

How the Social Plays into Bird (and other non-Human) Communication

In the quest to determine whether or not nonhuman communication systems (such as bird songs) are analogous to human Language, several aspects of these systems have historically been examined. There is significant work on, for instance, bird brains and other aspects of bird anatomy (cf. Jarvis et al 2005), bird cognition (cf. Miller et al 2023), and the use of tools (cf Shaw 2021). In addition, several studies have demonstrated that many bird species are vocal learners: a significant portion of these birds' songs are learned, and a significant portion of these birds' brains is devoted to such learning (cf. Bruno et al 2021).

While there have been links made to what researchers might label as 'culture' in other species -- whereby practices are taught, shared in a group, and are maintained over generations -- the links to such culture and the communication systems are not emphasized (with some notable exceptions; cf. Miller, R. et al 2023). Researchers have shown that, for instance, zebra finch songs have geographical variation; different colonies of the same species of birds (and some primates) have different calls for the same thing, even if the colonies are in contact with each other. Birds born in captivity that have been taught a song that is not "native" to their species will use that song when initially released into the wild, but will eventually begin to use the call of the colony they're released into. The question that remains is, why? Is there evidence that the colonization that we see in bird species has more than a utilitarian function, but a social function as well? And is this social function reflected in the communication system, as it is in humans?

While we focus on bird communication, we will present work on affect in other nonhuman communication systems, including recent work with dairy cows (Cornips & van Koppen 2024). We hope to show that, as is the case with human Language, social cognition shapes the communication systems of some nonhumans.

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