Form and Corresponding mental representations: Comparing the development of tonal group and linguistic abstractions

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Saffran (1999) et al. found that infants can segment a stream of continuous tone sequences that are organized into some sort of overall pattern. The ability to segment involves forming complex abstractions of groupings over a tone series. Similarly, Dominey (2006) speaks of children developing grammar from holophrases to verb islands to argument structure constructions by making continual revisions from a grammar of only closed-class constructions to one that has more open-class constructions. The process of moving from closed-class to open-class constructions also involves slowly making abstractions from patterns in the linguistic data. This paper discusses the "state of the art" in the development of music and language abstractions by reviewing and synthesizing literature from music and language acquisition and development. I discuss the commonality in the properties of abstractions for music and language, as well as common constraints on their developmental trajectories. Finally, I discuss the theoretical significance of abstraction in music and language for questions of modularity.

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