

# A Case Study of Coherence in Workplace Instant Messaging

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## Abstract

*This article presents a case study of two individuals' workplace instant messages. More specifically, it examines the strategies for maintaining a coherent conversation present in their IM manuscripts. It then presents three strategies that the two participants used. Finally, the article presents recommendations for future work on workplace instant messaging.*

*Keywords: instant messaging, workplace, coherence, turn-taking*

## Introduction

Instant messaging (IM) is now a mainstream means of communication, even in workplaces. Managers and employees who just a few years ago used email as their only means of CMC now use IM regularly. In fact, a recent study showed that 26% of people who use IM for social communication also use it at work [1]. This percentage, it appears, will only continue to grow as people in the workforce grow more comfortable with it.

Although IM has been in use since around 1996, it has gained attention from technical communication scholars only within the last few years (e.g., [2]). Indeed, the discourse of IM, particularly IM that is generated in workplaces, remains relatively unexamined and requires much further analysis. This case study examines discourse characteristics of two “expert” instant messengers. The goal of this study is to describe patterns in the discourse between the two interlocutors, particularly patterns in how they maintained coherence in their work-related IMs. This paper describes three strategies that the two participants exhibited to maintain coherent interactions.

## Coherence in IM Discourse

Prior research on face-to-face communication has examined how discourse participants, people communicating with one another, contribute to the conversation and then make way (or select) the next

contributor to the conversation; this process is called “turn-taking.” In what is probably the most important work on the subject to date, Sacks et al. described turn-taking in face-to-face conversations; three (out of 14) critical observations they made were these: 1) most often, one person speaks at a time, 2) turn size varies, and 3) transitions between turns usually occur with no gap or overlap [3, pp. 700-701].

In face-to-face interactions, Sacks et al. point out, participants exchange turns smoothly. One person contributes, holding the conversational “floor,” and then the other participant contributes, taking and subsequently holding the floor (for the duration of his or her turn). Face-to-face interactions facilitate smooth exchanges between participants because they provide visual and audio cues such as facial expression, eye contact, body language, and prosody, all signals of when one participant is stopping and when the other should begin [3].

Smooth turn taking is important because it contributes to an interaction's coherence—participants' shared sense of what is going on and what the interaction is about. Further, the idea of turn disruption is brought to light by Herring [4]. As Herring [4] and others (e.g., [5]) notice, the medium of IM can impair turn-taking and, thus, discourse coherence. Herring hypothesizes this problem stems from two characteristics of IM. First, she says that IM's lack of simultaneous feedback, caused by lack of audio and visual cues and an inability to overlap contributions (as in face-to-face interactions), disrupts participants' contributions. More importantly for this study, Herring notes that disrupted adjacency of discourse contributions, caused by the fact that participants' transmissions are posted in the order received by the system no matter the prior contribution to which they correspond, also impairs coherence [4, p. 5]. In other words, two IM transmissions that are relevant to one another may be separated by non-relevant transmissions. This coherence problem also relates to Grice's Maxim of relevance, which posits the expectation that adjacent turns should relate to one another [6, p.58]

In a study of synchronous (e.g., IM) and asynchronous (e.g., email and listserv communication), Herring found that transmissions that were relevant to each other in content were not adjacent to each other. Also, she found sequences in which one participant started or continued on one topic while the other participant added comments related to a different topic. Finally, she also found topic decay, in which participants ignored their discourse partner's contributions or dropped their discourse partner's topic.

Similarly, in another study of IM, Volda et al. found that "tensions" arose from IM's mixing of spoken and written language characteristics [7]. They write that it was "rarely apparent in transcripts whether the speaker intended one statement to be a complete series of phrases, as in verbal communication, or whether a statement was to act as a thesis to further elaboration, as in written communication" [7, p. 190]. Volda et al. suggest that it is the tension between written and spoken communication that disrupts IM coherence.

It may be the case, however, that IM users are adapting to the peculiarities of the IM medium, adopting strategies for creating and maintaining coherence across their IM interactions. In a recent comprehensive description of young adults' social IM (as opposed to workplace IM), Baron found that participants broke down single utterances into multiple transmissions [8]. For example, she presents the following example of a long utterance from one participant that was sent not as one long transmission but as five short transmissions:

- 1        That must feel nice
- 2        to be in love
- 3        in the spring
- 4        with birds chirping
- 5        and frogs leaping [8, p. 4]

Besides concluding that short transmissions make IM resemble spoken language more than it does written language, Baron concludes that short transmissions allow discourse participants to maintain the conversational floor. That is, by breaking down their contributions into several transmissions, IM participants can notify recipients that they are not yet finished with their contribution, which increases discourse coherence.

Baron's findings suggest that users may be able to create more coherence in their IM interactions than earlier studies like Herring's [4] acknowledged. In addition, it remains to be seen whether the same use of short transmissions to create more coherent transmission sequences manifests in workplace IM interactions. Indeed, most IM studies so far, like Baron's, have analyzed social IMs, as opposed to institutional,

particularly workplace IMs (e.g., [9], [10]). Given the task-oriented nature of much workplace discourse, it may be the case that participants in workplace IM interactions use even shorter transmissions than those of Baron's college-age participants [8], as IM users in the workplace may strongly prioritize efficient communication.

Before going further, it is important to pause here to define some terms that we use throughout this paper, such as the aforementioned "transmission." Table 1 defines the terms that we use frequently.

Table 1- Definition of Terms

<b>Transmission</b>	One line from one participant in the context of a whole interaction.
<b>Transmission Sequence</b>	A group of related transmissions strung together by one participant.
<b>Interaction</b>	The entire conversation between the two participants.

## Task-Driven Communication Between Expert IM Users

JR and CP were the two subjects for this case study. Both work in the media center of a technological university in the Midwest of the United States. We looked at data, which consisted of transcripts of their IM interactions and interviews with them. JR is the Director of the media center and is the superior of CP, the Employee, who works as a liaison between the university's community development office and the media center. The two have been working together since 2000 and have been communicating via IM since 2001—well over six years. They both characterized their relationship as very close, and IM has become a part of their daily interactions. The two can be considered not only "expert" IM users in general (with other users), but also experts in using IM with each other.

We collected 70 interactions that took place between the two participants over the course of 95 days. Both participants used MSN Messenger, an IM client that automatically saves each day's log as an .html file and stamps the time each transmission was sent. Both participants were typing from standard computer keyboards. From this data, we could see that the two participants used IM daily for primarily task-related communication. In fact, only 32 transmissions out of the total 906 transmissions related to non-task-related topics

such as where to eat lunch, what to eat for lunch, and how to pay for lunch (e.g., “do u have some money for me from lunch”). Otherwise, in 96% of the transmissions, the participants focused on work.

## Coherence Strategies

In this section, we describe and exemplify some of the discourse strategies that JR and CP used in their IM interactions, strategies that we believe helped them to maintain discourse coherence in completing workplace tasks via IM.

### Strategy 1: Using short, multiple, and sequential transmissions

Although JR and CP could have communicated via phone or in face-to-face conversations, they used IM as their primary mode of communication, suggesting that they must have developed ways to maintain useful and coherent IM interactions. Indeed, out of all 906 transmissions we analyzed, we noted only a few miscommunications. Even with the occasional miscommunication, JR and CP overwhelmingly communicated effectively and thus continued to use IM as their primary means of inter-office communication.

One strategy they used that was readily apparent was their use of a small number of words per transmission combined with multiple transmissions per sequence—the same strategy noted by Baron in her study of social IMs [8]. Baron suggests that short and multiple transmissions somehow signal the hearer that more is to come. However, we found that even if there is nothing in the actual word content that signals the hearer that more is to come, short, multiple, and sequential transmissions physically make it less possible for the hearer to interject. The key, we feel, is that the rate at which the speaker submits a transmission. Excerpt 1 shows an example of short, multiple transmissions from CP, one of our participants. It should be noted that there are only 5 to 6 seconds in between each transmission. This does not leave much time for the hearer to interrupt by typing a transmission and submitting the transmission, and therefore, increases the chances of maintaining relevant content in adjacent turns:

#### Excerpt 1

1	10:27:35	CP:	well sorry machine issues
2	10:27:40	CP:	caould not get anything done
3	10:27:41	CP:	sorry

There are three transmissions in this transmission sequence, and each transmission consists of a relatively small number of words. CP typed as much as he would speak, typing as soon as a thought came into his head. However, rather than typing one line of text, CP typed three separate transmissions, which took less time and decreased the possibility of being interrupted. If CP would have typed all three lines into one transmission, JR would have more time to introduce new off-topic transmissions. Thus, by using three transmissions, CP maintained the floor and increased the coherence of this turn.

Of course, we are aware that this is merely one pair of participants and understand that a more in-depth study needs to be conducted to formulate any strong conclusions. We did, however, interview the participants and asked them about transmission length in order to gain a possible explanation for their short transmissions. Both of our participants—CP and JR—stated several reasons for the short transmission length. CP mentioned that when he instant messages, he types as though he were speaking, making transmissions short and choppy like contributions to a face-to-face conversation. CP did not explicitly state that he realized his short transmissions facilitated discourse coherence, but nevertheless, his use of multiple, short transmissions allowed him to hold the floor and keep JR from interjecting her own contribution before he could finish his thought.

JR also used short and multiple transmissions in her IM conversations. In fact, in our interviews with her, she explicitly stated that she used them as a “floor holding” technique. Excerpt 2 shows an example of her use of short, multiple transmissions. Again, it is important to note that there are only 6 seconds intervals between each transmission:

#### Excerpt 2

1	10:25:52	JR:	[CP]...
2	10:25:58	JR:	The furniture has arrived
3	10:26:04	JR:	at the school

Besides using short transmissions to maintain the floor, JR said that she used them to keep conversations concise.

### Sub-strategy: Being direct

In their interviews, both JR and CP commented that their close relationship allowed them to be less polite and more direct with each other than they were with some other colleagues. Analysis of their IM transcripts suggests that their directness decreased their chances of

miscommunication and thus facilitated coherent communication. In addition, their directness created shorter, more concise conversations, exactly what the two valued about IM, according to their interview comments. Similar to using short, multiple, and sequential transmissions, directness may reduce the chance for the hearer to interject. Using a less direct strategy for a request would involve a longer and more elaborate request, consequently giving the hearer a chance to interject with an off-topic transmission. In Excerpt 3, JR states an order directly, with no mitigation for politeness:

Excerpt 3

1 9:02:33 JR: be sure to bring back for calss by wed.

Excerpt 4 shows similar directness:

Excerpt 4

1 10:23:12 JR: cancel urs for earlier in the day

In Excerpts 3 and 4, JR states orders as directives, in second-person and in imperative mood. That is, she eschews mitigating words like “could you,” which would allow her to state her orders as questions, as in “could you be sure to” or “could you cancel.” Also, she eschewed politeness terms like “please,” as in “Please be sure to.” However, when asked about this JR’s direct orders, CP stated that he did not perceive them as impolite. Rather, he said that he knew the task-at-hand was important and needed to be communicated clearly.

It is likely that case that not all working relationships will benefit from such directness, even if that directness facilitates clear IM transmissions and coherent IM interactions. IM users who lack the established relationship that JR and CP had (a relationship that spanned nearly seven years) may stress their relationship with such curt orders and requests. IM users like JR and CP, those with comfortable and long-term work relationships, are more likely to have a strong sense of the kinds of discourse acceptable to them for accomplishing work-related tasks. Such expert IM users may decrease miscommunication and increase coherence if they use directness in their IM transmissions.

**Strategy 2: Using topicalization**

The workplace IM participants used several other discourse strategies to maintain coherence, such as topicalization—using a word or phrase that introduces context to the hearer. Not only does topicalization provide context, which in turn helps maintain coherent discourse [e.g., 8], it also signals that another transmission is going to occur, and thus decreases the chance of interruption or interjection of an off-topic transmission. For example, in

Excerpt 5, CP begins with the topicalization marker “abt mike” (about mike), indicating to JR more on the topic, Mike, will be forthcoming:

Excerpt 5:

1 11:52:00 CP: abt mike  
 2 11:52:08 CP: how do we ahndle the 220  
 3 11:52:13 CP: i mean he gets \$220 for 2 weeks  
 4 11:52:34 JR: contract

In line 1, CP states the topic of his transmissions to come, “abt mike,” creating a schema for JR so that she can more easily understand how all of his subsequent transmissions are related. CP also uses the discourse marker “I mean” to indicate that his transmission elaborates on what he has just communicated; that is, he signals a particular relationship between his current transmission and his previous ones—restating of an idea, as opposed to adding to one or contrasting a new idea against another.

**Strategy 3: Using performative verbs**

Similar to CP’s use of topicalization, JR uses a performative verb that seems to increase coherence across her transmission sequence. Performative verbs, verbs that explicitly state the speaker’s intention, increase clarity in face-to-face discourse [e.g., 11] and can be used just as effectively in IM discourse. In line 4, JR uses the performative verb, “asking,” to state explicitly the speech act that she is trying to convey. In doing so, she clears up a miscommunication that has occurred; she lets CP know that she is asking him a question about credit notices, as opposed to ordering him to get credit notices:

Excerpt 6:

1 9:01:26 JR: will u get notices from credit purchases?  
 2 9:01:49 CP: okie  
 3 9:01:49 CP: which email address?  
 4 9:02:19 JR: im asking you.. if it is setup that way. . u  
 5 9:02:21 JR: have been incontact with luna. . or whoever  
 6 9:02:27 JR: sets that up  
 7 9:02:57 CP: no i dont think so let me ask if that is

8 9:03:02 CP: possible with them  
 9 9:03:08 JR: k

The miscommunication occurred because CP, at the beginning of the interaction, thought JR already knew that notices for credit purchases were available. Thus, CP at first understood JR's question in line 1 to be an indirectly stated order to obtain notices for credit purchases. When JR sees that CP has interpreted her question this way, she resolves the miscommunication by making her goal explicit. JR's performative verb generates greater coherence in that it indicates subsequent transmissions that will elaborate on her question, a question intended to disambiguate her meaning. The use of performative verbs to increase clarity is not unique to IM, and it serves the same function in IM as in face-to-face interactions. Myriad performative verbs exist; useful ones include "suggesting," "advising," "telling," "saying," "promising," and "ordering."

## Conclusion

We have presented three strategies that our two expert IM users in this case study used in their IM interactions. Table 2 summarizes their strategies.

Table 2- Summary of Coherence Strategies

Strategy	Reason behind strategy
Use short and multiple transmissions; use directness	Maintains the floor and lessens the chances of turn interruption
Use topicalization	Indicates intention to maintain the floor
Use performative verbs	Indicates intention to maintain the floor; decreases ambiguity, lessening chances for miscommunication

This case study presents patterns that two expert IM users exhibited in their workplace IM interactions as they kept their interactions coherent and relatively free from miscommunications. Novice IM users may be able to learn something from these experts. It is important to note, however, that we based our analysis on data stemming from just two IM interaction participants. Further research on workplace IMs should, of course, expand the data set beyond a case study. Such studies could analyze how people using IM in the workplace maintain different workplace relationships and how they accomplish various workplace tasks via IM. In addition, future studies could examine more complex manifestations of institutional power, such as politeness

(or lack of it) used in conveying orders, requests, and suggestions.

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