

An instance of inter species interaction between Hanuman Langur (*Semnopithecus entellus*) and Rhesus Macaque (*Macaca mulatta*)

Ashish Nerlekar*

Abstract

I observed an instance of inter-species interaction between Hanuman Langur (*Semnopithecus entellus*) adults and a Rhesus Macaque (*Macaca mulatta*) juvenile in Pench Tiger Reserve, Madhya Pradesh. The aforementioned pair had positioned themselves a short distance away from a Hanuman Langur troop. The interaction of the Rhesus juvenile was in the form of jumping and climbing on the back of an adult Langur. Such upward climbing and clinging reflexes are known to be important stages of development of infant-mother bond. Study of this unusual behaviour might help us better understand various aspects of primate sociology.

Keywords: Inter- species interaction, Hanuman Langur, Rhesus macaque, Pench Tiger reserve.

Inter-specific interactions have been noted between many species of primates, rodents, carnivores, artiodactyls, pinnipeds, and birds (Herzing & Johnson 1997). Bernstein (1967); Freeland (1977) and Rudran (1978) have reported polyspecific associations in non-human primates from a number of study sites.

Various instances of association of macaques (*Macaca mulatta*) with langurs (*Presbytis entellus*) have been reported (Parthasarathy 1972; Roonwal & Mohnot 1977; Pirta 1984). Manohar & Mathur (1990) have described significant play behaviour between infants and juveniles of Rhesus macaque and Hanuman Langur while feeding in a human modified habitat. The authors report interactions ranging from play initiation and somersaulting to chase and touch in an area where troops of both the species are fed by pilgrims. When feeding in their natural habitat, Hanuman Langur troops do not object to the presence of a troop of Rhesus macaques in the proximity, but go their separate way at dusk (Prater 2005). Inter-species grooming records are known from Mundanthurai sanctuary between Hanuman Langur and Nilgiri Langur (*Presbytis johnii*) (Johnson 1981). Interactions between Rhesus macaque and Pig-tailed macaque



Fig 1: Rhesus macaque juvenile sitting and feeding on Hanuman Langur's back. © Ashish Nerlekar



Fig 2: Rhesus macaque juvenile climbing on Hanuman Langur's back. © Ashish Nerlekar.

(*Macaca nemestrina leonina*) are also known from the Bherjan- Borajan forest, Assam (Choudhury 2009).

I report a case of Inter-species interaction from Pench Tiger Reserve,

Madhya Pradesh, (21° 44' 24.56" N 79° 19' 59.53" E) which involved an adult Hanuman Langur and a Rhesus Macaque juvenile. I entered the reserve on the morning of 29th March 2011 and encountered a troop of

*6, Shree Niwas Gaurav apartment, Mayur colony, Prabha housing society, Kothrud, Pune, Maharashtra, India. Email-ashishadmirerofficus@gmail.com

Hanuman Langurs foraging on the freshly fallen flowers of *Butea monosperma* and *Madhuca indica* trees at 06.30 am.

Two Langurs, one of which was a female and other of unknown sex were sitting and feeding a short distance away from the troop. Further, a Rhesus Macaque juvenile was seen socialising and playing with the adult Hanuman Langur female. The interaction of the Rhesus juvenile was in the form of jumping and climbing on the back (Fig. 1, 2), and playing as well as feeding along with the adult Langur. Upward climbing and clinging reflexes are described as a very important stage in the development of infant-mother affectional system (Harlow & Harlow 1965).

Due to logistical constraints, the observation of the pair was limited to this one instance and I, therefore, cannot conclusively state that is evidence of a case of inter-species alloparental adoption. However, the observed interaction contradicts the fact that Rhesus mothers are known to be possessive of their infants and do not share them with other members of even the same troop (Hrdy 1946). Further investigation into this behaviour could possibly provide insights into social interactions of non human primates.

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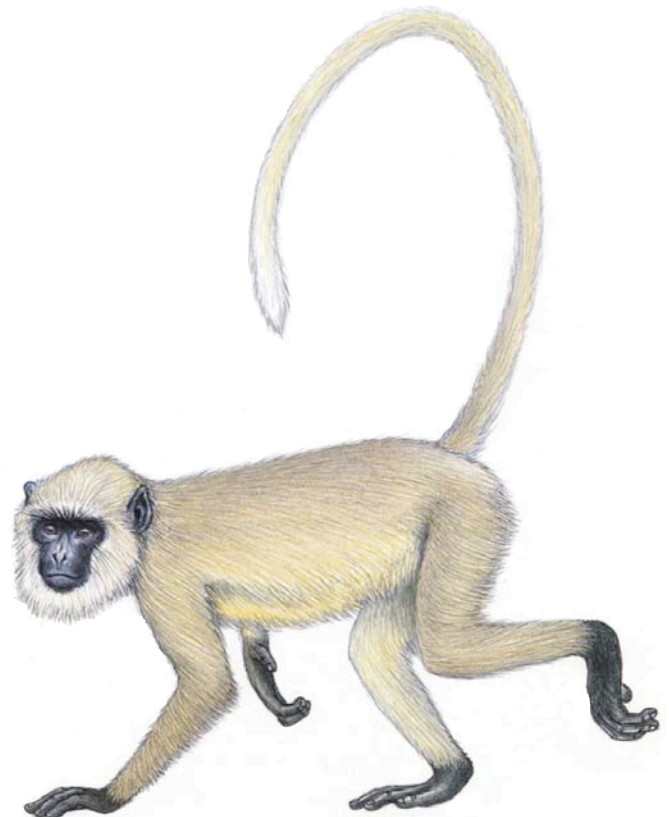
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Hanuman Langur by Stephen Nash