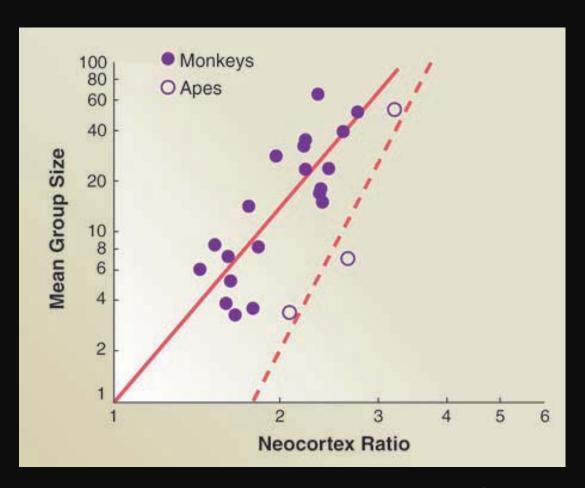
Résumé des deux chapitres précédents. Il ne peut y avoir de doute qu'il existe une immense différence entre l'esprit de l'homme le plus inférieur et celui de l'animal le plus élevé. Un singe anthropomorphe, s'il pouvait juger de son cas d'une manière impartiale, admettrait que, bien qu'il fût capable d'élaborer un plan habile pour piller un jardin et bien qu'il sût utiliser des pierres pour se battre ou pour casser des noix, pourtant l'idée de façonner une pierre pour en faire un outil serait tout à fait hors de sa portée. Et il lui est encore moins donné, comme il le reconnaîtrait lui-même, de poursuivre un raisonnement métaphysique jusqu'à sa conclusion, ou de résoudre un problème mathématique, ou de réfléchir sur Dieu, ou d'admirer un paysage grandiose.

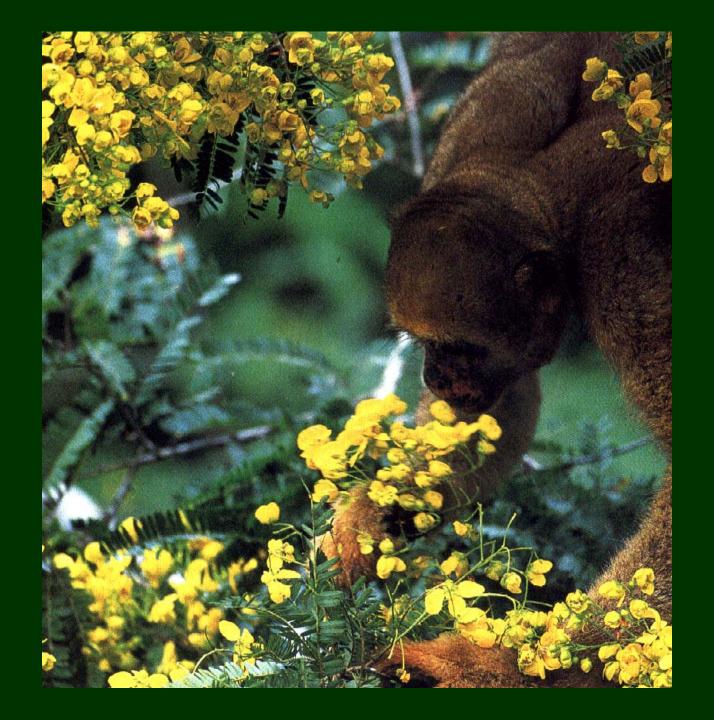


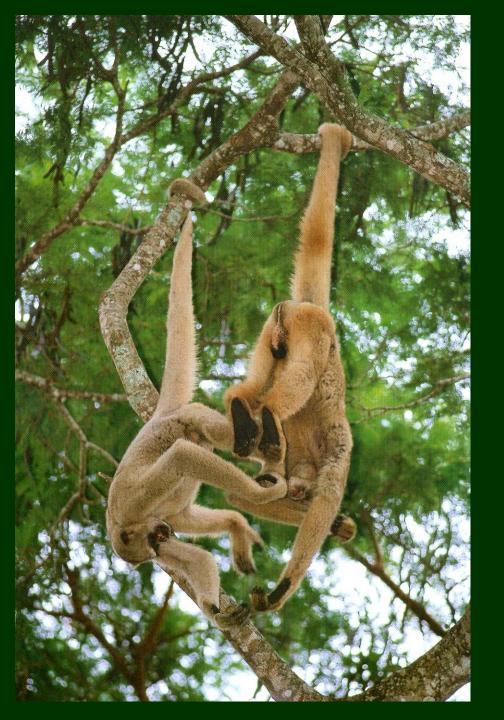
Dunbar 1998

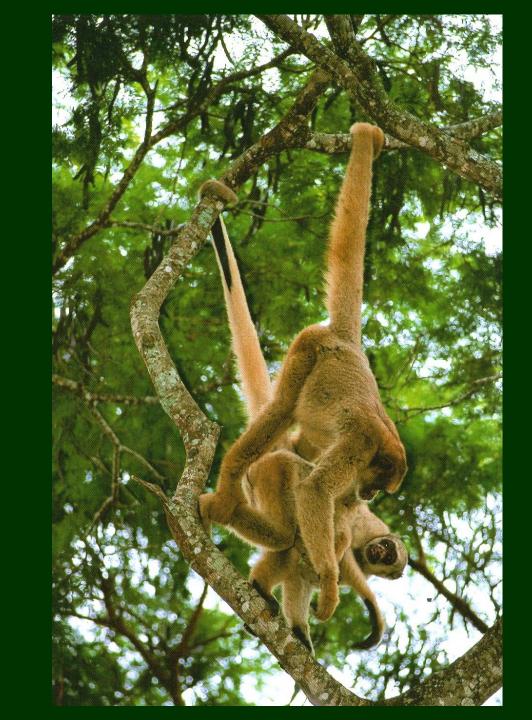
SOCIAL BRAIN HYPOTHESIS

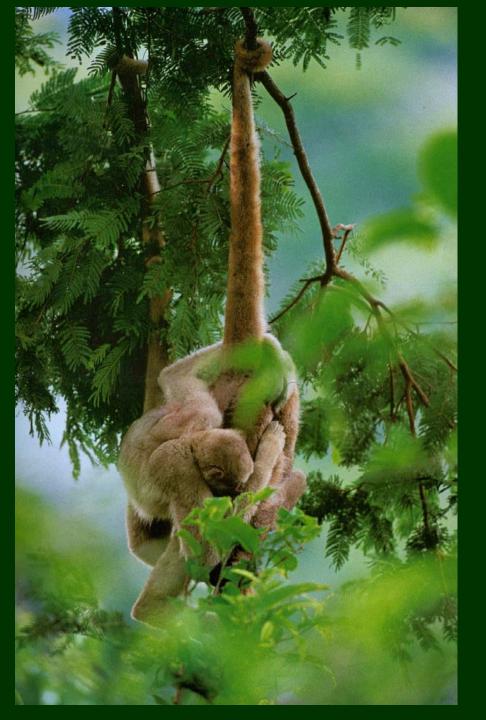




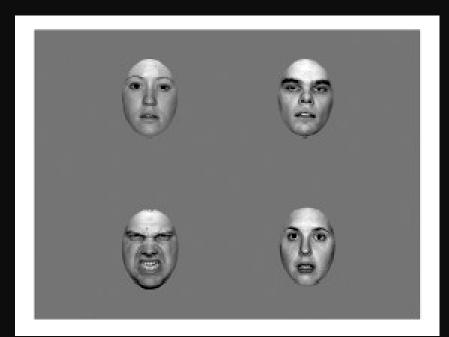


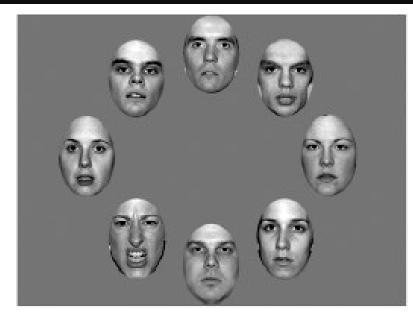












Williams e Mattingley, 2007



Rapid facial mimicry in orangutan play

Marina Davila Ross^{1,3,*}, Susanne Menzler² and Elke Zimmermann³

¹Centre for the Study of Emotion, Department of Psychology, University of Portsmouth, King Henry Building, Portsmouth PO1 2DY, UK

²Institute of Biometry, Epidemiology and Information Processing, and

³Institute of Zoology, University of Veterinary Medicine Hannover,

30559 Hannover, Germany

*Author for correspondence (marina.davila-ross@port.ac.uk).

Emotional contagion enables individuals to experience emotions of others. This important empathic phenomenon is closely linked to facial mimicry, where facial displays evoke the same facial expressions in social partners. In humans, facial mimicry can be voluntary or involuntary, whereby its latter mode can be processed as rapid as within or at 1 s. Thus far, studies have not provided evidence of rapid involuntary facial mimicry in animals.

This study assessed whether rapid involuntary facial mimicry is present in orangutans (Pongo pygmaeus; N=25) for their open-mouth faces (OMFs) during everyday dyadic play. Results clearly indicated that orangutans rapidly mimicked OMFs of their playmates within or at 1 s. Our study revealed the first evidence on rapid involuntary facial mimicry in non-human mammals. This finding suggests that fundamental building blocks of positive emotional contagion and empathy that link to rapid involuntary facial mimicry in humans have homologues in non-human primates.

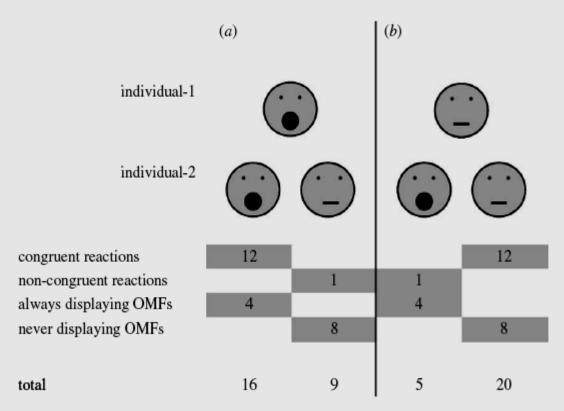


Figure 2. Overall number of individuals-2 (N=25) with OMFs and neutral faces in (a) scene display and (b) scene neutral. They were scored for congruent reactions, non-congruent reactions, always displaying OMFs and never displaying OMFs. Significantly more individuals-2 reacted congruently than non-congruently (McNemar: N=25, p<0.05).





MACHIAVELLIAN INTELLIGENCE

Social Expertise and the Evolution of Intellect in Monkeys, Apes, and Humans

EDITED BY
RICHARD BYRNE
ANDREW WHITEN

The manipulation of attention in primate tactical deception

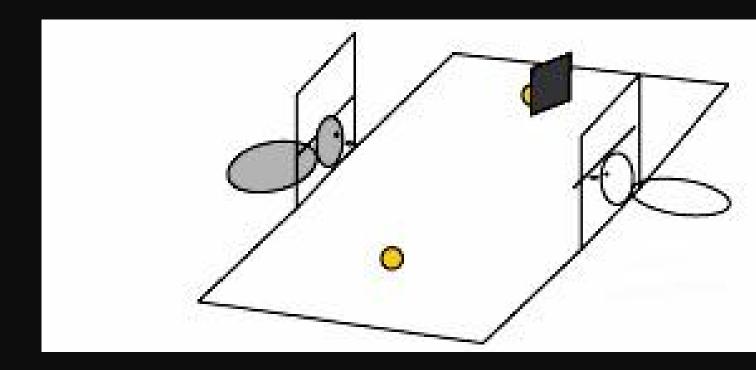
ANDREW WHITEN and RICHARD W. BYRNE

One chimp was alone in the feeding area and was going to be fed bananas. A metal box was opened from a distance. Just at the moment when the box was opened, another chimp approached at the border of the clearing. The first chimp quickly closed the metal box and walked away several metres, sat down and looked around as if nothing had happened. The second chimp left the feeding area again, but as soon as he was out of sight, he hid behind a tree and peered at the individual in the feeding area. As soon as that individual approached and opened the metal box again, the hiding individual approached, replaced the other and ate the bananas (No. 24; Plooij).

In other trials when we hid an extra piece of food about 10 ft away from the large pile, Belle led Rock to the single piece, and while he took it she raced for the pile. When Rock started to ignore the single piece of food to keep his watch on Belle, Belle had temper tantrums (No. 96; Menzel 1974).

S's group travelling slowly betwen feeding sites in a relatively straight line along a narrow trail. Four other animals behind S in line. S looks up into *Hypericum* tree and spies a nearly obscured clump of *Loranthus vine*. Without looking at those behind her, she sits down by the side of the trail and begins to intently self-groom until the others have passed her and all are out of sight some 15 foot ahead. Only then did S stop 'self-grooming' to rapidly climb into the tree, break off the vine clump and descend with it to the trail to hastily feed on it before running to catch up with the group. (No. 2; Fossey, gorillas).

The unit was resting. An adult female spent 20 minutes in gradually shifting in a seated position over a distance of about 2 metres to a place behind a rock about 50 cm high where she began to groom the subadult follower of the unit—an interaction not tolerated by the adult male. As I was observing from a cliff slightly above the unit, I could judge that the adult male leader could, from his resting position, see the tail, back and crown of the female's head, but not her front, arms and face; the subadult male sat in a bent position while being groomed and was also invisible to the leader. The only aspect that made me doubt that the arrangement was accidental was the exceptionally slow, inch by inch shifting of the female. This had in fact caused me to focus on her behaviour so long before she had reached the final position (No. 26. Kummer, Hamadryas baboons).







EYES EXPOSED/EYES COVERED BY A MASK



FRONT/ BACK CONDITION

TRANSPARENT BARRIER



LOW BARRIER





