

The Function of Peaceful Post-Conflict Interactions:  
An Alternate View

Joan B. Silk

Department of Anthropology

University of California, Los Angeles

In: *Natural Conflict Resolution* (ed. by F. Aureli and F.B.M. de Waal), University of California Press, Berkeley, CA, pp 179-181. (2000)

## Abstract

Most work on reconciliation assumes that the function of peaceful post-conflict interactions is to repair relationships that have been damaged by conflict. Here I present an alternative hypothesis for the evolution of these kinds of interactions. I suggest that the function of post-conflict interactions is to indicate that the conflict is over and the actor's intentions are now benign. Such interactions are important because there is often considerable uncertainty about whether conflicts will continue and this uncertainty creates considerable anxiety for former opponents. Signals of the actor's benign intentions enable former opponents to approach one another and interact in the minutes that follow conflicts. Here, I briefly describe this alternative hypothesis and describe some observations that are consistent with this view.

For most of the contributors to this volume and for many of the readers of these contributions, the function of peaceful post-conflict interactions is well established. Peaceful interactions after conflicts provide a means of resolving conflicts and repairing relationships that have been damaged by conflict (de Waal & van Roosmalen 1979). However, I believe that there are theoretical (Silk 1997) and empirical reasons to question this conclusion (Silk 1996). My goal here is to outline an alternative explanation for peaceful post-conflict behavior.

Discussions of the function of post-conflict behaviors are complicated by the terms that we use to describe these interactions. This is because “reconciliation” is a functional label, like affiliation or aggression, not a descriptive one, like grooming or biting (Silk 1998). However, I believe that important questions about the function of these interactions remain unresolved. Thus, I will use the term, peaceful post-conflict interactions, to refer to nonaggressive interactions between former opponents that take place in the minutes that follow conflicts.

I have recently proposed an alternative explanation for the evolution of peaceful post-conflict interactions (Silk 1996, 1997). I suggest that peaceful post-conflict interactions are honest signals that indicate that the conflict is over, and the actor’s intentions are now benign. The logic underlying this hypothesis goes like this. After conflicts, even conflicts that have clearly decided outcomes, there may be some uncertainty about whether the conflict will continue (Aureli et al. 1989; Aureli & van Schaik 1991). This uncertainty makes it potentially dangerous or stressful for former

adversaries to approach one another or reestablish peaceful contact. Both victims and aggressors exhibit behavioral signs of stress, e.g. scratching and other forms of self-directed behavior, in this situation (Aureli & Smucny, this volume).

Some behaviors may be honest signals which indicate that the conflict is over, and the actor's intentions are peaceful or benign. A good example of these kinds of signals comes from observations of conflicts among free-ranging female baboons in the Okavango Delta of Botswana. After conflicts, females often approached their former opponents and grunted to them. These grunts facilitated nonaggressive interactions between former opponents after conflicts (Silk et al. 1996; Cheney & Seyfarth 1997, this volume), and alleviated the victim's concern about becoming the target of renewed aggression from her former aggressor (Cheney et al. 1995). Thus, grunts seem to be honest signals of the actor's intention to behave peacefully. Signals of benign intent can evolve, even when there some conflict of interest between participants, and seem to play an important role in many social contexts among primates (Kaldor et al. in preparation).

Cords & Aureli (1996) have suggested that the benign intent hypothesis is simply a proximate explanation for how contact between former opponents is restored, while the relationship-repair hypothesis provides an ultimate explanation explanation for why former opponents are motivated to repair relationships after conflict occurs. According to this view, a female baboon's grunt signals her intention to behave peacefully toward former opponents, and this enables the female to interact with her former opponent in the immediate aftermath of conflict. However, a female's "decision" to grunt to any particular opponent is based upon the benefits that the female will ultimately derive from repairing and preserving her relationship with her former opponent.

Thus, the following question arises: Does the benign intent hypothesis provide a sufficient and complete explanation for the occurrence of peaceful post-conflict behavior in primates? I believe that it does. My intuition is based upon my reading of the literature on reconciliation and my observations of post-conflict behavior among baboons. I will outline two points which support this view below.

In the Okavango Delta, female baboons were significantly more likely to give peaceful post-conflict signals when their former opponent had a young infant than when she did not (Silk et al. 1996). Moreover, the rate of peaceful post-conflict signals closely tracked the rate of infant handling as infants matured (Figure 1; Silk, Cheney, & Seyfarth, unpublished data). In this group, females directed peaceful post-conflict signals selectively to mothers of newborn infants because they were motivated to interact with their infants, not because they were attempting to repair and preserve valued long-term social bonds. Although Cords & Aureli (1996) have disputed the relevance of this observation, I remain convinced that it supports the idea that peaceful post-conflict signals are not always used to repair and preserve social bonds.

The second observation which contributes to my intuition is that high rates of reconciliation often occur among kin (reviewed by de Waal & Aureli 1996; Silk et al. 1996). The relationship-repair model predicts that peaceful post-conflict signals should occur most often within dyads that value their relationships *because* conflict damages social bonds. There should be little need for kin to exchange peaceful post-conflict signals since their relationships are unlikely to be disrupted by conflict. Cords (1988) was the first to make this point. She hypothesized that kin, whose relationships are valuable but resilient, should have little need to reconcile because their relationships are unlikely

to be disrupted by conflict. The security of social bonds does not figure in recent writings about the pattern of peaceful post-conflict behavior (e.g. de Waal & Aureli 1996), but I believe that Cords' original logic was cogent. Therefore, evidence of high rates of peaceful post-conflict behavior among kin seems to fit the benign intent hypothesis better than the relationship-repair hypothesis.

Although we have studied peaceful post-conflict behavior in dozens of species (Introductory chapter, this volume), we do not yet have enough information about the form, pattern, and function of peaceful post-conflict behavior to draw firm conclusions about the selective forces that have shaped the evolution of peaceful post-conflict behavior. Predictions derived from these two hypotheses need to be tested empirically, and the logic underlying these hypotheses needs to be scrutinized further. However, this debate will be productive if it stimulates researchers to give more careful attention to why and how nonhuman primates resolve conflicts and to address functional questions explicitly.

#### Acknowledgments

I thank Felipe Aureli, Frans de Waal, Marina Cords, and Nicola Koyama for their comments on a previous draft of this paper. Their criticism has been instrumental in refining my ideas and their collegiality has been greatly appreciated.

## References

- Aureli, F. & van Shaik, C.P. 1991. Post-conflict behaviour in long-tailed macaques (*Macaca fascicularis*): II. Coping with the uncertainty. Ethology, 89:101-114.
- Aureli, F., van Shaik, C.P., & van Hooff, J.A.R.A.M. 1989. Functional aspects of reconciliation among captive long-tailed macaques (*Macaca fascicularis*). American Journal of Primatology, 19: 39-51.
- Cheney, D.L. & Seyfarth, R.M. 1997. Reconciliatory grunts by dominant female baboons influence victims' behavior. Animal Behaviour, 54: 409-418.
- Cheney, D.L., Seyfarth, R.M., & Silk J.B. 1995. The role of grunts in reconciling opponents and facilitating interactions among adult female baboons. Animal Behaviour, 50: 249-257.
- Cords, M. 1988. Resolution of aggressive conflicts by immature long-tailed macaques *Macaca fascicularis*. Animal Behavior, 36: 1124-1135.
- Cords, M. & Aureli, F. 1996. Reasons for reconciling. Evolutionary Anthropology, 5: 42-45.
- de Waal, F.B.M. & Aureli, F. 1996. Consolation, reconciliation, and a possible cognitive difference between macaques and chimpanzees. In: Reaching into Thought: The Minds of the Great Apes (A.E. Russon, K.A. Bard, and S.T. Parker, eds.), pp.80-110. Cambridge: Cambridge University Press.
- de Waal, F.B.M. & van Roosmalen, A. 1979. Reconciliation and consolation among chimpanzees. Behavioral Ecology and Socioecology, 5: 55-66.

- Kaldor, E., Silk, J.B. & Boyd, R. in preparation. Grunts and grineys among rhesus macaques (*Macaca mulatta*): Vocal signals of benign intent?
- Silk, J.B. 1996. Why do primates reconcile? Evolutionary Anthropology, 5: 39-42.
- Silk, J.B. 1997. The function of peaceful post-conflict contact among primates. Primates, 38: 265-279.
- Silk, J.B. 1998. Making amends: adaptive perspectives on conflict remediation in monkeys, apes, and humans. Human Nature.
- Silk, J.B., Cheney, D.L., & Seyfarth R.M. 1996. The form and function of post-conflict interactions between female baboons. Animal Behaviour, 52: 259-268.



## Figure Legends

Figure 1. As infants grew older, the rate of infant handling (acts per hour) by other adult females declined sharply. The proportion of all conflicts with mothers that were followed by peaceful post-conflict signals also declined as infants matured.

Photo caption:

An adult female sits beside a female with a newborn infant, and grunts to the mother. Then, the female gently handles the infant while the mother watches. This sequence of events is typical of many interactions among adult female baboons. Grunts seem to function as signals of the actor's intention to behave benignly and facilitate nonaggressive interactions in the minutes that follow conflicts.