COMPLETE PAPER

Instant Messaging by American College Students
A Case Study in Computer-Mediated Communication

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Abstract

Instant messaging (IM) has become a mainstay of online communication, especially among teenagers and young adults. While IM is commonly thought of as a written version of informal speech, there has been little empirical investigation of its linguistic characteristics. This paper reports on a cluster of studies of the IM behavior of American college students. Findings suggest that (1) the linguistic characteristics of college student use of IM are in many ways at odds with popular descriptions of the medium, (2) gender is a relevant variable in the construction of IM conversations, and (3) multitasking often renders IM an asynchronous (rather than "instant") form of communication. The paper concludes by suggesting that IM can be seen as a new style of discourse (here called "language under the radar") that reconfigures traditional assumptions about spoken and written language.

I. Instant Messaging as a Form of Computer-Mediated Communication

The term **computer-mediated communication** (CMC) refers to a variety of written messaging systems that allow two or more participants to correspond at a distance using computer-based technology. CMC messaging is generally described with respect to two variables. The first of these is synchronicity:

- In synchronous CMC, participants communicate in real time; that is, they are logged onto the computer-based technology simultaneously.
- In asynchronous CMC, users can construct and send messages without the recipient(s) needing to be available to respond when the messages are transmitted.

The second variable is number of participants in the conversation:

- In one-to-one CMC, a single user communicates with a single interlocutor.
- In many-to-many CMC, multiple users join together in conversations.

A four-way matrix results from these two variables:

	synchronous	**asynchronous**
one-to-one	instant messaging	email, texting on mobile phones
many-to-many	Chat, MUDs, MOOs, computer conferencing	listservs, newsgroups, blogs

Instant message (IM) is, in principle, a synchronous, one-to-one form of CMC. With the explosion of networked personal computers in the 1990s, coupled with the appearance of America Online's Instant Messenger program in 1997, use of IM has skyrocketed in the United States, especially among teenagers and young adults. Contemporary IM platforms that are especially popular among younger users include AIM (AOL Instant Messenger) and Yahoo! Messenger. Among users accessing IM in the workplace, MSN (Microsoft Network) Messenger and IBM Lotus Instant Messaging are common as well.

Here is a sample IM conversation between two male college students:

Line 1	Max:	I really hate you guys sometimes
Line 2	Max:	cause you don't just make fun of me sometimes
Line 3	Max:	but all the time
Line 4	Max:	and usually when I'm not around
Line 5	*Jim:*	*how would you know if we did it when you weren't around?*
Line 6	Max:	cause I find out later

Each numbered line (1-6) represents a distinct IM transmission. Max holds the conversational floor for four successive IM transmissions (lines 1-4). These transmissions constitute a single long utterance (roughly defined as a sentence or closely related sentences) that he breaks into chunks, which are transmitted a piece at a time. Part of our research considered the nature of and reasons for this utterance chunking.

II. Variables for Studying the Linguistic Nature of Instant Messaging

In recent years, IM has received considerable attention in the popular press. Some stories have focused on the overall linguistic make-up of IM conversations while others have asked whether the language style of IM is starting to erode schooled writing habits. Both types of reporting assume that IM messages are brief, that they contain many linguistic shortcuts (e.g., heavy use of abbreviations, acronyms, emoticons, and contractions), and that they are characterized by non-standard grammar and spelling. However, rather than reflecting empirical research, these descriptions typically represent self-reporting from teenagers – especially younger teens and more particularly young females. Among young teens, language (both online and off) is often intentionally crafted to create a social marker of in-group status. It does not follow that more mature and/or experienced populations of IM users generally create the sorts of messages depicted in popular media.

This paper reports on a set of studies that examined IM usage patterns among American college students. College-aged cohorts generally have several years of IM experience from high school and often anecdotally report having "outgrown" the stylized language patterns characteristic of many younger users. Moreover, college students typically spend many hours each day working on networked computers, with their machines anchoring both social and academic activities.

Our investigations explored four sets of variables: (1) the overall linguistic character of IM conversation, (2) the comparative relationship of face-to-face spoken language, off-line writing, and IM, (3) gender issues in speech, writing, and IM, and (4) discourse conditions in speech, writing, and IM.

Overall Linguistic Character of IM Conversation

The linguistic analysis was divided into two categories: discourse scaffolding (that is, how the overall conversations were constructed) and lexical issues (that is, issues relating to specific words).

The discourse scaffolding analysis included:

- average length (in words) of an IM transmission
- number of one-word transmissions
- average number of IM transmissions per minute
- average length of conversations (both in number of transmissions and in minutes)
- average length of conversational closings (both in number of transmissions and in seconds)
- frequency of multi-transmission sequences from the same message sender (e.g., lines 1-4 in the sample conversation above)
- grammatical character of utterance breaks (For example, in the sample conversation above, the utterance beginning with line 1 – "I really hate you guys sometimes" is broken into four chunks. The second chunk, appearing in line 2 –

"cause you don't just make fun of me sometimes", constitutes an adverbial clause modifying the main verb *hate* in line 1.)

The lexical analysis included:

- use of abbreviations (e.g., *k* for *okay*) and acronyms (e.g., *brb* for "be right back")
- use of emoticons (e.g., ☺ to represent a smiling face)
- spelling errors and self-corrections
- use of contractions (e.g., *don't* vs. *do not*)

Comparative Relationship of Face-to-Face Spoken Language, Off-Line Writing, and IM

The second variable examined was the extent to which IM conversations appear to resemble everyday face-to-face spoken conversations or more traditional (typically formal) off-line writing. There is a substantial literature on the relationship between speech and writing (e.g., Chafe 1994; Chafe and Danielewicz 1987; Chafe and Tannen 1987; Biber 1988; Crystal 1995) as well as a growing literature on the extent to which computer-mediated communication in general more closely resembles speech or writing, or is a genre unto itself (e.g., Baron 1998, 2000, 2003, 2004, In Press; Crystal 2001; Danet 2001; Herring 2002; Yates 1996).

Previous analyses (e.g., Crystal 2001) have argued that on balance, CMC has more similarities to written language than to spoken. The present study focuses specifically on the spoken or written character of IM.

Gender Issues in Speech, Writing, and IM

The third variable was gender: to what extent are male versus female IM conversations linguistically similar or different. Our formal corpus analysis looked only at linguistic issues relating to discourse scaffolding and lexical choice, not at the semantic content of the messages. However, one of the focus groups probed the relationship between gender and IM message content.

Sociolinguists have written extensively about stylistic differences they have observed between males and females in spoken and written language. For example, it is commonly reported that females tend to use more politeness indicators than males (Coates 1993), whereas males more frequently interrupt woman than vice versa (Tannen 1994). More generally, women (on average) tend to use language as a tool for facilitating social interaction, whereas males are more prone to use language for conveying information. These trends have been documented with respect to both speech (Cameron 1998; Coates 1993; Eckert & McConnell-Ginet 2003; Holmes 1993; Romaine 2003; Tannen 1994) and writing (Biber 1988; Biber, Conrad, & Reppen 1998; Palander-Collin 1999; Argamon, Koppel, Fine, and Shimoni 2003). It has also been observed (James 1996; Labov 1991) that on average, women's speech reflects standard phonological, lexical, and grammatical patterns more than men's does. This female pattern appears to be reflected in the results

of tests measuring written language skills. Grade-school girls consistently outpace boys on the writing component of the National Assessment of Educational Progress administered periodically in the United States (National Center for Educational Statistics 2002).

Gender differences have also been observed in studies of some forms of computer-mediated communication. Herring (2003) reports that on listservs and newsgroups (both of which constitute asynchronous, many-to-many CMC), males tended to be more adversarial and to write longer messages than females; females tended to be more supportive in their postings, to write shorter messages, and to apologize more than males. In her studies of Chat and of social MUDs and MOOs (all of which constitute synchronous, many-to-many CMC), males were more aggressive and insulting, while female discourse was more aligned and supportive, reflected in the fact that females used three times as many representations of smiles or laughter.

Very little linguistic work has been done on gender issues in one-to-one CMC. Boneva and Kraut (2002) report that females are more likely than males to use email (asynchronous CMC) to communicate with friends and family. However, ours appear to be the first study of gender issues in instant messaging (technologically a synchronous form of CMC).

Discourse Conditions in Speech, Writing, and IM

The final variable we considered was the conditions under which spoken, written, and IM communication takes place. Paradigmatically, when we think about speech, we typically have in mind face-to-face communication between two people. (For purposes of analysis, linguists typically put aside multi-party conversations, monologues, telephone conversations, etc.) Such face-to-face conversation takes place in real time (i.e., synchronously). Unless we are in a formal situation (such as a job interview), most of us do not edit our language before we "transmit" it (i.e., speak). Similarly, when we are speaking face-to-face, politeness conventions call for us to look at our interlocutor, reducing the amount of multitasking in which we are likely to engage. Granted, there are multiple exceptions to these politeness conventions (e.g., driving a car while talking, preparing a meal while talking), but as we shall see, the multitasking opportunities are slimmer than when using IM.

The discourse conditions for writing, again paradigmatically, are asynchronous: the time a text is composed is typically unrelated to the time when it will be read. (We can put aside exceptions such as notes passed at a meeting, and think, instead, of books, newspapers, and the like.) Traditional writing encourages editing. In fact, our education system trains us to do such editing before "transmitting" our texts for others to read. Multitasking while writing is possible, though again, it tends to be constrained. Since most of us write with our hands (i.e., rather than using voice recognition software on a computer), it proves cumbersome to simultaneously engage in additional manual activities.

Computer-mediated communication, though written, shares discourse conditions of both speech and writing. Technologically, CMC may be synchronous or asynchronous. However, in social practice, the dividing line is often unclear. For example, given rapid computer networking, "asynchronous" email is often used essentially synchronously; among college students (see below), "synchronous" IM is commonly used asynchronously.

Focusing on IM, although the medium was originally designed for one-to-one communication (i.e., like paradigmatic face-to-face speech), IM messages can be saved and forwarded to third parties. Like writing, IM is a durable medium, admitting of editing before being transmitted. However, since IM is generally an informal medium, the amount of editing users actually engage in is almost certainly less than that found in paradigmatic off-line writing. Finally, IM offers users ample opportunities to engage in multitasking while conducting IM conversations. Unlike face-to-face speech, IM affords the visual and auditory privacy of writing – your interlocutor does not know that you are simultaneously chatting with a friend on the phone, listening to music, or munching on potato chips. Unlike traditional writing, IM takes place on a computer, which offers access to other potential multitasking activity such as Web browsing or games.

Two of the studies we describe below (the multitasking questionnaire and the focus groups) were constructed to gather empirical data on the multitasking behavior in which students engage while conducting IM conversations. All of the research taken together was designed to help elucidate the nature of IM as a discourse style modulo conventional spoken and written discourse.

III. Studying IM Usage by American College Students

Three sets of IM studies were conducted: (1) collection and analysis of a corpus of IM conversations, (2) administration and analysis of an online questionnaire on multitasking, and (3) focus groups.

IM Corpus

In the Spring of 2003, a corpus of 23 IM conversations was collected from undergraduates (or recent graduates) at American University in Washington, DC. The corpus consisted of:

- 9 conversations between male partners (MM), 9 conversations between female partners (FF), and 5 conversations between male and female partners (MF)
- a total of 2185 individual IM transmissions
- a total of 11,718 distinct words

Multitasking Questionnaire

In the Fall of 2004, we designed an online questionnaire regarding the multitasking behavior in which subjects were engaged at the same time they were participating in an IM conversation. We collected data from 79 male and 79 female residential undergraduate students at American University. Among the variables we explored were:

- number and type of computer-based activities in which students engaged while they were doing instant messaging (e.g., word processing, Web searches, games, listening to a media player)
- number and type of off-line activities in which they were engaged while doing IM (e.g., face-to-face conversation, speaking on the telephone, eating, watching TV)
- how many simultaneous IM conversations they were holding

Focus Groups

Also in Fall 2004, we conducted a series of focus groups with American University undergraduates regarding their multitasking behavior (both on and off the computer), especially while participating in one or more IM conversations. Among the questions we posed were:

- Why do you multitask?
- What kinds of multitasking do you do while participating in IM conversations?
- Why do you sometime break single utterances into multiple IM transmissions?
- Do you see IM as a synchronous or asynchronous activity?

IV. Results from Linguistic Analysis of IM Corpus

Empirical Profile of IM

(1) Discourse Scaffolding

We began by analyzing the overall character of IM conversations. In looking at the corpus of individual IM transmissions, we found that

- The average length of an IM transmission was 5.4 words (range: 1-44 words).
- Approximately 22% of all transmissions were 1 word in length.
- An average of 4.0 IM transmissions were sent per minute.

Since most university students type more than 22 words per minute (5.4 x 4.0), we hypothesized that users were simultaneously engaged in additional activities. Our subsequent study of multitasking (see below) supported this hypothesis.

Next, we looked at the overall length of IM conversations and of conversational closings, both with respect to the number of distinct IM transmissions and the time the conversation (or conversational closing) took. We found:

- Conversations averaged 93.8 individual IM transmissions and took an average of 23.7 minutes.
- Conversational closing averaged 7.0 individual IM transmissions and took an average of 31.9 seconds.

We also explored the linguistic parameters of a phenomenon that is very common in teen and young adult IM conversations, namely for users to divide their "turns" into sequences of multiple IM transmissions, as we saw in the sample IM conversation above. (We use the term "turn" to refer to the time the same interlocutor holds the conversational floor. A turn may include one or more IM transmissions. Multiple transmissions may constitute single utterances or sequences of utterances, e.g., where the interlocutor changes topic but continues to hold the floor.)

Recall that there were 2185 distinct IM transmissions in the corpus. Of these, 42% were clustered into multiple transmission sequences. The longest uninterrupted turn from the same interlocutor was 18 successive IM transmissions.

Looking more closely at the issue of IM transmission sequences, we examined the grammatical structure of pairs of IM transmissions when an utterance was broken into multiple IM transmissions (e.g., Line 1: "I really hate you guys sometimes" <BREAK> Line 2: "cause you don't just make fun of me sometimes"). Out of a total of 189 pairs of IM transmissions that made up sequential components of an IM utterance,

- 112 pairs began the second transmission with a conjunction (e.g., "she's a phd student <BREAK> and my TA")
- 48 pairs began the second transmission with a modifier (e.g., an adjective or an adverb) that qualified a noun or verb in the first transmission (e.g., "what are you bringing <BREAK> on Saturday?"), where "on Saturday" is an adverbial prepositional phrase modifying the verb phrase "are bringing" in the first transmission.

Interestingly, the second turns in sequential transmissions almost never began with verbs. That is, we almost never found IM transmission pairs such as "and then the band <BREAK> performed 7 songs". Since pauses between subject noun phrases ("and then the band") and verb phrases ("performed 7 songs") do frequently appear in spoken discourse, our analysis of utterance breaks in the IM data suggests caution in equating IM with an essentially spoken style of language.

(2) Lexical Issues

We analyzed a number of the linguistic characteristics of the 11,718 words in the IM corpus. In each case, the findings were at odds with popular conceptions of the words found in IM conversations.

- Abbreviations and Acronyms
  - Relatively few abbreviations and acronyms specific to computer-mediated communication (which we called "CMC abbreviations" and "CMC acronyms") appeared in the corpus.
  - There were only 31 CMC abbreviations (16 of which were *k* for *okay*).
  - There were only 90 CMC acronyms (76 of which were *lol* for "laughing out loud").

- Emoticons
  - Relatively few emotions appeared in the corpus.
  - There were only 49 emoticons (of which 31 were a smiley face, i.e., ☺).

- Spelling Errors and Self-Corrections
  - Only 171 words were misspelled (out of 11,718).
  - Some of these spelling errors were corrected in subsequent turns.

- Contractions
  - While students used many contracted words in their IMs (e.g., *don't* instead of *do not*), they only used contractions in 65.3% of the cases in which a contraction was possible.
  - This percentage was lower than we would anticipate if IM is a written form of informal speech, where contractions are extremely frequent. (We are presently doing a comparable contraction analysis of an informal spoken-language corpus from college undergraduates.)

Gender Differences in IM

In analyzing gender issues in IM conversations, we grouped our findings with respect to discourse scaffolding and lexical issues. We report here only on the linguistic parameters that showed gender differences. The analysis is restricted to conversations between same-sex pairs (female-female and male-male).

(1) Discourse Scaffolding and Gender

- Conversational Closings

  Females took significantly longer to close IM conversations that did males, with respect to both number of transmissions and time. Comparing the IM conversations in which both interlocutors were female with the IM conversations in which both interlocutors were male, we found the following average number of turns and time on the clock for closing a conversation (i.e., from the time that one of the participants indicated that he or she was going to terminate the exchange):

	FF (N=16)	MM (N=6)
average # of transmissions to close	9.8	4.3
average seconds to close	41.0	16.3

- Use of Multiple IM Transmissions to Complete an Utterance
  Males were significantly more likely than females to break their utterances into multiple IM transmissions. That is, if we tally all the IM transmission units involved in sequential transmissions that make up single utterances (again, see the sample conversation at the beginning of this paper) and compare those totals with the total number of IM transmissions in the corpus, males used significantly more sequenced transmission units than did females. Comparing just female-female and male-male conversational pairs,
  - 13.2% of all IM transmissions in female-female conversations were part of utterances broken into multiple IM transmissions.
  - 22.9% of male-male IM transmissions were part of multi-turn sequences comprising a single utterance.

- Grammatical Nature of the Second Line in an Utterance Break Sequence
  - Males were significantly more likely than females to use a conjunction to join together two related clauses sent in sequential IM transmissions
    e.g., I am <BR> but I'm glad no one cares
  - Females were significantly more likely than males to begin the second related clause without a conjunction
    e.g., he doesn't have any friends here <BR> they're all in TN or KY

(2) Lexical Issues and Gender

- Emoticons
  Females used significantly more emoticons than did males:

	FF (N=16)	MM (N=6)
# of interlocutors using emoticons	12	1
total emoticons used	34	15

- Contractions
  Males used significantly more contractions than did females (calculated in terms of the number of potential instances in which a contraction might be used):

	FF (N=16)	MM (N=6)
% contracted	57.0%	77.1%

V. Results from Online Multitasking Questionnaire and Focus Groups

Questionnaire Results

The online questionnaire distinguished between additional online and additional off-line activities in which students were engaged while they were conducting the IM

conversation via which they received the questionnaire from someone on their IM Buddy list. The first two sets of data represent total results for the 158 subjects who completed the questionnaire. (Note: activities in which only a small number of subjects were engaged are not reported here.)

(1) Additional Computer-Based Activities

The following percentages of subjects reported that when they received the questionnaire, they were also engaged in one or more of these computer-based activities:

- Web activities (e.g., surfing the Net): 70.3%
- Computer-based media player: 47.5%
- Word processing: 38.6%

Many subjects reported engaging in multiple simultaneous IM conversations, ranging from 1-12, with an average of 2.67 simultaneous conversations per respondent.

(2) Additional Off-Line Activities

The following percentages of subjects reported that when they received the questionnaire, they were also engaged in one or more of these off-line activities:

- Face-to-face conversation: 41.1%
- Eating or drinking: 36.7%
- Watching television: 28.5%
- Talking on the telephone: 21.5%

Note that in our questionnaire, we did not ask subjects to distinguish between simultaneous behavior (e.g., listening to music while composing an IM) and sequential behavior (e.g., talking face-to-face, then sending an IM transmission, then returning to the face-to-face conversation). In a follow-up multitasking questionnaire, we are now attempting to address the distinction between these two types of multitasking behaviors.

We also analyzed both the computer-based and the off-line multitasking behaviors with respect to gender. Although many of the comparisons were not definitive, we found a significant difference with respect to face-to-face conversations:

- 33% of the males reported holding face-to-face conversations while they were engaged in an IM conversation.
- 49% of the females reported speaking face-to-face while IMing.

Focus Group Results

The results of the focus group discussions can be clustered into three categories of questions: those dealing with multitasking, those concerning conversational function and scaffolding, and those relating to the synchronous or asynchronous nature of IM conversations.

(1) Multitasking

Many participants in the focus groups reported that because of time pressures, they needed to multitask in their daily lives, both during general activities (e.g., studying while eating) and while using their computers. Such multitasking reasonably extended, they said, to participating in more than one IM conversation at a time.

Further questioning revealed that time pressures were not the only motivation for multitasking while conducting an IM conversation. When asked whether they ever held a single IM conversation and did not engage in any other online or off-line multitasking activity, the overwhelming response was "no". Such behavior, said one participant, would be "too weird", because IM conversations were, by their nature, conducted as background activity to other endeavors.

(2) Constructing Conversations

One of the focus groups reported gender differences in the way college students perceived the purpose of IM conversations. Paralleling findings from the sociolinguistic literature on spoken and (off-line) written language, females emphasized the social functions of IM, while males stressed the informative functions.

Male and female focus group members concurred that they frequently broke larger IM utterances into multiple distinct transmissions. Their explanation for this behavior was that by transmitting a sentence in chunks, the sender could keep his or her interlocutor "on the line" (i.e., not moving off into another activity – such as an IM conversation with a different person). Note that when an IM participant is typing a message, his or her interlocutor knows that the sender is typing but cannot read what is being typed until the entire message has been sent. College students often complain that their parents "don't know how to use IM" because they generally type long messages all of a piece (much like a traditional email). While the parents are typing, their progeny tend to multitask by engaging with other computer functions, including other IM conversations.

(3) Synchronous or Asynchronous?

Finally, we explored the extent to which participants in the focus groups perceived IM to be a synchronous or an asynchronous form of communication. Obviously, if you are conducting four or five simultaneous IM conversations, it is difficult to actively engage in all of them at the same time.

Students indicated that a given IM conversation could be synchronous or asynchronous, depending upon such factors as

- how good the "gossip" was in that conversation
- how serious the conversation was
- individual communication habits (A few students felt it was rude to hold simultaneous conversations, though they were in the minority.)

More generally, focus group members felt that with IM, participants are in control of how active a given IM conversation might be. Some IM conversations last for hours, though participants tend to go through spurts of communication interlaced with periods where neither party is transmitting messages. One student aptly described IM usage as "language under the radar", meaning it resides in the background of other online or off-line activities. Users control whether to make a particular conversation active (i.e., synchronous) or to let it lie dormant (i.e., asynchronous), without formally closing the conversation.

VI. Conclusions

Empirical Nature of IM

American college student IM conversations do not fit popular stereotypes. Linguistically, in the college IM conversations analyzed in our study,

- There are few abbreviations, acronyms, or emoticons.
- Spelling is reasonably good.
- Contractions are not ubiquitous.
- Grammar and vocabulary are sometimes reasonably sophisticated.

Our study suggests that American college student IM conversations display considerable variation both within and across users:

- Conversations contain many one-word transmissions, but also many lengthy transmissions.
- Stylistic variations sometimes seem geared to a specific conversational partner (e.g., the same person may use many contractions with one partner but very few with another).

Spoken, Written, and IM Structure

On balance, the language used in college IM conversations looks more like speech than it does like writing. Specifically, IM conversations resemble speech in that both modalities commonly show the following linguistic features:

- Discourse Scaffolding
    - frequent one-word utterances
    - extended conversational closings
    - frequent chunking of utterances into sequential transmissions (marked in speech with pauses)
    - the second member of a chunked sequence often begins with a conjunction
- Lexical Issues
    - contractions are common
    - paralinguistic cues are sometimes indicated (in speech: through prosodic or kinesic cues; in IM: through emoticons or punctuation)

Relevance of Gender in IM

Significant gender differences appear in the IM conversations of college students. Comparing conversations between two males with conversations between two females, we find that overall, male-male conversations have more of a spoken character, while female-female conversations have more of a written character. Specifically,

- Male-male conversations tend to be shorter than female-female conversations.
- With regard to breaking conversational turns into multiple sequential transmissions,
    - Males are more likely to chunk their discourse into sequential transmissions than are females.
    - Males are more likely to begin the second member of an utterance break sequence with a conjunction than are females.
- Males use more contractions than do females.

However, female-female conversations are more speech-like than male-male conversations in two respects:

- Females use more emoticons than do males.
- Females take longer (both in number of turns and time on the clock) to close a conversation than do males.

IM as a New Style of Discourse

Instant messaging as used by contemporary American college students can be seen as a new style of linguistic discourse. This novelty derives from the fact that (1) so much IM conversation takes place while users are engaging in other multitasking behaviors and (2) users feel considerable control over when they send and receive transmissions from actual or potential IM partners.

With regard to multitasking, it is important to remember that interlocutors cannot see or hear what else their conversational partner may be doing – and vice versa. And so, for example, neither party feels it is rude to be listening to music or working on a written document at the same time interlocutors are communicating over IM. In fact, since partners must often wait until their interlocutor has transmitted a message, there is often "down time" during which students feel they need to occupy themselves with other computer-based or off-line activity.

As a result of IM conversational practices, IM seems to be evolving into a form of linguistic discourse that we might describe as "language under the radar". That is, rather than commanding one's full attention (as is common in face-to-face spoken encounters), IM is emerging for many users as a background activity (similar to music playing in the background) in which users can raise or lower the "volume" on their involvement, depending upon their level of interest in the conversation. In fact, given the features

available on many IM systems (e.g., AOL's AIM program), users are offered multiple additional options for controlling their level of discourse involvement, such as

- keeping current with the activities of friends (by reading their away messages or profiles) without actually contacting those friends (e.g., by telephone or through an IM)
- blocking or ignoring selected incoming IMs

Since its popularization less than a decade ago, instant messaging has become a mainstay of communication, especially among American teenagers and young adults. Given its frequency of use, we are now able to study now only its formal linguistic properties but also the broader characteristics of IM discourse. The studies described in this paper represent a step towards better understanding how technology can redefine the nature of human linguistic interaction.

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