Turn-taking vs. backchanneling in spoken dialogue systems

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Abstract

Listeners have many options in dialogue: They may interrupt the current speaker, take the next turn after the speaker has finished, remain silent, or backchannel, to indicate that they are attending, without taking the turn. In this talk I will discuss two of these options which are particularly difficult, yet particularly important, to model in spoken dialogue systems: taking the turn vs. backchanneling. How can the system determine which option the user is taking? How can the system decide which option it should take, and when? I will describe results of an empirical study of these phenomena in the context of a larger study of human-human turn-taking behavior in the Columbia Games Corpus. This is joint work with Agus Gravano.