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# Interactional Costs of Interrupting Collaborative Tasks: Effect of Length on Face Management and Grounding

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## Introduction

Interruptions of conversations are common. Interrupted persons must suspend the conversation, address the problem and then reinstate the conversation. The process of suspending and reinstating requires coordinating both interpersonal and task-related issues between partners.

Research on task interruption has focused on cognitive processes (McFarlane & Latorella, 2002). But many tasks are collaborative, and interruptions must be jointly coordinated between participants. In conversation, people commit to interact and to talk about a topic. These commitments are established sequentially (Clark, 1996). Interrupted participants have to negotiate suspending and reinstating both the interaction and the topic. This is face threatening (Brown & Levinson, 1987) and disrupts coordination and grounding (Clark, 1996).

Previously, we examined naturally-occurring interruptions in telephone conversations (Chevalley, Bangerter & Ferigutti, 2005). Longer suspensions led to more face management and more effort to reinstate the topic. Conversational role of the person interrupted (speaker or listener) also influenced the suspension process.

Here we experimentally manipulated interruption length in telephone conversations. We predicted that longer suspensions lead to more face management (excuses, justifications) and to more effort in reinstating the conversation. We also investigated whether speakers and listeners acted differently.

## Method

Twenty-four non-acquainted pairs discussed a pre-specified topic for 12 minutes on Voice over Internet Protocol (VoIP) telephones in separate rooms. A target person was interrupted twice during the conversation (long and short, order counterbalanced). Thus, length was a within-subjects factor. As a cover story, we first had participants fill out questionnaires. When interrupting, the experimenter entered the room and asked the target a question about one of the questionnaires. The length manipulation induced a short ( $M = 12$  sec) and a long ( $M = 36$  sec) suspension of the interaction  $F[1, 20] = 81.4, p < .001$ .

Conversations were audio/video-recorded and transcribed. Face management was coded, e.g., requests to suspend, justifications, apologies and digressions. Effort in reinstating the topic was measured by meta-communication

(e.g. "where were we") and the proportion of words from the last topical utterance preceding the suspension repeated in the first topical utterance after reinstatement (repeated words). This last measure indicates how much conversation at reinstatement is lexically related to previous talk.

## Results and Discussion

Long interruptions made topic reinstatement more effortful. They led to more frequent meta-communication (79% vs. 47%, Cochran's  $Q[1, 19] = 4.5, p < .05$ ) and less repeated words (20% vs. 40%,  $F[1, 19] = 13.2, p < .01$ ) than short ones. Long interruptions led to more effortful face management after the suspension than short ones (33 vs. 11 words,  $F[1, 22] = 7.2, p < .05$ ).

Conversational roles influenced the initiation of suspension. Listeners used more speaking turns to suspend the interaction than speakers (4.2 vs. 2.6,  $F[1, 39] = 4.3, p < .05$ ).

Taken together, results show that longer interruptions lead to more effort to suspend and reinstate the interaction (face management) and the topic (grounding). Participants also acted differently as speakers or listeners. Listeners do not have the floor when interrupted. Thus the effort to suspend is greater for them than for speakers, who can cut short the conversation quicker (self-interruption is more polite and less disruptive than other-interruption).

Results highlight the interactional costs of interrupting collaborative tasks, an issue on which there is currently almost no research. Given the ubiquity of interruptions of collaborative tasks in everyday situations, more research is a needed. This study is a first step in this direction.

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