daunting by incomplete and/or fragmentary remains, so anthropologists are equipped with a toolkit of predictive equations featuring various skeletal locations or attributes. As part of a larger project of adding to this toolkit, cranial and postcranial measurements were obtained from a sample of modern humans drawn from American populations. In light of the trend toward fatness in American adults, an attempt to adjust for fatness was made by estimating fatness from triceps and subscapular skinfold measurements. A sample of 45 males of European descent provided known body weights, cranial and postcranial skeletal measurements, triceps and subscapular skinfolds, and an additional measurement of body fat. These data were used to examine the relationship of the skeletal measurements to body mass with and without adjustment for fatness. In this way modern humans of known body weight will become more useful as sample subjects in studies of body mass, even if subjects are drawn from an American or similarly Western population, especially as an estimate of lean body mass is more apropos to palaeoanthropological studies. On the other hand, forensic anthropology would be better served with estimates based on a realistic American body image.

Female reproductive strategies in chimpanzees of the Taï Forest, Côte d'Ivoire: Do females exhibit preferences for particular males?

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Relative to males, female chimpanzees have fewer gametes, a shorter lifetime reproductive potential, and a considerably larger investment in the gestation and care of offspring. Consequently, females should carefully select potential fathers to enhance survival of their offspring and maximize their reproductive success. However, chimpanzees have a promiscuous mating system in which females copulate with the majority of males over the course of their tumescence. The question arises whether females are so sexually indiscriminate as to risk leaving paternity to chance. The aim of this study is to examine if female chimpanzees exhibit sexual and social preferences for males, and if so, to determine how and when these preferences are expressed. Over 2200 hours of focal observation were collected on 14 estrous females from two communities. All stages of their reproductive cycle were sampled. For each female, detailed sexual and social behavior were recorded, as well as responsibility for both association and proximity to the adult males. Female sexual preferences were measured by quantifying female proceptive and receptive behaviors. Female social preferences were measured by determining which individual was responsible for maintaining association and proximity, as well as the frequency of dyadic interactions such as grooming, play, etc. Preliminary results suggest that females show distinct preferences for particular males over others. Females show a trend toward more selectivity during the peri-ovulatory period, and less selectivity outside of the peri-ovulatory period, suggesting a mixed reproductive strategy whereby females may influence paternity, while maintaining the benefits of promiscuous mating.

Human incisors and molars from the Late Middle Pleistocene locality of Hoedjiespunt 1, South Africa.

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Hoedjiespunt 1 (HDP1) is an archaeological and paleontological site located at Saldanha Bay on the West Coast of South Africa. In 1993, a brief survey of exposed fossil material from the late Middle Pleistocene paleontological layers yielded several fragments of a human left maxillary second molar. Subsequent excavations of these layers have yielded additional human remains – a right maxillary third molar found in 1994, a left central mandibular incisor and a left lateral mandibular incisor found in 1996, and a tibia found in 1998. The context in which these remains were found is discussed, and a description and analysis of the dentition is presented. Based on their stages of development, it is likely that all four teeth belonged to a single sub adult individual. Surprisingly, despite this individual's young age, its incisors already display early signs of a wear pattern that is commonly seen in people pursuing a hunter-gatherer lifestyle, and attributed to the habitual nonmasticatory utilization of the anterior teeth. The crown diameters of the HDP1 incisors and molars are larger than those of modern and archaeological African dentition. The incisors are particularly large, comparing most closely to a dental sample dating from the Plio-Pleistocene boundary. The molars however are comparable in size to other Middle and Lower Pleistocene hominids, thus following an apparent trend for size reduction in posterior teeth during this time period.

The response of white-bellied spider monkeys to the vocalizations of sympatric frugivores.

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The challenge for frugivorous primates is two-fold: to locate the few trees in the forest that are at the fruit-bearing stage of their phenologies, and then to visit those trees when they yield sufficient numbers of ripe fruits. The vocalizations of sympatric frugivores can provide information on the location and/or status of fruit-bearing patches (Olupot et al., 1998). This project investigates the possible use of frugivorous bird and mammal vocalizations by a ripe-fruit specialist, the white-bellied spider monkey (*Ateles belzebuth belzebuth*) in the Yasuni National Park in Amazonian Ecuador.

I evaluated the responses of spider monkeys to calls from nine species of sympatric frugivorous birds and mammals (whose diets overlapped that of *Ateles*) during a four-month period in order to test whether the monkeys approached the direction of the callers. I recorded location and time of each of these bird and mammal calls (n = 160) relative to the location of the monkey subjects at the time of the call, and at intervals of 10, 30, and 60-minutes to detect potential approaches.

Results indicate that the monkeys did not immediately approach the caller, nor were their locations at 30 and 60 minutes biased in the directions of the callers. This suggests that although the use of calls made by sympatric frugivores has the potential to increase feeding success, such information does not seem to play a significant role in the foraging decisions of spider monkeys.

Monkey see monkey learn: macaques learn 3-item lists by observing experienced subjects.

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It has been suggested that observational learning, whereby one individual learns through the actions of another, is evolutionarily recent and only present in great apes. However, most experiments on observational learning have involved complex motor sequences. To avoid that bias we trained two rhesus macaques (*Macaca mulatta*) on a 3-item serial task in which they had to obtain information about the ordinal position of list items that could not be encoded as motor responses. All list items were pre-