Appeasing Equals: Lateral Deference in Organizational Communication

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Appeasing Equals: Lateral Deference in Organizational Communication

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Abstract

Using archival data on a year of e-mail exchanges at a division of Enron (Study 1) and a field study of management professionals (Study 2), we explore how the relative hierarchical rank of a message sender and a message recipient affects expressions of verbal deference in organizational e-mail communication. Verbal deference refers to linguistic markers that convey a willingness to yield to another's preferences or opinions as a sign of respect or reverence. Although prior research has focused on upward deference in an organizational hierarchy, from lower-ranked senders to higher-ranked recipients, we predict and find that the greatest amount of deference is expressed laterally, between peers of equal or similar rank. Further, lateral deference is most frequently displayed by those individuals most concerned with preserving their status and rank, confirming that lateral deference may be used as a status-saving strategy designed to protect individuals from status loss associated with ''overstepping one's place.''

Keywords: deference, status, hierarchy, communication

Hierarchy—the unequal distribution of status and power among individuals in a collective—is a defining feature of organizations (Pfeffer, 1992; Leavitt, 2005; Mannix and Sauer, 2006; Magee and Galinsky, 2008; Gruenfeld and Tiedens, 2010). Individuals' desires to gain status and power through hierarchical advancement are often characterized as fundamental human motives (Winter, 1973; McClelland, 1975). In any given group hierarchy, individuals generally wish to move toward the top, where the greatest power and status reside.

Often, hierarchical positions are negotiated and navigated through subtle communication behaviors. Generally speaking, verbal and nonverbal behaviors that convey assertiveness have traditionally been associated with hierarchical

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advancement. For example, people who speak assertively are judged by observers as more likely to be hired, promoted, and supported by superiors (Wiley and Eskilson, 1985; Gallois, Callan, and Palmer, 1992; Parton et al., 2002; see also Ng and Bradac, 1993, for a review). People also convey assertiveness, and hence are more likely to gain status, when they speak quickly rather than slowly (Brown, Strong, and Rencher, 1973), use a confident rather than a hesitant tone of voice (Ridgeway, 1987), sustain eye contact rather than break it (Washburn and Hakel, 1973), and express anger rather than sadness (Tiedens, 2001).

Yet despite a fundamental desire for advancement, people are not unilaterally assertive. Rather, they often express deference, behaviors that convey a willingness to yield to another's preferences or opinions as a sign of respect or reverence (Henrich and Gil-White, 2001). In contrast to more assertive communication behaviors, signals of deference convey an acceptance of one's position in the hierarchy and assure others that there is no intent to mount a challenge to the order. Through subtle deferential communication cues, one party can attempt to appease another by signaling, ''I accept my place, I acknowledge your ranking in the hierarchy, and I am no challenge to you.'' In this way, deference behaviors are signals of appeasement and result in the communicator being perceived as more submissive (Erickson et al., 1978; Carli, 1990; Tiedens and Fragale, 2003; Fragale, 2006), polite (Brown and Levinson, 1987), agreeable, friendly, and warm (Lee, 1999; Parton et al., 2002; Tiedens and Fragale, 2003; Fragale, 2006).

Because deference behaviors affect how others perceive a communicator, deference can be conceptualized as a specific form of influence, whether intentional or not. Influence is defined as ''psychological change . . . in behavior, opinions, attitudes, goals, needs, values, and all other aspects of the person's psychological field'' (French and Raven, 1959: 150–151). Deference, like any other type of communicative act, has the potential to bring about change, or influence, in the message recipient. Specifically, deference behaviors are those that generally convince the recipient that the message sender is yielding, appeasing, and honoring the recipient's position in the rank order. Thus deference is defined not by the necessary intention of the communicator, but by the effect that the communication is likely to have on the recipient.

Past research has identified both nonverbal and verbal behaviors that are perceived as deferential. Nonverbally, deference is conveyed through postural constriction, slouching, smiling, patterns of eye contact and raised eyebrows (Camras, 1977; Keating, 1985; Dovidio et al., 1988; Burgoon, Buller, and Woodall, 1996; Hall, Coats, and Smith LeBeau, 2005), as well as accommodating another's speech rhythm and pitch (Giles and Coupland, 1991; Gregory and Webster, 1996). Deference is also conveyed verbally (Erickson et al., 1978; Ng and Bradac, 1993; Fragale, 2006). For example, hedging (e.g. ''I *kind of* like that idea,'' ''I'm *not sure* I agree'') is a common form of deference, used by a speaker to be vague about his or her opinions so as not to be seen as disagreeing with the recipient of the communication (Brown and Levinson, 1987). Likewise, disclaimers—verbal warnings used to ward off negative implications to the relationship between speaker and recipient based on the communication that follows (e.g., ''*Don't take this the wrong way*, but . . .'')—convey deference by subtly expressing to the recipient that the speaker values the relationship and does not desire to do anything to disrupt it (Hewitt and Stokes, 1975).

Despite the fact that deference is often expressed among members of a hierarchy, little attention has been paid to deference communication in organizations. Thus important questions remain unanswered. Specifically, is deference only expressed by individuals unmotivated by the desire for greater status and power, or is deference also likely among those who seek hierarchical advancement? Further, which individuals in a hierarchy are most likely to express deference, and to whom is this deference most likely to be expressed? Our research was designed to provide some initial answers to these questions by advancing and testing predictions about the predominant direction of deference communication in organizational hierarchies.

Theories of status loss (Pettit, Yong, and Spataro, 2010) and status competitions (Overbeck, Correll, and Park, 2005; Groysberg, Polzer, and Elfenbein, 2011) suggest that organizational members may express deference in their quest to be protected from the loss of status or rank. Prior communication theories have suggested that this concern is likely to be activated when communicating upward in a hierarchy, from subordinate to superior, making deference most frequent in these contexts. We suggest, however, that concerns about status loss, and hence deference displays to signal lack of threat, are likely to be even more pronounced when communicating laterally, with peers of equal or similar rank, than when communicating with superiors. Further, given that communicators may see deference to peers as a useful strategy to protect their hierarchical positions, deference to peers, which we term ''lateral deference,'' is likely to be most frequent among those communicators who are most concerned with maintaining their status positions.

Because prior theories of deference have predicted upward deference to occur most frequently, past studies conducted to test these theories do not provide sufficient evidence for or against the predominance of lateral deference. For one, the majority of prior studies of deference have used laboratory paradigms, which require participants to engage in some form of hypothetical interaction and predict how they would behave, rather than capturing actual behavior in a real organizational hierarchy (e.g., Holtgraves and Yang, 1992; Morand, 1996, 2000; Fragale, 2006; see also Hall, Coats, and Smith LeBeau, 2005, for a discussion). Further, many of these studies have only measured lower-ranked senders communicating with higher ranked-recipients, and vice versa (e.g., Cansler and Stiles, 1981; Morand, 1996, 2000). These studies have not included communication between equals, making it impossible to determine the extent to which deference in communication occurs laterally in organizational hierarchies. Thus the prevalence of lateral deference cannot be ascertained simply through an examination of past empirical research. Rather, new studies are needed to provide a sufficient test of the existence and frequency of lateral deference. To do that, we provide new evidence here from an archival study and a field study of deference in organizational communication.

DEFERENCE IN ORGANIZATIONAL COMMUNICATION

Deference is likely a functional behavior. For a hierarchy to facilitate the coordination of effective organizational performance, people must defer at times, and they need to know to whom they should defer (de Kwaadsteniet, 2010). When members of a hierarchy continually challenge the existing rank structure and compete with others for placement, organizational performance suffers, as the

group's energy is spent jockeying for status positions, rather than accomplishing its collective goal (Loch, Huberman, and Stout, 2000; Overbeck, Correll, and Park, 2005; Groysberg, Polzer, and Elfenbein, 2011). Thus an organization will perform best when at least some members of the hierarchy express deference, indicating that they accept their place and do not intend to challenge the rank ordering.

Yet it is less obvious why people would choose to express deference. If people want to gain status and power, why express deference, which signals that one is not attempting to move up in rank? Whereas assertive communication may be a status-gaining strategy, such that it enables individuals to advance, deference may be viewed as a status-saving strategy, preventing individuals from losing status and rank. Status is the extent to which one is respected, valued, and admired by others (Anderson et al., 2006; Fragale, Overbeck, and Neale, 2011). In contrast to power, the amount of resources that one controls (Magee and Galinsky, 2008), status cannot simply be claimed or taken. Rather, others must voluntarily confer it, and thus one can only possess as much status as others are willing to grant.

Although status research has traditionally focused on the fundamental human drive to gain status, recent research indicates that individuals are even more motivated to avoid losses in status. Following the loss aversion predictions of prospect theory (Kahneman and Tversky, 1979), Pettit, Yong, and Spataro (2010) found that people were willing to pay more, put more effort into their performance, and devoted more resources toward personal status concerns, at the expense of contributing to the group goal, to avoid a status loss than to achieve a comparable status gain.

People who attempt to convey superiority over another member in a hierarchy, and fail, are often negatively sanctioned by other members of the hierarchy for this behavior through the loss of status or rank (Gould, 2003; Anderson et al., 2006; Anderson, Ames, and Gosling, 2008). For example, Westphal and Khanna (2003) found that members of boards of directors who challenged the strategic decisions of the chief executive officer (CEO) lost status because of the social ostracism of other board members. These challengers were less likely to have their opinions solicited by other board members and were less likely to be invited to informal meetings. Similarly, Anderson and colleagues (Anderson et al., 2006; Anderson, Ames, and Gosling, 2008) found that group members who were too assertive and attempted to challenge the existing status ordering of their workgroup lost status: groups punished these status challengers by ostracizing them and denying them resources. Just as in the primate world, where challenges to the existing rank order can result in the death of the challenger (de Waal, 1982), these findings indicate that an unsuccessful challenge to an organizational hierarchy may result in ''career suicide'' (Gould, 2003; Miceli, Near, and Dworkin, 2008; Sumanth, Mayer, and Kay, 2011). Because they are likely to be aware of the risks involved in challenging status orderings, people may express deference to communicate that they are not ''overstepping their place'' relative to others. Through deference, they can signal, ''I'm not assuming that I outrank you in the hierarchy,'' thereby protecting themselves from the status loss that might result from a failed status challenge.

Two streams of research provide different answers to the questions of who is most likely to express deference and to whom deference will be expressed.

The most common perspective is that deference should most often be expressed upward in hierarchies, from lower-ranked communicators to higher-ranked recipients (Goffman, 1967; Brown and Levinson, 1987), but research on status competitions among rank equals (Overbeck, Correll, and Park, 2005; Groysberg, Polzer, and Elfenbein, 2011) suggests that deference may be more commonly expressed laterally, among peers of equal or similar rank. Our use of the terms lateral and upward is not meant to denote different forms of deference but, rather, is intended to designate two different directions that deference could be expressed—to a peer or a superior, respectively. Our research was designed to investigate which of these directions occurs most frequently.

Upward Deference

Theories of face management (Goffman, 1967; Brown and Levinson, 1987) assert that individuals have a universal desire to have their ''face,'' or social image, maintained, and interpersonal communicative acts play a critical role in maintaining face. According to face management theories, as the message recipient's rank relative to the message sender's rank increases, senders should become more concerned with managing the face of the recipient and consequently employ more deferential communication (Goffman, 1967; Brown and Levinson, 1987; Holtgraves and Yang, 1990, 1992). Lower-ranked message senders communicating with higher-ranked message recipients should therefore express the greatest amount of deference in a status hierarchy. Not expressing deference to superiors could be viewed as a status or face threat (i.e., overstepping one's place), by failing to acknowledge the rank difference between the parties, and could be punished as insubordination (e.g., Gould, 2003; Westphal and Khanna, 2003; Anderson et al., 2006). This perspective on deference also predicts that high-ranking message senders would be unlikely to express deference, as the sender's higher-ranked position would give him or her license to communicate superiority to others without being perceived as overestimating one's status or presenting a challenge to the existing hierarchical ordering.

Supporting this view, several past studies have illustrated that deference is communicated upward more frequently than downward in hierarchies. Morand (1996, 2000) and Holtgraves and Yang (1992) found that study participants used more deference in their requests for help when imagining that they were requesting help from someone of higher organizational rank than when they were requesting help from someone of lower rank. Similarly, Cansler and Stiles (1981) found that undergraduate seniors exhibited more deference when interacting with a higher-status professor than when interacting with a lower-status freshman. A meta-analysis conducted by Hall, Coats, and Smith LeBeau (2005) explored the effects of a communicator's hierarchical position on the use of nonverbal face management tactics across 91 studies and found that communicators who ranked lower in a hierarchy were found to use more constricted (as opposed to expanded) body postures, keep greater distances between themselves and their message recipients, speak at lower volumes, and interrupt less than their higher-ranking counterparts. Thus looking across studies of verbal and nonverbal deference, there is empirical support for the prediction that deference is most frequently communicated upward in hierarchies, from lower-ranked message senders to higher-status message recipients. Stated formally:

Hypothesis 1: In an organizational hierarchy, the greatest amount of deference will be displayed by lower-ranked message senders communicating with higher-ranked message recipients.

Lateral Deference

In contrast to prior work on deference, we suggest that members of a hierarchy, even those of highest rank, will often express the greatest amount of deference laterally, to peers of equal or similar status. This perspective does not preclude the possibility of upward deference occurring within a hierarchy but, rather, predicts that an even greater amount of deference will be directed laterally than upward.

Two aspects of peer relationships make lateral deference particularly likely. First, deferential communication may be especially necessary among peers, because the greatest threat to one's rank is likely to come from similarly ranked others, rather than from those far above or below them. Research in organizations has found that when status competitions and rivalries do occur, they are most likely to occur between individuals who are comparable in rank and ''equally matched'' (Overbeck, Correll, and Park, 2005; Kilduff, Elfenbein, and Staw, 2010; Groysberg, Polzer, and Elfenbein, 2011). As competitions between rank unequals are unlikely to result in success for the lower-ranked challenger, they are observed less often than peer competitions. Thus when rank unequals interact, such as an entry-level analyst and a CEO, neither the analyst nor the CEO is likely to believe that the analyst can credibly challenge the CEO for status or rank. Consequently, these parties may not have a great need to express signals of non-threat. In contrast, when two analysts interact, they are more likely to perceive each other as a threat to their own advancement—for example, some analysts may be more respected by senior management or promoted faster than others. Because status competitions are likely to occur among peers, peers may be very sensitive to cues that a status competition is being initiated, more sensitive than rank unequals. Due to this heightened sensitivity, individuals may need to use more strategies to communicate clearly that they are not overestimating their status or attempting to claim more status when communicating with peers—for fear of being socially and materially sanctioned for this self-aggrandizement (Ryan and Oestreich, 1998; Morrison and Milliken, 2000; Anderson et al., 2006).

Second, lateral deference also may be commonly observed in organizational communication because there is often greater ambiguity about the nature of the status order among peers than among rank unequals. In organizational hierarchies, rank is often formalized through visible markers such as job titles, job responsibilities, and physical work spaces, for example, executive suites versus cubicles (Caza, Tiedens, and Lee, 2011). When individuals of differing ranks interact, these formal markers make it clear who is in charge and who is not. Because these clear markers of differentiation exist, individuals who communicate across formal ranks in a hierarchy may be less dependent on verbal and nonverbal communication to signal that each person knows his or her place. Rather, the ''places'' are already clearly delineated to all parties through the formal markers associated with each rank. In interactions among individuals of the same or similar rank in a formal organizational hierarchy, however, the formal markers don't adequately clarify the status relationship among individuals,

because they share similar titles, responsibilities, or resources. Thus, in peer-to-peer communication, people need to find other channels to convey non-threat to others. Lateral displays of deference are a route through which these messages of acquiescence can be sent and received.

The heightened sensitivity to rank challenges among peers, combined with the lack of formal markers to signify a clear status relationship between parties, suggest that deference communication should be even more likely to occur laterally between peers of similar rank than upward from a lower-ranked message sender to a higher-ranked recipient in organizational hierarchies. This hypothesis does not suggest that upward deference doesn't or won't occur, but simply that lateral deference will be an even more pronounced pattern of communication. Stated formally:

> **Hypothesis 2:** In an organizational hierarchy, the greatest amount of deference will be displayed by message senders communicating with recipients of the same or similar rank.

Overview of the Current Research

To examine the deference patterns in organizational communication (upward and lateral), two studies assessed verbal deference in e-mails sent between members of organizational hierarchies. Study 1 used an archive of e-mail messages to analyze communication between members of differing ranks within a business unit of a single organization. Study 2 was a field study in which participants from different organizations provided e-mails they had previously sent to higher-, equal-, and lower-ranked members in their respective organizations.

Our rationale for focusing on e-mail communication was twofold. First, analyzing e-mails facilitated the measurement of deference, our dependent variable of interest, by providing a written record of naturally occurring communication within a hierarchy without the risk of altering the nature of the communication through a researcher's intervention (e.g., through a researcher's presence in the organization or audiotaping conversations). Second, our paradigm allowed us to explore deference communication in a frequently used medium that has received comparatively little empirical attention in past research. A 2004 survey of 840 U.S. businesses revealed that almost 60 percent of participants spent at least 90 minutes a day on e-mail (Flynn, 2004), yet the majority of prior research on deference communication has examined only face-to-face contexts (e.g., Dovidio et al., 1988; Holtgraves and Yang, 1992; Gregory and Webster, 1996; Morand, 1996, 2000).

STUDY 1

Method

Sample. The dataset for Study 1 consisted of e-mails written by employees of the West Power Trading division of Enron during a one-year period (March 2001–February 2002). These e-mails were made publicly available by the Federal Energy Regulatory Commission's (FERC) Western Energy Markets investigation (http://www.ferc.gov/industries/electric/indus-act/wec/enron/info-release.asp). The FERC database also provided an organizational chart of

the Enron division, which enabled us to determine each employee's rank in the division's hierarchy. We collected every available e-mail in the database that was sent by one of the employees listed on the division's organizational chart. This initial dataset consisted of 1,347 e-mails sent by 23 different members of the division. Many of these e-mails were sent to recipients outside of the division, however, preventing us from making assessments about the hierarchical position of the messages' recipients. We therefore restricted our sample to intradivisional e-mails: e-mails sent by an employee of the division that included at least one recipient in the same division. This resulted in a final sample of 322 e-mails sent by 21 of the division's employees (57 percent male).

We collected every available e-mail from the FERC website that was sent by one of the employees in the Enron division. Our initial dataset contained an average of 58 e-mails per sender, and our final dataset (looking only at intradivisional e-mails) contained an average of 15 e-mails per sender. Most likely, this number does not represent every single e-mail sent by employees over the course of a year. Through conversations with those responsible for creating the Enron e-mail database at the FERC's Office of External Affairs, we learned that this dataset contained all e-mails that Enron provided in response to a request to make all e-mails and documents available to the general public. Thus the e-mails are those that Enron submitted to the FERC. We have no way of knowing if or how Enron decided to submit some e-mails and withhold others. It seems unlikely, however, that any selection that did occur would be based on patterns of verbal deference. It seems most plausible to us that e-mails that were particularly incriminating to individuals or the organization were screened, and what was provided to the FERC were the more mundane, banal e-mails. If our supposition that the sample includes the most benign organizational communication is correct, then the selection procedure in place may actually increase the validity of this sample.

The e-mails in the final sample ranged in length from one-word messages to messages of almost 700 words, with an average length of approximately 55 words. The e-mails generally focused on the business matters of the division, energy trading, and many of the e-mails provided technical details of trades. The vast majority (75 percent) of the e-mails were fully focused on the business of the division, with only 25 percent of the e-mails containing any personal communication at all, and less than 4 percent of the e-mails containing primarily social messages. The majority (57 percent) of the e-mails were dyadic, sent to a single recipient, with the number of recipients ranging from one to 78.

Measures. *Sender rank* was assessed on the basis of employees' positions in the formal organizational hierarchy, as indicated by their job titles. There were nine different job titles represented in the divisional hierarchy, and thus we assigned numerical rankings of 1 (lowest ranking) to 9 (highest ranking) to each employee in the division.[1] Clerks (1) and administrative assistants (2) were the lowest-ranking employees in the division. Analysts were the

[1] To confirm that our interpretation of the rank orderings depicted in the organizational chart was correct, we interviewed a former Enron employee who worked in a parallel division at the time the e-mails were sent. The informant rank ordered all job titles in the division from lowest ranking to highest ranking, and these rankings did correspond to our understanding of the hierarchy based on the organizational chart.

next-lowest-ranking employees in the division (3). The analyst position was the entry-level professional position in the division, generally occupied by recent college graduates. Analysts, specialists (4), and senior specialists (5) reported to managers (6), managers reported to directors (7), and directors reported to regional vice presidents (8), who, in turn, reported to the divisional vice president—the highest ranking (9) position in the division. There was only one divisional vice president, and this individual was at the top of the organizational chart.

Message recipient rank. We used the same 9-point rankings to indicate the hierarchical rank of the recipient of the message. In cases in which a message was sent to multiple recipients, we coded *Recipient rank* as the rank of the highest-ranking recipient on the message.

Verbal deference. The dependent variable of interest was the level of *Verbal deference* expressed in e-mails between message senders and recipients. We used measures of deference employed in prior communication research (e.g., Erickson et al., 1978; Ng and Bradac, 1993; Fragale, 2006), to rule out the possibility that any differences in patterns of deference found between our studies and past studies were due to differences in the operationalization of deference.

Two coders, naïve to the purpose of the study, initially examined each e-mail for two indicators of verbal deference: hedges (kind of, sort of, maybe) and disclaimers (This may be a bad idea, but . . ., I hate to complain, but . . .).[2] The coders first rated a subset of e-mails (N = 87) to assess reliability. There was a high level of initial agreement between the coders for both measures of deference, indicating that counting hedges and disclaimers was a highly objective task. The two coders initially agreed on 94 percent of the e-mails for the number of hedges (r_{wg} = 0.98), and 91 percent of the e-mails for the number of disclaimers (r_{wg} = 0.86). Disagreements were then resolved through discussion, and one of the coders counted hedges and disclaimers for the remaining e-mails.

Deference is also conveyed by agreeing or consenting to the wishes and opinions of others, using unassertive language, being polite, and using formal, ceremonious speech markers (such as formal greetings and closings; Erickson et al., 1978; Brown and Levinson, 1987; Carli, 1990; Tiedens and Fragale, 2003; Fragale, 2006). Therefore we also coded the extent to which the tone of the message was agreeable, unassertive, polite, and formal. Each of these four items was assessed on separate 5-point scales (1 = not at all, 5 = very much) by two coders. The coders' ratings for these four items were reliable (r_{wg} = 0.85), thus we averaged the two coders' ratings for each item.

To ensure that these six measures (hedges, disclaimers, unassertive, agreeable, polite, and formal) represented a single underlying construct of verbal deference, we conducted a confirmatory factor analysis using AMOS software version 5.0 with maximum likelihood estimation procedures, guided by recommendations in the structural equation modeling literature (e.g., Bentler and Dudgeon, 1996; Kline, 1998). Because hedges and disclaimers were measured

[2] We also examined the e-mails for several other deference signals. Erickson et al. (1978) and Fragale (2006) also examined questioning forms, such as tag questions added to the end of a statement to turn it into a question (e.g., ''right?,'' ''you know?''), and hesitations (e.g., ''well,'' ''um''). No tag questions or hesitations were present in any of the e-mails, however, confirming the logic that these signals of verbal deference strategy are generally limited to spoken, rather than written, language.

on ratio scales, and the four measures of message tone were assessed on interval scales, we first computed Z-scores for each item. We specified a one-factor solution and relied on conservative rules of thumb to assess model fit (see Hu and Bentler, 1999). After consulting the modification indices and allowing error terms to correlate, the model demonstrated good fit with the data, χ^2 (12) = 14.46, p = .27, TLI = .93, CFI = .95, RMSEA = .034, RMSEA confidence interval (.000, .087), meeting all of Hu and Bentler's (1999) criteria.

This six-item composite was used to measure the amount of deference conveyed in the e-mails. To illustrate, ''Kim: Read this over and give me a call'' is an example of an e-mail in which the sender made a request of the recipient and did so with little deference. In contrast, ''Are you available anytime today or tomorrow to look at the records and the tx plan? I know this is short notice, so let me know if you can work anything out.'' is a similar request from sender to recipient, but expressed with greater deference.

Control variables. We controlled for the length of each e-mail (in words). We also controlled for the gender of the message sender and recipient (0 = female; 1 = male), as past research has indicated that women often express more verbal deference in communication than men (Lakoff, 1975; Wiley and Eskilson, 1985). In cases in which a message was sent to multiple recipients, we coded the gender of the highest-ranking recipient.

We also controlled for whether the e-mail was a new message or a reply to a prior message (0 = reply to prior message; 1 = new message). Communication is a social process, and e-mail communicators may alter their level of verbal deference, either to mimic (Chartrand and Bargh, 1999) or to complement (Tiedens and Fragale, 2003) the message recipient, when replying to a message in comparison to the amount of deference displayed in a new communication.

The majority of e-mails in our sample (57 percent) were dyadic, sent by one sender to one recipient, and the remainder were ''broadcast'' messages, sent by one sender to multiple recipients, with 33 percent of the total messages sent to between two and five recipients, and the remaining 10 percent of the messages sent to more than five recipients. To control for the possibility that the amount of verbal deference differs in dyadic versus broadcast communication, we controlled for the number of recipients of each e-mail.

Results

Means, standard deviations, and correlations for the variables are displayed in table 1. The data in the present study were multilevel in nature, with rank of the e-mail recipient, gender of the recipient, number of recipients, reply to prior message (reply versus new message), and total word count (Level 1) nested within e-mail sender (Level 2). Thus the primary analytical technique was hierarchical linear modeling (HLM; Bryk and Raudenbush, 1992; Hofmann, Griffin, and Gavin, 2000), because it is the analytical method that best takes into account this multilevel data structure. Furthermore, HLM is particularly well suited for estimating the type of cross-level interactions between sender rank and recipient rank that that we predict here.

Table 1. Means, Standard Deviations, and Correlations among Tested Variables, Study 1 (N = 322)

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Sender rank	6.15	1.35									
2. Sender gender	.84	.37	.36••								
3. Recipient rank	6.26	1.86	–.03	–.11							
4. Recipient gender	.86	.35	–.07	–.15••	.27••						
5. Word count	55.31	75.34	.17••	.09	.07	–.11					
6. New message	.68	.47	.06	.09	.19••	–.07	.08				
7. Number of recipients	3.18	6.64	.01	–.08	.18••	.06	.09	.13•			
8. Requests assistance	2.31	1.52	.12•	.02	–.08	–.03	.14•	–.09	–.08		
9. Personal matters	1.51	1.08	–.17••	.06	–.20••	.05	–.03	–.26••	–.06	.03	
10. Verbal deference	–.03	.47	.07	–.13•	.04	.07	.44••	–.07	.07	.02	–.05

•$p < .05$; ••$p < .01$.

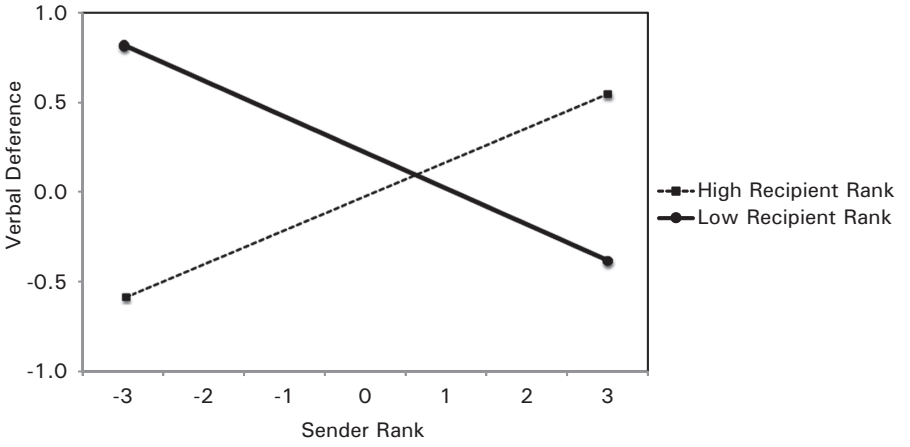
Table 2. Results of Hierarchical Linear Modeling Analysis Predicting Verbal Deference, Study 1*

	Model 1		Model 2	
Independent Variable	Coefficient	S.E.	Coefficient	S.E.
Intercept (γ_{00})	.102	.060	.082	.072
Sender rank (γ_{01})	.005	.041	.009	.040
Sender gender (γ_{02})	–.061	.043	–.057	.044
New message (γ_{10})	–.005	.086	.002	.092
Number of recipients (γ_{20})	–.016	.027	–.012	.027
Recipient rank (γ_{30})	–.060	.029	.054	.040
Recipient rank × Sender rank (γ_{31})	.097••	.027	.075•	.028
Word count (γ_{40})	.117•	.047	.091	.047
Recipient gender (γ_{50})	.071•	.033	.076	.037
Requests assistance (γ_{60})	–	–	.009	.030
Personal matters (γ_{70})	–	–	.052	.046

•$p < .05$; ••$p < .01$.
* N = 322 e-mails, 21 e-mail senders.

Table 2 provides a summary of the HLM model used to test the hypotheses. Verbal deference was regressed on sender rank and recipient rank, and the interaction between the two, controlling for word count, sender gender, recipient gender, the number of recipients to the message, and whether the message was a new message or a reply to a prior message. This analysis revealed two main effects. There was a main effect of word count, such that longer e-mails expressed more verbal deference than shorter e-mails ($\gamma_{40} = .12$, $p = .023$, $R^2 = .05$). There was also a main effect of recipient gender, such that message senders expressed more verbal deference when the recipient of their message was male than when the recipient was female ($\gamma_{50} = .07$, $p = .045$, $R^2 = .02$). More importantly, this analysis also revealed a cross-level interaction between sender rank and recipient rank ($\gamma_{31} = .10$, $p = .002$,

Figure 1. Verbal deference expressed as a function of sender and recipient rank, Study 1.



R^2 change = .03).[3] To interpret the nature of this interaction, we computed simple slopes for the moderator variable, recipient rank, at high and low values (two standard deviations above and below the mean of recipient rank) of the moderator. As shown in figure 1, when communicating with low-ranking recipients, low-ranking senders expressed more verbal deference than high-ranking senders (simple slope = –0.190, $Z = –2.93$, $p = .003$), whereas when communicating with high-ranking recipients, high-ranking senders expressed more verbal deference than low-ranking senders (simple slope = 0.200, $Z = 2.81$, $p = .005$).

Together, these results support hypothesis 2, predicting that the greatest amount of verbal deference will be displayed laterally in an organizational hierarchy. Hypothesis 1, predicting that the greatest amount of deference will be directed upward in the hierarchy, was not supported. As illustrated by the pattern of simple slopes in figure 1, message senders who were in low-ranking positions in the organizational hierarchy expressed more verbal deference when communicating with peers—other low-ranking recipients—than when e-mailing high-ranking recipients. Similarly, high-ranking message senders communicated more deference to fellow high-ranking message recipients than to lower-ranking recipients.

We also used the simple slope equations presented above to test whether, for a given level of sender rank, senders expressed significantly more deference toward others of equal or unequal rank. In essence, for a given level of sender rank, we sought to test whether the difference between points on the two simple slope lines depicted in figure 1 was significantly greater than zero. For this analysis, we selected the standardized rank equivalent to 3 on the 9-point hierarchy of sender rank (corresponding to relatively low-ranking

[3] To assess the magnitude of the effect size associated with significant main effects and interactions in a multi-level model, we followed the analytical procedure outlined by Hofmann, Morgeson, and Gerras (2003). Specifically, to determine the effect size for significant main effects in our model, we pooled residual variance terms to compare the restricted model against the null model. To assess the effect size of our significant interactions, we conducted hierarchical OLS regressions to determine the change in R-squared associated with the interaction.

analysts) for our evaluation of low-ranking senders and then compared the difference in the two simple slope lines for recipients who were either equal in rank to the sender (a standardized recipient rank equivalent to 3 on the 9-point scale) or higher in rank than the sender (a standardized recipient rank equivalent to 7, which corresponds to the title of director). These results revealed that low-ranking senders expressed significantly more verbal deference to similarly low-ranking message recipients than to high-ranking recipients, $t(315) = -38.89$, $p < .001$. We then conducted an analogous comparison for a high-ranking sender (a standardized sender rank equivalent to 7 on the 9-point ranking scale), communicating with either an equal-rank recipient (a standardized recipient rank equivalent to 7) or a lower-rank recipient (a standardized recipient rank equivalent to 3). Again, the results supported our lateral deference hypothesis. The high-ranking sender expressed significantly more verbal deference to recipients of similarly high rank than to recipients of lower rank, $t(315) = 25.56$, $p < .001$. Together, these results suggest that rather than directing the greatest amount of verbal deference upward in the organizational hierarchy, individuals modify their use of deferential communication so as to express the greatest amount of verbal deference to similar-ranking others.

Supplementary analyses. Although these results support the prevalence of lateral deference, it is also important to address some plausible alternative interpretations for our findings. One such alternative is that the *content* of what is discussed over e-mail is different in peer-to-peer communication than in subordinate-superior communication and that these differences in content result in corresponding differences in how much verbal deference is expressed. One possibility is that the hierarchical relationship could affect the extent to which individuals make requests for assistance from others (e.g., information, time, resources) via e-mail. Because seeking assistance from others creates a potential imposition on the helper, help seekers are often selective as to whom they ask for help and how they verbalize these requests. Lee (1997) studied the help-seeking behaviors of hospital workers and found that employees (e.g., nurses) were more likely to report making requests for help from those of similar rank (e.g., other nurses) than those of either higher or lower rank (e.g., physicians or secretaries). Furthermore, help-seekers have been shown to use verbal deference when seeking help from others as a means of both securing compliance with the request and maintaining the relationship with the potential helper (Lee, 1999). If requests for assistance were more likely to be made of peers rather than of rank unequals, and verbal deference is likely to be used when requesting help from others, lateral deference at Enron could merely be a by-product of requests for help.

To address this alternative explanation, two coders rated each e-mail for the extent to which the message sender was requesting assistance from the message recipient in the e-mail on a 5-point scale (1 = not at all, 5 = a great deal), and the ratings were averaged ($r_{wg} = 0.57$). Fifty percent of the e-mails contained at least some request for assistance (a rating greater than 1 on the 5-point scale), with a mean across all e-mails of 2.31. This dependent measure, *Requests assistance*, was regressed on the same independent and control variables used in our analysis above. Table 3 summarizes the results of this HLM model. High-ranking message recipients were less likely to receive requests for

Table 3. Results of Supplemental Hierarchical Linear Modeling Analyses Predicting Requests for Assistance and Personal Matters, Study 1*

	Requests Assistance		Personal Matters	
Independent Variable	Coefficient	S.E.	Coefficient	S.E.
Intercept (γ_{00})	2.428•••	.222	1.648•••	.201
Sender rank (γ_{01})	–.004	.099	–.290•	.134
Sender gender (γ_{02})	.118	.096	.100	.129
New message (γ_{10})	–.318	.311	–.084	.341
Number of recipients (γ_{20})	–.052	.116	.029	.069
Recipient rank (γ_{30})	–.362•	.160	–.083	.061
Recipient rank × Sender rank (γ_{31})	–.154	.106	.092	.066
Word count (γ_{40})	.176	.092	–.045	.055
Recipient gender (γ_{50})	–.001	.095	.078	.094

•$p < .05$; •••$p < .001$.
* N = 322 e-mails, 21 e-mail senders.

assistance than low-ranking message recipients ($\gamma_{30} = –0.36$, $p = .035$, $R^2 = .03$). But in contrast to the findings of Lee (1997), in which individuals' retrospective perceptions of their own help-seeking varied as a function of seeker and recipient rank, there was not a significant interaction in our sample between recipient rank and sender rank on the extent to which e-mails contained requests for assistance. Thus in our study, which examined actual (as opposed to self-reported) communicative acts, requests for assistance were not more prevalent among peers than among communicators of unequal rank. Furthermore, when *Requests for assistance* was added as a control variable to our model predicting verbal deference, the interaction between sender and recipient rank, indicating the prevalence of lateral deference, remained significant ($\gamma_{31} = 0.075$, $p = .014$, R^2 change = .03; see table 2, model 2). Thus although verbal deference may be used as a tool for securing compliance with a request for help (Lee, 1999), these results suggest that the frequency of lateral deference observed here is not simply a function of individuals asking peers for help more than asking parties of higher or lower rank.

A second possible alternative explanation is that verbal deference, because it is associated with perceptions of greater affiliation and friendliness (Erickson et al., 1978; Lee, 1999; Parton et al., 2002; Fragale, 2006), is more likely to be expressed among individuals engaged in a social conversation. Because individuals are more likely to engage in social discourse with similar others (Newcomb, 1963), e-mail conversations between peers may be more likely to address topics of a personal nature, and therefore entail more expressions of verbal deference, than conversations between individuals who are unequal in rank. To address this possibility, two coders rated each e-mail for the extent to which the message sender discussed personal (as opposed to business) matters, on a 5-point scale (1 = not at all, 5 = very much), and the coders' two ratings were averaged ($r_{wg} = 0.76$). Twenty-five percent of the e-mails in our sample discussed personal matters to some degree (a rating greater than 1 on our 5-point scale), with a mean rating across all emails of 1.51. As shown in table 3, this dependent measure, *Personal matters*, was regressed on the

same independent and control variables used in the preceding analysis. The extent to which personal information was discussed by message senders was not affected by any of our independent or control variables. The lack of a significant interaction between recipient rank and sender rank on the extent to which there was discussion of personal matters suggests that personal conversations were not more likely to occur between peers than between communicators of unequal rank in this sample. Also, when *Personal matters* was included as a control variable in our model predicting verbal deference, the interaction between sender and recipient rank, indicating more frequent lateral deference than upward deference, remained significant (see table 2, model 2). Thus these results suggest that the frequency of lateral deference observed in this study did not result from the amount of social discourse among peers.

Discussion

This study is the first, to our knowledge, to advance and test predictions about the frequency of lateral deference in organizational hierarchies. We found that more deference was expressed laterally, from peer to peer, than upward, from subordinate to superior, in this hierarchy. An advantage of our study method is that we examined naturally occurring organizational communication, including e-mails between peers as well as e-mails between rank unequals. This provided the opportunity to compare peer communication with hierarchically differentiated communication. That comparison has not been available in prior studies of deference, but examining peer-to-peer communication yielded evidence of lateral deference.

It is important to note several limitations of this study. For one, the archival data did not provide any insight into the divisional members and the relationships between them, other than their rank positions. Thus although we documented more lateral deference than upward deference, we were unable to measure moderators or mediators that would provide insight into why this deference pattern occurred. Also, we did not have access to every e-mail sent between members of this division, and the e-mails were all sent within a single organization that had its own (infamous) practices and norms, raising questions of generalizability to other organizations.

Although lateral deference is unlikely to be unique to Enron, there are aspects of the organizational culture of Enron that may have affected deference communication in this context. In particular, it is possible that our results may have been affected by the fact that our sample likely consisted of individuals who were all highly concerned about their status. Past research has demonstrated individual differences in the extent to which people endorse hierarchy as a social organizing mechanism (Sidanius and Pratto, 1999), as well as differences in the extent to which people are concerned about achieving high power (McClelland, 1975) or high-status positions in their hierarchies (Anderson, Ames, and Gosling, 2008; Sumanth and Cable, 2011; Anderson et al., 2012). Like most individual differences, concern for status can be further amplified or attenuated by contextual factors. For example, concern about one's status is heightened when there is instability in a hierarchy or uncertainly about one's position in the hierarchy (Gould, 2003) or when one perceives oneself to be a strong contributor to the group's performance (Anderson et al., 2012).

Given that Enron was notorious for having a highly status-focused culture (Sims and Brinkmann, 2003), it is reasonable to infer that Enron may have attracted and selected individuals with a high chronic concern for status and further promoted this psychology through its organizational practices. All employees holding the same job title (e.g., analyst) were rank-ordered every year for purposes of performance reviews and rewards. The results of performance reviews were made public, low performers were publicly derogated, and high performers received substantial rewards. This process created an ''up or out'' environment in which organizational members became very concerned with their status advancement and very fearful of status losses (Sims and Brinkmann, 2003).

We have suggested that deference may be used by communicators as a ''status saving'' strategy to protect them from the undesirable status loss associated with overestimating their status. Because peers may be particularly concerned about status competitions, and because peer relations lack the formal differentiating markers that exist between rank unequals, we predicted that communicators would see lateral deference as more important than upward deference for preserving their status. If this explanation is correct, then people who are highly concerned with gaining status and very fearful of losing it, like the prototypical Enron employee, should express the most deference overall (regardless of direction) and should be particularly likely to display more lateral deference than upward deference. To provide evidence for this moderating mechanism—concern for status—we conducted a second study. Stated formally, Study 2 was designed to test the following hypotheses:

Hypothesis 3: In an organizational hierarchy, the greatest amount of deference will be displayed by those communicators who are most concerned with protecting their status position (i.e., those who most want to gain status and are fearful of losing it).

Hypothesis 4: In an organizational hierarchy, communicators who are most concerned with protecting their status position will express more deference laterally than upward.

STUDY 2

In addition to providing evidence for the psychological process underlying our predicted results—concern with preserving one's status—Study 2 was also designed to improve the generalizability of our results by addressing the limitations of Study 1's archival methods. Study 2 was a field study in which we solicited e-mails from a diverse sample of working professionals from different organizations. This procedure again allowed us to obtain naturally occurring, meaningful, organizational communication, while also reducing the concern that deference patterns were an artifact of a particular organizational culture.

Further, our field study methodology enabled us to survey respondents about their characteristics and relationships with message recipients, so that we could directly rule out other plausible alternative explanations for our findings. In addition to measuring our proposed mechanism, concern for status, we also addressed two alternative explanations for lateral deference in this study: the desire to avoid conflict and the need to belong. One alternative theory is that people express deference as a strategy for avoiding interpersonal

conflict and disharmony. People may be motivated to avoid prolonged, irresolvable conflict, because it is interpersonally uncomfortable and can detract from goal achievement in task groups (Jehn and Mannix, 2001). In interactions between rank unequals, conflicts that do arise may be straightforward to resolve, as the role relationship provides for a clear decision maker (the superior) in the event that consensus can't be reached. But among peers, there is no clear decision maker in the event of disagreement, so irresolvable conflict and subsequent interpersonal disharmony may be more likely. As a result, an alternative explanation for our prediction is that individuals display lateral deference as a strategy for minimizing prolonged interpersonal conflict. If this explanation is correct, we would expect to see the greatest amount of lateral deference exhibited by those individuals who have the greatest desire to avoid conflict. Thus in this study we measured participants' desire to avoid conflict.

Another alternative explanation is that people display deference as a strategy for developing strong social bonds with others. Because deferential behavior is also seen as more affiliative and friendly (Erickson et al., 1978; Lee, 1999; Parton et al., 2002; Fragale, 2006), displays of lateral deference may occur simply because individuals are more likely to desire social acceptance from similar others, such as peers, rather than dissimilar others, like rank unequals (Byrne, 1971). If this explanation is correct, we would expect to see the greatest amount of lateral deference displayed by individuals who have the strongest desire for social acceptance from others. Thus in Study 2 we also measured participants' concern for social acceptance.

Method

Participants. We solicited study participants (N = 201) from a listserv maintained by a U.S. business school that advertises studies to working professionals. Forty-three percent of the respondents were male, and 78 percent were Caucasian. Participants were, on average, 35 years old and had worked for their current organization for 7.1 years, 4.9 years in their current position. Using a 5-point scale, participants indicated where they fell in their organization's hierarchy (1 = top of the hierarchy; 5 = bottom of the hierarchy), and this sample was roughly normally distributed: 7 percent indicated they were in the top level of their organization, 24 percent at level 2, 38 percent at level 3, 26 percent at level 4, and 5 percent at level 5. Participants represented over 20 different industries, including real estate, education, law, biotech, and consumer goods. According to the North American Industry Classification System (NAICS), 26 percent of the respondents worked in professional and business services; 22 percent in education and health services; 16 percent in trade, transportation, and utilities; and 4–6 percent each from leisure and hospitality, manufacturing, finance and insurance, information, construction, and public administration. Within these industries, a wide variety of functions and positions were represented. Approximately 18 percent of participants reported their position as a consulting or project management role, and 8–10 percent of participants were in each of the following positions: senior management (vice president, corporate-level executive, company owner, or president), R&D, IT and computing, customer service and administrative support, teaching or student support,

and engineering. Six percent of the participants worked in accounting or finance, 4 percent in operations, 3 percent in sales and marketing, with the remaining 14 percent coming from a variety of different jobs, each representing less than 1 percent (e.g., human resources, doctors and dentists, lawyers).

Procedure. The study was administered through Qualtrics, an online study platform. Participants were invited to participate in a study about e-mail communication at work and were told that they should only participate in the study if they were comfortable providing actual e-mails that they had sent to their coworkers. Those who did participate received $8 in compensation in exchange for approximately 45 minutes of their time.

Each participant was asked to provide an e-mail sent to a higher-rank, equal-rank, and lower-rank colleague (1 × 3 within-subject design). The order in which these e-mails were solicited was randomized. Our goal was to obtain a random sample of e-mails, with no selection bias from the participants, so we gave participants specific instructions designed to limit their ability to strategically select the e-mails they provided. Participants were asked to think about their organization's hierarchy in five levels, in which the people at the top (level 1) were the highest-ranking individuals in the organization and the people at the bottom (level 5) were the lowest-ranking individuals. Participants first indicated their own level in the hierarchy (1–5), and then were asked to list the initials of up to three people in each level of the hierarchy. On the next screen of the survey, the initials of those listed at each level were presented and participants were randomly assigned to pick either a peer (a person at the same level as the respondent in the hierarchy), a higher-ranked person, or a lower-ranked person whose last name came first alphabetically and to paste the entire text of the most recent e-mail sent to this person into the survey. If participants did not have an e-mail to this person, they were instructed to move to the next alphabetical name. We informed participants that it was essential that they provide their most recent e-mail and that if they were uncomfortable doing this for any reason, or if they did not have any e-mails sent to one of the listed coworkers at that level, to write ''PASS.'' They were instructed not to substitute another e-mail to this person or an e-mail sent to a different recipient. To facilitate the process of providing e-mails, we provided instructions on how to sort their sent messages by date.

Participants were instructed to provide only the text of the e-mail–no e-mail addresses, subject lines, or e-mail trails. To protect participants' confidentiality, we also instructed them to remove any e-mail signatures that identified them or their organization. We also gave the participants the opportunity to replace sensitive words or phrases with Xs, but asked them not to delete any words without replacing them with Xs so that we could get an accurate word count for the message. Other than these instructions, participants were told not to alter their e-mails in any way.

If participants provided an e-mail, they then answered several questions about the recipient and their relationship. Following these questions, the above process was repeated for the remaining two rank categories (e.g., if participants were first asked to provide an e-mail to a peer, they then repeated the survey and provided e-mails to a higher-ranked and lower-ranked recipient). After all three e-mails were provided and participants answered questions

about the recipients, participants answered another set of questions about themselves.

This procedure yielded a total sample of 443 e-mails provided by 201 individuals, for a 73-percent response rate. Many of the instances in which participants did not provide e-mails were non-discretionary, however, either because the participant was at the top or bottom of the organizational hierarchy, and thus couldn't provide an e-mail to a higher- or lower-ranked individual, or because participants didn't have any peers or have any e-mails to their peers. Eliminating these non-discretionary ''passes'' from the denominator of possible e-mails resulted in an adjusted response rate of 82.5 percent.

Measures. We collected all control variables used in Study 1, plus additional controls, as well as measures that would give us greater insight into the mechanism underlying lateral deference.

Control variables. We controlled for participants' self-reported age, gender (0 = female; 1 = male), and rank. As in Study 1, we also controlled for the gender of the recipient (0 = female; 1 = male), whether the e-mail was sent to a single individual or multiple recipients (0 = one recipient; 1 = more than one recipient), and whether this was a new message or a reply to an earlier message from the recipient (0 = reply to prior message; 1 = new message). Because we had direct access to e-mail senders in Study 2, however, these items were ascertained through participants' self-reports, rather than coders' assessments.

We also collected some additional self-report controls that we could not assess in Study 1. First, participants indicated whether there was a direct reporting relationship between themselves and the recipient, such that one party reported directly to the other (0 = not direct reports; 1 = direct reporting relationship), as well as their level of interdependence with the recipient (1 = not dependent on them at all; 7 = couldn't get my work done without their cooperation). These two measures were assessed to determine whether patterns of deference were affected by the work relationship between the parties.

Second, we assessed the level of friendship and familiarity between sender and recipient. Specifically, for each e-mail that they submitted, participants responded to three items measuring their level of friendship and familiarity with the recipient: the extent to which the sender and recipient were friends outside of work, the extent to which they generally discussed nonwork topics, and the extent to which they knew each other well (1 = not at all; 7 = very much/often/well). We used these three items to form a composite measure of friendship/familiarity between sender and recipient (α = .93) and controlled for this variable in all analyses.

Third, we controlled for participants' emotional and cognitive states while writing the e-mails. For each e-mail, participants completed a 9-item version of the Positive and Negative Affect Schedule (PANAS; Thompson, 2007), with each item measured on a 7-point scale (1 = not at all; 7 = very much; positive affect α = .87, negative affect α = .88), and also indicated the extent to which they thought carefully about the words they chose as they were writing the e-mail.[4] This latter measure was assessed to control for the sender's level of cognitive deliberation for each message.

[4] Thompson's (2007) PANAS scale contains 10 items. One positive affect item, alert, was inadvertently not included in our survey measures.

Finally, to assess whether deference patterns were affected by participants' organizational cultures, we also asked participants to indicate the degree of hierarchy in their organization. Although all organizations have some form of hierarchy (Magee and Galinsky, 2008; Gruenfeld and Tiedens, 2010), they differ greatly in the extent to which hierarchical differences are expected and accepted (Hofstede, 1980) and the extent to which hierarchies are formalized and visible (Aiken and Hage, 1966; Caza, Tiedens, and Lee, 2011). These differences may affect how much deference is expressed in a hierarchy, and so we controlled for the nature of the hierarchy using items from Caza, Tiedens, and Lee's (2011) hierarchical explicitness scale. Participants indicated the extent to which they agreed (7) or disagreed (1) with four statements: My workplace is very hierarchical, employees are encouraged to maintain a professional distance with one another, my supervisor treats me as an underling, and workplace interactions are guided by formal rules and protocols. These items were averaged to form a composite score of the formality of the organization's hierarchy (α = .73)

Coded control variables. In addition to the above measures generated from participants' survey responses, we also coded the e-mails for other control variables. As in Study 1, two coders rated the e-mails to assess the extent to which the message sender was requesting assistance from the message recipient (r_{wg} = .50) and the extent to which the e-mail concerned personal matters (r_{wg} = .67). In addition, we also coded for the extent to which the message sender was disagreeing, challenging, or debating with the message recipient (r_{wg} = .87). Each of these three items was coded on a 5-point scale (1 = not at all, 5 = a great deal), and the coders' ratings were averaged for each item. One coder also counted the number of words in each e-mail.

Concern for status. The moderator of interest in this study was participants' degree of concern about their own status and rank. We hypothesized that expressing lateral deference may be seen by communicators as a status-saving strategy and hence is most likely to be used by those who care the most about gaining status and avoiding status loss. We predicted that the deference pattern we demonstrated in Study 1—more lateral than upward deference—would be replicated in Study 2, but only for those individuals who were most concerned about their status. The absence of this moderated effect would challenge our hypothesis that concern for preserving status drives lateral deference. This moderator, then, can provide evidence for or against our hypothesized psychological mechanism (Spencer, Zanna, and Fong, 2005).

To measure individual differences in concern for status, we used subscales of the Narcissistic Personality Inventory (NPI; Raskin and Terry, 1988). A defining feature of narcissism is a ''chronic goal of obtaining continuous external self-affirmation'' (Morf and Rhodewalt, 2001: 177). Because status is a subjective judgment of one's value in the eyes of others (Anderson et al., 2006; Fragale, Overbeck, and Neale, 2011), status is external affirmation of one's value and esteem. Thus a chronic desire for external self-affirmation—narcissism—is essentially a chronic desire for status. In support of the link between narcissism and concern for status, Anderson, Ames, and Gosling (2008) used the NPI—one of the most validated and widely used measures of narcissism (Raskin and Terry, 1988)—in a study of individuals' status-seeking behavior. They found that individuals who scored high on the NPI were the most likely to

attempt to claim status in task groups and in fact tried to claim more than others felt they deserved.

Although narcissism and concern for status are conceptually similar, the former construct is broader than the latter. In addition to a concern for status, narcissism is also characterized by a desire for external self-affirmation of one's appearance (i.e., vanity) and a lack of regard for, or empathy with, others (Raskin and Terry, 1988). Thus to assess concern for status, we used the four subscales of the NPI—Authority, Self-sufficiency, Superiority, and Entitlement—that directly address one's concern for status. The three subscales that we did not use are Exhibitionism (e.g., I get upset when people don't notice how I look when I go out in public), Vanity (e.g., I like to look at myself in the mirror), and Exploitativeness (e.g., I find it easy to manipulate people), because they tap into aspects of narcissism that are broader than a general concern for status.

Each NPI scale item requires participants to choose which of two statements is truer of them. For example, ''The thought of ruling the world frightens the hell out of me'' (scored as a 1) versus ''If I ruled the world it would be a much better place'' (scored as a 2). In each case, the response indicating a greater narcissistic tendency is scored a 2. The four subscales directly measuring concern for status total 25 items (out of 40 items in the full NPI), and examples of the high concern for status choices (i.e., scores of 2) include the following: I have a strong will to power; I want to amount to something in the eyes of the world; I will never be satisfied until I get all that I deserve; I insist on getting the respect that is due me; I would prefer to be a leader; I am going to be a great person; I like to be complimented.

Other potential mechanisms. In addition to testing our proposed moderator, concern for status, we also measured two additional moderators, desire to avoid conflict and need for social acceptance, each designed to address possible alternative explanations for displays of lateral deference. We measured participants' desire to avoid conflict using the 6-item conflict avoidance subscale (α = .90) of the Rahim Organizational Conflict Inventory (ROCI-II; Rahim, 1983). All items were measured on a 5-point scale (1 = does not describe me at all; 5 = describes me extremely well), and sample items included the following: I usually avoid open discussion of my differences with coworkers; I try to stay away from disagreement with my coworkers; I generally avoid arguments with my coworkers. We measured participants' desire for social acceptance using the 10-item Need to Belong scale (α = .84; Leary et al., 2007). All items were measured on a 5-point scale (1 = strongly disagree; 5 = strongly agree), and sample items included the following: My feelings are easily hurt when I feel that others do not accept me; I do not like to be alone; I seldom worry about whether other people care about me (reversed).

Verbal deference. As in Study 1, the dependent variable of interest was the level of verbal deference expressed in e-mails between message senders and recipients, and we coded deference using the same six items in the prior study: hedges, disclaimers, and the extent to which the e-mail was perceived as agreeable, unassertive, polite, and formal.

For hedges and disclaimers, two coders, both naïve to the purpose of the study, again rated a subset of e-mails (N = 75) to assess reliability. There was a high level of initial agreement between the coders for both of these measures. The coders initially agreed on 92 percent of the e-mails for the number of

hedges (r_{wg} = 0.96) and 97 percent of the e-mails for the number of disclaimers (r_{wg} = 0.89). Disagreements were then resolved through discussion, and one of the coders counted hedges and disclaimers for the remaining e-mails.

We also coded the extent to which the tone of the message was agreeable, unassertive, polite, and formal. To ensure that the coders had similar interpretations of each of these adjectives, we provided dictionary definitions for each item. In cases in which adjectives had multiple meanings, we selected the meaning most closely associated with the construct of deference: Agreeable = ready to consent or submit; Unassertive = timid, lacking self-confidence; Polite = showing consideration for others, tact, and observance of accepted social usage; Formal = Stiffly ceremonious. Each of these four items was assessed on separate 5-point scales (1 = not at all, 5 = very much) by two coders. As with hedges and disclaimers, the two coders first coded a subset of messages (N = 75) to assess reliability on these four items (r_{wg} = 0.91), and one coder then coded the remaining e-mails.

To ensure that these six measures again represented a single underlying construct, verbal deference, we conducted a confirmatory factor analysis using AMOS software version 5.0 with maximum likelihood estimation procedures. We specified a one-factor solution and relied on conservative rules of thumb to assess model fit. After consulting the modification indices and allowing error terms to correlate, the model demonstrated good fit with the data, χ^2 (6) = 8.755, p = .188, TLI = .96, CFI = .99, RMSEA = .032, (90 percent CI = .000, .075, p = .704), meeting Hu and Bentler's (1999) criteria.

Results

Means, standard deviations, and correlations for all study variables are displayed in table 4. As in Study 1, we used HLM to account for the multilevel nature of the data (e-mails nested within sender). As HLM requires complete data at Level 2 (sender), any observations with missing sender-level data were not included in the analyses below. This resulted in a final sample of 388 e-mails from 177 senders.

Table 5 provides a summary of the HLM models used to test the hypotheses. In model 1, verbal deference was regressed on the control variables, as well as the sender's level of concern for status, and the interaction of concern for status with two dummy variables representing the rank relationship between sender and recipient. The variable titled *Lower recipient rank* compares lower-rank recipients with the omitted category of equal-rank recipients, thus measuring differences in downward versus lateral deference. The variable titled *Higher recipient rank* compares higher-rank recipients with the omitted category of equal-rank recipients, measuring differences in upward versus lateral deference.

Model 1 revealed several main effects. As in Study 1, there was a main effect of word count, such that longer e-mails expressed more verbal deference than shorter emails (γ_{10} = .002, $p < .001$, R^2 = .09). Also, e-mails requesting assistance were more deferential (γ_{100} = .08, $p < .001$, R^2 = .01) than e-mails that did not request help, consistent with Lee's (1999) findings, and greater friendship and familiarity between sender and recipient was associated with fewer expressions of deference (γ_{150} = –.03, p = .044, R^2 = .00).

Table 4. Means, Standard Deviations, and Correlations among Tested Variables, Study 2 (N = 443)

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Lower recipient rank	.31	.46										
2. Higher recipient rank	.34	.47	−.48••									
3. Sender rank	2.99	1.00	−.11•	.10•								
4. Word count	41.85	56.15	−.03	.13••	−.08							
5. Number of recipients	.16	.37	−.09	.04	.03	.27••						
6. New message	.58	.50	−.04	.07	.07	−.07	−.11•					
7. Direct reports	.41	.49	−.02	.34••	−.12•	.17••	.02	−.11				
8. Interdependence	3.84	1.81	−.02	−.01	−.15••	.03	.00	−.06	.24••			
9. Cognitive deliberation	3.35	1.79	−.04	.16••	−.06	.31••	.03	−.03	.16••	.10•		
10. Sender age	35.11	8.86	.03	−.04	−.24••	.06	.02	−.02	.10•	−.05	.07	
11. Sender gender	.43	.50	.01	−.01	−.03	.09	.01	.04	.03	.07	.15••	−.21••
12. Concern for status	11.62	4.72	.05	.01	−.13•	−.04	−.08	−.05	.04	.08	.01	−.09
13. Social acceptance	3.21	.66	−.02	.01	.12•	−.07	.03	.06	−.05	.06	.01	−.23••
14. Positive affect	4.62	1.39	−.02	.03	−.17••	.15••	.11•	−.09	.13••	.26•	.38••	.07
15. Negative affect	1.44	.82	−.02	.06	−.03	.15••	.02	−.04	.08	.10•	.28••	−.12•
16. Formality of hierarchy	3.68	1.29	−.02	−.01	.16••	−.10•	−.05	−.01	−.02	−.01	.03	−.07
17. Friendship/familiarity	3.79	1.77	−.01	−.13••	−.17••	.10•	−.02	−.04	.04	.26••	.03	.03
18. Conflict avoidance	3.49	.86	−.01	−.02	.09	−.07	−.04	−.05	−.03	−.11•	.06	.15••
19. Requests assistance	2.65	1.56	.09	−.07	.03	.06	−.06	−.29••	.07	.05	.15••	.05
20. Personal matters	1.54	.95	.04	−.03	−.02	.15••	.03	.05	.07	−.01	.02	.07
21. Disagreement/debate	1.30	.69	−.00	−.01	.03	.18••	.12•	.09•	−.02	.03	.17••	.00
22. Recipient gender	.50	.50	−.06	.08	−.15••	.06	−.03	−.09	.11•	.05	.04	.00
23. Verbal deference	.00	.50	−.01	.02	−.02	.32••	.06	−.02	.04	.03	.21••	.12•

Variable	11	12	13	14	15	16	17	18	19	20	21	22
12. Concern for status	.27••											
13. Social acceptance	−.14••	−.23••										
14. Positive affect	.10•	.07	.01									
15. Negative affect	.12•	.12•	.11•	.07								
16. Formality of hierarchy	.13••	.05	.03	−.04	.06							
17. Friendship/familiarity	.11•	.03	.07	.25••	.08	−.14••						
18. Conflict avoidance	−.20••	−.26••	.25••	.02	−.13••	.05	.02					
19. Requests assistance	−.09	−.08	.03	.12•	.00	.09•	−.05	.06				
20. Personal matters	−.09	−.04	.11•	.04	.09	.01	.11•	.05	−.16••			
21. Disagreement/debate	−.02	.04	.06	.10•	.19••	−.02	.05	−.06	.08	.07		
22. Recipient gender	.24••	.07	−.17••	.00	.09•	−.02	.00	−.04	−.07	−.05	−.08	
23. Verbal deference	−.06	−.05	.07	.11•	.07	−.09	−.05	−.04	.26••	.04	.15••	−.07

•$p < .05$; ••$p < .01$.

In support of hypothesis 3, we found a main effect of concern for status, such that those individuals more concerned with their status were more deferential in general ($\gamma_{04} = .09$, $p = .037$, $R^2 = .00$). This main effect was qualified by predicted interactions between the sender's concern for status and the rank relationship between sender and recipient (lower recipient rank interaction: $\gamma_{81} = -.16$, $p = .004$; higher recipient rank interaction: $\gamma_{91} = -.12$, $p = .028$; R^2 change = .02). These cross-level interactions indicate that deference patterns (downward vs. lateral vs. upward) were moderated by the sender's concern for status. To interpret the nature of these interactions, we computed simple slopes at high and low values (two standard deviations above and below the

Table 5. Results of Hierarchical Linear Modeling Analyses Predicting Verbal Deference, Study 2*

	Model 1		Model 2		Model 3	
Variable	β	S.E.	β	S.E.	β	S.E.
Intercept (γ_{00})	–.392•	.225	–.377••	.228	–.394	.227
Sender rank (γ_{01})	.003	.030	.001	.030	.001	.029
Sender age (γ_{02})	.004	.003	.004	.003	.005	.003
Sender gender (γ_{03})	–.023	.061	–.028	.061	–.002	.060
Concern for status (γ_{04})	.089•	.042	–	–	–	–
Conflict avoidance (γ_{04})	–	–	–.062	.041	–	–
Social acceptance (γ_{04})	–	–	–	–	.021	.040
Formality of hierarchy (γ_{05})	–.042	.022	–.037	.022	–.039	.022
Word count (γ_{10})	.002••	.000	.002••	.000	.002••	.000
Number recipients (γ_{20})	.011	.071	–.001	.071	–.000	.072
New message (γ_{30})	–.092	.053	–.099	.054	–.087	.054
Direct reports (γ_{40})	–.047	.054	–.027	.054	–.020	.055
Recipient gender (γ_{50})	–.037	.051	–.036	.051	–.028	.052
Interdependence (γ_{60})	.017	.015	.014	.015	.013	.015
Cognitive deliberation (γ_{70})	.023	.016	.020	.016	.017	.016
Lower recipient rank (γ_{80})	–.041	.055	–.042	.056	–.041	.056
Lower recipient rank × Concern for status (γ_{81})	–.155•	.054	–	–	–	–
Lower recipient rank × Conflict avoidance (γ_{81})	–	–	.085	.052	–	–
Lower recipient rank × Social acceptance (γ_{81})	–	–	–	–	.064	.052
Higher recipient rank (γ_{90})	–.002	.058	.001	.059	–.004	.059
Higher recipient rank × Concern for status (γ_{91})	–.118•	.053	–	–	–	–
Higher recipient rank × Conflict avoidance (γ_{91})	–	–	.094	.051	–	–
Higher recipient rank × Social acceptance (γ_{91})	–	–	–	–	.011	.049
Requests assistance (γ_{100})	.083••	.017	.081••	.017	.079••	.017
Personal matters (γ_{110})	.006	.027	–.003	.027	–.004	.027
Disagreement/debate (γ_{120})	.042	.037	.047	.037	.051	.038
Positive affect (γ_{130})	.024	.021	.025	.021	.024	.021
Negative affect (γ_{140})	.009	.034	.009	.035	.001	.035
Friendship/familiarity (γ_{150})	–.030•	.015	–.031•	.015	–.034•	.015

•$p < .05$; ••$p < .001$.
* N = 388 e-mails, 177 e-mail senders.

mean) of the moderator, sender's concern for status. First, comparing lateral to upward deference (simple slopes for the concern for status × higher recipient rank interaction), we found that, as predicted in hypothesis 4, individuals highly concerned about their status expressed more deference laterally than upward (simple slope = –0.237, $Z = -1.98$, $p = .048$). In contrast, individuals who were not as concerned about their status expressed marginally more deference upward than laterally (simple slope = 0.234, $Z = 1.90$, $p = .058$). Although we did not make specific predictions about the relative amount of downward deference (from higher-ranked senders to lower-ranked recipients) we would observe, we also computed simple slopes for the concern for status × lower recipient rank interaction. We found that individuals highly concerned about their status expressed more deference laterally than downward (simple slope = –0.352, $Z = -2.95$, $p = .003$), whereas individuals who were not concerned about their status expressed more deference downward than laterally (simple slope = 0.269, $Z = 2.21$, $p = .027$).

Together, these results provide evidence for our suggested mechanism for lateral deference. We found that lateral deference was more frequent than either upward or downward deference, but only for those individuals most concerned with gaining, and not losing, status. In contrast, individuals who were less concerned about their status expressed more deference upward (and downward) than laterally. These findings are consistent with the notion that lateral deference may be used as a tactic to protect individuals from status loss: those individuals who see status loss as most undesirable are the ones who express the most lateral deference.

In models 2 and 3 of table 5, we report the results of our analyses to test our two alternative explanations. In model 2, we assessed whether lateral deference was driven by a desire to avoid conflict with others, and in model 3, we assessed whether lateral deference was driven by a desire for social acceptance from similar others. Both of these models revealed the same significant main effects as model 1 for word count, requests for assistance, and friendship/familiarity. But there were no significant main effects of either the sender's desire to avoid conflict or need for social acceptance on expressions of deference, nor were there interactions between these variables and the dummy variables representing the rank relationship between the parties (which would indicate that deference patterns were moderated by these factors). Thus models 2 and 3 did not provide any support for these alternative explanations for displays of lateral deference.

Discussion

As in Study 1, Study 2 documented patterns of deference in naturally occurring organizational hierarchies. At the same time, the method of Study 2 enabled us to address many of the limitations of Study 1. We were able to gather information about the relationships between senders and recipients, such as their level of interdependence and familiarity, allowing us to control for more in our analyses. We were also able to survey individuals from hundreds of different organizations and to collect measures of their organizational cultures, thus ruling out the possibility that our findings were an artifact of any one type of organizational environment.

Most importantly, we collected measures to provide evidence for our proposed mechanism for lateral deference and ruled out alternative mechanisms for our observed effects. We proposed that lateral deference may be used as a status-saving strategy to protect individuals from the undesirable status loss associated with overestimating one's status. Consistent with this proposal, our analyses revealed that the sender's concern for status moderated deference patterns, such that only those individuals concerned with their status expressed more deference laterally than upward or downward, whereas those less concerned with protecting their status expressed more deference upward and downward than laterally. In contrast, we did not find any support for two alternative theories that we tested: lateral deference was not driven by a desire to avoid conflict or a desire for social acceptance from peers.

GENERAL DISCUSSION

In this paper we investigated the prevalence of lateral deference, a behavioral pattern in which people defer to their peers. We demonstrated that when

individuals are particularly concerned about maintaining status, they are more likely to engage in lateral deference than upward deference. In the first study, we were able to observe frequent lateral deference displayed within an existing organization, where the senders and recipients shared a set of organizational norms and practices. Demonstrating lateral deference in that setting allowed us to know that organizations can develop a shared norm in which peers defer to one another more than they defer to their superiors. Of course, the primary limitation of that study was that examining a subset of e-mails from just one organization, and a unique one at that, raised questions about the generalizability of our findings. Thus the second study built on the first by demonstrating lateral deference among individuals who belong to a wide range of organizations, indicating that the frequency of lateral deference is not an artifact of any one type of organizational culture. This study also provided evidence for the mechanism underlying our effects by demonstrating that deference patterns were moderated by individuals' concern for their own status positions.

The objective of our work was to make theoretical predictions about the frequency of lateral deference in organizational hierarchies and to document empirically when and why this occurs. Although there have been prior theoretical and empirical investigations of deference, they have generally focused on the likelihood of upward deference rather than lateral deference in hierarchies (e.g., Goffman 1967; Cansler and Stiles, 1981; Brown and Levinson, 1987; Holtgraves and Yang, 1990, 1992; Morand, 1996, 2000). Consistent with this prior research, we found evidence of upward deference in both studies. But we also found that in both samples, lateral deference was displayed more frequently than upward deference, especially when communicators were most concerned with their status positions. We believe that our data showed evidence for lateral deference, when other studies have not, for both methodological and conceptual reasons. For one, many previous studies have asked individuals to provide retrospective self-assessments (e.g., Lee, 1997) or to indicate hypothetically how they would communicate with higher- and lower-ranked others (e.g., Holtgraves and Yang, 1992; Morand, 1996, 2000). These approaches do not capture individuals' naturally occurring behaviors in real and consequential hierarchies but, rather, rely on people's theories and schemas about how hierarchies should affect behavior. But people's lay theories of the effects of hierarchies on behavior are often erroneous (Hall, Coats, and Smith LeBeau, 2005). Our studies examined naturally occurring behavior and thus are not biased by people's beliefs about how they should or would behave. In a similar vein, many of the previous studies on acts of deference examined these behaviors in a laboratory setting (Cansler and Stiles, 1981; Holtgraves and Yang, 1992; Morand, 1996, 2000). This is an understandable approach, given that many deference behaviors are quite subtle and, consequently, may be difficult to observe in more ecologically valid contexts. At the same time, the laboratory approach comes with predictable downsides. Among them, laboratory studies require simple designs, which may explain why past studies of deference communication have examined only interactions among parties of unequal rank and have not included interactions between individuals of equal rank. This type of design precludes comparisons of the amount of deference occurring in interactions of unequals versus equals, thereby making it impossible to investigate the frequency of lateral deference.

Although these methodological shifts were critical to our finding novel empirical results, a central contribution of our work is really in what it implies about the experience of social hierarchy. Scholars have long recognized that organizational members are concerned about the hierarchies that inevitably characterize their workplaces (Winter, 1973; McClelland, 1975; Pfeffer, 1992; Leavitt, 2005; Magee and Galinsky, 2008; Gruenfeld and Tiedens, 2010). Hundreds of papers have examined the factors that predict whether and how quickly people move up the ranks of their organization, and much of management education is dedicated to turning these findings into actionable lessons for managers who see their progression through the organizational hierarchy as a primary goal. In much of this research, one's rank in a hierarchy is conceptualized as an individual attribute that subsequently affects one's behavior and outcomes. In the study of deference, traditional theories of upward deference imply that deference will be displayed by people who have low status, because deference has been conceptualized as a role obligation of people in subordinate positions, but this is not what we found in our studies. Importantly, we found no main effect of the message sender's rank in either study, suggesting that deference was not simply a behavior displayed by subordinates. Instead, we found that members at all levels of the hierarchy, even those of the highest rank, expressed deference in certain circumstances, depending on the rank of the message recipient. Our findings emphasize the notion that hierarchies are inherently relational. To understand and predict the effects of hierarchy on individual behavior in organizations, it is not enough to classify an individual as ''high'' or ''low.'' Rather, one needs to focus on the relationship between actors, as we have done in our examination of lateral deference. Our work underscores the need for future research to conceptualize and investigate hierarchy as an attribute of relationships, not an individual characteristic.

Our work also refines the concept of deference, which has received relatively little attention in prior studies of organizational communication and hierarchies. Many prior studies of deference behavior have discussed deference as if it is defined as the behaviors that low-ranked individuals must display when interacting with higher-ranked individuals. Rather than defining deference as an attribute of a particular rank in the hierarchy, we emphasized the function of deference, conceptualizing deference as acts that convey a willingness to agree with and appease others, regardless of to whom this behavior is directed. As such, deferential acts signal that one individual in a hierarchy does not intend to challenge another. Although this definition is consistent with prior work (Henrich and Gil-White, 2001), it shifts the conceptualization of deference from one that requires a particular rank relationship between communicating parties (superior and subordinate) to one that focuses on the message it communicates and its effect on the recipient.

Limitations and Future Directions

In these studies we relied on e-mail communication to examine deference patterns. This method had a number of advantages, including the ability to examine micro-patterns within real organizational communication. As important as e-mail communication has become (Flynn, 2004), however, it remains just one form of social interaction and it may have unique features. Thus future research needs to establish whether, and how, lateral deference occurs in face-to-face

settings, over the phone, in more formal written communication, or in other technologically mediated forums.

It is also worthwhile to consider how future laboratory research may provide even stronger evidence for our causal claims. Although we have no reason to suspect that the e-mails we analyzed were parsed based on the amount of deference they displayed, both of our studies relied on e-mails provided by other parties, with no way for us to observe whether any e-mail selection or censoring occurred. Further, each e-mail we analyzed was embedded in a larger context: an ongoing relationship, an existing dialogue, and a set of organizational norms. We used prior theories of communication patterns to control for those aspects of the relationship and context that were likely to influence deference displays, but it is possible that our findings were attenuated or amplified by other aspects of the situation that we did not measure. Randomly assigning participants to a position in an experimentally created hierarchy and then asking them to compose e-mails to another member of that hierarchy would be one way to ensure that participants complied with researchers' instructions and that there were no preexisting relationships or contextual factors to influence their communication. This type of artificial hierarchy might reduce the significant concern for status loss that individuals are likely to experience in their organizational lives, but replicating our effects in a controlled environment would strengthen the causal claim that the heightened concern for status loss in peer relationships drives deference displays.

In addition, we have suggested that lateral deference may be used as a strategy to avoid the perception of status competitions and hence protect an individual against status loss. In other words, we contend that people express deference because they believe that doing so will be beneficial. Although the patterns we have shown are consistent with this argument, and this logic is supported by prior empirical research (Fragale, 2006), we do not have direct evidence in the present studies demonstrating that lateral deference has this status-saving consequence. It would be worthwhile for future research to investigate how the consequences of deference are moderated by the relationship between message sender and recipient (equal versus unequal ranked communicators) and whether people who express deference to peers are less likely to lose status, and perhaps more likely to gain status. Although this lingering question may be addressed through a variety of methods, the laboratory may be a useful environment in which to test the prescriptive value of lateral deference.

Conclusion

Social hierarchies are ubiquitous, and life in hierarchies requires that individuals actively manage and negotiate them. Hierarchies present people with potential rewards in the form of status gain and potential punishments in the form of status loss. As is often the case when it comes to the uncertainty associated with gains and losses, people are risk-averse and fear status loss and disruption to the status quo more than they desire status gain. Navigating the way through these possible outcomes shapes individuals' behavior in their organizational hierarchies. Behavior and communication patterns are influenced by the status relationships of the interacting parties, and these communication patterns have the potential to mold the hierarchy by either protecting existing status relations

or by disrupting them. Understanding how people make sense of the potential for and consequences of status gain and loss is thus critical to knowing how organizations affect the individuals within them. The use of deference is one of the strategies available to people negotiating their social hierarchies. With these simple and subtle statements or gestures of appeasement, they may protect their positions from those who could take them. Because the greatest threats to one's position are often those nearby, frequent lateral deference may well characterize many social hierarchies.

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REFERENCES

Aiken, M., and J. Hage
1966 "Organizational alienation." American Sociological Review, 31: 497–507.

Anderson, C., D. R. Ames, and S. D. Gosling
2008 "Punishing hubris: The perils of overestimating one's status in a group." Personality and Social Psychology Bulletin, 34: 90–101.

Anderson, C., S. Srivastava, J. S. Beer, S. E. Spataro, and J. A. Chatman
2006 "Knowing your place: Self-perceptions of status in face-to-face groups." Journal of Personality and Social Psychology, 91: 1094–1110.

Anderson, C., R. Willer, G. J. Kilduff, and C. Brown
2012 "The origins of deference: When do people prefer lower status?" Journal of Personality and Social Psychology, 102: 1077–1088.

Bentler, P. M., and P. Dudgeon
1996 "Covariance structure analysis: Statistical practice, theory, and directions." Annual Review of Psychology, 47: 563–592.

Brown, B. L., W. J. Strong, and A. C. Rencher
1973 "Perceptions of personality from speech: Effects of manipulation of acoustical parameters." Journal of Acoustical Society of America, 54: 29–35.

Brown, P., and S. C. Levinson
1987 Politeness: Some Universals in Language Usage. New York: Cambridge University Press.

Bryk, A. S., and S. W. Raudenbush
1992 Hierarchical Linear Models: Applications and Data Analysis Methods. Newbury Park, CA: Sage.

Burgoon, J. K., D. B. Buller, and W. G. Woodall
1996 Nonverbal Communication: The Unspoken Dialogue, 2d ed. New York: McGraw-Hill.

Byrne, D.
1971 The Attraction Paradigm. New York: Academic Press.

Camras, L. A.
1977 "Facial expressions used by children in a conflict situation." Child Development, 48: 1431–1435.

Cansler, D. C., and W. B. Stiles
1981 "Relative status and interpersonal presumptuousness." Journal of Experimental Social Psychology, 17: 459–471.

Carli, L. L.
1990 ''Gender, language, and influence.'' Journal of Personality and Social Psychology, 59: 941–951.
Caza, B., L. Z. Tiedens, and F. Lee
2011 ''Power becomes you: The effects of implicit and explicit power on the self.'' Organizational Behavior and Human Decision Processes, 114: 15–24.
Chartrand, T. L., and J. A. Bargh
1999 ''The chameleon effect: The perception-behavior link and social interaction.'' Journal of Personality and Social Psychology, 76: 893–910.
de Kwaadsteniet, E. W.
2010 ''Social status as a cue for tacit coordination.'' Journal of Experimental Social Psychology, 46: 515–524.
de Waal, F.
1982 Chimpanzee Politics: Sex and Power among Apes. Baltimore, MD: Johns Hopkins University Press.
Dovidio, J. F., C. E. Brown, K. Heltman, S. L. Ellyson, and C. F. Keating
1988 ''Power displays between women and men in discussions of gender-linked tasks: A multichannel study.'' Journal of Personality and Social Psychology, 55: 580–587.
Erickson, B., E. A. Lind, B. C. Johnson, and W. M. O'Barr
1978 ''Speech style and impression formation in a court setting: The effects of powerful and powerless speech.'' Journal of Experimental Social Psychology, 14: 266–279.
Flynn, N.
2004 ''Workplace E-mail and Instant Messaging Survey.'' http://www.epolicyinstitute.com/survey.
Fragale, A. R.
2006 ''The power of powerless speech: The effects of speech style and task interdependence on status conferral.'' Organizational Behavior and Human Decision Processes, 101: 243–261.
Fragale, A. R., J. Overbeck, and M. A. Neale
2011 ''Resources versus respect: Social judgments based on targets' power and status positions.'' Journal of Experimental and Social Psychology, 47: 767–775.
French, J. R. P., Jr., and B. Raven
1959 ''The bases of social power.'' In D. Cartwright (ed.), Studies in Social Power: 150–167. Ann Arbor: University of Michigan Press.
Gallois, C., V. J. Callan, and J. A. M. Palmer
1992 ''The influence of applicant communication style and interviewer characteristics on hiring decisions.'' Journal of Applied Social Psychology, 22: 1041–1060.
Giles, H., and N. Coupland
1991 Language: Contexts and Consequences. Milton Keynes, UK: Open University Press.
Goffman, E.
1967 Interaction Ritual: Essays on Face-to-face Interaction. Oxford: Aldine.
Gould, R. V.
2003 Collision of Wills: How Ambiguity about Social Rank Breeds Conflict. Chicago: University of Chicago Press.
Gregory, S. W., and S. Webster
1996 ''A nonverbal signal in voices of interview partners effectively predicts communication accommodation and social status perceptions.'' Journal of Personality and Social Psychology, 70: 1231–1240.
Groysberg, B., J. Polzer, and H. A. Elfenbein
2011 ''Too many cooks spoil the broth: How high status individuals decrease group effectiveness.'' Organization Science, 22: 722–737.

Gruenfeld, D. H., and L. Z. Tiedens
2010 ''Organizational preferences and their consequences.'' In S. T. Fiske, D. T. Gilbert, and G. Lindzey (eds.), Handbook of Social Psychology, 2: 1252–1287. Hoboken, NJ: Wiley.
Hall, J. A., E. J. Coats, and L. Smith LeBeau
2005 ''Nonverbal behavior and the vertical dimension of social relations: A meta-analysis.'' Psychological Bulletin, 131: 898–924.
Henrich, J., and F. Gil-White
2001 ''The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission.'' Evolution and Human Behavior, 22: 165–196.
Hewitt, J. P., and R. Stokes
1975 ''Disclaimers.'' American Sociological Review, 40: 1–11.
Hofmann, D. A., M. A. Griffin, and M. B. Gavin
2000 ''The application of hierarchical linear modeling to organizational research.'' In K. J. Klein and S. W. J. Kozlowski (eds.), Multilevel Theory, Research, and Methods in Organizations: 467–511. San Francisco: Jossey-Bass.
Hofmann, D. A., F. P. Morgeson, and S. J. Gerras
2003 ''Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: Safety climate as an exemplar.'' Journal of Applied Psychology, 88: 170–178.
Hofstede, G.
1980 Culture's Consequences: International Differences in Work-related Values. Newbury Park, CA: Sage.
Holtgraves, T., and J. Yang 1990
''Politeness as universal: Cross-cultural perceptions of request strategies and inferences based on their use.'' Journal of Personality and Social Psychology, 59: 719–729.
Holtgraves, T., and J. Yang 1992
''Interpersonal underpinnings of request strategies: General principles and differences due to culture and gender.'' Journal of Personality and Social Psychology, 62: 246–256.
Hu, L., and P. M. Bentler
1999 ''Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives.'' Structural Equation Modeling, 6: 1–55.
Jehn, K. A., and E. A. Mannix
2001 ''The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance.'' Academy of Management Journal, 44: 238–251.
Kahneman, D., and A. Tversky
1979 ''Prospect theory: An analysis of decisions under risk.'' Econometrica, 47: 263–291.
Keating, C.
1985 ''Human dominance signals: The primate in us.'' In S. L. Ellyson and J. F. Dovidio (eds.), Power, Dominance, and Nonverbal Behavior: 89–108. New York: Springer-Verlag.
Kilduff, G. J., H. A. Elfenbein, and B. M. Staw
2010 ''The psychology of rivalry: A relationally dependent analysis of competition.'' Academy of Management Journal, 53: 943–969.
Kline, R. B.
1998 Principles and Practice of Structural Equation Modeling. New York: Guilford Press.
Lakoff, R.
1975 Language and Woman's Place. New York: Harper and Row.

Leary, M. R., K. M. Kelly, C. A. Cottrell, and L. S. Schreindorfer
2007 ''Individual differences in the need to belong: Mapping the nomological network.'' Unpublished manuscript, Department of Psychology and Neuroscience, Duke University.
Leavitt, H. J.
2005 Top Down. Boston: Harvard Business School Press.
Lee, F.
1997 ''When the going gets tough, do the tough ask for help? Help seeking and power motivation in organizations.'' Organizational Behavior and Human Decision Processes, 72: 336–363
Lee, F.
1999 ''Verbal strategies for seeking help in organizations.'' Journal of Applied Social Psychology, 29: 1472–1496.
Loch, C. H., B. A. Huberman, and S. Stout
2000 ''Status competition and performance in work groups.'' Journal of Economic and Organizational Behavior, 43: 35–55.
Magee, J. C., and A. D. Galinsky
2008 ''Social hierarchy: The self-reinforcing nature of power and status.'' Academy of Management Annals, 2: 351–398.
Mannix, E. A., and S. J. Sauer
2006 ''Status and power in organizational group research: Acknowledging the pervasiveness of hierarchy.'' In S. R. Thye and E. J. Lawler (eds.), Advances in Group Processes, 26: 149–182. Bingley, UK: Emerald Group.
McClelland, D. C.
1975 Power: The Inner Experience. New York: Irvington Press.
Miceli, M. P., J. P. Near, and T. M. Dworkin
2008 Whistle-blowing in Organizations. New York: Lexington Books.
Morand, D. A.
1996 ''Dominance, deference, and egalitarianism in organizational interaction: A sociolinguistic analysis of power and politeness.'' Organization Science, 7: 544–556.
Morand, D. A.
2000 ''Language and power: An empirical analysis of linguistic strategies used in superior-subordinate communication.'' Journal of Organizational Behavior, 21: 235–248.
Morf, C. C., and F. Rhodewalt
2001 ''Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model.'' Psychological Inquiry, 12: 177–196.
Morrison, E. W., and F. J. Milliken
2000 ''Organizational silence: A barrier to change and development in a pluralistic world.'' Academy of Management Review, 25: 706–725.
Newcomb, T. M.
1963 ''Stabilities underlying changes in interpersonal attraction.'' Journal of Abnormal and Social Psychology, 66: 376–386.
Ng, S. H., and J. J. Bradac
1993 Power in Language: Verbal Communication and Social Influence. Thousand Oaks, CA: Sage.
Overbeck, J. R., J. Correll, and B. Park
2005 ''Internal status sorting in groups: The problem of too many stars.'' In M. A. Neale, E. A. Mannix, and M. Thomas-Hunt (eds.), Research on Managing Groups and Teams, 7: 169–199. New York: Elsevier/JAI.
Parton, S. R., S. A. Siltanen, L. A. Hosman, and J. Langenderfer
2002 ''Employment interview outcomes and speech style effects.'' Journal of Language and Social Psychology, 21: 144–161.

Pettit, N. C., K. Yong, and S. E. Spataro
2010 ''Holding your place: Reactions to the prospect of status gains and losses.'' Journal of Experimental Social Psychology, 46: 396–401.
Pfeffer, J.
1992 Managing with Power. Cambridge, MA: Harvard Business School Press.
Rahim, M.
1983 ''A measure of styles of handling interpersonal conflict.'' Academy of Management Journal, 26: 368–376.
Raskin, R., and H. Terry
1988 ''A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity.'' Journal of Personality and Social Psychology, 54: 890–902.
Ridgeway, C. L.
1987 ''Nonverbal behavior, dominance, and the basis of status in task groups.'' American Sociological Review, 52: 683–694.
Ryan, K. D., and D. K. Oestreich
1998 Driving Fear out of the Workplace: Creating the Hgh Trust, High Performance Organization. San Francisco: Jossey-Bass.
Sidanius, J., and F. Pratto
1999 Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression. New York: Cambridge University Press.
Sims, R. R., and J. Brinkmann
2003 ''Enron ethics (or: Culture matters more than codes).'' Journal of Business Ethics, 45: 243–256.
Spencer, S. J., M. P. Zanna, and G. T. Fong
2005 ''Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes.'' Journal of Personality and Social Psychology, 89: 845–851.
Sumanth, J. J., and D. M. Cable
2011 ''Status and organizational entry: How organizational and individual career status affect justice perceptions of hiring systems.'' Personnel Psychology, 64: 963–1000.
Sumanth, J. J., D. M. Mayer, and V. S. Kay
2011 ''Why good guys finish last: The role of justification motives, cognition, and emotion in predicting retaliation against whistleblowers.'' Organizational Psychology Review, 1: 165–184.
Thompson, E. R.
2007 ''Development and validation of an internationally reliable short-form of the Positive and Negative Affect Schedule (PANAS).'' Journal of Cross-Cultural Psychology, 38: 227–242.
Tiedens, L. Z.
2001 ''Anger and advancement versus sadness and subjugation: The effect of negative emotion expressions on social status conferral.'' Journal of Personality and Social Psychology, 80: 86–94.
Tiedens, L. Z., and A. R. Fragale
2003 ''Power moves: Complementarity in dominant and submissive nonverbal behavior.'' Journal of Personality and Social Psychology, 3: 558–568.
Washburn, P. V., and M. D. Hakel
1973 ''Visual cues and verbal content as influences of impressions formed after simulated employment interviews.'' Journal of Applied Psychology, 58: 137–141.
Westphal, J. D., and P. Khanna
2003 ''Keeping directors in line: Social distancing as a control mechanism in the corporate elite.'' Administrative Science Quarterly, 48: 361–398.

Wiley, M. G., and A. Eskilson
1985 ''Speech style, gender stereotypes, and corporate success: What if women talked more like men?'' Sex Roles, 12: 993–1007.
Winter, D. G.
1973 The Power Motive. New York: Free Press.

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