

Anthropology essays – australopithecines and homos

[Science](#), [Biology](#)



**ASSIGN
BUSTER**

Australopithecines and Homos

Section 1

At Olduvai Gorge, East Africa, several *australopithecines* and *gay*, such as *Australopithecus Boisei* (sometimes *Paranthropus Boisei*) and *Homosexual Habilis* (big) may hold coexisted (Leakey 1994, 24-27, 29) .

Australopithecus Boisei is distinguished by outstanding sagittal crests on the top and dorsum of the skull and a long, wide and rather level ' dished' face with big grinders (Wood 1992, 236). *Homosexual Habilis* (big) besides has a big level face with a little forehead ridge, though without the broad, dished' visual aspect and crests of *Australopithecus Boisei* (Stringer 1992, 242 & A ; 251). It besides had a robust jaw and big narrow grinders.

The robust jaws and big grinders of both *Australopithecus Boisei* and *Homosexual Habilis* suggest that the diets of both were chiefly vegetable. It is possible that early *Homosexual Habilis*, a tool shaper, besides hunted or scavenged for meat. Cut Markss from tools found on carnal castanetss from Olduvai show that meat was being cut from the bone by *gay* around 1. 8 million old ages ago (Potts 1992, 331) . However, the tools from the earlier Oldowan industry can non steadfastly be associated with either genus *Australopithecus* or *gay*, though Leakey favours the latter because of the ulterior association (1994, 41). Stanford cautions that we remember that even one species may expose a assortment of behaviors (2001, 25) .

(a, B & A ; degree Celsiuss)

The earliest illustrations of Acheulean engineering date of the month to 1.5 million old ages ago and are associated with *Homo Erectus* (Leakey 1994, 93 ; Gowlett 1992b, 353). The handaxe (or biface) is associated with the development of a long axis linked to a ' walnut' form and illustrations may be symmetrical through a different planes and subdivisions (Gowlett 1992a, 343) .

Apart from usage as the eponymic handaxe, Acheulean tools were used as choppers and chisels – some twelve implements have been identified (Gowlett 1992b, 354 ; Leakey 1994, 93) .

In eastern and south Asia discoveries of *Homo Erectus* have not yielded Acheulean tools, perchance due to the presence of splintered bamboo rendering rock engineering redundant (Gowlett 1992b, 351) . Besides, we might anticipate variability in behavior over a broad, or even rather narrow, geographic country (Stanford 2001, 25) .

(a, B & A ; degree Celsius)

The Clovis people could have reached America, possibly via a land p, as part of a series of three migrations or movements of population from northern Asia, suggested by a assortment of grounds from linguistics, tooth analysis and genetic sciences (Renfrew & Bahn 1996, 438) . Dates for the movements are debatable and vary from up to 42,000-21,000 old ages ago for the earliest, 20,000 old ages ago for the 2nd and 16,000-5000 old ages ago for the last pre-Columbian movement. Martin had suggested they were the first civilization to come in the Americas (1973) . Evidence from sites such as

Murray Springs, Arizona, reveal Clovis civilization artifacts association with macrofauna that subsequently became nonextant (Haynes1984) .

A assortment of tools characterise the Clovis civilization, in peculiar bifacially worked and fluted missile points (Gowlett 1992b, 359) . Such tools are characteristically those of huntsmans.

Section 2

(a, B & A ; degree Celsius)

Table 1. Showing Relative day of the months, encephalon sizes and encephalon construction of assorted species of hominid and hominoid (after Deacon 1992, 116-7 ; Stringer 1992, 251 ; Wood 1992, 236) .

Species	Dates (approximative old ages ago)	Brain size (cm ³)	Brain construction
Proconsul	23-15 million	N/A	N/A
Australopithecus Afarensis	4-2. 5 million	400-500	Broca's country non present
Homosexual Habilis (big)	2. 4-1. 6 million	600-800	Broca's country nowadays
Homo Erectus	1. 8-0. 3 million	750-1250	Broca's country

			nowadays
Homosexual Sapiens Neanderthalensis	150, 000-30, 000	1200-1750	Broca's country nowadays
Homosexual Sapiens (early modern)	130, 000-60, 000	1200-1700	Broca's country nowadays
Chimpanzee	Present	400	Area homologous to Broca's country

Table 1 shows that early hominoids such as *Australopithecus Afarensis* had comparable and somewhat larger encephalons than modern Pan troglodytes (400-500cm³), although Broca's linguistic communication country seems non to hold been present. Broca's country was present in the larger encephalons (600-800cm³) of *Homosexual Habilis* (big) and in subsequently *gay* species up to and including *modern Homo Sapiens Sapiens* . The encephalon size of *gay* species has increased over clip, top outing at that of *Homo Sapiens Neanderthalensis* at 1200-1750cm³, similar... that of *Homosexual Sapiens Sapiens* with a scope of 1200-1700cm³.

From the informations tabled above, it is non possible to reason that encephalization was a cardinal event in human development although worlds are without uncertainty the most encephalized species on Earth with a encephalon three times bigger than that of a similar sized ape (Deacon 1992, 116 ; Curtis et Al 2001, 167) . The relationship between intelligence

and encephalon size is non simple and the presence of Broca's country does non turn out linguistic communication usage. Chimpanzees are sociable, learn and Teach, usage tools and show complex behavior, even capable of being trained in sign-language yet their encephalons are relatively little. Worlds besides display great assortment in their behavior and it is non ever clear that they are better adapted to life than less encephalized species, which calls into inquiry the nature and cogency of such comparings. Besides really important are the recent finds on Flores, which suggest that a tool and fire utilizing *gay* species weighing merely 55 lbs and with a encephalon three times smaller than modern worlds evolved from *Homo Erectus* (Morwood et al. 2005) .

Section 3

(a, B, degree Celsius & A ; vitamin D)

Multiregionalists, such as Wolpoff and Thorne have observed continuity, despite spreads, from *Homo Erectus* in Java to modern Aboriginal Australians (Curtis et al. 2001, 198) . The Sangiran *Homo Erectus* was dated at 700, 000 old ages old, the skulls from Ngandong to between 400, 000-100, 000 old ages old and the Australian Mungo people to 24, 000 old ages old. Wolpoff and Thorne have observed anatomical continuity in the cranial characteristics, known as the ' mark of ancient Java' .

The Ngandong *Homo Erectus* braincases have been redated from 400, 000-100, 000 to 50, 000-30, 000 old ages old by negatron spin resonance (ESR)

dating and uranium series dating (U-series dating) (Curtis et al. 2001, 221) . Dates achieved by gamma beam dating have not been published.

The Mungo remains have been diversely dated, originally at 24, 000 old ages old so to about 62, 000 in 1999, and most late utilizing optically exciting luminescence, both the Mungo Lady and Man were redated once more to 40, 000 old ages old (Bowler et al. 2003) .

The new day of the months for the Ngandong braincase and the Mungo people, if right, suggest that *Homo Sapiens* and *Homo Erectus* coexisted in south east Asia. While ab initio an uncomfortable decision for many, the assorted dating techniques do look to confirm one another, and recent discoveries of *Homo Floresiensis* may supply further cogent evidence of diverseness. The redating of the Mungo people has led to the proposal that modern *Homo Sapiens* dispersed eastward from Africa, before coming in Europe, therefore retaining the ‘ Out of Africa’ place (Gore 2000, 97) . Thorne, commented that the redating had no impact on multiregionalism, Wolpoff adding that from 2 million old ages ago there was merely one human species (Curtis et al. 2001, 229) . Whatever theoretical attack one has to dispersal, it seems indispensable to recognize the diverseness and coexistence of communities of *Homo Sapiens* .

Mentions

- Bowler, J. M. , Johnston, H. , Olley, J. Prescott, J. Roberts, R. Shawcross, W. and Spooner, N. 2003. New ages for human business and climatic alteration at Lake Mungo, Australia. *Nature* 421 (February) 837-40.

- Curtis, G. H. , Swisher III, C. C. and Lewin, R. 2001. *Java Man* . London: Little, Brown & A ; Co.
Deacon, T. W. 1992. The human encephalon. In Jones et Al. (eds.) . 1992. *The Cambridge Encyclopedia of Human Evolution* . Cambridge: Cambridge University Press, 115-123.
- Gore, R. 2000. Peoples Like Us. *National Geographic* Vol. 198/1 (July) , 90-117.
Gowlett, J. A. J. 1992a. Early human mental abilities. In Jones et Al. (eds.) . 1992. *The Cambridge Encyclopedia of Human Evolution* . Cambridge: Cambridge University Press, 341-345.
- Gowlett, J. A. J. 1992b. Tools – the Palaeolithic record. In Jones et Al. (eds.) . 1992. *The Cambridge Encyclopedia of Human Evolution* . Cambridge: Cambridge University Press, 350-360.
- Haynes, C. V. 1984. Stratigraphy and Late Pleistocene Extinction in the United States. In Martin, P. S. and Klein, R. G. (eds.) . 1984. *Quaternary Extinctions* . Tucson: University of Arizona Press, 345-353.
- Jones, S. , Martin, R. and Pilbeam, D. (explosive detection systems.) 1992. *The Cambridge Encyclopedia of Human Evolution* . Cambridge: Cambridge University Press.
- Leakey, R. 1994. *The Origin of Humankind* . London: Weidenfeld & A ; Nicolson. Martin, P. S. 1973. The find of America. *Science* 179, 969-74.
- Morwood, M. , Sutikna, T. and Roberts, R. 2005. World of the Small People. *National Geographic* Vol. 207/4 (April) , 2-15.
Potts, R. 1992.

- The hominian manner of life. In Jones et Al. (eds.) . 1992. *The Cambridge Encyclopedia of Human Evolution* . Cambridge: Cambridge University Press, 325-334.
- Renfrew, C. and Bahn, P. 1996. *Archaeology, Theories, Methods and Practice* . London: Thames & A ; Hudson.
- Stanford, C. B. 2001. *The Hunting Apes* . Princeton: Princeton University Press. Stringer, C. B. 1992.
- Development of australopithecines. In Jones et Al. (eds.) . 1992. *The Cambridge Encyclopedia of Human Evolution* . Cambridge: Cambridge University Press, 241-254.
- Wood, B. A. 1992. Development of early worlds. In Jones et Al. (eds.) . 1992. *The Cambridge Encyclopedia of Human Evolution* . Cambridge: Cambridge University Press, 231-240.