

The evolution of *Homo sapiens* and 'modern' behaviour

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If we restrict the use of *Homo sapiens* to specimens in the fossil record that share a significant number of derived features in the skeleton with extant *H. sapiens*, the origin of our species would probably be placed in the African late middle Pleistocene, based on the preserved morphology of the Omo Kibish 1 skeleton, now dated to at least 230,000 years in age. However, genetic data suggest that we and our sister species *Homo neanderthalensis* shared a last common ancestor more than 500,000 years ago, much older than the Omo Kibish fossil and its derived *H. sapiens* features. Thus the African fossil record should document earlier members of the *sapiens* lineage, potentially showing only some of the derived features of later members of the lineage. Possible examples such as Jebel Irhoud, Florisbad, Eliye Springs and Omo Kibish 2 have often been termed 'archaic *H. sapiens*', though I now prefer to use the term 'basal *H. sapiens*' for them, because of previous lax and sometimes questionable uses of the word 'archaic'.

Crucial questions in the debate about the origin of quintessential human behaviours, including artistic and musical expression, are whether so-called 'modern' cognition and associated innovations developed uniquely in our species during our African evolution (but perhaps then diffused to other forms of humans), and whether they emerged abruptly, gradually or piecemeal either within our lineage, or in parallel in several human lineages. Ten years ago there was still a strong view among some archaeologists that the evolution of our present behavioural complexity occurred largely or entirely in Africa and was relatively punctuational, perhaps linked to changes in the brain and/or vocal tract. This is far more difficult to argue now, with extensive evidence of behavioural complexity in Neanderthals, including apparent symbolic expression. However, is the production of musical instruments (as distinct from musical expression) and representational art (as distinct from linear patterns and dots) specific to *H. sapiens*? The answers to such questions will only come from further research and discoveries, but given similar dating of early representational art from the geographically distant regions of France and Sulawesi, it is possible that this form of expression had developed within Africa, and was brought out with dispersing *H. sapiens* about 60,000 years ago.