Who Was Who and Who Did What, Where and When?

The origin of the Prehumans and the reason of their new standing posture

Common ancestors (Hominidae) to Prehumans (Homininae) and Prechimpanzees (Paninae) are supposed to have lived in tropical Africa, in a forest environment, 10 million years ago. Their descendants, because of the settlement of the Antarctic sheet (for cosmic reasons), had then to deal with two sorts of environments instead of the previous forest one: a covered one (forest again) and a less covered one (open forest); this was the reason for the double descent of the aforementioned common ancestors, Prechimps in the covered environment and Prehumans in the less covered one. The birth of Antarctica has been explained by astrophysicists, the opening of the landscape by biochemists (proportions of carbon isotopes in the enamel of vertebrate teeth before and after 10 million years). Homininae adapted to this very new open environment thanks to an erect posture. Prehumans therefore stood tall, walked but still climbed, ate fruits in the trees and roots on and in the ground.

The extinction (?) of early Prehumans and the emergence of “middle” ones

Around 4 million years ago, again in tropical Africa, the environment becoming dryer, the Homininae were obliged to adapt to this new ecological niche; it is the time of Australopithecus (known in Chad, Ethiopia, Kenya, Tanzania and South Africa) and of Kenyanthropus (known only in Kenya).

The emergence of late Prehumans and the birth of Humans (the very first Homo)

3 million years ago, because of the settlement of the Arctic sheet this time (for cosmic reasons), the Homininae had to cope, again in tropical Africa, with a new drought, wonderfully documented by the evolution of the fauna; two main adaptations of the Homininae (a robust one and a gracile one) and several variations for each of them appeared in our history (in Afar, Ethiopia, in Omo, Ethiopia, in Turkana, Kenya, in Tanzania, in Malawi, in South Africa). This is the reason for the emergence of the genus Homo (one of the gracile adaptations mentioned).

Out of Africa n°1, the first Humans outside Africa

2.5 million years ago, at least, the genus Homo moved from Africa to Eurasia, probably through the Sinai peninsula, towards Asia first, and Europe later, probably for paleogeographical and paleoclimatological reasons.

The emergence of Modern Man in Africa and his “travel” to Eurasia

500,000 years ago (?) Homo sapiens appeared in Africa, descending from Homo erectus; these earlier modern men are not known but discoveries of Homo sapiens, 300,000 years old, have been made in Morocco as well as in South Africa, demonstrating their pan-Africanism. This modern Man would use the same way to reach Eurasia as his predecessor 2 million and a half years before, and his most ancient remains (180,000 years old) have recently been found in Israel.

In short, since the important 2013 symposium on the origin and evolution of Man, beautifully called Sur le chemin de l’Humanité, Via humanitatis, les grandes étapes de l’évolution morphologique et culturelle de l’Homme, Emergence de l’Être humain, proposed by Msgr Roger Etchegaray and Prof. Henry de Lumley and held at the PAS, there have been new fossils, new artefacts, new datings, new techniques to determine species and filiations, and new questions. Discoveries of cut marks on vertebrate bones in Africa as soon as 3.4 million years ago, in Asia as soon as 2.6 million years ago, in America as soon as 130,000 years ago: what are their real meanings? Stone tools in Africa as soon as 3.3 million years ago; who made them? Homo (habilis?) in Africa as soon as 2.8 million years ago, Homo (habilis?) in Asia before 2 million years ago, Homo sapiens in Eurasia around 200,000 years ago, in Europe around 50,000 years ago, in Siberia around 50,000 years ago; an intriguing contemporaneity in South Africa, 300,000 years ago, of two very different species (?) of the genus Homo, different in their cognitive capabilities as well as in their locomotion! What could have been their relationship? And, as always, the questions of “What is a Man” (only Homo or more or less?), when did Man appear, and if Man is only Homo, why did they make tools before him?

Professor Yves Coppens

© Fri Apr 10 09:40:29 CEST 2026 - The Pontifical Academy of Sciences