

Prosody and listeners' interpretation of ambiguous

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While prosody has been shown to correlate in systematic ways with the structure of discourse in speech (Lehiste 1975, Hirschberg & Grosz 1992, Tyler submitted), much less is known about prosody's ability to affect the interpretation of discourse (but see Silverman 1987; Mayer, Jasinskaja and Kölsch 2006). This talk will focus on experiments that test prosody's ability to bias listeners' interpretation of ambiguous discourses. For example, the discourse "I sat in on a history class. I read about housing prices. And I watched a cool documentary." could reasonably be interpreted two ways, as the narrator meaning she read about housing prices and watched a cool documentary in history class or separate from history class. And crucially, the lexical and syntactic material is identical; thus, the ambiguity arises precisely in the relations between sentences (discourse). The experiments test the ability of different prosodic manipulations to bias interpretation towards one or the other interpretation. Results show that contrasts in sentence-final pitch contours, inter-sentential pause duration, mean pitch and mean intensity do bias interpretation. Originally using participants from the Psychology Subject Pool, these results were replicated with participants from the online labor market Amazon Mechanical Turk. Because both populations used prosody systematically and similarly in their interpretation, this suggests Mechanical Turk is a reliable, quick and inexpensive alternative to bringing people into the lab. In sum, these experiments show that prosody can systematically bias the interpretation of ambiguous discourse and creates a paradigm for subsequent studies to isolate more specific contributions of individual prosodic features to discourse interpretation.