

Small but important – Building metacommunicative interaction mechanisms into conversational agents

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Artificial conversational agents, such as voice assistants and conversational interfaces, are now widely available. They are primarily used casually in the home for convenience and entertainment purposes, but more impactful applications, e.g., as assistive technologies in home-care settings, are becoming more relevant. It is thus important that they are easy to use for all types of users. Despite the significant advances in automatic speech recognition and natural language processing technologies over the past decade, the actual conversational capabilities of these assistants are still limited. One reason is that much of the interactional infrastructure that humans rely upon to smoothly make progress in conversation – surfacing in seemingly ‘small’ phenomena such as feedback, turn-taking signals, or repair – are often overlooked. In this talk, I will focus on computational models of the metacommunicative mechanism of linguistic and multimodal feedback and their effects on interactions with conversational agents and will make the argument that research in conversational technology, but also the disciplines working on human speech, should pay more attention to metacommunicative and interactional mechanisms and phenomena.