Functions of vocalizations in male and female wild pygmy chimpanzees. M. Y. MERRILL and F. J. WHITE, Biological Anthropology and Anatomy, Duke University, Durham, NC 27708.

Frequencies and types of vocalizations were recorded for habituated pygmy chimpanzees (bonobos), *Pan paniscus*, at the Lomako Forest study site in central Zaïre from 1983 to 1995. Both loud and soft calls were recorded both during feeding and during other activities. Soft calls were made during feeding and were related to the quality of the food, but did not function in inter-party communication.

Both males and females participated in loud calls used for inter-party communication. Loud calls often preceded party fusion, but not party fission, both during feeding and in non-feeding contexts. Loud calls were common between night-nesting parties, and would precede lone animals or other parties joining nesting parties. Loud calls were also frequently given in food patches, most often at the start of a feeding bout, or in response to loud calls by other parties. Parties that had recently fissioned were observed to reunite when loud calls were given by some of the females that moved into a new food patch. Loud calls by both males and females during feeding would also precede party avoidance. Ecological factors such as the amount of available fruit in a food patches as well as whether the patches contained fruit or leaves influenced both the frequency of calling and the frequency of party fusion. Single males also gave loud calls, and appeared to attempt to call parties containing females into food patches, but were not always successful.

We conclude that both males and females use loud calls in party fusion and ecological information, and that calling does appear to function as patch defense in some circumstances.