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THE USE OF FIELD EXPERIMENTS TO STUDY CULTURE IN WILD CHIMPANZEES

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Claims for chimpanzee culture currently rest on empirical evidence from population and group-specific behavioural differences. Sceptics have emphasized the role of social learning in human cultures and argued that ecological or genetic factors provide a more parsimonious explanation for the behavioural diversity observed in wild chimpanzee populations. Work with captive chimpanzees has showed that experimentally created traditions can be transmitted through social learning but it is unclear to what extent such findings apply to the wild. Here, we evaluate the role of field experiments to address the question of chimpanzee culture directly with wild populations. We discuss several paradigms suitable for fieldwork, which have the potential to produce answers to the points of contention. One key feature is to expose two or more genetically related populations (which originated from the same ancestral population in the recent past) to the same task. This way it is possible to study the impact of recent ecological changes on the maintenance or disappearance of potential cultural traits and how chimpanzees rely on this common knowledge to solve tasks in community-specific ways. Second, diffusion experiments in the field can be useful to study the transmission of newly acquired behaviours and will allow analysis of the learning mechanisms at work. In combination, such paradigms can bring a deeper understanding of what should be considered as cultural in chimpanzees, and how this compares to human cultures.

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