

# ON HOW THINGS ARE SAID

## Voice Tone, Voice Intensity, Verbal Content, and Perceptions of Politeness

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*Individuals in two studies listened to statements or questions that were either consistent or inconsistent across verbal content and tone of voice. Results showed that tone of voice substantially affected judges' ratings of the politeness for positive content statements but did so only minimally for negative content statements. Tone of voice affected judges' politeness ratings of both positive and negative questions.*

**Keywords:** *nonverbal; politeness; interpersonal perception; communication*

Scant attention has been paid to the importance of nonverbal cues in the communication of politeness. Researchers commonly examine politeness by verbal content alone; however, nonverbal channels of communication such as facial expressions and tone of voice are enormously informative, often inevitably used, and so powerful that they can communicate information about internal states, attitudes, and feelings (DePaulo & Friedman, 1998). Without the aid of verbal content, nonverbal cues also can inform perceivers about others' abilities,

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bias, and personality (Ambady, Bernieri, & Richeson, 2000). Much of the time people do not use nonverbal channels of communication in isolation but use verbal and nonverbal channels of communication simultaneously (DePaulo & Friedman, 1998; LaPlante & Ambady, 2002). Consequently, independent examinations of verbal and nonverbal cues might provide an incomplete picture of normal interpersonal interactions. The goal of this work is to explore how nonverbal cues influence the politeness with which individuals perceive statements and questions.

The most notable theory of politeness is P. Brown and Levinson's (1978, 1987) sociolinguistic theory. Derived from Goffman's (1967) understanding of "facework," this theory suggests that all individuals hold two primary desires—positive face (the desire to maintain one's self-image) and negative face (the desire to have one's actions unimpeded by others)—and that in our interpersonal interactions we occasionally threaten others' face needs with criticisms (positive face-threatening acts) and requests (negative face-threatening acts). Politeness is our attempt to redress for such face-threatening acts.

Politeness theory provides several linguistic strategies for redress; however, nonlinguistic aspects of politeness may be equally important to redress (P. Brown & Levinson, 1987; Goffman, 1967). Although there has been a shortage of research on the role of nonverbal cues in the communication of politeness, some researchers have suggested that politeness theory itself can be expressed through nonverbal cues such as smiles, bows, and personal distance (R. Brown, 1990). Research supports these sentiments by demonstrating that nonverbal cues do play an important role in the expression of politeness. For example, vocal pitch and facial expressions have been found to vary with intent to convey politeness (Camras, 1984; Loveday, 1981). Similarly, nonverbal cues of politeness have been found to vary reliably with status, depending on culture (Ambady, Koo, Lee, & Rosenthal, 1996). Related work shows that nonverbal messages manipulated to vary in politeness (polite/impolite) affect perceptions of the politeness of critical messages. Specifically, during criticisms, polite nonverbal tone increased perceived politeness and impolite nonverbal tone decreased perceived politeness (Trees & Manusov, 1998).

The following two studies explored how tone of voice influences individuals' perceptions of positive and negative verbal messages. We considered and tested through planned contrasts if nonverbal and verbal cues work additively to determine politeness. The previously mentioned research on nonverbal cues and politeness suggests that nonverbal cues might be powerful enough to direct the politeness with which positive and negative messages are perceived in the direction of the nonverbal message. However, although predictions pertaining to consistently positive and consistently negative messages are straightforward, two types of mixed messages (i.e., conditions in which tone

and content are in conflict) are indistinguishable (+ content/– tone and – content/+ tone) if verbal and nonverbal cues hold equal weight. To account for this possibility, we expanded the mixed message conditions by varying tonal intensity. Hence we might expect to see the following progression, assuming equal weight, from least to most polite if verbal and nonverbal cues have an additive relationship: negative content/moderate negative tone (NC/NT: –/–), positive content/high-intensity negative tone (PC/HNT: +/–), positive content/moderate negative tone (PC/NT: +/–) = negative content/moderate positive tone (NC/PT: –/+), negative content/high-intensity positive tone (NC/HPT: –/++), positive content/moderate positive tone (PC/PT: +/+).

In the first study, we examined the valence and intensity combinations of verbal and nonverbal cues that communicate politeness during statements.<sup>1</sup> We recruited 60 male and 60 female college students through sign-up sheets and from an introductory psychology course to participate in this study. The participants were randomly assigned to listen to and rate eight audiotaped statements recorded by one of two potential actresses that reflected one of six conditions: (1) positive content/moderate positive tone, (2) positive content/moderate negative tone, (3) positive content/high-intensity negative tone, (4) negative content/moderate negative tone, (5) negative content/moderate positive tone, and (6) negative content/high-intensity positive tone. In other words, eight positive statements (e.g., “You passed the test.”) and eight negative statements (e.g., “Sorry you failed the test.”) were each recorded in three different tones of voice for a total of 48 audiotaped statements. Participants rated these statements on a 7-point scale for the degree of politeness that they felt was conveyed by the statement (*not at all polite to extremely polite*). Study 2 used an identical method; however, rather than statements, stimuli included positive (e.g., “Would you like to go get ice cream?”) and negative (e.g., “Would you leave me alone?”) questions.

We submitted the content and the tone of all the stimuli in Study 1 and Study 2 to manipulation checks. Participants of the manipulation checks were not the same as the study participants. For both studies the manipulation checks revealed that all the conditions that were intended to be positive, negative, or high intensity were perceived as such. Ratings for Actress 1 and Actress 2 were never significantly different so no further differentiation between actresses was made in subsequent analyses. For both studies, we used a  $2 \times 6$  between-subjects ANOVA (Participant Sex  $\times$  Experimental Conditions) to analyze the data. All contrasts were planned unless otherwise indicated.

As a set, the participants rated the statements highly reliably: the effective reliability of the participants in Study 1 was  $R = .94$  and the effective reliability of the participants in Study 2 was  $R = .92$ . In each study, then, each participant’s ratings were averaged over each state-

ment. Thus, each experimental condition had 20 average politeness ratings, one for each randomly assigned participant.

### STUDY 1

A significant main effect of message condition was found,  $F(5, 108) = 18.84, p < .0001$ . No main effects or interactions involving participant sex were observed,  $F_{\text{sex}}(1, 108) = 1.18, p < .3$ ;  $F_{\text{sex} \times \text{message}}(5, 108) = 0.49, p < .8$ ; however, as shown by Table 1, the influence of tone seemed to differ depending on verbal content. A post hoc linear contrast within positive content +1 (positive content/moderate positive tone), 0 (positive content/moderate negative tone), -1 (positive content/high-intensity negative tone) was significant,  $t(108) = 6.83, p < .0001, r = .55$ .

In contrast, little variation was observed between the negative verbal content conditions regardless of tone of voice. A corollary increasing linear trend from negative content/moderate negative tone (-1) to negative content/high-intensity positive tone (0) to negative content/moderate positive tone (+1) approached conventional levels of significance,  $t(108) = 1.45, p < .08, r = .14$ , but was not well reflected by the means. Furthermore, meta-analytic comparison showed that this effect size was significantly smaller than the effect size for positive content,  $p = .006$ .

### STUDY 2

A significant main effect of message condition was observed,  $F(5, 108) = 12.39, p < .0001$ . No main effects or interactions involving participant sex were observed,  $F_{\text{sex}}(1, 108) = .61, p < .5$ ;  $F_{\text{sex} \times \text{message}}(5, 108) = 0.73, p < .7$ . As can be seen in Table 2, messages that were positive in tone were rated as significantly more polite than messages with negative tone. Furthermore, high-intensity positive tone when paired with a negative message was perceived as less polite than moderate-intensity positive tone when paired with a negative message. Similarly, high-intensity negative tone, when paired with positive content, was perceived as less polite than moderate-intensity negative tone when paired with positive content. A contrast testing this decreasing linear pattern reached significance,  $t(108) = 7.59, p < .0001, r = .59$ .

In light of the differential effect of tone observed in Study 1, we conducted two additional contrasts to determine if the effect of tone was stronger in positive content conditions than in negative content conditions. Decreasing linear contrasts showed that both tone and intensity had the predicted effect on perceptions of politeness for positive content,  $t(108) = 6.18, p < .0001, r = .51$ , and negative content,  $t(108) = 4.29, p < .001, r = .38$ . Meta-analytic comparison showed that these effect sizes were not significantly different from each other,  $p = .19$ . Thus,

Table 1  
*Study 1: Means and Standard Deviations for Perceptions of Politeness*

Dependent Variable	PC/PT	NC/PT	NC/HPT	PC/NT	PC/HNT	NC/NT
Polite	4.06 (1.89)	2.09 (0.71)	2.30 (1.16)	3.07 (1.15)	2.13 (0.83)	1.68 (0.52)

*Note.* PC/PT = positive content/moderate positive tone, NC/PT = negative content/moderate positive tone, NC/HPT = negative content/high-intensity positive tone, PC/NT = positive content/moderate negative tone, PC/HNT = positive content/high-intensity negative tone, NC/NT = negative content/moderate negative tone.

Table 2  
*Study 2: Means and Standard Deviations for Perceptions of Politeness*

Dependent Variable	PC/PT	NC/PT	NC/HPT	PC/NT	PC/HNT	NC/NT
Polite	4.42 (1.01)	3.71 (0.75)	3.09 (0.96)	3.04 (1.06)	2.56 (1.08)	2.41 (0.75)

*Note.* PC/PT = positive content/moderate positive tone, NC/PT = negative content/moderate positive tone, NC/HPT = negative content/high-intensity positive tone, PC/NT = positive content/moderate negative tone, PC/HNT = positive content/high-intensity negative tone, NC/NT = negative content/moderate negative tone.

unlike in Study 1, the effect of tone of voice on perceptions of verbal content was not greater for positive content relative to negative content.

Studies 1 and 2 provide evidence for the influence of nonverbal cues on individuals' perceptions of politeness. This influence, though, depends on the type of verbal message one is sending. For statements, tone of voice shifted perceptions of politeness for positive verbal content but not negative verbal content. In contrast, for questions, tone of voice shifted perceptions of politeness for both positive and negative verbal content. Positive tone shifted perceptions toward greater politeness and negative tone shifted perceptions toward lesser politeness. For the cases in which tone of voice was influential, increasing the intensity of the positive or negative tone of voice increased perceptions of impoliteness and decreased perceptions of politeness.

Nonverbal cues play an important but limited role in conveying politeness. For example, no matter how hard we try to soften the blow of a negative statement, nonverbal cues may not be able to compensate enough to result in a polite message overall. As researchers continue to explore the nonverbal correlates of politeness and the general structure of politeness theory is expanded to accommodate behavior, this important exception should be kept in mind. This research also has implications for the manner with which individuals conduct themselves in their everyday lives. The use of politeness in the realms of education, health care, and interpersonal relationships is pervasive and often pivotal in creating effective and successful social

interactions (Holtgraves, 1997; Lee, 1995; Robins & Wolf, 1988). In effectively using strategies of politeness, individuals should be aware of the adequacies of the behavioral cues that accompany their chosen strategies lest misunderstanding occurs.

Some limitations exist. These studies were limited to female actresses because gender differences in the use of politeness strategies have been observed; women are more likely to actually engage in strategies of politeness (Baxter, 1984) and women have repeatedly been found to be superior encoders of nonverbal cues (Hall, 1990). Therefore, the use of politeness is likely to be found more believable from women than from men, and the naturalness of the nonverbal cues from women is likely to be greater than it would be from men. This, however, limits the generalizability of the findings.

Second, culture has been found to play an enormous role in the use of verbal (Koo, 1995) and nonverbal politeness strategies (Ambady et al., 1996). But the role of culture in the perceptions of verbal and nonverbal politeness strategies was not explored. Furthermore, because nonverbal dominance has been found to be extremely attenuated among nonnative speakers for the English language (Solomon & Ali, 1975), this effect is likely to be enhanced for individuals speaking a second language.

Third, these studies only explored the influence of one nonverbal channel of communication. Although there are many instances (e.g., phone conversations) in which we are limited to tone of voice, we spend a great deal of our time communicating face-to-face. Other channels such as the face and the body also hold the potential to guide others' perceptions of politeness. Body lean, for example, has been found to be related to status and respect (Dovidio & Ellyson, 1985). Picture, for example, the smug teenager slouching in his chair as he is being disciplined by the principal or the attentive job applicant with perfect posture eager to make a good impression both saying, "Well, thanks a lot."

In addition to these structural limitations, our predictions were not completely borne out for negative content in Study 1. Specifically, tone of voice had little to do with the politeness levels for negative content criticisms. More work is needed to determine whether these differences reflect differences between positive and negative verbal messages or if the extremity of content used in this study precluded any influence of tone of voice.

This research provided insight into the role of verbal and nonverbal cues in the communication of politeness. This work was the first of its kind to explore verbal and nonverbal consistency with questions. Furthermore, although some researchers have examined nonverbal consistency and politeness, none of the researchers have identified the intensity of the nonverbal cues included in mixed messages. As can be seen by the data, not all tones are alike; intensity has predictable important effects on the perceived politeness of verbal statements. In

sum, the expression of politeness is a complex dynamic that is influenced by multiple channels of communication. Theories of politeness would do well to include the role of nonverbal cues.

## NOTE

1. Additional methodological and statistical detail is available from the authors.

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