Politeness Accommodation in Electronic Mail

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Email has become a common form of interaction between both individuals and groups in the online environment. Based on Buzzanell et al.'s (1996) research of politeness accommodation with telephone messages, this study has investigated politeness accommodation in email. Response rate was high at 81% (n=121). Results indicated that subjects accommodated to verbal markers in the body of a message, and to greetings. Responses to those email messages that included either verbal politeness cues or structural politeness cues were significantly more polite than responses to those email messages that did not include such cues. This research provides a foundation for explaining issues of relationship forming, communication accommodation in an electronic environment, and discourse analysis in online interaction.

Over the course of history, modes of communication have changed drastically. Before widespread literacy, society depended on oral history. With the emergence of new technologies such as the printing press, the telegraph, or the radio that enabled newspapers, the distribution of information sped up considerably. In the last few decades, a rapid diffusion of electronic media has led to a significant field of study: computer-mediated communication (CMC). CMC “refers to person-to-person communication . . . over computer networks” (Pickering & King, 1995, p. 479), and is generally

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understood to include technologies such as email, computer conferencing, online discussion boards, MUDs and MOOs, and more recently online instant messaging and even short message sending via cell phones.

CMC has become a prevalent topic for research because of its widespread use and influences in interpersonal, organizational, and pedagogical settings. Over the last 30 years, interpersonal communication theory has made vast contributions to explaining and predicting communicative behavior. The observations that serve as the foundation for interpersonal theories are primarily based on face-to-face (FtF) interaction, and to a smaller extent on telephone interactions. While it is important that communication theories are considered in FtF settings, it is also important that these theories are considered in computer-mediated settings.

Research shows there are, indeed, communicative effects of using CMC to interact with others. For example, studies suggest that CMC can foster the use of flagrant and hostile language, known as “flaming,” and messages reflecting status equalization among communicators who differ in social or professional standing (Kiesler, Siegel, & McGuire, 1984; O'Sullivan & Flanagin, 2003; Siegel, Dubrovy, Kiesler, & McGuire, 1986; Sproull & Kiesler, 1986). Sproull and Kiesler (1986) observed significant differences between CMC and FtF communication when they noted that CMC resulted in messages that were self-absorbed, undifferentiated by status, and uninhibited. The authors argued that these communicative effects of CMC were the result of a lack of regulation of the communication by social context cues, which are not as prevalent in CMC as in FtF communication. Other research, however, has shown that the amount of time that people spend interacting with each other online can have a significant positive effect on their relationships and can help make CMC interaction more personal (Walther, 1992). The important thing to note here is that the electronic environment of CMC may have an impact on communication, and it is important to determine how this influences the way people adapt to each other’s communication during CMC interaction.

Over a decade ago, research investigated issues of gender (i.e., Herring, 1992; Herr- ring, 1996) and politeness (Herring, 1994) in online discursive interactions. Recent studies have continued topic-specific research into this direction, such as a study on gender in electronic discourse (Thomson & Murachver, 2001), one on the influence of gender on the development of personal relationships via email (Boneva, Kraut, & Frohlich, 2001), and a study on the impacts of emoticons on message interpretation (Walther & D’Addario, 2001).

RELATED LITERATURE
Cues-Filtered-Out and Social Information Processing

In the prevalent CMC literature, research has generally confirmed that computer-mediated settings affect interpersonal communication. However, different streams of research support opposing directions of this impact. Some argue that CMC is less personal than FtF communication (e.g., Trevino, Lengel, & Daft, 1987), while others argue that personal information actually does pass through CMC, only it takes more time for individuals to adjust to the medium to allow this information to pass (e.g., Walther, 1992).

In general, cues-filtered-out theories focus on social context cues such as nonverbal
cues or situational factors that cannot be conveyed as easily through CMC as through FtF. Certain lean media allow for fewer context cues, less immediate feedback, and limited personalization while requiring asynchronous communication (Daft & Lengel, 1984, 1986). These researchers consider face-to-face communication to be the richest channel, and argue that computer-mediated channels are leaner and more ineffective media for interpersonal communication. In addition, due to the leaner nature of communication media and the filtering-out of social context cues, social presence declines (Short, Williams, & Christie, 1976). Social presence can be described as the degree of real-ness or there-ness that two communication participants perceive in each other. Short, Williams and Christie consider social presence to be a perceived quality of media, and social presence theory as a framework predicts less personal, more task-oriented communication in CMC (Culnan & Markus, 1987; Hiltz, Johnson, & Turoff, 1986; Rice, 1984).

On the other hand, studies conducted following theories such as social information processing theory or the theory of hyperpersonal communication proposed by Walther (1992, 2002) demonstrate that CMC message exchanges are not always less personal than FtF interaction (Rice & Love, 1987; Foulger, 1990; Hiemstra, 1982). Social information processing theory explains the effects of time on interpersonal relationships among CMC users. The theory posits that “communicators using any medium experience the similar needs for uncertainty reduction and affinity, and to meet these needs CMC users will adapt their linguistic and textual behaviors to the solicitation and presentation of socially revealing, relational behavior. The critical difference between FtF and CMC from this perspective is a question of rate, not capability” (Walther, Anderson, & Park, 1994, p. 465). In other words, actors adapt to the lack of nonverbal behavior inherent to CMC through textual and linguistic cues that, in time, are interpreted as social or personal information. Thus, the exchange of personal or social information might be slower in CMC, but it can be just as potent over time.

**Communication Accommodation Theory**

Communication accommodation theory (CAT) addresses behavioral adjustments individuals make during communication in order to express values, attitudes, and intentions. Specifically, CAT sets out “to clarify the motivations underlying, as well as the constraints operating upon, speech shifts during social interactions and the social consequences of these” (Giles, Mulac, Bradac, & Johnson, 1987, p. 14).

Two key concepts related to CAT are convergence and divergence. Convergence is the process of individuals adapting toward each other’s speech. When Giles (1973) first introduced accommodation theory, he illustrated convergence by reporting that individuals in interview situations adjusted their accents toward that of the interviewer. Divergence, on the other hand, refers to the way individuals adjust their speech away from each other in order to accentuate differences. Bourhis and Giles (1977) reported divergence in their study of the reactions of Welsh people to language questions asked of them by English-sounding speakers. When the English-sounding speakers threatened the ethnic identity of the Welsh by challenging the value of learning the Welsh language, the Welsh individuals diverged from the English by broadening their Welsh accents.

Adaptive behaviors have been identified in several studies (Giles, Coupland, &
Coupland, 1991). Features converge that may include utterance length, speech rate, information density, vocal intensity, pausing frequencies and lengths, response latency, self-disclosure, jokes, expressing solidarity/opinions/orientations, gesture, head nodding, facial affect, and posture. While excessive convergence may be perceived as patronizing or inappropriate (Giles & Smith, 1979; Scotton, 1980), speech convergence is generally met with positive evaluation. It follows that convergence may reflect an individual’s desire for social approval (Giles et al., 1987). Giles et al. (1987) pointed to research demonstrating that similarity in speech rates, response latencies, language, and accent are perceived more favorably than dissimilarity in the realms of social attractiveness (Street, Brady, & Putnam, 1983), communication effectiveness (Giles & Smith, 1979), perceived warmth (Welkowitz & Kuc, 1973), and cooperativeness (Feldman, 1968). This study will examine politeness as a form of accommodation in email messages.

**RESEARCH QUESTIONS**

Following communication accommodation theory and prevalent CMC theories, this study seeks to identify whether individuals accommodate to verbal politeness markers and structural politeness elements when using email to interact with others. This study posits that social context cues indicating politeness can easily be, and often are, included in CMC messages, and it is conceivable that individuals may accommodate to these cues when interacting with others through email. For the purposes of this study, politeness in email messages will be represented by verbal markers and structural elements. The phrases “please” and “thank you” have been selected as verbal markers for politeness for obvious reasons. Use of a salutation, such as “Dear [recipient name],” and a closing remark, such as “Regards,” in email messages has been selected to represent structural elements of politeness. The salutation and closing are presumed to be politeness cues because they convey an increased level of respect and formality compared to more abrupt messages that lack these structural elements.

The previous considerations lead to the following research questions:

- **RQ1:** Do individuals accommodate to politeness in email messages by converging to verbal markers (i.e., “please” and “thank you”)?
- **RQ2:** Do individuals accommodate to politeness in email messages by converging to structural elements (i.e., salutation and closing remark)?
- **RQ3:** Do verbal markers and structural elements interact to explain the extent to which individuals accommodate to politeness in email messages?

**METHODS**

**Participants**

A manipulation check was conducted through a pilot study to test whether the messages used were significantly different from each other with respect to their level of politeness. An original scale was used for this test. Participants were asked to rate the level of politeness reflected in verbal markers and structural elements in email messages. For the pilot study, 106 subjects (54% female) were recruited from sections of the basic public speaking course at a large mid-western research university. Stu-
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dents were awarded credit toward their class grade for their participation in this study. On average, subjects were 21 years old, and used the Internet about two-and-a-half hours per week.

For the main study, 121 students (N = 150, response rate of 81%, 60% female) were recruited from the same population as above. Subjects of the main study also received credit toward their class grade for participation in the study. Repeat participation was prevented. The majority of subjects were 19 (48%) or 20 (29%) years old. On average, participants used email two (30%) or three-to-four (30%) hours per week. Subjects had been using email for an average of just over three years. Fifty-two percent of the participants reported using email primarily for social reasons, such as interacting with friends and family. Secondarily, participants reported using email for task-related purposes, such as school or work (46%).

Materials
An original self-report questionnaire was used for this study assessing participant age, sex, years of experience using email, amount of weekly email use, and type of email use (school/work and personal/social usage). Years of experience using email, amount of weekly email use, type of email use, age, and sex were measured with ordinal and nominal response options (see survey in Appendix B). The only other materials involved in this study were email messages.

Four different messages were constructed and sent to the participants. All four messages were highly significantly different from each other in their levels of politeness as confirmed by the results from the pilot study. Only one change was made in message one. The sentence “Thank you for expressing interest in being a participant in a research study I am conducting” was changed to “You expressed interest in being a participant in a research study I am conducting. Thank you for that.” Using “thank you” as the first words of the message seemed too leading to us. Each participant was randomly assigned to one of four groups to receive one of the four messages (see email messages in Appendix A).

Procedures
Students were notified by their instructor that a visiting professor at the university was looking for participants to fill out a survey for a study being conducted. The students were told the professor would contact them via email with more information if they provided their email address to their basic course instructor. Students were also informed that participation in the study would fulfill one of the three research credits required as a course assignment. All students had access to a free email account provided by the university.

Once the student email addresses were collected, each participant received an email message from the visiting professor. Unbeknownst to the students, the true purpose of this message was to evoke email responses that would later be examined to assess whether the students accommodated to the professor’s email. It was necessary to have the students respond with a message at least a paragraph in length in order to provide ample opportunity for convergence to take place. Therefore, the professor’s email asked subjects to explain their reasons for participating in the study, as if the professor was not familiar with the research requirement and the credits assigned in the basic public
speaking course.

While the general content of the professor’s message was the same for each recipient, the professor’s messages were manipulated in a 2x2 factorial design. The two independent variables for this design consisted of verbal politeness markers and structural politeness elements. See Table 1 for an overview of which messages contained what kind of politeness elements.

<table>
<thead>
<tr>
<th>Verbal Indicators</th>
<th>Structural Indicators</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Message 3</td>
<td>Message 1</td>
</tr>
<tr>
<td>Message 2</td>
<td>Message 4</td>
</tr>
</tbody>
</table>

The dependent variable was the overall “politeness score” for a message, determined by adding the verbal politeness markers and the structural politeness elements included in a message. Verbal and structural elements were identified and quantified using a simple form of content analysis. The measurement process consisted of both researchers together agreeing on a coding scheme by identifying words or terms that would be considered politeness indicators. The phrases “please,” “thank you,” and similar expressions of appreciation, such as “I would appreciate” or “I’m grateful” were considered to be verbal politeness markers. Salutations and closing sign-offs were considered to be structural politeness elements. When 100% coding agreement was reached, emails were divided up and the researchers identified and counted the verbal politeness markers and structural politeness elements in the responses. To test inter-coder reliability, 10% of the email messages were chosen at random and coded by each of the two researchers. Inter-coder reliability was acceptable with 94% agreement between the coders.

The professor, Dr. Chris Aitken, was actually a fictitious character in this study. The researchers established a separate email account through the university and contacted the participants themselves under the pseudo-identity of Dr. Chris Aitken. As in the case of a similar study investigating student convergence to a professor’s answering machine message (Buzzanell, Burrell, Stafford, & Berkowitz, 1996), the status difference between the students and the professor was thought to motivate students “to attempt behaviors (i.e., moderate convergence) that facilitate goals and influence positive reactions” (p. 313). An actual professor was not used for this investigation in order to prevent existing relationships from influencing the level of politeness in the participant responses. Also, the name “Chris” was chosen because it is gender-neutral.

RESULTS

A 2x2 ANOVA was conducted to determine whether subjects accommodated to verbal and structural politeness indicators in email messages (RQs 1 and 2), and whether verbal and structural elements interact to explain accommodation (RQ3). The messages to subjects were manipulated so that only half contained verbal politeness markers and only half contained structural politeness elements. Therefore, the independent variables consist of verbal markers (i.e., “please” and “thank you”) and structural elements
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(i.e., salutation and closing remark), with levels for each being the presence/absence of the factor's politeness indicator in the experimental email messages. The dependent variable is the politeness score in the subjects' reply messages. The politeness score is the total number of politeness indicators (both verbal and structural) in the subject reply emails. The means and standard deviations for politeness score as a function of verbal markers and structural elements are presented in Table 2. The ANOVA indicated no significant interaction between verbal markers and structural elements, $F (1, 117) = 1.60, p = .21, \eta^2 = .01$, but significant main effects for verbal markers, $F (1, 117) = 4.00, p = .05, \eta^2 = .03$, and structural elements, $F (1, 117) = 24.40, p < .001, \eta^2 = .17$.

Because each of the independent variables contained only two levels, presence and absence, the main effects associated with these factors are sufficient for examining the differences in accommodation levels. Subjects who received messages with verbal politeness markers responded with higher politeness scores ($M = 3.05, SD = 1.29$) than those who received messages absent of verbal markers ($M = 1.98, SD = 1.15$). Those who received messages with structural politeness elements responded with higher politeness scores ($M = 2.73, SD = 1.16$) than those who received messages without structural elements ($M = 2.32, SD = 1.47$). Overall, the 2X2 ANOVA indicates that subjects accommodated to politeness in email messages.

<table>
<thead>
<tr>
<th>Structural Elements</th>
<th>Verbal Markers</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>Present</td>
<td>3.13</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Absent</td>
<td>2.97</td>
<td>1.45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.05</td>
<td>1.29</td>
</tr>
<tr>
<td>Absent</td>
<td>Present</td>
<td>2.32</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td>Absent</td>
<td>1.61</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.98</td>
<td>1.15</td>
</tr>
<tr>
<td>Total</td>
<td>Present</td>
<td>2.73</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Absent</td>
<td>2.32</td>
<td>1.47</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.53</td>
<td>1.33</td>
</tr>
</tbody>
</table>

The structural elements factor was analyzed further to explore accommodation levels for salutations and closing remarks independent from one another. Regarding salutations, independent samples t-tests indicated that there was a significant difference in politeness among the responses with regard to the greeting, $t (37) = 6.43, p < .001$. Subjects who received the message with structural politeness indicators were significantly more polite in the greeting of their response ($M = 1.06, SD = .81$) than were subjects who received a message containing no politeness indicators ($M = 1.06, SD = .81$). Thus, participants accommodated structural politeness in the form of greetings in electronic mail.

With regard to politeness in the sign-off or closing remark, t-tests only approached significance, $t (56) = 1.89, p = .064$. Subjects who received messages with structural politeness indicators were not significantly more polite in the closing remark of their response ($M = 1.42, SD = .76$) than were subjects who received a message containing no politeness indicators ($M = 1.04, SD = .79$). Thus, it cannot be shown that participants...
accommodated to structural politeness in the form of closing remarks in electronic mail, though the effects did approach significance.

Additional statistics were conducted to investigate the influence of age, gender, amount of experience using email, frequency of email use, and purpose of email use on politeness accommodation. As no significant results were found, these results are not reported here in detail.

**DISCUSSION**

As the field of computer-mediated communication is continually evolving, communication theory has made advancements in explaining technology mediated communication, including interpersonal mediated communication. Recently, several studies have focused on issues of gender (Boneva et al., 2001; Thomson & Murachver, 2001), and emoticons (Walther & D’Addario, 2001) in email interactions. This study continues this line of research by examining politeness in electronic mail. The purpose of this study was to investigate whether people accommodate to both verbal and structural politeness indicators in email interactions. The results of this research indicate that certain politeness indicators are accommodated. This research, thus, provides a new perspective on previous research which has argued that the absence of face-to-face interaction in computer-mediated communication fosters the use of flagrant and hostile language, also known as “flaming.” In the future, it may be possible to reduce flaming and instead stimulate politeness by including basic politeness indicators in one’s online messages.

In this study, subjects (n = 121) received one of four message versions. Each version had the same content, but varied in politeness. Messages contained either verbal politeness indicators (i.e., “please,” “thank you”), or structural politeness indicators (i.e., greeting, closing remark), or both, or none. All messages were sent by Dr. Chris Aitken, a fictitious person, to equalize status differences and control for pre-existing personal relationships.

Results of a 2x2 factorial ANOVA showed significant main effects for verbal politeness cues, and for structural politeness cues. Participants accommodated verbal politeness indicators in the body of a message (research question 1), and the structural politeness indicator of a greeting/salutation (research question 2). When such indicators were included in messages, subjects responded with significantly more polite messages (greeting and body) than when indicators were absent. Independent samples t-tests showed that the structural politeness indicator of a closing remark/sign-off only approached significance despite a significant main effect for overall structural elements. More research is needed, possibly with a larger sample, to investigate this issue further.

No significant interaction effect was found between verbal markers and structural elements (research question 3). Thus, including both kinds of politeness cues in an email message does not stimulate significantly more polite email responses than including either verbal markers, or structural elements. Demographics such as age and gender, amount of experience using email, frequency of email use, and purpose of email use do not influence politeness accommodation in electronic mail.

Overall, this research adds to the field of mediated communication by showing that politeness can be expressed easily in email, where it then acts as a social cue to
enrich mediated electronic communication. Email recipients are capable of detecting politeness indicators, and, consciously or not, accommodate this politeness by including similar politeness indicators in their email responses. More research investigating other social context cues including level of formality, friendliness, and personalness and their communicative accommodation in personal messages is currently in process (Campbell & Bunz, 2002).

The results of this research provide support for communication accommodation theory in a computer-mediated communication context. Similar to the detection of accents, speech rate, or self-disclosure, communication participants in a mediated environment are able to detect politeness. Convergence takes place when an email response mirrors the politeness cues of the original message. Also, this research reinforces CMC literature (i.e., Walther, 1992; Walther, Anderson, & Park, 1994) that argues that effective interpersonal communication can occur in computer-mediated communication. Certain social cues may be filtered out by communication technologies, but politeness indicators are communicated, interpreted, and reciprocated, allowing us to build towards positive impression management in electronic mail.

REFERENCES


APPENDIX A

Message 1: Verbal Polite
*Only verbal politeness markers included*

You expressed interest in being a participant in a research study I am conducting. Thank you for that. Participation would involve filling out a short survey asking about your uses of electronic mail and basic demographic information. If you are still interested, please send a response to me via email and I will forward the survey to you. As a visiting professor, I am not familiar with the research requirements of the COMS 130 course, so please also provide a brief explanation of why you wish to be a participant in this study. If you are no longer interested, please disregard this message. Thanks again for your interest.

Chris W. Aitken, Ph.D.

Message 2: Structural Polite
*Only structural politeness elements included*

Dear [insert participant first name],

Recently you expressed interest in being a participant in a research study I am conducting. Participation would involve filling out a short survey asking about your uses of electronic mail and basic demographic information. If you are still interested, send a response to me via email and I will forward the survey to you. As a visiting professor, I am not familiar with the research requirements of the COMS 130 course, so please also provide a brief explanation of why you wish to be a participant in this study. If you are no longer interested, disregard this message.

Regards,

Chris W. Aitken, Ph.D.
Message 3: Both
Both verbal markers and structural elements included

Dear [insert participant first name],

Thank you for expressing interest in being a participant in a research study I am conducting. Participation would involve filling out a short survey asking about your uses of communication technology and basic demographic information. If you are still interested, please send a response to me via email and I will forward the survey to you. As a visiting professor, I am not familiar with the research requirements of the COMS 130 course, so please also provide a brief explanation of why you wish to be a participant in this study. If you are no longer interested, please disregard this message.

Thanks again.
Regards,
Chris W. Aitken, Ph.D.

Message 4: None
Neither verbal markers nor structural elements included

Recently you expressed interest in being a participant in a research study I am conducting. Participation would involve filling out a short survey asking about your uses of communication technology and basic demographic information. If you are still interested, send a response to me via email and I will forward the survey to you. As a visiting professor, I am not familiar with the research requirements of the COMS 130 course, so also provide a brief explanation of why you wish to be a participant in this study. If you are no longer interested, disregard this message.
APPENDIX B

Self Report Scale of Email Usage and Demographics, Administered via Email

GENERAL INSTRUCTIONS

Please reply to this message. Make sure the text of this message will show in your reply. Then, place an “x” (without the “”) in front of the answer you would like to select.

Chris Aitken

This survey consists of items designed to provide information about your use of electronic mail and demographics. There are no right or wrong answers. Please respond to each item according to the scale provided.

1. How many years have you been using email to interact with others?
   ___(1) Less than 1
   ___(2) 1-2
   ___(3) 3-4
   ___(4) 5-6
   ___(5) 7-8
   ___(6) 9-10
   ___(7) More than 10

2. How many hours per week would you estimate you currently spend using email to interact with others?
   ___(1) 0
   ___(2) 1
   ___(3) 2
   ___(4) 3-4
   ___(5) 5-6
   ___(6) 7-8
   ___(7) 9-10
   ___(8) 11-12
   ___(9) 13-14
   ___(10) 15+

3. I use/would use email primarily for ... 
   ___(1) interacting socially with acquaintances, friends, or family 
   ___(2) school, work, or other task-related purposes 
   ___(3) gathering information on current events/special interests 
   ___(4) gathering information about an upcoming purchase 
   ___(5) all of the above 
   ___(6) none of the above
4. I use/would use email secondarily for ...  
   (1) interacting socially with acquaintances, friends, or family  
   (2) school, work, or other task-related purposes  
   (3) gathering information on current events/special interests  
   (4) gathering information about an upcoming purchase  
   (5) all of the above  
   (6) none of the above

5. What age group are you a member of?  
   (1) 17-18  
   (2) 19  
   (3) 20  
   (4) 21  
   (5) 22-23  
   (6) 24-26  
   (7) 27-29  
   (8) 30-35  
   (9) 36-45  
   (10) 46+

6. What is your sex?  
   (1) female  
   (2) male

This concludes the survey. Please send your responses to Dr. Chris Aitken via email at cmcresgp@ku.edu. Thank you for your participation.