

Pan Africa News

The Newsletter of the Committee for the Care and Conservation of Chimpanzees, and the Mahale Wildlife Conservation Society



JUNE 2009

VOL. 16, NO. 1

P. A. N. EDITORIAL STAFF

Chief Editor:

Toshisada Nishida, *Japan Monkey Centre, Japan*

Deputy Chief Editors:

Kazuhiko Hosaka, *Kamakura Women's University, Japan*
Michio Nakamura, *Kyoto University, Japan*

Associate Editors:

Christophe Boesch, *Max-Planck Institute, Germany*
Jane Goodall, *Jane Goodall Institute, USA*
Takayoshi Kano, *Kyoto University, Japan*
Tetsuro Matsuzawa, *Kyoto University, Japan*
William C. McGrew, *University of Cambridge, UK*
John C. Mitani, *University of Michigan, USA*
Vernon Reynolds, *Budongo Forest Project, UK*
Yukimaru Sugiyama, *Kyoto University, Japan*
Richard W. Wrangham, *Harvard University, USA*

Editorial Secretaries:

Noriko Itoh, *Japan Monkey Center, Japan*
Koichiro Zamma, *Hayashibara GARI, Japan*
Agumi Inaba, *Japan Monkey Centre, Japan*

Instructions for Authors:

Pan Africa News publishes articles, notes, reviews, forums, news, essays, book reviews, letters to editor, and classified ads (restricted to non-profit organizations) on any aspect of conservation and research regarding chimpanzees (*Pan troglodytes*) and biliar (*Pan paniscus*). Contributors are requested to write in English and the papers except forums, reviews and essays should usually be 1,500 words or less. Articles and notes will be peer-reviewed by at least one appropriate expert on request of the *PAN* editorial staff.

Manuscripts should be formatted as DOC or RTF files and submitted by e-mail to:
pan.editor@gmail.com

Photos and figures should be formatted as JPEG or GIF files and sent separately by e-mail attachments.

PAN is published twice a year in June and December. Deadline for manuscripts is one month before publication (i.e. the ends of May and November).

Contents

<NOTE>

Flu-like epidemics in wild bonobos (*Pan paniscus*) at Wamba, the Luo Scientific Reserve, Democratic Republic of Congo

Tetsuya Sakamaki, Mbangi Mulavwa & Takeshi Furuichi 1

<NOTE>

Grooming Hand-Clasp by Chimpanzees of the Mugiri Community, Toro-Semliki Wildlife Reserve, Uganda

Tim H. Webster, Phineas R. Hodson & Kevin D. Hunt 5

<NOTE>

Preliminary Report on Hand-Clasp Grooming in Sanctuary-Released Chimpanzees, Haut Niger National Park, Guinea

Tatyana Humle, Christelle Colin & Estelle Raballand 7

<Book Review>

Raymond Corbey, *The Metaphysics of Apes. Negotiating the Animal-Human Boundary*, Cambridge University Press, Cambridge 2005

Paola Cavalieri 10

<NOTE>

Flu-like Epidemics in Wild Bonobos (*Pan paniscus*) at Wamba, the Luo Scientific Reserve, Democratic Republic of Congo

Tetsuya Sakamaki¹, Mbangi Mulavwa² & Takeshi Furuichi¹

1. Primate Research Institute, Kyoto University, Japan

2. Research Center for Ecology and Forestry, Democratic Republic of Congo

INTRODUCTION

Epidemics such as some respiratory diseases, poliomyelitis, and Ebola hemorrhagic fever have caused significant mortality in the wild chimpanzee population at long-term study sites^{1,2,3,4}. It is possible that increased contact with humans has caused some of these epidemics.

The high risk of disease transmission from human to apes, and *vice versa*, necessitates the institution of procedures to prevent disease transmission by investigators who study wild animals closely related to humans, such as apes.

We observed two epidemics of a flu-like disease, one in 2003 and one in 2008, in the wild bonobo population at Wamba, which has been under study since 1973. In the present paper, we report the symptoms and transmission of the disease and discuss the effects of the social contact between bonobos and humans at the study site.

METHODS

The subjects were the bonobos (*Pan paniscus*) of the E1 group at Wamba (0°11'8"N, 22°37'58"E) in the northern sector of the Luo Scientific Reserve in the Democratic Republic of Congo. This group has been studied since 1973⁵. The Luo Scientific Reserve was established in 1990, and people have been allowed to live in a village on the Reserve and use the protected areas in their traditional way⁶. Although the study was interrupted by political disorder in 1991 and two civil wars between 1996 and 2001, it was resumed in 2002. All 19 bonobo group members, including those who were born or immigrated during and after the disorder, were

identified in March 2004⁷. We attempted to locate the E1 group six days per week and to follow the parties from sleeping site to sleeping site. Observations were usually made by one or two researchers and two research assistants. After 1996 the bonobos were never provisioned with food. All members were well habituated to the environment.

RESULTS

The First Epidemic of a Flu-like Disease

MM and research assistants noted that one adult male was coughing severely during the last week of October 2003. On November 5, an adult female began coughing. The flu-like symptoms spread rapidly, and most of the group members had the symptoms by November 7. They coughed and had difficulty breathing through their noses. They did not eat well or travel a long distance, and they spent much time lying on the ground. On November 11, they began to recover and eat a variety of food as usual. Only two individuals continued to have symptoms on November 15, but they eventually recovered. No bonobos died from this flu-like disease. The people in the village did not experience any respiratory epidemic at this time.

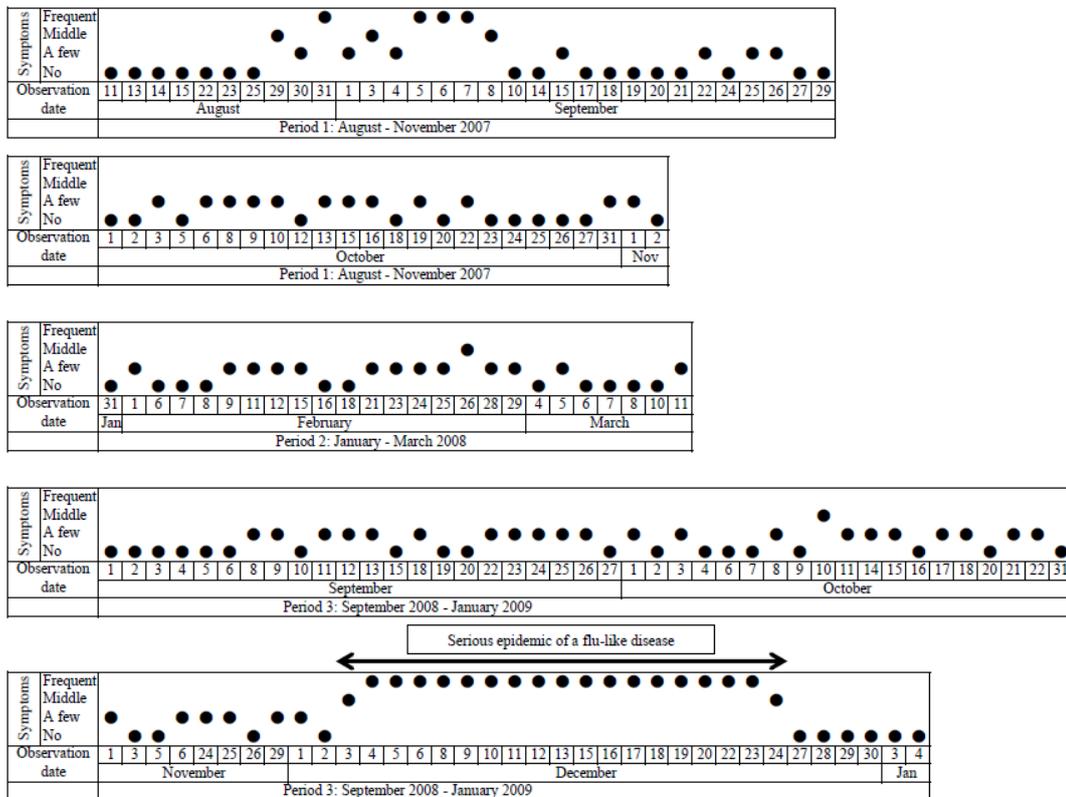


Fig. 1. The fluctuation of flu-like symptoms (i.e. coughing, sneezing, and/or picking one’s nose) during the study periods of TS (Period 1: August 11–November 2, 2007; Period 2: January 31–March 11, 2008; Period 3: September 1, 2008–January 4, 2009). The extent of symptoms in the group on each day was divided into four categories; “No”: no symptoms were confirmed during observation; “A few”: symptoms were confirmed in 1–5 1-min observation units (OU); “Middle”: symptoms were confirmed in 6–10 1-min OU; “Frequent”: symptoms were observed in more than 10 1-min OU.

The Second Epidemic of a Flu-like Disease

TS and research assistants observed the second epidemic of a flu-like disease between December 3 and 24, 2008. Fig. 1 shows the fluctuation of the disease symptoms during the study periods (Period 1: August 11–November 2, 2007; Period 2: January 31–March 11, 2008; Period 3: September 1, 2008–January 4, 2009; The total observation time was 1141 h and 57 min in 156 days). During these periods, the E1 group consisted of 23–26 individuals. All occurrences of flu-like symptoms, *i.e.* coughing, sneezing, and/or picking one's nose, observed or heard were recorded. The symptoms observed on each day were divided into four categories: "No": no symptoms were confirmed during observation; "A few": symptoms were confirmed in 1–5 1-min observation units (OU); "Middle": symptoms were confirmed in 6–10 1-min OU; "Frequent": symptoms were observed in more than 10 1-min OU. Fig. 1 shows that flu-like symptoms did not always lead to disease outbreaks. The most serious epidemic of a flu-like disease occurred between December 3 and 24, 2008. Flu-like symptoms were frequently observed in the group between August 29 and September 8, 2007, but to a lesser degree.

Fig. 2 shows the daily and the total number of individuals that exhibited flu-like symptoms (coughing, sneezing, sniffing, and/or picking one's nose) between December 3 and 24, 2008. It is likely that the number of individuals exhibiting symptoms was underestimated when the bonobos formed large parties because it was often difficult to identify coughing and/or sneezing individuals when they were in the trees. On December 3,

TS confirmed coughing for six 1-min OU in one juvenile male (Jiro). By the next day, the symptoms had spread rapidly to more individuals (flu-like symptoms were confirmed in 37 1-min OU). A subadult female (Fuku), an adult female (Hoshi), and an adult male (Nord) had severe coughs. From December 8, the group split into small parties and did not travel long distances. They ate only a few kinds of foods each day. As an example of the altered behaviors observed by the researchers, on December 9, Hoshi and her 1-year daughter (Hina) arose at 8.55h (bonobos of this group usually arose at 6.00h), and Hoshi stayed in the trees with only Hina. She coughed severely all day and never climbed down to the ground. She ate only Musanga fruits and returned to the same bed at 14.31h. We followed an adult female (Sala) with her 4-year son (Shiba) for all observation days during the epidemic. Sala and Shiba first exhibited flu-like symptoms on December 13 and 17, respectively. On December 17, we confirmed that Sala had had a newborn infant who died. We could not confirm whether it was a live or stillbirth. She carried the corpse for two days. On December 22, Sala's coughing began to decrease, and on December 23 she reunited with some other group members. December 24 was the last day on which symptoms were confirmed in the group. Sala's newborn infant was the only member of the E1-group who was confirmed to have died during the period of the flu-like disease. However, Hoshi's daughter, Hina, may also have died during this period because she has not been observed by local assistants after TS left Wamba in January 2009.

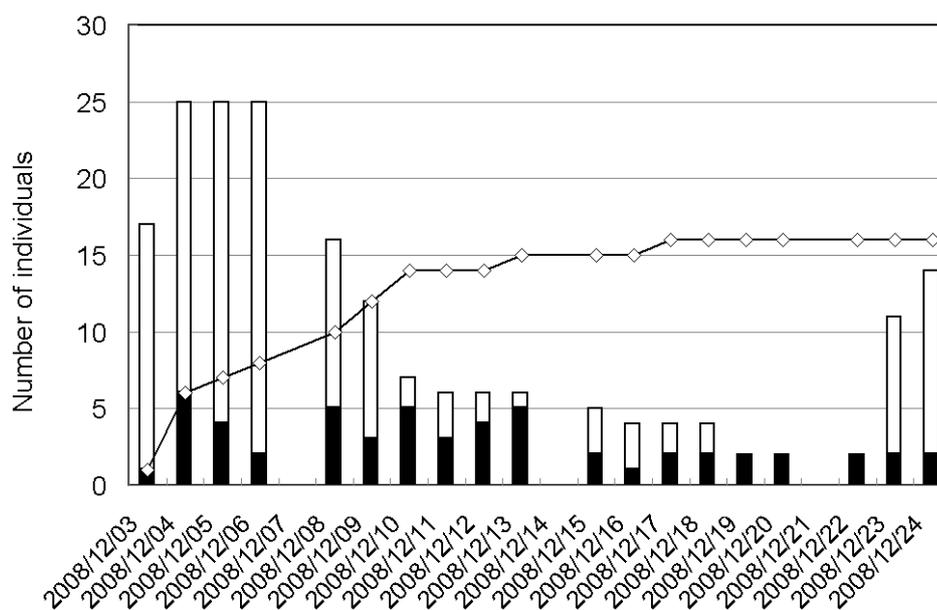


Fig. 2. The observed flu-like symptoms. Solid bar: The number of observed individuals who showed flu-like symptom(s) (coughing, sneezing, sniffing, and/or picking one's nose) on each day. Open bar: those who did not show symptoms on each day. Line: the accumulated number of individuals who showed symptom(s) at least once between December 3 and 24, 2008.

During the serious epidemic, flu-like symptoms spread to at least 62% of the group. No symptoms were confirmed in four adult males and in two adult females and their infants. However, these individuals were observed only at the beginning and the end of the epidemic period (except for one adult male who had not been observed between August 2008 and January 2009), and it is possible that they had contracted the disease when they were not being observed. If that is the case, nearly all of the group members contracted the flu-like disease.

Several of the people in the village had flu-like symptoms in November and December 2008. No data are available to confirm that people had any similar disease at this time, but we were aware of the symptoms because we stayed at a research station in the village; that is, we saw some people coughing, having a fever, and/or being laid down in a week or more. TS also observed some goats and a duck coughing in the village in December. People in the village continued to exhibit flu-like symptoms until at least the beginning of January 2009, when TS left the study site.

DISCUSSION

Several individuals in the bonobo study group were observed to have flu-like symptoms between October and November 2003; this was the first serious epidemic to be observed in the group at Wamba since study began in 1974. No evidence shows that this epidemic was transmitted from people to the bonobos. Researchers at Wamba were always at least 10m from the bonobos while observing them. In contrast to the chimpanzees in the Mahale Mountains National Park in Tanzania, who are habituated to humans and are known to approach them (Sakamaki, personal observation), the bonobos in the Wamba study group rarely came closer than 10m to the human observers. A limited number of tourists visit Wamba, and although the people in the village entered the study group's habitat on a daily basis, neither group approached bonobos in the same way as the researchers. Therefore, there was little risk of infection-including droplets being transmitted from humans to bonobos at Wamba.

It is possible that the flu-like disease in the second epidemic was transmitted to the bonobos from infected people. Flu-like symptoms were observed in several people and domestic animals in the village in November 2008. A gap of about a month occurred between the disease outbreak in the village and that in the bonobo population. In addition, two researchers from outside the village visited Wamba and began observation of the bonobos at the end of November, just before the disease outbreak. However, because no diagnostic analysis was conducted, we have no evidence that the flu-like symptoms exhibited by the bonobos were caused by a contagious virus transmitted to the group from humans.

As the number of people who visit primate research sites increases, we must be aware of the potential risks this additional social contact brings. In addition to researchers, people who visit Wamba today include people from NGOs who support forest conservation and the livelihood of the villages, television teams covering the bonobos, poachers, and peddlers traveling between towns and villages. We must put in place measures to decrease the risk of disease transmission between humans and apes, and it is imperative that researchers establish and update observation guidelines that minimize the transmission of infections from humans to bonobos.

ACKNOWLEDGEMENTS

This study was financially supported by the Global Environment Research Fund (F-061 to T. Nishida) the Ministry of the Environment of Japan. We thank the Research Center for Ecology and Forestry of the Democratic Republic of Congo for permission to conduct fieldwork in the Luo Scientific Reserve. We are also grateful to N. Mwanza, K. Yangozene, S. Kuroda, H. Takemoto, Y. Tsuji, and the research assistants at Wamba for their support and cooperation in the field, to the members of the Wamba Committee for Bonobo Research and T. Nishida for their encouragement and useful comments, and to R. Wrangham for useful comments.

REFERENCES

1. Boesch C, Boesch-Achermann H 2000. *The Chimpanzees of the Tai Forest: Behavioural Ecology and Evolution*, Oxford University Press, New York.
2. Matsuzawa T, Humle T, Koops K, Biro D, Hayashi M, Sousa C, Mizuno Y, Kato A, Yamakoshi G, Ohashi G, Sugiyama Y, Kourouma M 2004. Wild chimpanzees at Bossou-Nimba: deaths through a flu-like epidemic in 2003 and the Green-Corridor Project. *Primate Res* 20: 45–55. (in Japanese with English summary)
3. Lonsdorf EV, Travis D, Pusey AE, Goodall J 2006. Using retrospective health data from the Gombe chimpanzee study to inform future monitoring efforts. *Am J Primatol* 68: 897–908.
4. Hanamura S, Kiyono M, Lukasik-Braum M, Mlengeya T, Fujimoto M, Nakamura M, Nishida T 2008. Chimpanzee deaths at Mahale caused by a flu-like disease. *Primates* 49: 77–80.
5. Furuichi T, Idani G, Ihobe H, Kuroda S, Kitamura K, Mori A, Enomoto T, Okayasu N, Hashimoto C, Kano T 1998. Population dynamics of wild bonobos (*Pan paniscus*) at Wamba. *Int J Primatol* 19: 1029–1043.
6. Idani G, Mwanza N, Ihobe H, Hashimoto C, Tashiro Y, Furuichi T 2008. Changes in the status of bonobos, their habitat, and the situation of humans at Wamba in the Luo Scientific Reserve, Democratic Republic of Congo. In: *The Bonobos: Behavior, Ecology, and Conservation*, Furuichi T, Thompson J (eds), Springer, New York, pp 291–302.
7. Hashimoto C, Tashiro Y, Hibino E, Mulavwa M, Yangozene K, Furuichi T, Idani G, Takenaka O 2008. Longitudinal structure of a unit-group of bonobos: male philopatry and possible fusion of unit-groups. In: *The Bonobos: Behavior, Ecology, and Conservation*, Furuichi T, Thompson J (eds) Springer, New York, pp 107–119.

<NOTE>

Grooming Hand-Clasp by Chimpanzees of the Mugiri Community, Toro-Semliki Wildlife Reserve, Uganda

Tim H. Webster^{1,2}, Phineas R. Hodson² & Kevin D. Hunt³

1. Departments of Anthropology and Zoology, Miami University
2. Leverhulme Centre for Human Evolutionary Studies, University of Cambridge
3. Department of Anthropology, Indiana University

INTRODUCTION

We present the first report of the grooming hand-clasp (GHC) from the chimpanzees of Toro-Semliki Wildlife Reserve, Uganda. One of the five observations is of a previously unreported form of the GHC which we call the branch-clasp/hand-clasp (BCHC).

The GHC, first observed in Mahale Mountains National Park¹, has been documented in several chimpanzee (*Pan troglodytes*) and bonobo (*P. paniscus*) communities across Africa (Table 1). This social custom involves two individuals facing one another and each extending an arm overhead to clasp the partner's hand, while using the other hand to groom the exposed torso of the partner. Variations of this behavior include grasping the partner's hand, grasping the partner's wrist and resting one's wrist on the partner's wrist^{2,3}.

METHODS

The Toro-Semliki Wildlife Reserve ("Semliki") is located in the Rift Valley in western Uganda. Physical and botanical characteristics of the site are described elsewhere⁷. Four communities of chimpanzees (*P. t. schweinfurthii*) are reported to inhabit the reserve⁷. Habituation and research began in 1996 on the Mugiri community and has continued intermittently to the present⁷. We made observations opportunistically from May to November 2008 during habituation and studies of insectivory and well-digging. At the beginning of the study, chimpanzees were semi-habituated: observers could observe chimpanzees in trees, but rarely observed them on the ground without the chimpanzees fleeing. During the study, habituation progressed to a point where observers occasionally could approach within 15 m of chimpanzees, usually males, on the ground.

OBSERVATIONS

On 4 July, TW and a Uganda Wildlife Authority (UWA) ranger found a group of nine adult and sub-adult males on the ground in undergrowth in gallery forest at 09.59 hr. Most individuals were resting, but two adults were mutually grooming. At 10.55, both chimpanzees raised their right arms overhead and one individual rested its wrist on the other's wrist. Vegetation obscured observations, so that observers could not identify individuals. About 50 seconds later, each lowered its arm and continued to groom until 10.59, when the entire group left the area.

Table 1. Reported status of the grooming hand-clasp in *Pan* communities.

Site	Country	Species	Hand-clasp ^a	Source
Bossou	Guinea	<i>P. troglodytes</i>	Absent	4
Budongo	Uganda	<i>P. troglodytes</i>	Absent	4, N Newton-Fisher pers. comm.
Fongoli	Senegal	<i>P. troglodytes</i>	Habitual	WC McGrew pers. comm.
Gombe	Tanzania	<i>P. troglodytes</i>	Absent	1, 2
Goualougo	Rep. Congo	<i>P. troglodytes</i>	Habitual	WC McGrew pers. comm.
Kalinzu	Uganda	<i>P. troglodytes</i>	Customary	4
Kanyanchu	Uganda	<i>P. troglodytes</i>	Present	TH Webster unpub. data
Kanyawara	Uganda	<i>P. troglodytes</i>	Customary	4
Lopé	Gabon	<i>P. troglodytes</i>	Customary	4
Mahale K	Tanzania	<i>P. troglodytes</i>	Customary	1, 4
Mahale M	Tanzania	<i>P. troglodytes</i>	Customary	1, 4
Ngogo	Uganda	<i>P. troglodytes</i>	Customary	4
Tai-North	Ivory Coast	<i>P. troglodytes</i>	Habitual	4
Tai-South	Ivory Coast	<i>P. troglodytes</i>	Present	WC McGrew pers. comm.
Lui Kotal	Dem. Rep. Congo	<i>P. paniscus</i>	Habitual	5
Wamba	Dem. Rep. Congo	<i>P. paniscus</i>	Present	4

^aStatus of the GHC (for definitions see 6)

On 16 July, TW, Charlotte Payne, an UWA ranger and two Ugandan tourism students found a group of four adult males and one adult female with a ventral infant in gallery forest above the Mugiri River. The party was feeding on *Cynometra alexandri* pods in the canopy. From 09.58–10.10 hr, an adult male and the adult female groomed mutually. At 11.45, TW observed two arboreal male-male grooming dyads. In one dyad the first individual grabbed an overhead branch with its right hand then the second individual clasped the wrist of the hand holding the branch (BCHC). About 60 seconds later they lowered their arms and continued grooming until 12.42, when one of the males left the area.

On 1 August, TW, PH and an UWA ranger found 3 chimpanzees resting arboreally in gallery forest. At 09.47 hr, we began observing of a pair of adult males in day beds and a single adult male 30 meters from them. The view of the two males in beds was somewhat obstructed. At 12.10, the lone male joined the two other individuals, who had left their beds and begun grooming arboreally. All three individuals were then in full view. At 12.51, the grooming males each raised an arm overhead and commenced a wrist-on-wrist hand-clasp. At 12.52, they lowered their arms and began to feed on *C. alexandri* pods.

On 28 August, at 10.55 hr, PH and an UWA ranger found a group of at least two adult males, one subadult male, two adult females in estrous, one adult non-estrous female and one juvenile of unknown sex. At 11.35 an estrous female began to groom an adult male on the ground. At 11.38, the male reciprocated. At 11.48, grooming ended and the female withdrew. At 11.50, she returned and grooming recommenced. At 11.54, both individuals raised their left hands and clasped hand-to-hand. About 15 seconds later, they released the clasp and lowered their arms. At 11.55, grooming ended.

PH observed a second interaction within the group at 11.58 hr between an adult male and a non-estrous adult female. At 11.59, both individuals raised their right hands straight overhead and clasped hands. During the hand-clasp the male groomed the female but she did not reciprocate. At 12.01, they lowered their hands, stopped grooming and began feeding on *C. alexandri* pods.

DISCUSSION

Of the five instances of the GHC, we observed three variants: two observations of palm-to-palm (A in Fig. 1 of source 3, pg. 109), two observations of wrist-to-wrist (C in Fig. 1 of source 3, pg. 109), and a single observation of a branch-clasp/hand-clasp (BCHC). During the BCHC one individual grasped an overhead branch while the other individual grasped the wrist of the hand grasping the branch.

This is the first report of the BCHC, but it has also been observed at Mahale, usually between mother-offspring pairs (M Nakamura, pers. comm.).

Researchers have previously suggested that the GHC might have evolved from branch-clasp grooming^{8,9}, a behavioral pattern (that is a chimpanzee universal) in which grooming chimpanzees grab an overhead branch⁶. If this is so, then the first variation of the GHC may have been the BCHC. In this scheme, the first step towards a behavior without a branch would be to remove one of the hands from the branch and place it on the wrist of the grooming partner still grasping the branch. Alternately, the BCHC could simply be another variation of the GHC; the hand grasping the branch might provide support, allowing the GHC to be performed in an arboreal setting. Further observations are needed to understand this behavioral variation.

Five observations are too few enough to classify the behavior at Semliki as customary⁶. A habitual code is defined as “pattern is not customary but has been seen repeatedly in several individuals, consistent with some degree of social transmission” (pg. 1488)⁶. At Mugiri, at least six (four males and two females), but perhaps as many as 10, chimpanzees used the GHC, so we classify the GHC as habitual in the Mugiri community.

ACKNOWLEDGEMENTS

We thank the Uganda Wildlife Authority and the Uganda National Council for Science and Technology for permission to do research in the Toro-Semliki Wildlife Reserve; Dr. Linda Marchant, Dr. William McGrew, Charlotte Payne, Samantha Russak, David Samson and Uganda Wildlife Authority rangers for assistance in the field; Semliki Chimpanzee Camp staff for support; Dr. Linda Marchant, Dr. William McGrew and Charlotte Payne for helpful discussion; and Dr. William McGrew and Dr. Michio Nakamura for comments on the manuscript. Funding was provided by the National Science Foundation, Indiana University and the Rebecca Jeanne Andrew Memorial Award.

REFERENCES

1. McGrew WC, Tutin CEG 1978. Evidence for a social custom in chimpanzees? *Man* 13:234–251.
2. McGrew WC, Marchant LF, Scott SE, Tutin CEG 2001. Intergroup differences in a social custom of wild chimpanzees: the grooming hand-clasp of the Mahale Mountains. *Curr Anthropol* 42:148–153.
3. Nakamura M, Uehara S 2004. Proximate factors of different types of grooming hand-clasp in Mahale chimpanzees: implications for chimpanzee social customs. *Curr Anthropol* 45: 108–114.
4. Nakamura M 2002. Grooming hand-clasp in Mahale M group chimpanzees: implications for culture in social behaviours. In: *Behavioural Diversity in Chimpanzees and Bonobos*, Boesch C, Hohmann G, Marchant LF (eds), Cambridge Univ. Press, Cambridge, pp. 71–83.
5. Fruth BI, Hohmann G, Beuerlein MM, McGrew WC 2006. Grooming hand-clasp by bonobos of Lui Kotal, Democratic Republic of Congo. *Pan Afr News* 13:6–8.
6. Whiten A, Goodall J, McGrew WC, Nishida T, Reynolds V, Sugiyama Y, Tutin CEG, Wrangham RW, Boesch C 2001.

Charting cultural variation in chimpanzees. *Behaviour* 138: 1481–1516.

7. Hunt KD, McGrew WC 2002. Chimpanzees in the dry habitats of Assirik, Senegal and Semliki Wildlife Reserve, Uganda. In: *Behavioural Diversity in Chimpanzees and Bonobos*, Boesch C, Hohmann G, Marchant LF (eds), Cambridge Univ. Press, Cambridge, pp. 35–51.
8. de Waal FBM, Seres M 1997. Propagation of handclasp grooming among captive chimpanzees. *Am J Primatol* 43: 339–346.
9. McGrew WC 2004. *The Cultured Chimpanzee: Reflections on Cultural Primatology*. Cambridge Univ. Press, Cambridge.

habitually observed at Fongoli, Senegal, the other two forms have more rarely been witnessed at this site (Pruetz pers. com.). At Bossou in Guinea, GHC has only been recorded once (Yamakoshi pers. obs.), and, at Taï in Côte d'Ivoire, the behavior emerged spontaneously and disappeared within a year in two communities (Boesch pers. comm.). GHC has more recently been reported at other sites with semi-habituated individuals, i.e. chimpanzees at Semliki, Uganda (see report in this issue) and bonobos (*Pan paniscus*) in Lui Kotal in the Democratic Republic of Congo⁸. We report here on the first record of GHC in sanctuary-released chimpanzees (*P. t. verus*).

<NOTE>

Preliminary Report on Hand-Clasp Grooming in Sanctuary-Released Chimpanzees, Haut Niger National Park, Guinea

Tatyana Humle¹, Christelle Colin² & Estelle Raballand³

1. Wildlife Research Center, University of Kyoto, Japan

2. Projet Primates France, France and Chimpanzee Conservation Center, Faranah, Republic of Guinea

3. Project Primate Inc., USA and Chimpanzee Conservation Center, Faranah, Republic of Guinea

INTRODUCTION

Grooming hand-clasp (GHC) was the first social custom labeled as such in chimpanzees (*Pan troglodytes*)^{1,2}. This behavior is characterized by variations in form (sometimes also referred to as conventions³ or types²) and in frequency of occurrence (ranging from absent to customary) whether between or within wild chimpanzee communities² or captive colonies^{4,5}. GHC presents three basic distinct forms: palm to palm¹, non-palm to palm² and wrist to wrist⁶. This behavior involves two individuals sitting face to face, typically extending their arms overhead (some flexed variations have also been described²) thus clasping or resting their hands or arms, and grooming each other with the other hand^{1,2}.

Among long-term study sites, with the exception of Gombe, Tanzania and Budongo, Uganda, GHC has been noted at all East African^{2,7}. While wrist to wrist GHC is

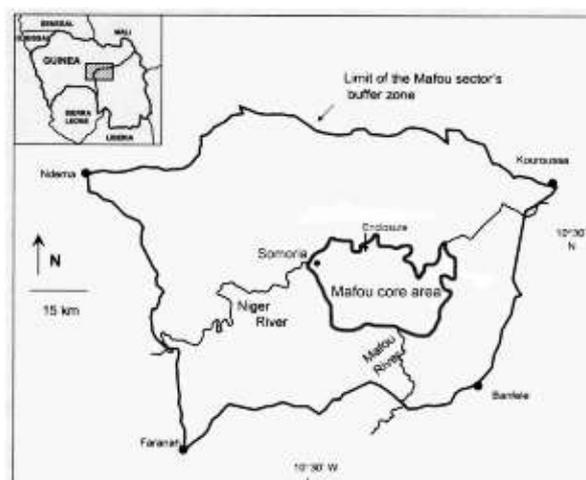


Fig. 1. Map of the location of the Haut Niger National Park in Guinea, West Africa, highlighting the Mafou core area of the park and the relative locations of the sanctuary (Somoria) and the release holding facility (Enclosure) (adapted from Brugiere et al. (2005)¹⁰).

STUDY SITES AND SUBJECTS

The Haut Niger National Park (HNNP) is located in the center of the Republic of Guinea, West Africa. This park was created in 1997 and extends over c. 10,000 km square^{9,10} (see Fig. 1). It is the largest protected area in the country and is one of the last remaining important formations of dry forest-savanna mosaics in West Africa. This park is also a priority site for the conservation of the Western subspecies of chimpanzee (*P. t. verus*)¹¹, with a viable population estimated at 500 individuals^{12,13,14}.

The Chimpanzee Conservation Center (CCC), the only chimpanzee sanctuary in Guinea, was created in 1997. This sanctuary is located in Somoria within the Mafou core area of the HNNP (see Fig. 1). Twelve chimpanzees between 8–20 years old were released by the CCC in June 2008 in the HNNP, 30 km from the sanctuary¹⁵ (see Table 1). The CCC's chimpanzee release project is the first in West Africa and the second of its kind in Africa after the HELP-Congo project in the Democratic Republic of Congo. This preliminary report concerns all 12 recently released chimpanzees from the

CCC sanctuary. Data presented here are based on *ad libitum* observations of GHC by the authors, including a volunteer veterinarian, Carole Geernaert.

OBSERVATIONS

Four instances of GHC have so far been noted. The first instance was witnessed in the holding facility at the release site prior to the release, while the other three were observed post release. Only 3 adult males performed this social custom. One of these adult males, Albert, was involved in all cases observed.

Three of the 4 events presented the palm to palm form of GHC (see Fig. 2). However the first instance, which was recorded in the chimpanzees' holding facility prior release, did not consistently involve straight overhead extension of the arms, as the chimpanzees eventually sat face to face, clasping hands and bracing their elbows on their knees, whilst grooming one another's forearm (see Fig. 2). The wrist to wrist form (which then graded into a more relaxed form during the course of the same bout-see Fig. 3b) was observed only once (see Fig. 3a and Fig 3b). The latter event involved Albert and Rappa. The former supported the wrist of his subordinate grooming partner as illustrated in Figure 3. In effect, the non-palm to palm form of GHC was never observed.

Although details on specific bout duration of the clasping posture were not precisely recorded at the time of observation, bouts lasted for several minutes, two exceeded 10 minutes in duration. Three of the 4 instances of GHC followed a context of reunion between the males involved (in the presence of adult females in only one case) after several months of separation. We unfortunately have no record or recollection of the

context that preceded the first event, but we know it took place in the absence of adult females.

DISCUSSION

This brief account describes GHC among recently released chimpanzees at the Chimpanzee Conservation Center in Guinea. It is clear that other instances of GHC may have gone unnoticed and that therefore the emergence was never witnessed. However, CCC staff members and researchers now all agree that this behavior occurs rarely, although all chimpanzees regularly engage in mutual social grooming, including adult females. Albert was involved in all instances of GHC witnessed so far. Both Albert and Rappa were rescued as infants, and although Robert was rescued at the age of 7, he had spent many years alone in captivity and had most likely been captured as an infant as well. It is, therefore, unlikely that any of these three males had prior knowledge of and experience with this behavior. One of them may have acquired it by interacting with another individual at the sanctuary or alternatively one of these three males may have innovated this behavior.

Continued data collection on frequency, propagation, i.e. individuals involved and initiating GHC, context prior to grooming, and duration of bouts, as well as form adopted, is underway. But preliminary data presented here suggest so far that GHC in this group may be 1) male-biased (however, so far adult females have had few opportunities to witness this behavior), 2) longer in its bout durations than reported elsewhere and 3) context-specific ensuing reunion events post lengthy periods of separation, characteristics which differ from other published reports concerning this social custom whether in captivity or in the wild.

Table 1. List of the 12 released chimpanzees with details of their age and sex and observed individual frequency of GHC.

Name	Sex	Approximate age in years (June 2008)	No. GHC events
Robert	Male	20	2
John	Male	17	
Orlando	Male	15	
Andrew	Male	8	
Albert	Male	13	4
Rappa	Male	11	2
Nana	Female	19	
Laurence	Female	9	
Mama	Female	16	
Lottie	Female	15	
Nanou	Female	12	
Zira	Female	14	



Fig. 2. (left) Palm to palm form of grooming hand-clasp among adults male chimpanzees from the Chimpanzee Conservation Center. Here the arm has been lowered, but the hand-clasping is still very clear. At the same time, a third male chimpanzee is sitting behind; grooming one of the males of the GHC dyad (© Carole Geernaert).

Fig. 3. (below) GHC among released male chimpanzees from the Chimpanzee Conservation Center: (a) sideways wrist to wrist form at the start of the bout with Albert facing the camera and obstructed from view by Rappa (© Chris Colin) and (b) later during the grooming bout, when Rappa took a rest from grooming, Albert continued to groom Rappa with his fingers/palm wrapped around Rappa's forearm and Rappa's left hand/wrist draped loosely over Albert's forearm. Contrary to McGrew et al.⁶'s findings from Mahale, Tanzania, in this case it was the dominant male who was supporting the arm of the subordinate male (© Tatyana Humle).



Indeed, based on 12 years of data at Yerkes, GHC bout mean duration was 71.4 sec. and presented no sex-bias⁴. Among Kanywara chimpanzees in the forest of Kibale, Uganda, GHC bouts last on average 47 sec. (Wrangham pers. comm.), while at Mahale bouts are significantly shorter lasting on average only 37 sec. in the M-group and 22 sec. in the K-group². At both sites, both adult female and male individuals engaged in this behavior. In addition, no consistent specific context preceding GHC has ever been noted in the wild or in captivity, although de Waal¹⁶ described an atypical succession of GHC involving an adolescent male and multiple partners after he was reintroduced into the Yerkes colony after a lengthy absence. This incident was interpreted as reflecting a sense of "belonging" to the group. Preliminary data presented here may corroborate

such a hypothesis^{6,16} at least among males, but it is still too early to conclude anything on the potential symbolic significance of this social custom in the CCC's release group.

Finally, one of the forms reported here may differ from variations observed elsewhere (see Fig. 2) (variations of GHC have been described in detail¹⁷). We hope that future data and observations of GHC among this group of released individuals may shed further light on its function, its propagation (as it relates to rank⁶, experience and affiliation⁴) and its potential symbolic and cultural significance.

ACKNOWLEDGEMENTS

We like to thank the local and expatriate staff at the Center for the Conservation of Chimpanzees (CCC) for their invaluable help and assistance with the chimpanzee release and with care

and rehabilitation of chimpanzees held at the sanctuary. We are also grateful to Dr. Mamby Keita, national director of the Direction Nationale de la Recherche Scientifique et Technologique and Mr. Aboubacar Oulare, national director of the Direction de la Diversité Biologique et des Aires Protégées, for their continued support of the CCC's activities in the Haut Niger National Park, in the Republic of Guinea. We would also like to thank and acknowledge the Arcus Foundation and the U.S. Fish and Wildlife Services for their financial support of the release program.

REFERENCES

1. McGrew WC, Tutin CEG 1978. Evidence for a social custom in wild chimpanzees? *Man* 13: 234–251.
2. Nakamura M 2002. Grooming hand-clasp in Mahale M group chimpanzees: implications for culture in social behaviors. In: *Behavioural Variation in Chimpanzees and Bonobos*, Boesch C, Hohmann, G, Marchant LF eds., Cambridge University Press, Cambridge, pp. 71–83.
3. Whiten A 2005. The second inheritance system of chimpanzees and humans. *Nature* 437: 52–5.
4. Bonnie KE, de Waal FBM 2006. Affiliation promotes the transmission of a social custom: handclasp grooming among captive chimpanzees. *Primates* 47: 27–34.
5. de Waal FBM, Seres M 1997. Propagation of handclasp grooming among captive chimpanzees. *Am J Primatol* 43: 339–346.
6. McGrew WC, Marchant LF, Scott SE, Tutin CEG 2001. Inter-group differences in a social custom of wild chimpanzees: the grooming hand-clasp of the Mahale Mountains, Tanzania. *Curr Anthropol* 42: 148–153.
7. McGrew WC 2004. *The Cultured Chimpanzee*. Cambridge University Press, New York.
8. Fruth BI, Hohmann G, Beuerlein MM, McGrew WC 2006. Grooming Hand Clasp by Bonobos of Lui Kotal, Democratic Republic of Congo. *Pan Africa News* 13: 6–8.
9. Ziegler S, Nikolaus G, Hutterer R 2002. High mammalian diversity in the newly established National Park of Upper Niger, Republic of Guinea. *Oryx* 36: 73–80.
10. Brugiere D, Dia M, Diakite S, Gbansara M, Mamy M, Saliou B, Magassouba B 2005. Large- and medium-sized ungulates in the Haut Niger National Park, Republic of Guinea: population changes 1997–2002. *Oryx* 39: 50–55.
11. Kormos R, Boesch C, Bakarr MI, Butynski TM (eds) 2003. *West African Chimpanzees: Status Survey and Conservation Action Plan*. UCN/SSC Primate Specialist Group: IUCN, Gland, Switzerland and Cambridge, UK.
12. Fleury-Brugiere M-C, Brugiere D 2002. *Estimation de la population et analyse du comportement nidificateur des chimpanzés dans la zone intégralement protégée Mafou du Parc National du Haut-Niger*. Report on the Parc National du Haut-Niger/AGIR project, Faranah.
13. Brugiere D in press. Key population of the endangered western chimpanzee *Pan troglodytes verus* in the Haut Niger National Park, Republic of Guinea. *Int J Primatol*.
14. Humle T, Deniau C, Lapeyre V, Houpline C, Colin C, Raballand E, in review. Diurnal primates and large- and medium-sized ungulates in the Haut Niger National Park, Republic of Guinea: Update on status, abundance and threats.
15. Raballand E 2009. *Annual Report 2009*. Project Primate Inc., Chimpanzee Conservation Center, Faranah, Republic of Guinea.
16. de Waal FBM 2001. *The Ape and the Sushi Master*. New York, Basic Books.
17. Nakamura M, Uehara S 2004. Proximate factors of different types of grooming hand-clasp in Mahale chimpanzees: Implications for chimpanzee social customs. *Curr Anthropol* 45: 108–114.

<Book Review>

Raymond Corbey, *The Metaphysics of Apes. Negotiating the Animal-Human Boundary*, Cambridge University Press, Cambridge 2005

Paola Cavalieri

Italy

The Metaphysics of Apes is a deconstructive book. What, exactly, does this survey of three “great ape debates”—around 1760, starting from the first encounters with the apes; around 1860, with reference to the discovery of apish ancestors; and after 1960, following the detection in the apes of behaviors which were previously considered uniquely human—and their aftermaths deconstruct? What is the aim of the critical examination of the conjectures about the state of nature and its inhabitants, of the post-Darwinian idea of an “ascent from the ape”, or of the peculiar philosophical connotations of the notion of “humanity” in most paleontology works?

Corbey's central contention is that the discovery of ambiguous ape-like creatures was immediately perceived as a serious threat to the deeply cherished idea of human uniqueness; and that, in the face of such threat, the animal-human boundary—a boundary specifying what can be owned, killed, eaten, and what not—was not abandoned but relentlessly policed and redrawn. Subjecting to close scrutiny disciplines like biology, natural history, anthropology and primatology, Corbey highlights how the metaphysical commitment to the idea of an animal/human dichotomy influenced not only their conceptualizations but even the articulation of their disciplinary identity.

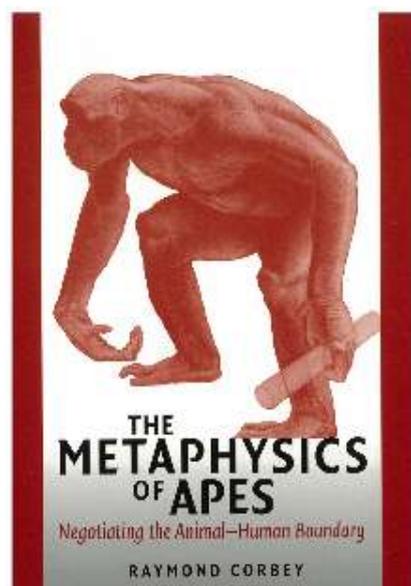
Seen in this perspective, Corbey's book shows how easily in our cultural history we have tended to draw *facts* from *values*. The overcoming of the barrier between facts and values is usually stressed in relation to the opposite

course. In moral philosophy there is a name for what forbids such an overcoming—“Hume’s Law”¹. The basic idea is that, since the realm of *what is* is logically distinct from the realm of *what ought to be*, one cannot deduce prescriptive conclusions from descriptive premises. In this version, such logical point is today accepted by most moral philosophers. Obviously, however, once accepted, it holds as well in its contrary enunciation, according to which one cannot deduce descriptive conclusions from prescriptive premises. In this version too, the point is accepted by the majority of those who are interested in it—namely, not the philosophers but the scientists. All the more so: the most ingrained scientific apologetics always aimed at representing science as a *value free* enterprise.

That this representation doesn’t always fit reality has been repeatedly alleged. What Corbey underlines, however, is a more radical phenomenon. In brief, what is in question is a guiding-function of values so decisive as to almost programmatically distort the facts. The values are those inherited from the traditional European metaphysical vision—the normative notions of human uniqueness, of a hierarchical order of beings, of a nature-culture divide—and the facts are those concerning the categorisation of the various apish beings progressively bursting in the North Atlantic cosmos.

Corbey’s examples come from all the involved disciplines. In natural history, when Linnaeus classifies humans in the same genus as the Orang-Outang, authors like Buffon, Blumenbach and Camper are quick to reaffirm the traditional separation. In evolutionary biology, the idea of a long ascent towards humanity of our apelike ancestors has the function of preserving the concept of a hierarchy at whose apex are the members of our species. In paleoanthropology, the attribution of fossils to the genus *Homo* undergoes a reordering whenever *hominitas*, or being human in the biological sense, does not coincide with *humanitas*, or being human in the philosophical sense. In cultural anthropology, finally, the nature-culture theoretical duality shows through the claim of a radical autonomy from biological disciplines.

An analogous process can be detected in the younger field of primatology. Initially experienced as a subdiscipline of physical anthropology, primatology, as soon as the relevance of its discoveries gave it an autonomous disciplinary identity, immediately called forth further defense mechanisms, causing a continual adjustment of the conventional marks of humanity. Thus, if chimpanzees use tools, the cleavage shifts to toolmaking; if chimpanzees make tools, the cleavage is the systematic making of tools of varied types; and if chimpanzees pass the mirror self-recognition test, this is not enough to reveal self-awareness in the absence of the capacity for making plans and for attributing mental states to others. (Useless to say, these capacities too were later to be found in nonhuman primates.)



The explicative power of Corbey’s deconstruction is apparent. Yet, at least two objections may come to mind. One is substantive, and concerns the dominant Western focus: aren’t there also different traditions, favoring different orientations? In fact, albeit synthetically, Corbey considers non-Western traditions. In this context, he not only underscores how Eastern cultures did not always postulate an insuperable boundary between humans and the other animals, but also emphasizes the originality of Japanese primatology, with its practice of naming individuals, stressing relationships and applying the *Kyokan* (“sympathetic”) method—a practice with respect to which he acknowledges the debt of scientists from all over the world.

The second question concerns instead methodology: cannot such a critical approach risk to delegitimize the entire scientific enterprise? Well aware of this problem, Corbey does not evade epistemological problems. First, he admits that in his view, based on Hilary Putnam’s² “internal realism” —a sort of methodological third way between Popperian rationalism and Kuhnian irrationalism—what is tested against reality is never a single proposition, but always an entire theoretical assemblage, so that, in the absence of an absolute criterion transcending all theoretical activity, “reality” is always that of a specific discourse. But second, he stresses that two elements prevent any extreme form of relativism: the approach allows that every scheme might be criticized on the basis of important requirements such as internal consistency and practicability for specific purposes; and it entails that the empirical data, with their solid structure, dictate unambiguous answers to the questions that are formulated within the framework of each particular conceptual scheme.

On the other hand, an important consequence of this

epistemological stance is that it makes possible a first challenge to the traditional dualistic paradigm that issues in dichotomies such as animal-human and nature-culture. That is to say, the deconstructive argument according to which both the general view of Darwinian evolution and the approach to the nonhuman primates are still policed by prescientific philosophical outlooks amounts to “a gambit, perhaps of a queen more than a pawn”—of a move, that is, which can actually make a difference, both philosophically and ethically.

The reference to ethics leads us to a final aspect of *The Metaphysics of Apes* which deserves to be mentioned. While surveying the different elements to which the phrase “metaphysics of apes” may refer, Corbey wonders whether in his work, as compared to the room devoted to the first three—the status granted to the apes, the convictions guiding their classification, and the perspective at work in the ways they are conceptualized—the fourth, that is, the way in which the apes themselves see the world, may not have been dealt with merely in an indirect manner, through the analysis of the various human construals of their subjectivities. Not so. For the appearance of ethics evokes a radical sense in which the apes’ very perception of the world is included in the book.

In a chapter devoted to a survey of the results of the current scientific investigation on the great apes, after illustrating the evidences of the complexity of their social life and of the extent of their cognitive capacities, Corbey turns his attention to the recent movement to grant fundamental legal rights to these close evolutionary relatives of ours. In doing so, he does not confine himself to describing an ongoing social process, but also refers to an initiative, *the Great Ape Project*³, in which he has personally participated, subscribing, together with such scholars as Toshisada Nishida, Takayoshi Kano, Jane Goodall and Richard Dawkins, the demand for a first extension of basic equality to chimpanzees, gorillas and orang-utans.

What this move amounts to is an epistemic and normative assumption of the perspective of these beings at its most basic level, concerning the intentional relationship which, as agents, they have with their goals and with the means by which to pursue them—a relationship that can be substantiated only insofar as they are not deprived of their life, well-being and freedom. With this ethical gesture, and with this anti-dualist choice, Corbey picks up all the threads of his discourse. For in this way the great apes, once redeemed from the condition to which they are now relegated, may become the much sought-after missing links in a new and more positive key: “[Not] primarily as evolutionary links in an ‘ascent’ to civilization, but as go-betweens and mediators between humans and other animals, philosophically, scientifically and morally”.

REFERENCES

1. Hume D 1978. *A Treatise of Human Nature*. Oxford University Press, Oxford.
2. Putnam H 1987. *The Many Faces of Realism*. Open Court, LaSalle, Ill.
3. Cavalieri P, Singer P (eds) 2001. *The Great Ape Project*. St Martins Press, New York.



Pan Africa News, Vol. 16, No.1

Published in June, 2009

Address: Japan Monkey Centre
26 Kanrin
Inuyama, Aichi 484-0081
JAPAN

TEL: (+81)568-61-2327

FAX: (+81)568-62-6823

E-mail: pan.editor@gmail.com

URL: <http://mahale.web.infoseek.co.jp/PAN/>