zuntz, at the Royal Agricultural College, Berlin, where he remained until 1914. He served as a surgeon at the Western Front and, after the war, was engaged in rehabilitation of the wounded and invalids. In 1920 he succeeded L. Apolant at Frankfurt, remaining there in charge of the Department of Cancer until his dismissal in 1936 by the Nazi administration under the Nuremberg decrees.

As one of the pioneers of vitamin research, Caspari was early engaged in the metabolism of nutrition. He took part in Zuntz's expedition to Monte Rose for the purpose of investigating the influence of mountain climate on metabolism and participated in the classic, scientific reports of this undertaking. Later he became interested in the action of radiation on cell metabolism and growth—in particular, on cancer. With Emil Aschkinass he investigated the effects of X-rays on bacteria and was the first to apply radioactive material to the treatment of cancer. At Frankfurt, he worked on immunity, on resistance against cancer, on the effects of catabolic products of the necrotic part of tumors and of other dead or injured cell material, and on the influence of outside agents such as irradiation. His approach to the cancer problem was that of the physiologist, e.g. his studies on the influence of hormones and of nutrition on tumor growth. His experiments on the action of tumoraffine heavy metal salts on tumors, undertaken with Neuberg and Loehe, were interrupted by World War II.

In addition to the multitude of his published reports on experiments carried out by himself and his many fellow workers, he contributed to handbooks of physiology, cancer research and radiation. For many years he served on the council of the German Cancer Committee. He was an honorary Ph.D. of the University of Frankfurt, a corresponding member of the National Academy of Medicine of Spain, of the British Empire Cancer Campaign, and of the Physico-Medical Academy, Florence, Italy.

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