

Gesture vs. Speech: What Can Non-Verbal Communication Tell Us About Language Uniqueness?

Human communication is not confined to speech; gestures play an important part in expressing ideas. While humans use gestures to supplement language or as part of elaborate sign languages, many non-human primates rely on gestures for social interaction. This research critically investigates whether gesture-based communication provides insights into the uniqueness of human language. We start by distinguishing between co-speech gestures, which support spoken language, and independent gesture systems, such as sign language. We examine fresh evidence demonstrating that chimps and bonobos make purposeful gestures to request actions or communicate emotions. While these behaviours demonstrate goal-directed communication, they are limited to immediate contexts and cannot express abstract or displaced meanings, a feature of human language. Our analysis emphasises the adaptability and cultural significance of human gestures. For example, studies of deaf societies show that gestures can grow into structured linguistic systems capable of expressing speculative and abstract concepts. Primate gestures, on the other hand, are more consistent and vary little between contexts and communities.

We believe that integrating gestures with speech enables humans to express sophisticated ideas, whereas animal gestures remain concrete, context-specific functions. This discrepancy lends credence to the notion that displacement—the ability to relate to things other than the "here and now"—is unique to humans. This paper contends, using data from comparative linguistics, cognitive science, and primatology, that while gestural communication is evolutionarily ancient and widespread across animals, its integration with abstract language is a distinguishing aspect of human uniqueness. This research contributes to the evolution of the language issue by highlighting the cognitive and social advances that underpin human gestural flexibility.

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References:

- Cartmill, E. A., & Byrne, R. W. (2010). Semantics of primate gestures: Intentional meanings of orangutan gestures. *Animal Cognition*, 13(6), 793–804. <https://doi.org/10.1007/s10071-010-0328-7>
- Cartmill, E. A., Beilock, S., & Goldin-Meadow, S. (2012). A word in the hand: Action, gesture, and mental representation in humans and non-human primates. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 367(1585), 129–143. <https://doi.org/10.1098/rstb.2011.0162>
- Zlatev, J., & Żywiczyński, P. (2020). Pantomime as the original human-specific communicative system. *Journal of Language Evolution*, 5(2), 156–176. <https://doi.org/10.1093/jole/lzaa006>