

Macaque chatter offers language clue

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WOMEN may be fed up with being stereotyped as the chattier sex, but the cliché turns out to be true – in female-centric monkey groups at least. The gossipy nature of female macaques also adds weight to the theory that human language evolved to forge social bonds.

Many researchers think that language replaced grooming as a less time-consuming way of preserving close bonds in ever-growing societies.

Nathalie Greeno and Stuart Semple from Roehampton

University in London hypothesised that if this was true then in species of animals with large social networks, such as macaques, vocal exchanges should be just as important as grooming.

The duo listened to a group of 16 female and eight male macaques living on Cayo Santiago island off Puerto Rico for three months. They counted the grunts, coos and girneys – friendly chit-chat between two individuals – while ignoring calls specific to the presence of food or a predator.

The team found that females made 13 times as many friendly

noises as males. “The results suggest that females rely on vocal communication more than males due to their need to maintain the larger social networks,” Greeno says.

Females were also much more likely to chat to other females than to males. Greeno suggests this is because female macaques form solid, long-lasting bonds as they stay in the same group for life and rely on their female friends to help them look after their offspring. In contrast, males, who rove between groups throughout their life, chatted to both sexes equally (*Evolution and Human Behavior*, DOI: 10.1016/j.evolhumbehav.2008.09.002).

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The team say this is the first time that sex differences in communication in non-human primates have been identified.

It is not known whether early human societies were female-centric, as macaques are, but the team believe that their findings support the theory that human language evolved to strengthen ties between individuals.

Klaus Zuberbühler from the University of St Andrews in the UK, who studies primate communication, agrees that the findings back the theory of language development.

In all social species, he says, communication “helps individuals navigate their daily social lives, usually by influencing the minds and behaviour of group members. He adds that communication helps resolve the tension between a species’ “need to compete and a desire to cooperate”. ●