

Pathways to language: The role of communicative plasticity in joint action coordination

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Arguably the most powerful social tool in the animal kingdom, language may have evolved as an adaptation to a new demand: the coordination of joint action. Coordinated and cooperative joint action is only possible with effective communication, which in turn requires highly flexible adjustments to social context, interaction partner and ecological settings. Are the evolutionary roots of this plasticity to be found in our closest living relatives, the great apes? Despite evidence for signal innovation and flexible signal use in the hominid family, this hypothesis remains to be tested, because most comparative work focuses on population- or species-level variation rather than variation on the individual level. With this project, I aim to investigate the proximate factors driving communicative plasticity in great apes' and humans' social action coordination using a multimodal (i.e. considering various signal types and sensory modalities) approach. To tease apart variation on an individual, population and species level, I will pioneer applying a behavioural reaction norm approach to extensive observational and experimental datasets from wild and captive great apes as well as humans in large-scale, industrialized and small-scale, hunter-gatherer societies. Moreover, I will test to which extent specific social and ecological environments bring about a tendency in individuals to modify or even invent communicative acts and structures, and in turn also understand such novel acts. To that end, the goal of this project is to reach beyond the traditional study of "species-typical" signal repertoires derived from single communities only. By operating at the interface of comparative psychology, behavioural ecology and interactional linguistics, this project will help to draw critical inferences about the role communicative plasticity in joint action coordination played at the dawn of human language.

Projektbeteiligte

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