



1 In Chad, Central Africa ... on the track of a new paradigm for the CRADLE OF MANKIND

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The idea of an ascendance for our species is quite recent (about 150 years ago). But who was the ancestor, when and where did he arise? ... are still always topical questions. In the 80's, early hominids are known in South and East Africa but the oldest being in East Africa led Coppens (1983) proposed an "East Side Story" original savannah hypothesis. From 1994 the M.P.F.T.² digging in Djurab desert (Northern Chad) unearthed successively a new australopithecine, *Australopithecus bahrelghazali*, nicknamed Abel (biochronologically dated to 3-3.5 Ma), the first ever found West of the Rift Valley (Brunet et al., 1995) and later a new hominid (nicknamed Toumaï) *Sahelanthropus tchadensis* Brunet et al., 2002 from the late Miocene, biochronologically dated close to 7 Ma (.....Vignaud et al., 2002). This earliest known hominid is a new milestone suggesting that an exclusively southern or eastern African origin of the hominid clade is unlikely to be correct.

Since 1994, our roots went deeper, from 3.6 Ma to 7 Ma today, with three new Late Miocene species: *Ardipithecus kadabba*Haile-Selassie, 2001 (5.2–5.8 Ma, Middle Awash, Ethiopia) and *Orrorin tugenensis*() Senut *et al.*, 2001 (ca. 6 Ma, Lukeino, Kenya) while the oldest (ca. 7 Ma) is the Chadian one. These discoveries have a scientific impact similar to that of *A. africanus* Dart, 1925.

S. tchadensis displays a unique combination of primitive and derived characters that clearly shows that it is not related to chimpanzees or gorillas, but clearly suggests

that it is related to later hominids, and temporally close to the last common ancestor between chimpanzees and humans (.....Brunet *et al.*, 2002 & 2005; C. P. E. Zollikofer & *al.*, 2005). In Chad, the Late Miocene sedimentological and paleobiological data are in agreement with a mosaic of environments(Vignaud *et al.*, 2002). Today in Central Kalahari (Botswana) the Okavango Delta appears to be a good analog with a similar mosaic of lacustrine and riparian waters, swamps, patches of forest, wooded islets, wooded savannah, grassland and desertic area (Brunet *et al.*, 2005). Among this mosaic the precise habitat of Toumaï is still in progress but probably, as the others known late Miocene Hominids, a wooded one. Moreover these three late Miocene hominids are probably usual bipeds. So the models that invoke significant role for savannah in the hominid origin must be reconsidered. Now, it appears that the earliest hominids inhabited wooded environments and were not restricted to Southern or Eastern Africa but were rather living in a wider geographic region, including also Sahelian Africa: at least Central Africa (Chad) and probably Libya.

According to, the early hominid history must be reconsidered within a completely new paradigm.

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