

Parrot-Human Vocal Interactions: Turn-Taking Dialogues and One Instance of “Repair”

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Although some researchers argue that turn-taking—in all forms, but particularly with respect to communication—is a uniquely human skill (1), elements of such behavior are common in many birds, who are separated from humans by over 300 MY of evolution. Almost all territorial songbirds use countersinging for defense, a behavior pattern that, depending on the species, shows an extreme range of flexibility—from exact song matching to evaluating and singing one of several different songs in a neighbor’s repertoire (2). Somewhat more specialized are duets, which are generally used between mated pairs, and have been found from wrens to parrots. The flexibility again varies, depending on the species, and the functions can be manifold (3). My own research has been based on Todt’s initial finding that Grey parrots (*Psittacus erithacus*) will adapt their species-specific turn-taking interactions to interspecies communication (4). Over the course of 40 years of study, I have found that several of these parrots would indeed respond flexibly to various human queries (e.g., “What’s this?”, “What color?”, “What shape?”, “How many?”, “What’s same/different?” etc.), often with respect to the same pair of stimuli, providing evidence that they processed each question, determined the meaning of the question and the category involved, and then chose the appropriate, specific response (5). Although my students and I did not focus on the issue of turn-taking dialogues or instances in which the birds initiated vocal interactions, and thus did not consistently record occurrences of such behavior, several anecdotes were documented. Birds questioned experimenters for information about novel items (e.g., asking about colors, shapes, and object labels); the birds expected answers and repeated their requests if no responses were forthcoming. One bird learned several new labels through such interactions (5,6,7). Some interactions more closely resembled their species-specific duets, such as a “good night routine”, although the elements and roles of the speakers varied nightly. On occasion, birds used turn-taking to repair interactions for clarity, so as not only to request a particular food, but also the specific subset that was desired (i.e., a *purple* grape). Interestingly, turn-taking was also demonstrated with humans in a food-sharing task (8). These birds could not be said to have acquired a complexity of interaction in any way comparable to the richness of human language, but did use what speech they had acquired in order to demonstrate that they understood and could referentially use certain elements of communication once thought beyond the reach of nonhumans.

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