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# Supplemental Material to:

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## It's never too early to get it right: A conserved role for the cytoskeleton in left-right asymmetry

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# Supplemental Material to:

Cyril C Grueter*

# No effect of inter-group conflict on within-group harmony in non-human primates

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## Supplementary File

| Species | Grooming (%) | Home range overlap (%) | Source | Notes |
|---|---|---|---|---|
| *Lemur catta* | 11 | 42 | (Jolly et al. 1993; Sussman 1977) | |
| *Propithecus verreauxi* | 2 | 40.8 | (Benadi et al. 2008; Lewis 2009) | |
| *Cebus olivaceus* | 1.85 | 90 | (de Ruiter 1986) | Home range overlap estimated from Fig 1 |
| *Alouatta guariba* | 2.55 | 16.5 | (Agostini et al. 2010), Agostini in (Grueter et al. 2013) | |
| *Alouatta caraya* | 1.15 | 22 | (Agostini et al. 2010), Agostini in (Grueter et al. 2013) | |
| *Brachyteles hypoxanthus* | 0 | 46 | (Strier 1987; Strier 1992) | |
| *Presbyis femoralis/melalophos* | 0 | 79 | (Bennett 1983) | *Presbytis siamensis* in (Grueter et al. 2013) |
| *Presbytis thomasi* | 1.3 | 40.5 | (Grueter and van Schaik 2010; van Oijen 1992) | |
| *Presbytis potenziani* | 0.1 | 28 | (Sangchantr 2004) | |
| *Presbytis rubicunda* | 0 | 10 | (Davies 1984) | |
| *Trachypithecus leucocephalus* | 11.5 | 16.2 | (Li and Rogers 2005; Li and Rogers 2004) | |
| *Trachypithecus pileatus* | 0.35 | 84 | (Stanford 1991) | |
| *Semnopithecus entellus* | 6 | 50 | (Newton 1992) | |
| *Rhinopithecus bieti* | 6.1 | 100 | (Kirkpatrick 1996) | |
| *Rhinopithecus avunculus* | 6.8 | 100 | (Boonratana and Le 1998) | |
| *Pygathrix nigripes* | 2.25 | 9.6 | (Hoang 2007) | Mean overlap of 2 sites |
| *Nasalis larvatus* | 2.8 | 100 | (Boonratana 1993) | |
| *Colobus polykomos* | 0.7 | 4 | Dasilva in (Dunbar 1991) and (Oates 1994) | |
| *Colobus guereza* | 6.175 | 73 | (Fashing 2001; Oates 1977) | |
| *Colobus vellerosus* | 1.345 | 81.5 | (Teichroeb et al. 2003; Teichroeb and Sicotte 2009) | |
| *Piliocolobus rufomitratus* | 2.1 | 36 | (Marsh 1981a; Marsh 1981b) | |
| *Piliocolobus badius* | 5.4 | 60 | (Starin 1991) | |
| *Piliocolobus kirkii* | 7.03 | 30.86 | (Siex 2003) | |
| *Piliocolobus tephrosceles* | 4.5 | 99 | (Struhsaker 1975; Struhsaker and Leland 1979) | |
| *Procolobus verus* | 3.6 | 15 | (Korstjens 2001), Noe and Korstjens in (Lehmann et al. 2007) | Home range overlap measures only overlap with one of the multiple groups that overlap study group's home range; home range overlap overlap >14 |

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|---|---|---|---|---|
| *Cercopithecus mitis* | 8.06 | 12.2 | (Butynski 1990) | |
| *Cercopithecus ascanius* | 5.6 | 5 | (Struhsaker 1980; Struhsaker and Leland 1979) | "very little overlap" |
| *Cercopithecus campbelli* | 2.8 | 0 | (Buzzard 2004) | |
| *Cercopithecus diana* | 2.5 | 8 | (Buzzard 2004) | Home range overlap estimated from Fig. 5.7 |
| *Chlorocebus aethiops* | 6.8 | 5 | (Isbell and Young 1993) | Overlap "minimal" |
| *Chlorocebus djamdjamensis* | 2.7 | 3.5 | (Mekonnen et al. 2010) | |
| *Lophocebus albigena* | 5.2 | 76 | (Chancellor and Isbell 2009; Waser 1976) | |
| *Macaca fuscata* | 23.4 | 38 | (Agetsuma 1995; Maruhashi 1981; Maruhashi 1982; Maruhashi et al. 1998) | Home range overlap data from the same population, but not from the same group as grooming data were obtained |
| *Macaca munzala* | 12 | 10 | (Kumar et al. 2007) | Home range overlap ca 10% |
| *Theropithecus gelada* | 17.4 | 100 | (Iwamoto and Dunbar 1983) | |
| *Papio papio* | 8.3 | 15 | (Sharman 1981) | |
| *Papio ursinus* | 10 | 75 | (Barrett et al. 1999; Whiten et al. 1987) | Same population, but home range overlap data from earlier study on possibly different groups |
| *Papio cynocephalus* | 8.95 | 25 | (Bronikowski and Altmann 1996; Stacey 1986) | Same groups, but grooming and range overlap data not from exactly the same time; used % time socializing (which was essentially time spent grooming); home range overlap ca 25% |
| *Hylobates lar* | 4 | 20.25 | (Bartlett 1999; Ellefson 1974) | Ellefson: home range overlap "slight" |
| *Hylobates klossii* | 0 | 10 | (Whitten 1980) | Home range overlap "slight" |
| *Hylobates agilis* | 0 | 24 | (Gittins 1980; Gittins and Raemaekers 1980) | |
| *Symphalangus syndactylus* | 10 | 30 | (Chivers 1974; Gittins and Raemaekers 1980) | Same siamang group; home range overlap from Chivers; home range overlap = average of 2 groups |
| *Nomascus concolor* | 1.71 | 10 | (Guan et al. 2013) | |
| *Hylobates pileatus* | 5 | 25 | (Brockelman and Srikosamatara 1984; Srikosamatara 1984) | |
| *Pan paniscus* | 5.7 | 40 | (Thompson-Handler 1990; White 1992) | |
| *Pan troglodytes* | 9.77 | 20.5 | (Boesch and Boesch-Achermann 2000; Huffman 1990; Nishida 1979; Willems et al. 2013; Wrangham 1977) | Wrangham: home range overlap “slight” |
| *Gorilla gorilla* | 0.09 | 100 | Doran, cited in (Lehmann et al. 2007), (Doran and McNeilage 2001 ) | |
| *Gorilla beringei* | 2.49 | 74 | (Watts 1994; Watts 1998); KRC data in (Grueter et al. 2013) | Group 5 shared 47% and group Nk shared 100% with other groups |

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|---|---|---|---|---|
| *Pongo pygmaeus* | 0.01 | 67.8 | (Knott et al. 2008; Mitra Setia et al. 2009; van Noordwijk et al. 2009) | |


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