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EDITORIAL NOTE

# Great ape gestures: intentional communication with a rich set of innate signals

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**Abstract** Great apes give gestures deliberately and voluntarily, in order to influence particular target audiences, whose direction of attention they take into account when choosing which type of gesture to use. These facts make the study of ape gesture directly relevant to understanding the evolutionary precursors of human language; here we present an assessment of ape gesture from that perspective, focusing on the work of the "St Andrews Group" of researchers. Intended meanings of ape gestures are relatively few and simple. As with human words, ape gestures often have several distinct meanings, which are effectively disambiguated by behavioural context. Compared to the signalling of most other animals, great ape gestural repertoires are large. Because of this, and the relatively small number of intended meanings they achieve, ape gestures are redundant, with extensive overlaps in meaning. The great majority of gestures are innate, in the sense that the species' biological inheritance includes the potential to develop each gestural form and use it for a specific range of purposes. Moreover, the phylogenetic origin of many gestures is relatively old, since gestures are extensively shared between different genera in the great ape family. Acquisition of an adult repertoire is a process of first exploring the innate species potential for many gestures and then gradual restriction to a final (active) repertoire that is much smaller. No evidence of syntactic structure has yet been detected.

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