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# The closeness-communication bias: Increased egocentrism among friends versus strangers

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#### ABSTRACT

People commonly believe that they communicate better with close friends than with strangers. We propose, however, that closeness can lead people to overestimate how well they communicate, a phenomenon we term the closeness-communication bias. In one experiment, participants who followed direction of a friend were more likely to make egocentric errors—look at and reach for an object only they could see—than were those who followed direction of a stranger. In two additional experiments, participants who attempted to convey particular meanings with ambiguous phrases overestimated their success more when communicating with a friend or spouse than with strangers. We argue that people engage in active monitoring of strangers' divergent perspectives because they know they must, but that they "let down their guard" and rely more on their own perspective when they communicate with a friend.

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In his tell-all about the culinary profession, Anthony Bourdain (2000) extols upon the bond between chef and sous-chef, and the effortless communication it engenders. "In our glory days together, I could look across the room at Steven, raise an eyebrow, maybe make an imperceptible movement with my chin, and the *thing*—whatever the *thing* was at the time—would be done" (p. 205). It is a compelling intuition: The connection one feels with friends and confidants would seem to facilitate communication.

Nevertheless, we propose that closeness may sometimes lead people to overestimate how well they can communicate—a dynamic noted by writer Geeta Kothari (1999) in her home kitchen: "When my husband tries to help me cook, he cannot identify all the spices. He gets confused when I forget their English names and remarks that my expectations of him are unreasonable... [And yet,] I expect knowledge to pass from me to my husband without one word of explanation or translation. I want him to know what I know, see what I see, without having to tell him exactly what it is" (p. 14). Although a friend may well know what the "thing" is more than a stranger would, he or she may not know as often as one expects. We term this phenomenon the *closeness-communication bias*.

Successful communication requires communicators to recognize that others' perspectives may differ from their own and that others may not always know what they mean (Keysar & Henly, 2002). Such perspective taking requires both time and mental effort (Epley, Keysar, Van Boven, & Gilovich, 2004), rendering adults prone to

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egocentric biases that can lead to miscommunication when these resources are in short supply (Epley, Morewedge & Keysar, 2004; Nickerson, 1999). A wife who says to her husband, "It's getting hot in here," as an "obvious" request for him to open a window, may be surprised when he interprets her statement as a coy, amorous advance.

We examine whether people are more or less prone to consider others' perspectives when communicating with friends and close acquaintances versus strangers, and how this affects perceived versus actual communication success. In some respects, egocentrism seems most likely to occur among strangers. Lacking information about a stranger's perspective, one may rely instead on what is availableone's own perspective. Nevertheless, we suggest that communication among friends can be more prone to egocentrism than communication among strangers because people relax their perspective-taking efforts when communicating with friends. Because friends are often similar to-even "included in"-the self (Aron, Aron, Tudor, & Nelson, 1991; Decety & Sommerville, 2003), people may utilize their own thoughts and beliefs as a benchmark when they take a friend's perspective (Ames, 2004). One may therefore monitor a stranger's perspective closely because it is presumed to differ, but "let one's guard down" with a friend's perspective because it is presumed to be similar.

Of course, friends often *do* have similar perspectives, and relying on mutually shared information is an effective communication strategy (Wu & Keysar, 2007), suggesting that friends may sometimes communicate more accurately than strangers. However, people may overestimate the extent to which their friends share their perspective in the first place, with perceived overlap increasing more steeply as a

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function of relationship length or closeness than does actual overlap (Kenny & Kashy, 1994; Swann & Gill, 1997). People may also overgeneralize the benefits of friendship, assuming implicitly that a bond in one domain can facilitate communication in another. As a result, people may still overestimate how effectively they communicate with friends versus strangers even if friends sometimes *do* communicate more effectively than strangers.

Several studies are consistent with our hypothesis. In one study, self-other merging—feeling that another "is there with one in oneself, and can see what one can see"—increased individuals' egocentric tendency to overestimate the transparency of their personal characteristics (Vorauer & Cameron, 2002, p. 1346). In another, groups that completed a friendship-building exercise overestimated their ability to engage in covert communication more than did groups of strangers (Van Boven, Kruger, Savitsky & Gilovich, 2000). We report three studies that tested the closeness-communication bias more directly, one from the listener's perspective and two from the speaker's perspective.

### Study 1

Study 1 examined whether listeners are more egocentric when they communicate with a friend than a stranger. We utilized a task capable of revealing such egocentrism in which a "director" instructs an "addressee" to move objects in a display, some of which are visible to the addressee but are hidden from the director. The director might tell the addressee to "move the tape," referring to a mutually visible cassette tape. To comply, addressees must ignore a role of adhesive tape that they can see but know the director cannot. Egocentrism is revealed by addressees' tendency to look at or reach for objects that are visible only to them (Epley, Morewedge, et al., 2004; Keysar, Barr, Balin & Brauner, 2000). We expected egocentrism to be greater when listeners were directed by a friend than by a stranger.

# Method

#### Participants

Native English speaking University of Chicago undergraduates participated—96 as addressees, 48 as directors. Each director

participated twice, once with a friend and once with a stranger (order counterbalanced).

#### Materials and design

Objects were presented in a  $4 \times 4$  grid of slots. All slots were visible to the addressee but five were occluded from the view of the director. Each session consisted of eight trials. Each trial included six to nine objects, including two critical objects—a "target" and a hidden "competitor." In half of the trials, the competitor was a potential referent of the director's instructions (e.g., the target on the left of Fig. 1 is a computer mouse and the competitor is a toy mouse); in the rest, the object in the competitor slot was unrelated (e.g., the plastic truck on the right of Fig. 1). The design was a 2 (relationship: friends versus strangers)×2 (relevance of competitor: relevant versus irrelevant) mixed-model design, with the latter factor within-session.

We tracked addressees' eye gaze with head-mounted eye-tracking equipment that provided a time-stamped recording of addressees' gaze and a digital file of the coordinates sampled at 60 Hz.

### Procedure

The experimenter assigned roles and explained that participants would be playing a communication game in which they would rearrange a set of objects in a grid. In each trial, the director would receive a picture of the grid from his or her own perspective, with arrows showing where certain objects were to be moved. The director would then verbally instruct the addressee where to move each object. The experimenter pointed out that the director could not see the occluded objects and therefore would never ask the addressee to move them. Participants practiced with one grid, switched roles, and practiced with a second grid to ensure that the addressee understood the director's perspective.

Before each trial, the experimenter placed a screen between the director and the grid, arranged a new set of objects, gave the addressee the competitor object, and showed him or her where to place it. The director then received the picture showing which objects were to be moved and the screen was removed. To standardize the instructions for the critical objects, the experimenter asked each director privately to use a scripted instruction printed on each picture.



Fig. 1. Example grids from Study 1. The target in both grids is the computer mouse, identified by the director in both cases simply as "the mouse." The grid on the left includes a relevant competitor in one of the occluded slots (the toy mouse), whereas the grid on the right includes an irrelevant competitor (the toy truck).

Finally, participants rated how close they were with their counterpart from 0 (*complete stranger*) to 10 (*best friend*). We averaged ratings for each pair, retaining pairs of friends with a score  $\geq$  8.0, and pairs of strangers with a score  $\leq$  2.0. This excluded 11 pairs of friends and 5 pairs of strangers.

#### Coding

We defined a temporal window of observation starting from the beginning of the noun that identified the target (e.g., the "m" in "mouse") and ending with the addressee's touch of the target object. An addressee's eye-gaze had to stay within a slot for at least 100 ms to be considered a fixation on that object. We indexed target selection as the last fixation on it before reaching. To eliminate outliers, we truncated the data at 2.5 SDs from the mean. We excluded 2.3% of critical trials because the director did not follow the scripted instructions.

# Results and discussion

We first considered the time it took addressees to identify the target and observed the predicted interaction between competitor relevance and relationship: Compared to the irrelevant competitor baseline, the relevant competitor slowed addressees paired with friends more than those paired with strangers, F(1, 73) = 5.20, p < .05 (Fig. 2). Addressees paired with a friend were more affected by their egocentric perspective than were those paired with a stranger.

This effect did not stem from differences in participants' consideration of an initial, egocentric default—addressees were just as likely to gaze at the relevant competitor object at least once with a stranger (65%) as with a friend (63%)—but from their tendency to correct that default less effectively when paired with a friend. We estimated latency of correction as the time from the beginning of the first fixation on the competitor to the beginning of the final fixation on the target and found a significant interaction between competitor relevance and relationship, F(1, 67) = 7.16, p < .01 (Fig. 3). People were just as likely to consider the relevant competitor when communicating with friends as with strangers, but were slower to correct that initial interpretation. Indeed, addressees went so far as to grab and move the competitor object—a clear indication that they had not corrected their initial, egocentric impulse—more often with a friend (24% of trials) than with a stranger (15%), t(77) = 2.24, p < .05.

# Studies 2a and 2b

Study 1 showed that people are less able to correct their egocentric default when they listen to friends than when they listen to strangers.

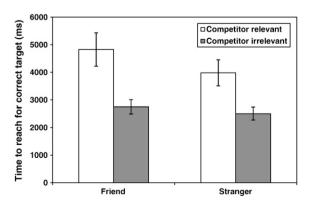
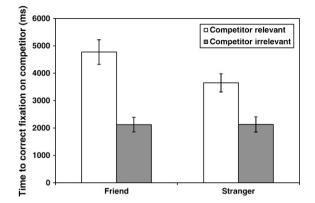


Fig. 2. Latency to select the target object as indicated by last fixation on the target before reaching for it, as a function of relationship to the director and relevance of the competitor object to the target object. Error bars show the standard error of the mean.



**Fig. 3.** Latency from first fixation on the competitor object to the last fixation on the target object, as a function of relationship to the director and relevance of the competitor object to the target object. Error bars show the standard error of the mean.

It is possible, though, that speakers are sensitive to this fact and that they adjust accordingly their beliefs about the success with which they communicate. Studies 2a and 2b thus tested speakers' ability to gage the effectiveness of their communication with friends versus strangers. Participants attempted to communicate particular meanings (e.g., "Open the window") with ambiguous phrases (e.g., "It's getting hot in here"), and then estimated how well a friend and strangers understood what they meant. We expected participants to overestimate how successfully they had conveyed their intended meanings—a common manifestation of egocentrism in communication (Keysar & Barr, 2002—more with friends than with strangers.

#### Method

#### Participants

Sixty Williams College students participated in well-acquainted mixed-sex couples in Study 2a. Twenty-four married couples (married 14.4 years, on average) from Williamstown, MA, participated in Study 2b.

#### Materials

We created 20 ambiguous phrases, each with four possible meanings. For example, "What have you been up to?" could convey irritation that someone is late, interest in someone's wellbeing, suspicion over possible romantic infidelity, or playful conjecture about an imminent surprise party.

#### Procedure

Each session included four participants: two pairs of friends (2a) or two couples (2b). Participants sat in a circle facing away from one another and played four rounds of a communication game. In each round, the "speaker" received ten phrases with their meanings, with one meaning highlighted for each. Speakers spoke each phrase aloud, attempting to convey the highlighted meaning to the three "listeners." Listeners received the same phrases and meanings, and selected the meaning they guessed the speaker had intended for each. After each round, the speaker guessed the number of phrases each listener understood and, in Study 2b, all participants indicated their confidence that communication had been successful from 0 (*no confidence*) to 10 (*most confident*).

Each phrase was spoken by two speakers during each session (with different meanings). Each speaker had a unique combination of phrases. Highlighted meanings were counterbalanced across sessions. Participants received no feedback regarding accuracy.

# Results and discussion

Participants in Study 2a rated themselves closer to their friend on a scale from 0 (*not at all*) to 10 (*very close*) than to the strangers (Ms = 8.11 and 0.69, respectively), paired t(29) = 26.0, p < .0001.

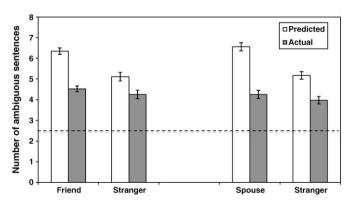
Listeners in both studies—friends and strangers alike—exceeded chance accuracy of 2.5 correct out of 10, all *ps*<.0001. Nevertheless, speakers in both studies overestimated their effectiveness with friends more than with strangers. In Study 2a, a repeated-measures ANOVA, using session as the unit of analysis, revealed the predicted interaction between accuracy and relationship, F(1, 14) = 27.45, *p*<.0001 (Fig. 4, left). Although speakers expected their friend to be significantly more successful than the strangers, t(14) = 11.27, *p*<.0001, friends were actually only marginally more successful, t(14) = 1.81, *p* = .09.

The interaction between accuracy and relationship was also significant in Study 2b, F(1, 11) = 9.73, p < .01 (Fig. 4, right). Although speakers expected their spouse to understand them better than strangers, paired t(11) = 9.63, p < .0001, accuracy rates for spouses and strangers were statistically identical, paired t(11) = 1.08, ns. This null result is striking because speakers in Study 2b were more confident that they were understood by their spouse (M = 6.27) than by strangers (M = 5.00), paired t(11) = 5.97, p < 0001, and listeners were more confident that they understood their spouse (M = 6.17) than the strangers (M = 5.18), paired t(11) = 3.55, p < .005. (Neither speakers' nor listeners' confidence correlated with accuracy.)

### General discussion

We have proposed that people relax their perspective-taking efforts when they interact with those they know well. Accordingly, participants in Study 1 were more likely to interpret instructions egocentrically when they were delivered by a friend versus a stranger, and participants in Studies 2a and 2b overestimated the extent to which they communicated meanings of ambiguous phrases to their friend or spouse more than to strangers.

Our studies do not show that friendship necessarily impedes communication. Closeness may enhance accuracy in a number of ways, such as by helping communicators feel comfortable asking for clarification when they are confused. Moreover, when one's perspective *does* overlap with that of a friend, egocentrism may be helpful by facilitating quick and effortless communication (Hoch, 1987). Individuals whose friendship is confined to a particular domain, with a tightly circumscribed set of potential communication referents—a chef and sous-chef, say—may therefore enjoy an enhanced ability to communicate within that domain (Swann, 1984). The difficulty comes



**Fig. 4.** Predicted versus actual accuracy at guessing speakers' meaning for ten ambiguous sentences among pairs of friends (Study 2a; left) or married couples (Study 2b; right) versus strangers. Error bars show the standard error of the mean and the dotted line denotes chance performance of 2.5 correct sentences out of 10.

when individuals overestimate the degree of shared perspective with a friend in the first place, or venture into a relatively unfamiliar domain and assume that a common frame of reference in one domain will translate into successful communication in another. In these instances, friends are likely to overestimate how well they can communicate with one another.

Our findings lend credence to a dual-process account of perspective taking in which adopting another's perspective reflects the operation of both an initial, egocentric default and a subsequent, relatively effortful correction process to reflect differences between one's own and others' perspectives (Epley, Keysar, et al., 2004; Gilbert & Gill, 2000; Nickerson, 1999). Our findings dovetail with this account by showing that egocentrism increases when one interacts with close friends—individuals who are assumed to be similar to oneself, and for whom one may therefore relax efforts to correct an initial, egocentric default. In Study 1, addressees who were paired with a friend were no more likely to notice the relevant competitor object but were relatively slower and less able to undo this egocentric default, even reaching for an object that only they could see.

And yet, the dual process account implies that egocentrism is not inevitable among friends, and it is an open question whether making individuals mindful of the differences between themselves and their friends would inspire renewed enthusiasm for the correction processes that accurate perspective taking requires. In the meantime, our findings lend themselves to one piece of practical advice for those in close relationships: When your spouse turns to you and says "It's getting hot in here," it is wise to remember that you may not know exactly what he or she means.

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