

Evolutionary Anthropology of Conflicts and Resolution

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【Outline of survey】

Conflicts on food resources are the fundamental and universal problems for human beings. However, we do not have a clear understanding of their biological basis and evolutionary histories. Our project aims to clarify the evolutionary trends in conflicts and resolution of humans and the great apes, from three different approaches of primatology, paleoanthropology and ecological anthropology. In and around the African tropical forest, we will monitor the annual and seasonal changes in food availability of natural habitats, while analyzing inter- and intra-specific conflicts of gorillas, chimpanzees and hunter-gatherers on food resources. Measurement of hormones and DNA analysis will be made using fecal samples to understand stressful states and genetic relationships. We will also make a survey on diet, morphological features and behavioral culture of fossil hominids, and will collect data on rules and norms to avoid conflicts in hunter-gatherer and peasant societies.

【Expected results】

Our survey on conflicts of humans and the great apes over ecological and social resources will enable us to understand the biological and evolutionary backgrounds of human conflicts. A comprehensive comparison of reconciliation and resolution among humans and the great apes will lead us to discuss on appropriate measures for peacemaking in human societies.

【References by the principal investigator】

- Yamagiwa, J., Kahekwa, J. & Basabose, A.K., 2003. Intra-specific variation in social organization of gorillas: implications for their social evolution. *Primates*, 44: 359-369.
- Yamagiwa J, Basabose AK, 2006. Diet and seasonal changes in sympatric gorillas and chimpanzees at Kahuzi-Biega National Park. *Primates*, 47 (1): 74-90.
- Yamagiwa, J., 2004. Diet and foraging of the great apes: ecological constraints on their social organizations and implications for their divergence. In: *The Evolution of Thought: Evolutionary Origins of Great Ape Intelligence*, A.E. Russon & D.R. Begun (eds.), Cambridge University Press, Cambridge, pp. 210-233.

【Term of project】 FY2007– 2011

【Budget allocation】 24,400,000 yen
(2007 direct cost)

【Homepage address】

<http://jinrui.zool.kyoto-u.ac.jp/>