

From Biological Evolution to Evolutionary Theory of Knowledge and Culture (1)

● Two Methods to Apply Theories of Biological Evolution to Human Knowledge and Culture:

1. Trace evolutionary history of human beings

When did people come to have 'culture'?

When did people begin making artifacts?

When did people start to 'study'?

How did these develop?

What is the driving force behind these developments?

What is the mechanism?

2. Recognize and treat knowledge and culture as evolutionary systems

→to be continued...

● Evolution of Mankind

Three major turns of events: Birth of Hominidae, of Genus *Homo*, of species *Homo sapiens*

Hominidae: Five million years ago~ Australopithecine (*Australopithecus*)

Several species existed

Genus *Homo*: Two and a half million years ago~ *Homo habilis*... ..oldest genus, tool using

Homo erectus

Neanderthal man (*Homo neanderthalensis*)

Species *Homo sapiens*: 200 thousand years ago~ *Homo sapiens*

● Inception of Culture?

Territorial transformation due to tool using of chimpanzees

Cultural behavior of other animals

What is culture? It is an acquisition of new behavior through social learning

● **Bibliography**

de Waal, Frans, *The Ape and the Sushi Master: Cultural Reflections by a Primatologist*, Hara-shobo

(Why is it that many researchers do not want to recognize the existence of culture and consciousness of animals? De Waal pioneered fascinating fields of "cultural" zoology and lucidly argued the cultural aspect of natural science.)

See <http://park.itc.u-tokyo.ac.jp/sakuralab/index.htm> for further readings.