

Keynote

More than meets the ear: Processes that shape dialogue

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Abstract: What is dialogue, anyway—language produced in alternating turns by two or more speakers? A way to collaboratively accomplish a task or transaction with an agent, whether human or computer? An interactive process by which two people entrain and coordinate their behaviors and mental states? A corpus that can be analyzed to answer a research question? The ways in which researchers conceptualize dialogue affect the assumptions and decisions they make about how to design an experiment, collect or code a corpus, or build a system. Often such assumptions are not explicit. Researchers may decide to characterize, stage, control, or entirely ignore such potentially key factors as the task two people are charged with, their identities, their common ground, or the medium in which dialogue is conducted.

Such decisions, especially when left implicit, can affect the products and processes of dialogue in substantial but unanticipated ways; in fact, they can change the results of an experiment. As one example, spoken dialogue experiments often use a simulated partner or confederate in the role of speaker or addressee; just how the confederate is deployed reflects the researcher's explicit theory and implicit assumptions about the nature of dialogue. As another example, sometimes experiments place people in infelicitous situations; this can change the kind of language game people think they're playing. I will cover some implicit assumptions about the nature of dialogue that affect the risks researchers take, and highlight pairs of studies that have found different results, perhaps due to these assumptions.

Speaker's Bio: Susan Brennan is Professor of Psychology in the Cognitive Science Program at Stony Brook University (State University of New York), with joint appointments in the Departments of Linguistics and Computer Science. She received her Ph.D. in Cognitive Psychology from Stanford University with a focus on psycholinguistics; her M.S. is from the MIT Media Lab, where she worked on computer-generated caricature and teleconferencing interfaces; and her B.A. is in cultural anthropology from Cornell University. She has worked in industry at Atari Research, Hewlett-Packard Labs, and Apple Computer. Her research interests span language processing in conversation, joint attention, partner-specific adaptation during interactive dialogue, the production and comprehension of referring expressions, lexical entrainment, discourse functions of prosody and intonation, speech disfluencies, multimodal communication, social/ cognitive neuroscience, natural language and speech interfaces to computers, spoken dialogue systems, and repair in human and human-computer dialogue. She has used eye-tracking both as a method for studying the incremental comprehension and production of spontaneous speech and as a channel in computer-mediated communication. A currently funded project is "Communication in the Global University: A Longitudinal Study of Language Adaptation at Multiple Timescales in Native- and Non-Native Speakers." She is temporarily on leave from Stony Brook University in order to serve as Program Director for NSF's oldest program, the Graduate Research Fellowship Program in the Division of Graduate Education.