The Construction of Away Messages: A Speech Act Analysis

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Previous research suggests that "away messages" in instant messaging express informational and entertainment communicative goals while displaying a users' identity. This study investigated the extent to which these communicative goals are reflected in the language structure of away messages, by examining the speech acts performed through the production of 483 away messages crafted by 44 participants. The messages were also analyzed for the use of non-standard orthography and humor. The results show that the messages were constructed primarily with assertives, followed by expressives and commissives, but rarely with directives, confirming that away messages tend to reflect both informational and entertainment goals. Non-standard orthography and humor were also common, although experienced participants used fewer non-standard forms than less experienced participants. These findings are discussed in terms of computer-mediated discourse and online self-presentation.

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Introduction

Perhaps the most important function of communication technologies is to enable people to maintain connections with those from whom they are distanced physically. This function is most obviously achieved through the interpersonal messaging capabilities that these technologies support. On a daily basis individuals may use the phone to talk to friends and family, email colleagues about work and social activities, and use instant messaging to message people on their buddy lists. While these technologies are used to achieve specific objectives, like arranging a meeting or coordinating a project, they are also used more generally to stay informed about

friends and family—to be in the know about what they are doing, what they are thinking, and how they are feeling. Indeed, the social uses of technology play an explicit role in maintaining relationships and presenting oneself to others (Baym, 1995; Lea & Spears, 1995; McKenna, Green, & Gleason, 2002; Walther, 1992).

Communication technologies can also provide more implicit ways of maintaining social contact (Erickson & Kellogg, 2003). Instant messaging (IM), for example, allows users to create and display *away messages*, or customized text messages signifying users' presence or absence in front of a computer (Baron, Squires, Tench, & Thompson, 2005). While the ability to leave messages for people trying to contact someone via communication technologies is not new (e.g., answering machines for the telephone, auto-responders for email), IM users appear to employ away messages in a different way from forms of messaging such as answering machines. For example, while people use answering machines in order to leave messages much as one would send a letter (Dingwall, 1992), IM users frequently check the away messages of people on their buddy list without leaving a message (Baron, et al., 2005; Grinter & Palen, 2002). Moreover, while some research suggests that people can feel frustrated or disoriented when using answering machines (Ehrlich, 1987), people frequently check away messages to amuse themselves (Baron, et al., 2005; Grinter & Palen, 2002).

The present study investigates the social uses of IM by examining how participants use language to construct their away messages. In particular, we examine what specific types of utterances, or speech acts, used by participants to create their away messages can tell us about the structural and functional properties of away messages. We are also interested in how people use non-standard orthography (e.g., LOL) and humor in their away messages. The objectives of this article are thus (1) to provide an empirical analysis of an important new type of communication (Pew Internet & American Life Report, 2005), (2) to assess the usefulness of speech acts as a framework for analyzing computer-mediated communication (CMC) (Twitchell & Nunamaker, 2004), and (3) to examine how away messages can achieve social functions that were not necessarily intended in the design of the away message (Dourish, 2001).

Communication Features of Instant Messaging and Away Messages

Instant messaging is currently one of the most popular CMC technologies. For instance, IM appears to be the communication technology of choice for teenagers in the U.S., who employ instant messaging (IM) to make plans with friends, talk about homework, share jokes, check in with parents, and post away messages or notices about what they are doing when they are away from their computers (Pew Internet & American Life Report, 2005). Instant messaging is also an important resource for adults, who use it for both social and task-related interactions (Isaacs, Walendowski, & Ranganathan, 2001; Ljungstrand & Hard af Segerstad, 2000; Nardi, Whittaker, & Brander, 2000; Quan-Haase, Cothrel, & Wellman, 2005). For example, IM is used in the workplace for scheduling and coordinating meetings (Isaacs,

Walendowski, Whittaker, Schiano, & Kamm, 2002), as well as for more personal, informal online conversations in the workplace (Grinter & Palen, 2002).

Online text-based conversations require users to master a number of coordination strategies in order to achieve understanding, such as managing turn-taking (e.g., Hancock & Dunham, 2001). Instant messaging introduces another factor into the coordination process, namely that there is no guarantee that one's partner is actively attending to the conversation, because IM users tend to take on multiple tasks at the same time (Grinter & Palen, 2002; Nardi, et al., 2000; Pew Internet & American Life, 2003, 2005). As such, it is difficult for a sender to know whether a non-response reflects some message effect (e.g., his or her last message insulted the addressee) or whether the addressee is otherwise engaged (e.g., multi-tasking) or is no longer at the computer. Away messages were developed to deal with this threat to the coordination of online conversations. Away messages indicate whether communicators are in front of their computer and available for conversation or not (Baron, et al., 2005; Grinter & Palen, 2002). When these messages are activated by the user or automatically (e.g., after 10 minutes of idle time), they become visible to anyone looking at the user's IM profile.

How can we conceptualize away messages as a form of communication? In her discussion of computer-mediated discourse analysis (CMDA), Herring (2001, 2004) describes several dimensions that can frame an analysis of mediated language use. In the CMDA framework, discourse is first classified according to medium and situational variables that may shape language use. According to this framework, away messages can be classified as an asynchronous and single-channel (text) medium, with a relatively small granularity (i.e., messages are typically short) and controlled persistence (users control how long their away message remains accessible to others). Because of their small granularity, the linguistic structure of away messages might be expected, for example, to involve non-standard orthographic forms that minimize typing effort and space (Clark & Brennan, 1991; Herring, 2001).

The CMDA framework also describes different domains or levels of analysis of online discourse, including (1) *structure,* (2) *meaning*, (3) *interaction management*, and (4) *social practices* (Herring, 2004). The level of interaction management analysis refers to how users coordinate their ongoing interaction (e.g., turn-taking and threading; see Cherny, 1999; Hancock & Dunham, 2001). With respect to this level, away messages are a unique form of CMD because, as noted above, they were designed explicitly to manage interactions by providing evidence about a user's availability for communication. According to a Pew Internet and American Life Report (2005), away messages can also be used to regulate interaction coordination by allowing users to dodge conversational partners, for example by putting up an away message that remains even after the person has returned to his or her computer.

With respect to the social practices domain of CMDA, which refers to the analysis of social or contextual factors that may shape discourse, recent research suggests that away message use has evolved to include a number of important social functions, such as self-expression. For example, Grinter and Palen (2002) note that

IM users dislike employing default away messages and report feeling compelled to personalize their messages in order to avoid being seen as impersonal or rude. In fact, almost eight million away message users in the United States reported that they do not use the default away message included in the popular AOL instant messenger program (i.e., "I'm away from my computer right now"), and instead post their own (Pew Internet & American Life Project, 2005).

The personalization of away messages does not appear to go unnoticed. In perhaps the first systematic analysis of away messages, Baron, et al. (2005) observed that teenagers reported signing on to IM not necessarily to talk, but rather to look at the away messages of their online buddies. Based on interviews with college-age IM users and a qualitative analysis of their away messages, Baron and colleagues argued that users tend to post away messages with two communicative goals in mind: to entertain and to inform. Messages used for entertainment were often examples of self-expression and included the use of humor, quotations, and links to different websites. Messages used for informational purposes conveyed, for instance, personal information about the sender's location or activity (e.g., "at the library"), or simply that the person was away from the computer (e.g., "out"). More broadly, away messages seemed to serve an overt self-presentation purpose, as away messages were interpreted by participants as capable of providing a glimpse of the sender's identity (Baron, et al., 2005).

These observations suggest that users construct personalized away messages with informational and expressive purposes in mind in order to regulate conversations, maintain social connections, and express their identity. If this is the case, then the linguistic composition of away messages should reflect these purposes. In the present study, we examine whether the speech acts in away messages support the informational and expressive goals that away messages are believed to accomplish. Consistent with Herring's CMDA framework, speech act analysis is considered a type of analysis at the level of *meaning* (i.e., semantics, pragmatics).[1] At the same time, we are also interested in the non-standard orthography used in away messages (e.g., LOL), which involves a *structural* level of analysis. These analytic approaches are described below.

Speech Acts and Away Messages

In conversation, most types of utterances do not involve simply communicating a meaning; rather, they are designed to accomplish something, such as convince someone of a belief, get someone to do something, etc. (Austin, 1962). The different types of actions that we try to accomplish with our utterances are referred to as speech acts (Bach, 1994), and a long tradition of research has attempted to develop categories and classifications of different types of speech acts. Although many different taxonomies of speech acts have been presented (e.g., Austin, 1962; Bach & Harnish, 1979), one well-known taxonomy that has been used in natural language processing and other CMC research (e.g., Twitchell & Nunamaker, 2004) is described by Searle (1969, 1979). In his taxonomy, Searle categorizes speech acts according to their illocutionary purpose (i.e., what the speaker is doing with the

utterance), their fit to the world, their expressed psychological state, and their propositional content.

According to Searle's basic taxonomy, there are five main categories of speech acts. (1) *Assertive* acts are phrases employed to form in the addressee a specific idea, proposition, or belief (e.g., "Out for a while," "We won the game!"). With assertives speakers commit themselves to something being true. (2) *Directive* speech acts focus on calling the addressee to action, yet do not require the sender to reciprocate any action of his own (e.g., "call the cell"). (3) *Commissive* speech acts relate to committing oneself to a future action. Note that in contrast to assertive speech acts, commissives are not based in current facts (e.g., "Going to the gym then class"). (4) *Expressive* speech acts are based on psychological states and relate to the expression of feelings or emotions to the receiver (e.g., "It's been a sad day"). Expressive speech acts reflect affective reactions to a situation, and therefore are not necessarily based on assertions of fact.

The fifth category of speech acts is *declaratives*; according to Clark (1996), this category can be broken down into two subsets, the (5) *effective* speech acts and (6) *verdictive* speech acts. Clark maintains that although effective and verdictive speech acts are related, they are also subtly unique. Both the effective and verdictive speech acts require the sender to be in power within an institution. The effective speech act refers to those utterances that are able to change an institutional state of affairs, such as a minister baptizing a baby. Verdictive acts also refer to changing a state of affairs, but unlike effectives they refer to judgments made by persons vested with certain institutional power, such as an umpire calling a pitch a strike even if it was outside

Table 1 Coding scheme for analyzing speech acts and quotations in away messages

Speech act	Properties of speech act	Examples
Assertive	Statements of fact, getting the viewer to form or attend to a belief	"At the library," "I have class until 5 today," "out"
Directive	The sender uses this to get the receiver to do something (i.e. a command)	"call me," "pick me up at 8," "call the cell"
Commissive	The sender commits himself to do something	"be back at 5," "I'll meet you at 7," "bars all night"
Expressive	Sender expresses feeling towards the receiver	"I hate this weather," "School sucks," "I love Fridays"
Effective	To change an institutional state of affairs	"You're fired," "Play ball," "Chapter at 7 or you're fined"
Verdictive	To determine what is the case in an institution	"I find him innocent," "strike"
Quotation	The message is not originally produced by the sender	"Do or do not, there is no try," "And she's buying a stairway to heaven…"

Note. The examples were selected from the current away message corpus.

the strike zone. Although in reality the pitch might have been a ball, with the utterance "Strike!" the umpire creates a different truth that must be upheld. These speech acts are illustrated in Table 1.

Searle's scheme has a number of important problems (Bach, 1994; Bach & Harnish, 1979; Burkhardt, 1990). For example, the scheme does not provide any principles for how new illocutionary acts should be classified, and its assumption that each speech act belongs only to one category fails to account for the multi-functionality of language use (Clark, 1996). Nonetheless, Searle's basic classification scheme's widely accepted nomenclature and structuralist approach provides a useful framework for the present attempt to analyze the basic linguistic construction of away messages.

If, as previous research suggests, away messages are used to inform and entertain (Baron, et al., 2005), then away messages should reflect a specific pattern of speech acts. For instance, if away messages provide information about a user's current situation or state, then the most common speech act should be the assertive. Since assertives encompass the category of notifications, they can be used to inform others about activities or current events (e.g., "not here") as well as to entertain (e.g., "My tissues and I are staying in tonight").

Similarly, commissive speech acts, in which the speaker pledges a future action, may also be used to provide information, since many users post away messages pertaining to tasks they plan on completing throughout the day (e.g., "Going to the gym then class"). Finally, expressive speech acts, typically based on emotional reactions to situations, may also provide information about a person (e.g., "I'm not happy now") and entertain (e.g., "Feeling hot today").

To the extent that away messages have as their primary purpose to provide informational and entertainment content, it seems unlikely that directive speech acts would be common, since they do not increase awareness regarding the speaker's current state, but instead focus on the receiver. Finally, effective and verdictive speech acts are not expected to be observed frequently, as there appears to be no institutional component to away messages, at least in the context of informal IM usage.

Since assertive, commissive, and expressive speech acts may all serve to provide information and entertainment, we expected the construction of speech acts within away messages to be comprised mostly of these three speech act types. The least observed speech acts should be directives, verdictives, and effectives.

Non-standard Orthography in Away Messages

A second objective of the present study was to examine how different types of non-standard orthographic forms are used in away messages. The first type of non-standard orthography of interest was *CMC-based orthography*. Online communication is rife with non-standard orthographic forms, such as abbreviations (e.g., "LOL"), emoticons (i.e., "smiley faces"), intentional misspellings (e.g., "looooong day"), and non-standard uses of punctuation (e.g., ~*sleeping*~) (Baron, 2004; Hancock, 2004a; Herring, 2001; Walther & D'Addario, 2001; Yates & Orlikowski,

1992). Consistent with Grice's (1989) maxims of *quantity* (i.e., contributions to the conversation should be informative, but no more than necessary) and *relevance* (i.e., contributions should be relevant to the topic of conversation), such non-standard forms have been assumed to minimize the cost of producing long textual utterances (Clark & Brennan, 1991; Herring, 2001). For instance, substituting "BRB" for "Be Right Back" saves the communicator ten keystrokes.

The use of non-standard orthography has been observed frequently in text-based messaging in which the cost of producing characters is particularly high (Grinter & Eldridge, 2001; Peña & Hancock, 2006; Utz, 2000). These types of non-standard orthographic forms have been studied in various modes of text-based interactions, including instant messaging (e.g., Baron, 2004; Grinter & Eldridge, 2001; Hancock, 2004b), Internet Relay Chat (Werry, 1996), and SMS (Thurlow, 2003). The present study examines the use of non-standard CMC-based orthography in away messages in an effort to determine how frequently they are used in this message type.

The second type of orthography of interest was non-standard forms of language use that rely on knowledge that is common ground only to members within a specific community (Clark, 1996). For example, the non-standard spelling of library as "libe" may be understandable only to the group of people for whom the term "libe" has been previously established as referring to the library. We refer to orthographic forms that are understood primarily within small groups or communities as *group-based orthography*. Given that group-based orthography relies on specific shared knowledge within a group, IM users who are members of groups should be more likely to rely on this type of orthography to reach understanding with less effort. If this is the case, then a student who is a member of multiple groups (e.g., a fraternity, a sports team, a club) should use more group-based orthography in her away messages than a student who is a member of only one group.

Theories concerned with social identity online also suggest that people involved in computerized group activities may have distinct uses and perceptions of group-based orthography (e.g., Lea & Spears, 1992). A number of studies have shown that members of in-groups interacting in online environments are more likely to express the social norms of the in-group in order to identify with the in-group and distance themselves from out-groups (Douglas & McGarty, 2001, 2002). For example, some group-based orthographic forms identify the user with specific clubs (e.g., "453 review session at GS"). Note that in this view group-based orthography relies not only on the shared knowledge of the specific community, but its use also highlights the speaker's identification with that group or community. Thus, we expected that the more active a user is with groups, the more group-based orthography should be observed in away messages.

Another research question is how experience with instant messaging affects the use of these types of non-standard orthography. On the one hand, given that more experience with a channel tends to lead to enhanced perceptions and proficiency when using that channel (Carlson & Zmud, 1999), we might expect that more experienced instant messagers would use more non-standard orthographic forms

in their away messages (Peña & Hancock, 2006; Utz, 2000). On the other hand, a "newbie effect" in CMC has often been observed (e.g., Kraut, et al., 2002), according to which new users tend to go through an initial phase of maximizing their use of novel communication forms and practices, such as the CMC orthographic forms described above, only to reduce their use over time and with experience (Bergs & Kesseler, 2003; Thurlow, 2003). If this is the case, and users tend to move from a high use of non-standard orthography over time to more standard forms of English, then we should see an inverse relationship between IM experience and CMC orthography in away messages.

Finally, we are also interested in the role of humor in away messages. Research suggests that humor is often observed in text-based online communication (e.g., Baym, 1995; Danet, Ruedenberg-Wright, & Rosenbaum-Tamari, 1997; Hancock, 2004a; Holcomb, 1997; Hubler & Bell, 2003; Morkes, Kernal, & Nass, 1999). Hancock (2004a) has argued, consistent with the assumption of Social Information Processing theory that communicators verbalize socioemotional content (Walther, 1992), that participants in text-based environments may use humor in an attempt to achieve relational goals. That is, humor may be a verbal adaptation for expressing relational intentions in a medium in which nonverbal communication is not possible. Given that away messages appear to accomplish social functions such as self-expression, humor may be an important strategy in away messages. Indeed, Baron, et al. (2005) report that away messages often incorporate humor in an attempt to showcase personality, and that the participants in their study appeared to value the use of humor in away messages. In the present study, we extend Baron, et al.'s work by providing an empirical analysis of the frequency of humor production in away messages.

Method

Participants

This study used a sample population consisting of 49 undergraduate students who were recruited in Spring 2004 from a communication class at a large northeastern university in the United States. The sample consisted of 29 females (59.1%) and 20 males (40.9%), who ranged in age from 18 to 22 years old. Students in the study were given course credit for their participation. Five participants did not produce any away messages; thus the final sample size was reduced to 44 participants.

Materials

Participants completed a questionnaire pertaining to their computer and Instant Messenger use.[2] Participants were asked about their online activity, including how many minutes they spend online daily, the number of minutes they spend on IM, the number of months that they have been using IM, and the number of people on their buddy list. The questionnaire also included questions relating to their involvement in

campus group activities, including the number of hours devoted to group activity each week. Participants also completed three other scales (i.e., a personality measure, a sarcasm scale, and a conversation indirectness scale) that are not reported in the present study.

Procedure

Participants were first informed that the study required collecting their Instant Messenger screen name in order to record their away messages, and were asked for their written consent. Participants completed the measures described above after consenting to partake in the study. Participants were told that their away messages would be observed for either a one or a two-week period, although they were not told how often they would be looked at daily. Due to university scheduling conflicts (i.e., Spring break), not all the participants could be observed for two consecutive weeks, which led to two groups of participants, with 28 (57.1%) participants being observed for one week, and 21 (42.9%) participants observed for two weeks. However, statistical analyses revealed no overall differences between the two groups, and the data were collapsed. Away messages were gathered three times daily, with recording periods set at 10 a.m., 5 p.m., and 10 p.m.

Content Analysis

Recorded messages were coded according to their speech acts as described in Table 1. The unit of analysis was the speech act, defined as punctuation or propositional units. Away messages were parsed into their constitutive speech acts, as a single message could contain more than one speech act. For example, in the message "class now, then the gym" there are two speech acts, one referring to "class now" and the other referring to "then the gym." Speech act categories, however, were mutually exclusive.

Away messages were first analyzed for the number of speech acts they contained. Next, using the speech act taxonomy described in Table 1, the speech acts were coded as assertive, directive, commissive, expressive, effective, or verdictive. Quotations within away messages were coded in a separate category, and were not categorized into speech acts.

Messages were also coded for non-standard orthography, which was categorized into two types: that requiring group-based knowledge and that regularly found in CMC (Hancock, 2004b; Herring, 2001; Peña & Hancock, 2006; Thurlow, 2003; Utz, 2000). Abbreviations and phrases requiring localized, group-related knowledge (e.g., "at the libe," where *libe* refers to the library) were coded as *group-based orthography*. Any time a message included non-standard orthography such as emoticons, repeated punctuation (e.g., "Woo hoo Friday!!!!!," or "Is it really raining again?!?!?!"), ellipses, intentional misspellings (e.g., "sleeeeeping", or "riiiight"), or abbreviations (e.g., "lol" for laughing out loud, or "brb" for be right back), the element was coded as *CMC-based orthography*.

The speech acts were also evaluated for humor, and were coded as either containing humor or not containing humor. Humor was defined broadly to include any form of jocularity that appeared to be an attempt to signal or evoke amusement (Norrick, 1993). This could include jokes (e.g., "I've decided to go to class…. not falling asleep and paying attention are NOT guaranteed :-O"), verbal wit (e.g., "You are the apex of sexy danger"), sarcasm or irony (e.g., "Just call me sniffles"), and teasing or facetious remarks (e.g., "Sleep… Kicking some Dartmouth a** tomorrow night on the turf… be there or you smell A LOT").

Two raters individually coded all the messages. Inter-coder reliability at the most detailed level of the coding scheme (i.e., parsing away messages into thought-units, see Hirokawa, 1988), and coding these into the six types of speech acts was high (*kappa*=.90). The inter-coder reliability for the humor was also satisfactory (*kappa*=.83).

Results

A total of 483 unique away messages were recorded, with a mean of .93 (*SD*=.63) messages produced per day during the observation period. Five participants produced no away messages during the recording period, and they were excluded from the analysis. Females and males produced approximately the same number of away messages per day and similar frequencies of speech acts and orthography types; for this reason, gender differences are not discussed further.

A total of 80 quotations were observed. Quotations included song lyrics, famous quotes, and links to webpages. On average, there were .17 (*SD*=.22) quotes per message, suggesting that about one-fifth of away messages contained a quote.

Speech Act Analysis

Messages were analyzed according to their speech act composition (see Table 1). Only messages produced by the user were included. For example, message content that consisted of quoted material (e.g., a song lyric, a hyperlink, etc.) was excluded from the speech act analysis. This yielded a total of 574 speech acts, with an average of 1.14 (*SD*=.44) acts per away message.

Recall that speech acts were coded into one of six mutually exclusive speech act categories (i.e., assertives, directives, commissives, expressives, effectives, and verdictives). The proportion of each speech act category produced per participant was calculated by dividing the number of speech acts in a given category by the total number of speech acts produced by the participant. Only one effective and no verdictive speech acts were produced by the participants. As such, effectives and verdictives were not included in the analysis.

Means and standard deviations for all speech act categories are presented in Figure 1. Non-parametric statistics were employed for the speech act analysis because of the categorical nature of the data (Siegel, 1956). Pairwise comparisons among the four remaining speech acts categories (i.e., assertives, directives, commissives, and expressives) using Wilcoxon signed-rank tests revealed that participants

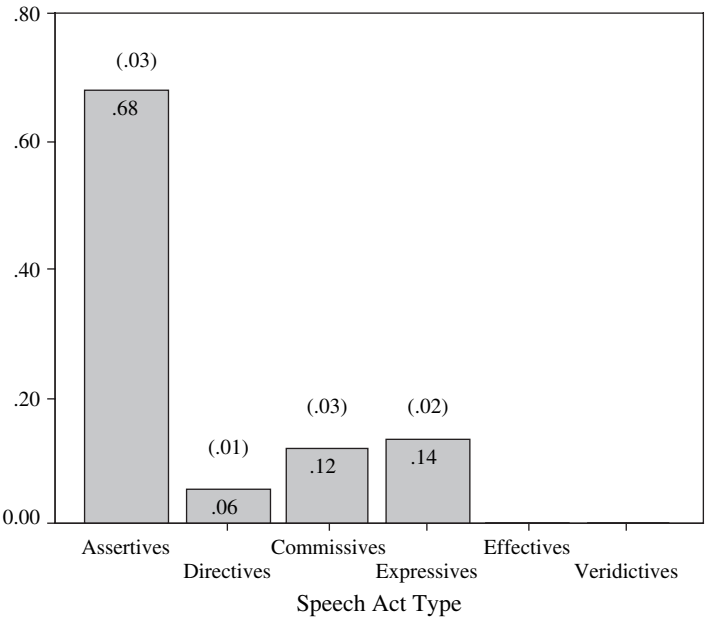

Figure 1 Means and (standard errors) of speech act types in away messages.
Note. Proportions are based on the number of speech acts divided by the total number of unique messages in that category. Because proportions represent averages across participants, the total does not necessarily sum to 1.

constructed away messages with assertives (e.g., "At the library") more than with any other speech act. Expressives (e.g., "What a lousy day") and commissives (e.g., "…studio, kickboxing, chapter…") were both produced more frequently than directives (e.g., "call my cellphone"), but expressives and commissives were not significantly different from one another. These analyses are described in Table 2. Taken together, the data suggest that away messages are constructed primarily with assertive, expressive, and commissive speech acts.

Analyses of Non-standard Orthographic Forms and Humor

A second analysis was conducted to examine the use of non-standard orthography and humor in away messages. Recall that non-standard orthography was coded

Table 2 Pairwise Wilcoxon test comparisons among proportions of speech act types

	Assertives/ Directives	Assertives/ Commissives	Assertives/ Expressives	Directives/ Commissives	Directives/ Expressives	Expressives/ Commissives
Z	5.582**	5.085**	5.450**	2.099*	2.932**	1.092

Note. Pairwise comparisons were based on the proportion of each speech act category, calculated by dividing the total of speech acts in a given category by the total number of speech acts produced by the participant.
*$p<.05$, two tailed. **$p<.01$.

into two types: group-based and CMC-based forms. The proportion of orthographic forms per message was calculated by dividing the total number of orthographic forms by the total number of messages produced per person. The two orthography types were not significantly related (r=.21, *ns*); hence independent analyses were done for each type.

On average, 9% (SD=14%) of away messages included group-based orthographic forms. We expected that involvement in local group activities should be associated with higher production of group-based orthography in away messages. Involvement in student groups was measured in two ways: (1) as the total number of groups with which a participant was involved, and (2) as the total number of hours participants reported working in group-based activity per week. The correlation between total number of groups and group-based orthography usage was not significant (r=−.10, *ns*). Similarly, the correlation between hours involved in group activity and group-based orthography was not reliable (r=−.05, *ns*).

On average, 39% (SD = 50%) of away messages included CMC-based orthography. Our primary question was how IM experience related to the use of orthographic forms. Experience with IM was measured in three ways: (1) the number of months that a participant had used IM, (2) the number of minutes that a participant reported using IM on a daily basis, and (3) the number of people on a participant's buddy list. CMC orthography did not correlate with either the number of minutes a participant used IM on a daily basis (r=−.03, *ns*), or the number of people on a participant's buddy list (r=.03, *ns*). While these measures of experience were not related to CMC orthography usage, the number of months that a participant had been using IM was negatively correlated with CMC orthography production (r=−.33, p<.01), indicating that the longer participants had used IM, the fewer CMC orthographic forms they used per away message. These data suggest that increased experience with IM may result in a reduced rate of CMC orthography in away messages.

Finally, the proportion of humor per message was calculated in the same manner described above for non-standard orthography. Specifically, the total number of messages that involved humor was divided by the total number of messages produced per person. On average, 16% (SD=21%) of away messages contained some element of humor, suggesting that approximately one-fifth of messages were humorous.

Speech Acts, Orthography, and Humor

To what degree are different speech acts associated with different types of orthography and humor? In order to examine this question, the frequencies of group-based and CMC-based orthographic forms, as well as humor, were examined across the four types of speech acts observed in the sample of messages (i.e., assertives, directives, commissives, and expressives) (see Table 3). A Chi square analysis revealed significant differences in the pattern of group-based orthography use across speech acts, χ^2 (3) = 35.09, p<.001. As can be seen in Table 3, group-based orthography was used in the assertive category more than would be expected by chance and less than

Table 3 Observed and (expected) values across speech acts, orthography, and humor

	Assertives	Directives	Commissives	Expressives	Total	χ^2	$p <$
Group-based orthography	27 (11)	2 (11)	11 (11)	4 (11)	44	35.09	.001
CMC-based orthography	98 (38)	9 (38)	20 (38)	25 (38)	152	129.84	.001
Humor	64 (25.75)	1 (25.75)	3 (25.75)	27 (25.75)	95	108.58	.001

expected in the directive and expressive categories. The pattern of CMC-based orthography across speech act categories was also significant, χ^2 (3) = 129.84, $p<.001$. As described in Table 3, CMC orthography was produced more frequently than expected in assertive speech acts and less than expected in expressive, commissive, and directive categories. Finally, humor was also observed more often than expected in the assertive category and less than expected in the directive and commissive categories, with the expected amount of humor being displayed in the expressive category, χ^2 (3) = 108.58, $p<.001$. When comparing across the orthography types, assertives appeared to be most frequently associated with group-based and CMC-based orthographic forms, as well as with humor.

Discussion

The present study investigated the construction of away messages by examining how IM users produced speech acts, group-based and CMC orthography, and humor in their messages. While previous studies have taken a qualitative approach to why people use away messages (e.g., Baron, et al., 2005; Grinter & Palen, 2002), the present study complemented this research by empirically analyzing the linguistic structure of away messages in relation to the communication goals identified in the previous studies. First, it is worth noting that participants appear to use away messages far more frequently than the message features of other communication technologies (e.g., answering machines for telephones). Participants in this study posted an average of .93 unique messages on a daily basis. This observation suggests that away messages are changed approximately once per day, which is much more frequent than other asynchronous messaging services, such as answering machine messages or voicemail (Ehrlich, 1987).

Recent studies have argued that away messages provide either informational or entertainment value when explaining one's absence (Baron, et al., 2005). Consistent with these functions, the speech act structure of observed away messages was also found to be primarily informational and expressive in nature. Assertive speech acts or statements of facts accounted for 68% of all speech acts produced, with expressive speech acts or affective reactions accounting for 14%, and commissive speech acts accounting for 12%. The proportion of assertive speech acts within away messages was significantly higher than all other speech act categories. The rates at which commissive

and expressive speech acts were produced did not differ from one another, but both were produced more frequently than directives, verdictives, and effectives.

The very low production rate of directive speech acts is consistent with the assumption that away messages are used primarily for informational and expressive purposes. Directive speech acts focus on getting the receiver to do something (Searle, 1979). Effective and verdictive speech acts are statements made in conjunction with institutional settings (Clark, 1996). Because instant messaging lacks this institutional framework, at least in the context of student away messaging, the absence of effective and verdictive speech acts was expected.

One of the main functions of informational away messages is to convey that one is not in front of the computer or to otherwise signal unavailability for instant messaging at that time (Baron, et al., 2005). It appears that this function is mostly accomplished by using assertives stating where one is (e.g., "at the gym"), or assertives simply stating that one is unavailable (e.g., "out and around…"). Baron, et al. observed that whether away messages signaled unavailability or one's whereabouts and activities, the messages still fulfilled the function of informing buddies of a person's online conversational status (i.e., available/unavailable). In particular, the assertive speech acts observed in this study often conveyed unavailablility (e.g., "very busy, off doing stuff") rather than offering explicit information about one's whereabouts and activities (e.g., "classes, gym, girlfriend"). Finally, compared to the other speech acts, assertives were also the most frequently associated with non-standard orthographic forms and humor (see Table 3), providing additional evidence that assertives are the most important speech act in the construction of away messages.

Commissive speech acts, which usually list the activities one will become involved in, such as "then class" in the away message "at the gym til 2, then class," also seem to support the provision of information about one's activities. By posting commissive-based away messages detailing personal schedules or future plans (e.g., "Class and then testing fume hoods in Duffield!! Def want to get out of work early-back around 4 ?!?!"), participants are fulfilling the informational function ascribed to away messages (Baron, et al., 2005). Commissives were not significantly associated with humor, indicating that this particular speech act may not fulfill entertainment purposes when posting away messages.

Expressive speech acts were also relatively frequent in the construction of away messages, comprising 14% of the speech act sample. In contrast to assertive and commissive speech acts, expressive acts are typically emotion based (Clark, 1996). Instead of providing factual or scheduling information, expressive speech acts reflect sentiments about specific events or people. Expressive speech acts also appear to be uniquely suited to achieving both the informational and entertainment functions of away messages described by Baron, et al. (2005). Through the display of emotions and feelings (e.g., "Yaay for Friday!," "Damm the political theories of hobbes, locke, rousseau…damn them!"), participants not only inform buddies of their personal opinions (e.g., their favorite classes, people, and activities), but they also give a glimpse of their emotional state (e.g., aroused, happy, sad, angry, stressed).

While Baron, et al. (2005) found that away messages were sometimes used to initiate discussions or social encounters, this purpose was not reflected in the speech act structure of the away messages observed in the present study. As stated above, directive speech acts (e.g., "call the cell"), which ask the receiver to take some action (Searle, 1979), comprised only 6% of the total speech acts in the sample. Instead, based on the most prevalent speech act categories in away messages (i.e., assertives, commissives, and expressives), it appears that the main goal of the away message is not to coordinate joint activities, but rather to provide a forum for posting personal information and self-expression. Future studies might focus on possible behavioral responses elicited by away messages beyond their speech act structure. For instance, an assertive-based away message (e.g., "at Mann library") may prompt closer buddies actually to go to the library to interact with the sender of the informative message.

Although the use of Searle's taxonomy in the present study offers important insight into how away messages are built linguistically, some assumptions underlying Searle's notion of speech acts have been criticized over the years (e.g., Bach & Harnish, 1979; Burkhardt, 1990). For example, the mutually exclusive nature of the speech act categories glosses over the multiple levels and goals of communication (see Hirokawa, 1988). While Searle's speech acts may represent a narrow view on language use (see Clark, 1996), the taxonomy provides a well-known nomenclature for this initial analysis of speech acts in away messaging. Indeed, the speech act perspective has been recently reinvigorated as a valuable approach to understanding CMC conversations in other contexts (Twitchell, Adkins, Nunamaker, & Burgoon, 2004; Twitchell & Nunamaker, 2004).

We also investigated the use of non-standard orthography within away messages. We considered both group-based (e.g., students saying "at the libe" to refer to the library), and CMC-based orthographic forms (e.g., "lol" to refer to laughing out loud). Drawing on theories of common ground (e.g., Clark, 1996) and research on social identity (e.g., Douglas & McGarty, 2001, 2002; Lea & Spears, 1992), we predicted that the greater one's group involvement, the more group-based orthography a person would post. This prediction, however, was not supported; the correlations between group involvement and group-based orthography were not significant. This lack of support could be due in part to the university setting from which the participants were selected. A university is in itself a large group, and university students tend to share a large number of experiences. As a consequence, they may also have substantial amounts of common ground and non-standard orthography signaling shared group identification (e.g., naming conventions for places on campus, knowledge of specific classes, and university sporting events). While some group-based orthography observed was related to specific campus groups such as fraternities and sororities, the majority of group-based orthography was grounded in the localized language of the university (e.g., "at club uris," referring to the campus library, and "on the hill," referring to campus). Additional research is required to examine differences in group-based orthography in away messages comparing more heterogeneous communities (e.g., a student community and a professional community).

CMC-based orthography was more frequently produced in the away messages than was group-based orthography, with 39% of away messages containing some type of CMC orthography, including common abbreviations (e.g., "BRB" for Be Right Back), emoticons, intentional misspellings (e.g., "looooooong day"), and non-standard uses of punctuation (e.g., ~*sleeping*~). These findings support views of language use that argue that users adapt their language to the constraints of the communication medium and to their social objectives (e.g., Clark & Brennan, 1991; Herring, 2001). The present data suggest that users view these orthographic forms as an effective language strategy for accomplishing the informational and entertainment objectives discussed above, through shortening phrases (e.g., BRB) or lengthening expressions (e.g., "looooooong day").

The participants' experience with instant messaging played an important role in how frequently they used non-standard orthography. In particular, a negative correlation was observed between the number of months a participant had used instant messaging and their production of CMC orthography, suggesting that more experienced players used fewer non-standard forms. This observation is consistent with recent research suggesting that people tend to overuse these distinctive forms of non-standard orthography initially, returning to more standard forms of English as they gain experience with the medium (Bergs & Kesseler, 2003; Thurlow, 2003). This negative trend, from overuse to more normalized use, however, has not been observed in all forms of CMC. In fact, research in synchronous forms of CMC such as online multiplayer videogames suggests that more experienced participants rely more heavily on CMC-based orthography (Peña & Hancock, 2006; Utz, 2000). Additional research is needed to investigate the factors that identify the factors that moderate the relationship between experience and non-standard language use.

Finally, the humor analysis suggested that away messages often have a jocular or witty component. Almost one-fifth of all away messages in our sample included some attempt to evoke amusement. The frequency with which humor was observed in the present study is consistent with a growing literature suggesting that CMC is rife with humor (Baym, 1995; Danet, et al., 1997; Hancock, 2004a, 2004b; Holcomb, 1997; Hubler & Bell, 2003; Morkes, Kernal, & Nass, 1999). The fact that humor was so frequently observed in away messages also suggests that, as noted above, while a primary function of away messages may be to provide information about one's activities or status, self-expression is also important. At the level of speech acts, humor was associated with assertive and expressive speech acts rather than with commissive or directive speech acts.

Quotations coming from books, movies, and song lyrics were also often used in away messages. In our data, 17% of away messages contained a quotation of some kind. This finding is consistent with Baron, et al. (2005), who also found that quotations were a common component of away messages. Baron, et al. (2005) argue that quotations fulfill the same functions as self-produced language in away messages, namely to entertain and provide personal information.

At a broader level, our findings suggest that participants made active use of away messages for self-presentation purposes (Goffman, 1956), a social function that was not necessarily a part of their original design (i.e., indicating absence from computer) (see Dourish, 2001, for a discussion of emergent technology use). Much as we do with clothes, the IM users in this study tended to change their away messages on a daily basis. The quantitatively defined speech act structure (i.e., assertives, commissives, and expressives) reported in the present study, which is assumed to reveal the intentions of the speakers (Searle, 1979), complements the qualitative approach of Baron, et al. (2005), supporting the view that informational and entertainment motivations underlie the construction of away messages. Participants also displayed their personal tastes by using humor and various forms of quotation in many of their away messages. These results paint an overall picture of active and purposeful impression management by means of away messages. This is congruent with Baron, et al.'s (2005) proposition that away messaging is "onstage" or overt impression management behavior. It appears that away messages are part of the modern expressive equipment students at U.S. universities use to perform social roles (Goffman, 1956), at least in front of online buddies.

Taken together, these results improve our understanding about how away messages are constructed in relation to identified messaging goals. While some messages provide information about one's activities and others focus more on personal beliefs and mottos, what these messages all have in common is that they provide information regarding a user's current communication status (e.g., online/offline), activity, schedule, emotional state, etc., potentially offering cues for impression formation and the maintenance of social links. Through posting away messages, users can express their identity and maintain their sense of connection to their friends and family by providing them with a window into their lives.

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Notes

1 Speech acts accomplish different functions simultaneously; they "do things with words" on the illocutionary level and may also participate in interaction (i.e., count as interactional moves). As such, speech act analysis can be classified at multiple levels of analysis in the CMDA framework. In the present study, we consider speech act analysis at the meaning level of CMDA, in that we do not analyze the exchange of messages but rather the qualities of individual messages.

2 AOL was the primary instant messaging system used by all the recruited participants.

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