Dialogue, response quality and mode choice in iPhone surveys

As people increasingly communicate via mobile multimodal devices like iPhones, they are becoming accustomed to choosing and switching between different modes of interaction: speaking and texting, posting broadcast messages to multiple recipients on social media sites, etc. These changes in everyday communication practices create new territory for researchers interested in understanding the dynamics of dialogue. This talk will describe studies of 1200+ survey respondents answering survey questions from major US social surveys, either via voice vs. SMS text (native iPhone apps) and either with human vs. automated interviewers; because the studies contrast whether the interviewing agent is a person or automated and whether the medium of communication is voice or text, we can isolate effects of the agent and the medium. The studies measure completion rates, respondent satisfaction and response quality when respondents could and could not choose a preferred mode of responding; response quality was measured by examining “survey satisficing” (taking shortcuts when responding—providing estimated or rounded vs. precise numerical answers, and “straightlining”—providing the same responses to multiple questions in an undifferentiated way), reports of socially desirable and sensitive behaviors, and requests for clarification. Turn-taking structure in text vs. voice is, of course, vastly different, with notably longer delays between turns in the asynchronous text modes, and greater reported multi-tasking while texting; and there were some notable differences in texting and talking with human vs. automated interviewers/interviewing systems. But the overall findings are extremely clear: notably greater disclosure of sensitive/embarrassing information in text vs. voice, independent of whether the interviewer is human or automated; and less estimation/rounding in text vs. voice, again independent of whether the interviewer is human or automated. The opportunity to choose a mode of interviewing led to improved satisfaction and improved response quality, with more respondents choosing text than voice. The findings suggest that people interviewed on mobile devices at a time and place that is convenient for them, even when they are multitasking, can give more trustworthy and accurate answers than those in more traditional spoken interviews. Survey interviews are a very particular kind of dialogue with particular constraints, but they are a useful laboratory for deeper understanding of the dynamics and pragmatics of dialogue.