Do chimpanzees say “goodbye”? Leave-taking in chimpanzees (Pan troglodytes) of Bossou

Lucy Baehren*a,b
Alex Piel*, Susana Carvalho*, Testuro Matsuzawa*
aUniversity of Oxford, Primate Models for Behavioural Evolution
bLiverpool John Moores University, Department of Natural Science and Psychology
cPrimate Research Institute, University of Kyoto
*correspondence to lucy.baehren@anthro.ox.ac.uk

Introduction
Greeting and leave-taking are arguably universal in humans [1]. Extensive study has been done on human greeting [2] but much less on leave-taking behaviour [3]. Greeting has been studied in non-human primates, like the chimpanzee [4], but non-human reports of leave-taking are only anecdotal [5]. Questionnaires from wild chimpanzee field-sites found that although greeting was universally present in the species, leave-taking was apparently universally absent [6]. The current study is the first empirical investigation into the presence of non-human leave-taking.

Hypothesis 1: Chimpanzees will show some behaviour/s consistently before parting

Hypothesis 2: The behaviour/s will show a temporal trend towards the parting event

Methods

Study design
The study site is a 7 x 20 km clearing in Bossou, Guinea (Fig. 2). Chimpanzees here are provisioned with nuts, but come and leave the clearing of their own accord, and filmed by two or three cameras. For this study the 2006 videos were used, when 11 adult and juvenile chimpanzees were present.

Data collection protocol
Focal, all-encounter behaviours preceding separations were recorded in two-minute intervals of 0-2, 2-4 and 4-6 minutes prior to parting. Behaviours recorded included gestures, self-directed behaviours, vocalisations and eye gaze direction.

Discussion

• Chimpanzees in Bossou precede parting with self-scratching and gaze in the direction of parting
• They could be aware of the imminent separation
• First evidence that non-humans show some continuity of behaviour with human leave-taking
• Future work – do measures of parting that focus on ending a joint activity show similar results?
• Investigate possible function of leave-taking

References