

Song in songbirds: a window on language?

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Birdsong is not language. The semantics of birdsong, for instance, is - if we can speak of this concept at all - not at all comparable to language. Nevertheless, there are also several similarities. Like language, song is a vocal communication signal consisting of a complex rapid sequence of vocal units, structured according to specific rules. Like language, song also develops by learning at an early age, with perception preceding and guiding production, and is characterized by selectivity in what will be learned. The learning process provides plasticity to different song features, which can result in dialect formation and cultural changes. I will argue that these similarities make birdsong an interesting model for comparative research on several aspects of language. Study of birdsong may reveal analogues of linguistic processes and may provide hypotheses about the mechanisms required for learning and processing language, as well as about evolutionary processes that may have been relevant to language evolution and change. In my talk I will give attention to both mechanistic and evolutionary aspects of birdsong studies. I will review some findings about bird song learning. The examples will show that there may be two levels at which learning may affect song copying: that of the phonology of the elements and that which might be called the 'syntax' - the way these elements are arranged in a song or series of songs. I will also address the role of learning in relation to song syntax (is it 'UG' or 'UB'?) and discuss whether birds are able to detect abstract grammatical structures in vocalizations. I will then turn to dialect variation in songs, illustrating that change may affect both phonology and syntax of songs.