How to Seem Telepathic: Enabling Mind Reading by Matching Construal

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Abstract

People can have difficulty intuiting what others think about them at least partly because people evaluate themselves in more fine-grained detail than observers do. This mismatch in the level of detail at which people construe themselves versus others diminishes accuracy in social judgment. Being a more accurate mind reader requires thinking of oneself at a higher level of construal that matches the observer's construal (Experiments 1 and 2), and this strategy is more effective in this context than perspective taking (Experiments 3a and 3b). Accurately intuiting how others evaluate themselves requires the opposite strategy—thinking about others in a lower level of construal that matches the way people evaluate themselves (Experiment 4). Accurately reading other minds to know how one is evaluated by others—or how others evaluate themselves—requires focusing one's evaluative lens at the right level of detail.

Magical versions of mind reading are the stuff of science fiction, but intuitive versions of mind reading are the stuff of everyday life. People routinely wonder about what others think (e.g., "Is she telling the truth?"), and perhaps especially wonder what others think about *them* (e.g., "Does she find me intelligent, attractive, trustworthy?"). These inferences are often made with a great deal of confidence, but surprisingly little accuracy (Epley, 2008; Ickes, 2003; Kenny & DePaulo, 1993; Realo et al., 2003). The correlation, for instance, between how much people think others in a group like them and how much others actually like them may be no better than chance (Andersen, 1984; Kenny & DePaulo, 1993). Although considerable research has investigated why people have difficulty intuiting other minds (e.g., Nickerson, 1999), very little has been aimed at identifying strategies that might make people systematically better at such mind reading. The research we report in this article does exactly that.

We suggest that people can have difficulty knowing how they are evaluated by others (often called metaperception; Kenny & DePaulo, 1993) at least partly because they construe themselves differently than they construe others. In particular, existing research demonstrates that people tend to evaluate themselves in relatively fine-grained, low-level, and contextually based detail, whereas they tend to evaluate others in more generalized, high-level, and abstract detail (Chambers, Epley, Savitsky, & Windschitl, 2008; Jones & Nisbett, 1972;

Liberman & Trope, 2008; Pronin, Gilovich, & Ross, 2004; Semin, 2004). A person is likely to evaluate his or her own attractiveness, for instance, by focusing on fine-grained details of hair placement, facial expressions, or clothing, whereas others evaluate the same person by attending to more general characteristics, such as gender, ethnicity, or overall presentation. Similarly, a teacher is likely to evaluate his or her lecture by considering specific words, phrases, or details on visual materials, whereas audience members are likely to evaluate the overall content and general delivery style. If people evaluate themselves in more fine-grained detail than they evaluate others, and rely on egocentric knowledge to intuit others' evaluations (Gilovich, Medvec, & Savitsky, 2000; Kenny & DePaulo, 1993; Nickerson, 1999; Royzman, Cassidy, & Baron, 2003), then mismatched construal can create inaccuracy. Enabling accuracy may therefore require aligning construal of the self and others.

These self-other differences in construal appear to arise from at least two sources: differences in knowledge and differences in psychological distance. First, people tend to have more detailed information about themselves, such as specific past behaviors or private intentions and thoughts, than they

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have about others (Chambers et al., 2008; Gilovich et al., 2000; Jones & Nisbett, 1972; Liberman, Trope, & Stephan, 2007; Pronin, 2008; Semin, 2004). A person knows, for instance, that his hair looks much better today than it did yesterday, or that he is in worse shape than he would like to be. A person's potential date is likely to know none of this. Expertise enables fine-grained distinctions and low-level comparisons that novices cannot make, such that people can metaphorically evaluate themselves through the fine-grained lens of a microscope, whereas others evaluate them through the bigger-picture lens of the naked eye. Second, as objects and events become more psychologically distant—further away from the present self in space, time, or social relation (Liberman & Trope, 2008)—they tend to be construed in higher levels of abstraction. Other people are more psychologically distant than the present self, and therefore tend to be construed at a higher level of abstraction than people construe themselves. These two explanations suggest that people are not only able to evaluate themselves in lower-level detail than observers are, but because of social proximity are also more naturally inclined to do so.

We propose that accurately reading other minds requires perceiving the world through the same lens of construal that others are using. The following experiments tested this hypothesis both for intuiting how one is viewed by others (Experiments 1, 2, and 3a) and for intuiting how others view themselves (Experiment 4). We also examined whether differences in construal mediate differences in accuracy (Experiment 1). Using both situational manipulations and dispositional measures, we compared the effectiveness of matching construal level with the effectiveness of an alternate strategy: perspective taking (Experiments 3a and 3b).

Experiment 1: Attractiveness

People think about themselves at a higher level of construal, focusing on more general features, when they think about themselves from a temporally distant perspective (e.g., the distant future) than when they think about themselves from a temporally near perspective (e.g., the near future; Liberman & Trope, 2008; Pronin et al., 2004). We therefore predicted that people will be more accurate intuiting how attractive they will be judged by others in the distant future than in the near future.

Method

Participants ($N = 106$ University of Chicago undergraduates) were randomly assigned to be targets or observers. Targets learned that the experiment was an investigation of how people think their attractiveness will be rated by others, and posed for a picture that was displayed on a computer screen. They learned that an opposite-sex participant would evaluate their attractiveness later that day (near condition) or several months later (distant condition). Targets were asked to write down how they thought the observer would describe the photograph

and then anticipated the observer's attractiveness rating, on a scale from 1 (*not at all*) to 9 (*very*). Each observer saw a target's photograph, wrote a description of the target, and rated the target's attractiveness on the same scale.

Results and discussion

Accuracy. A regression analysis predicting observers' ratings from targets' anticipated ratings yielded a significant interaction with construal condition, $\beta = 2.42$, $p_{rep} = .88$; targets were more accurate in the distant condition, $r(26) = .51$, $p_{rep} = .97$, than in the near condition, $r(27) = .23$, $p_{rep} = .67$ (see Table 1). The absolute difference between anticipated and actual ratings was also significantly smaller in the distant condition than in the near condition, $t(51) = 3.08$, $p_{rep} = .98$, $d = 0.86$.

Construal. To assess whether differences in construal mediated differences in accuracy, we asked two naive raters to code participants' written descriptions for construal level on the basis of a theoretically relevant distinction between contextualized and decontextualized information (Nussbaum, Trope, & Liberman, 2003). Contextualized details represent fine-grained, low-level features (e.g., "hair tied in a pony tail," "looks tired"), whereas decontextualized details represent general, high-level features (e.g., "Asian," "wears glasses"). After identifying the distinct details in each description, the coders classified each detail as decontextualized, contextualized, or "other." Interrater agreement was high (95%), and disagreements were resolved by discussion.

Table 1. Primary Dependent Measures From Experiments 1, 2, 3a, and 4

	Anticipated versus actual evaluations	
Experiment and condition	Correlation	Absolute difference
Experiment 1		
Low-level construal (near future)	.23	2.19 (1.50)
High-level construal (distant future)	.51**	1.15 (0.91)
Experiment 2		
Low-level construal (near future)	−.31	2.05 (1.80)
High-level construal (distant future)	.49*	1.43 (1.25)
Experiment 3a		
Low-level construal (near future)	−.24	2.42 (1.33)
High-level construal (distant future)	.55*	1.17 (1.25)
Perspective taking	−.10	2.00 (1.53)
Experiment 4		
Low-level construal (near past)	.36*	1.65 (1.08)
High-level construal (distant past)	−.14	2.17 (1.47)

Note: Experiments 1, 2, and 3a tested the relationship between targets' predictions of how observers would rate them and observers' actual ratings. Experiment 4 tested the relationship between targets' ratings of themselves and observers' predictions of these self-evaluations.
*$p < .05$. **$p < .01$.

As predicted, targets generated a smaller proportion of contextualized details in the distant condition ($M = .39$) than in the near condition ($M = .50$), $t(51) = 2.00$, $p_{rep} = .88$, $d = 0.55$, and observers generated a smaller proportion of contextualized details ($M = .38$) than decontextualized details ($M = .62$) about the target, $t(52) = -3.59$, $p_{rep} > .99$, $d = 1.00$. These differences in construal on the part of the targets mediated the differences in their accuracy (see Fig. 1; Sobel $Z = 2.02$, $p_{rep} = .88$).

In Experiment 2, we examined the generalizability of Experiment 1 by testing whether people would be more accurate intuiting how favorably they would be evaluated following a short introduction when they construed themselves at a higher level of abstraction.

Experiment 2: General Evaluations

Method

Participants ($N = 82$ Ben-Gurion University undergraduates) were randomly assigned to be targets or observers. Targets were asked to describe themselves for 2.5 min, speaking into a microphone, and were told to talk about a range of topics (e.g., studies, hobbies, family, and future plans). Targets learned that observers would listen to their presentation and form an overall impression of them later that day (near condition) or several months in the future (distant condition). They predicted observers' overall impression on a scale ranging from −4 (negative) to +4 (positive). Observers listened to the targets' self-descriptions and reported their overall impressions of the targets on the same scale.

Results and discussion

A regression analysis predicting observers' ratings from targets' anticipated ratings yielded a significant interaction with
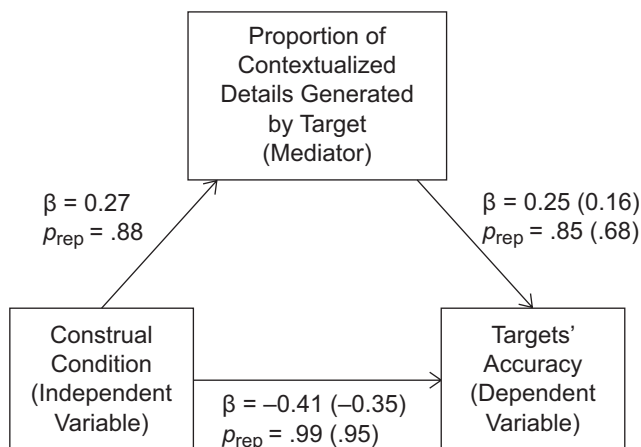
Fig. 1. Mediational analysis for Experiment 1. Values in parentheses represent the strength of direct or simple relationships between the variables; values outside parentheses represent the strength of the relationships between two variables when the other variable in the model is controlled.

construal condition, $\beta = 2.87$, $p_{rep} = .96$; targets were more accurate in the distant condition, $r(21) = .49$, $p_{rep} = .92$, than in the near condition, $r(21) = -.31$, $p_{rep} = .74$. The absolute difference between anticipated and actual ratings was also smaller in the distant condition than in the near condition (see Table 1), although this difference was nonsignificant, $t(40) = 1.29$, $p_{rep} = .74$, $d = 0.36$. The findings of Experiments 1 and 2 suggest that altering construal level can increase accuracy in at least two very common and important instances of mind reading in everyday life—intuiting how attractively one will be evaluated by others and intuiting others' overall impressions of oneself.

Experiments 3a and 3b: Comparing Strategies

One intuitive strategy for understanding other minds, suggested by parents and conflict-resolution experts alike, is to deliberately put oneself in other people's shoes. Although perspective taking has many benefits in social interaction (e.g., Batson, Early, & Salvarani, 1997; Galinsky & Moskowitz, 2000), research suggests that systematically increasing mind-reading accuracy may not be among them (Ickes, 2003; Ickes, Stinson, Bissonnette, & Garcia, 1990; Myers & Hodges, 2009; Stinson & Ickes, 1992).

Experiments 3a and 3b examined the relative effectiveness of matching construal level and perspective taking. We predicted that matching construal level would be more effective in the context of intuiting other people's evaluations of oneself, primarily because altering construal level more directly influences the mechanism that we believe creates inaccuracy. Perspective taking should increase mind-reading accuracy only to the extent that it highlights new information about a stimulus or event that people fail to consider from their own egocentric perspective (Epley, Keysar, Van Boven, & Gilovich, 2004; Keysar & Barr, 2002; Piaget, 1959; Thompson & Hastie, 1990). Differences in construal level, however, are produced by top-down influences that alter the way people encode the very same stimulus. Such top-down influence on construal generally occurs without people's awareness, creating *naive realism*—people's intuitive belief that they perceive the world accurately and that others are therefore likely to perceive it similarly (Ross & Ward, 1996). Differences associated with construal level—such as in Experiments 1 and 2—are unlikely to be affected by perspective taking to the extent that there is little awareness that the construal level of another person's perspective differs from one's own.

We conducted Experiments 3a and 3b to test if we could replicate the results of Experiment 1 using an experimental manipulation (3a) and an individual difference measure (3b) of construal level, and also to compare the effect of construal level with that of a standard experimental manipulation (3a) and an individual difference measure (3b) of perspective taking.

Method

Participants. University of Chicago undergraduates participated in both Experiment 3a ($N = 110$) and Experiment 3b ($N = 60$).

Experiment 3a procedure. The procedure for Experiment 3a was identical to that of Experiment 1, except for the addition of a third, randomly assigned condition: the perspective-taking condition. Participants in the perspective-taking condition were asked to "think about the other student who will see your picture," who "may view this picture from a different perspective than you do," and to "adopt the other student's perspective as if you were that person, looking at your picture through his/her eyes" (instructions based on Batson et al., 1997; Galinsky & Moskowitz, 2000; Stotland, 1969).

Experiment 3b procedure. The procedure for Experiment 3b was identical to that of Experiment 1, except that instead of manipulating construal level, we measured participants' tendency to construe themselves in low-level (fine-grained) or high-level (general) details (using the Behavior Identification Form, BIF; Vallacher & Wegner, 1989) and their tendency for perspective taking (using the perspective-taking subscale from the Interpersonal Reactivity Index, IRI; Davis, 1983). In the BIF, 24 midlevel actions (e.g., locking a door) are listed. For each action, a lower-level identification (e.g., putting a key in the lock) and a higher-level identification (e.g., securing the house) are provided, and participants choose which alternative is a better description for them. The score is the total number of higher-level alternatives chosen. In the IRI, participants indicate how well each statement describes them (e.g., "When I'm upset at someone, I usually try to 'put myself in his shoes' for a while").

Results and discussion

In Experiment 3a, targets' anticipated ratings were significantly correlated with observers' actual ratings in the distant condition, $r(18) = .55$, $p_{rep} = .94$, but not in the near condition, $r(18) = -.24$, $p_{rep} = .61$, or the perspective-taking conditions, $r(19) = -.10$, $p_{rep} = .38$. The absolute difference between anticipated and actual ratings was also significantly smaller in the distant condition than in the near condition, $t(34) = 2.91$, $p_{rep} = .97$, $d = 0.81$, and was smaller in the distant condition than in the perspective-taking condition, although this effect was nonsignificant, $t(35) = 1.81$, $p_{rep} = .84$, $d = 0.50$.

In Experiment 3b, individual differences in construal level (BIF) were correlated with participants' accuracy, $r(30) = .38$, $p_{rep} = .91$, whereas differences in perspective taking (IRI) were not, $r(30) = .09$, $p_{rep} = .41$.

These two experiments replicate the main conclusion from Experiment 1: Individuals who think of themselves at higher levels of construal are better able to intuit another person's impression of them than are those who think of themselves at lower levels of construal. Moreover, Experiment 3b demonstrates that construal level need not be experimentally manipulated for this

effect to occur; individuals who are naturally inclined to think of themselves at a higher level of construal show the same effect. These experiments also suggest that altering the way people construe themselves may be a more effective strategy for increasing accuracy than is explicitly encouraging perspective taking when the self is the target of judgment. We interpret this result tentatively, suggesting only that intuiting other people's impressions may sometimes require more than simply trying to put oneself in their shoes. A broader investigation of the contexts in which particular strategies increase accuracy in social judgment is beyond the scope of the present research, but we return to this issue in the General Discussion.

Experiment 4: Predicting Self-Evaluations

In Experiment 4, we considered one more critical prediction concerning the importance of matching construal level. People care not only about how they are evaluated by others, but also about how others evaluate themselves. Therapists are paid to intuit their patients' self-evaluations, but parents, partners, and friends care about their loved ones' self-assessments as well. If people evaluate themselves by considering relatively fine-grained details, then intuiting another person's self-evaluation should require a strategy that is the very opposite of the one that was effective in Experiments 1 through 3. In particular, leading observers to construe a target in low-level, fine-grained detail should enable them to more accurately intuit that person's self-evaluation.

Method

University of Chicago undergraduates ($N = 62$) participated in a procedure similar to that of Experiment 1, except that targets rated how attractive they found themselves, using a scale ranging from 1 (*not at all*) to 9 (*very*), and observers received the construal manipulation. We did not obtain written descriptions. Observers were told that the pictures were taken earlier in the day (near condition) or a few months earlier (distant condition), and rated how attractive they thought the targets found themselves to be, using the same scale. Each picture was shown to one observer in each construal condition.

Results and discussion

Because we manipulated construal within observers, we conducted a Fisher *r*-to-*Z* analysis to compare correlations, rather than a regression analysis as in Experiments 1 and 2. As predicted, observers' were more accurate in the near condition, $r(31) = .36$, $p_{rep} = .88$, than in the distant condition, $r(31) = -.14$, $p_{rep} = .65$, $Z(30) = 1.94$, $p_{rep} = .88$. The absolute difference between observers' and targets' ratings was also marginally smaller in the near condition than in the distant condition, $t(30) = -1.91$, $p_{rep} = .86$, $d = 0.69$ (see Table 1). These results suggest that matching construal level between a target and an observer, rather than simply increasing the level of construal, enables accuracy.

General Discussion

People can have difficulty knowing how they are evaluated by others, but little research has identified how to systematically increase accuracy. One barrier to accuracy is that people construe themselves differently than others do, evaluating themselves by considering low-level and contextualized details, whereas others consider higher-level and general features. Reducing this barrier should therefore increase accuracy. The five experiments reported here support this hypothesis. Participants accurately intuited how they were evaluated by others when they took a big-picture look at themselves, considering more general features that match an observer's level of construal (Experiments 1, 2, 3a, and 3b). Participants accurately intuited how others evaluated themselves, however, when they used a more microscopic lens and considered the low-level and contextual details that people consider when evaluating themselves (Experiment 4).

Identifying a barrier to accuracy not only identifies strategies for improvement, but also identifies when particular strategies are likely to be helpful and when they are not. A difference in construal level between oneself and another person arises when the self or the other person is the target of judgment, and this difference is likely to be especially large when the difference between the self and the other is also especially large (e.g., in the case of two strangers). When the self or another person is not the target of judgment, or when the gap in construal level of self versus others is likely to be smaller (e.g., between very close friend), altering construal level is likely to be a less effective strategy for increasing accuracy in social judgment. And in domains where the main barrier to understanding another mind is not differential construal of the same stimulus but rather attention to very different stimuli, strategies that draw attention to new information—such as perspective taking—may be more effective for accurately intuiting other people's thoughts. For instance, people tend to overestimate how harshly they will be judged for committing an embarrassing blunder because they focus too much on the blunder itself and pay too little attention to all of the other information that observers will consider when evaluating them. Asking people to consider an observer's perspective highlights this additional information, and increases accuracy (Epley, Savitsky, & Gilovich, 2002).

A complete understanding of how different strategies affect mind-reading accuracy will require more empirical attention, beyond the experiments we have presented here. We suggest, however, that identifying the barriers that diminish people's ability to accurately intuit others' mental states will be critical for understanding the likely impact of different strategies. As we have shown here, matching construal level helps to overcome one barrier to getting into the minds of others. This strategy will not turn other minds into open books, but it should, under the right circumstances, make other minds somewhat easier to read.

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