In B.F. Malle & S.D. Hodges, eds., Other Minds: How Humans Bridge the Divide Between Self and Others. New York: Guilford Press, 2005.

# 18

# Empathy Gaps in Emotional Perspective Taking

LEAF VAN BOVEN GEORGE LOEWENSTEIN

One of the hallmarks of psychological maturity is a "theory of mind" that allows one to understand that other people, particularly those in different situations, have feelings, preferences, and behavioral inclinations that are different from one's own. Having just gorged on Ritz crackers and Velveeta cheese, one expects that someone who has not eaten in several hours is hungrier than oneself. And even though one may have just received good news that a manuscript was accepted, there is no surprise when someone whose grant was not funded is not elated about one's success. In each of these situations, a theory of mind creates the recognition and anticipation that, because others are in a different affective situation, they feel, think, and behave differently than oneself.

Such "emotional perspective taking" is ubiquitous in everyday life, and doing it well is important for social interactions. This chapter describes a simple, dual-judgment model of how—and how well—people engage in emotional perspective taking. The chapter also describes recent studies that test a key implication of the model: that errors and biases in predicting one's own reactions to emotional situations produce

corresponding errors and biases in predicting others' reactions to emotional situations.

### DUAL JUDGMENTS IN EMOTIONAL PERSPECTIVE TAKING

Social psychologists are fond of pointing out that, despite their sophisticated theory of mind, adults are more egocentric than they like to believe, and that social judgments tend to be biased in the direction of their own attitudes, behaviors, and beliefs (e.g., Krueger & Clement, 1997; Marks & Miller, 1987; Nickerson, 1999, 2001; Royzman, Cassidy, & Baron, 2003). Most social-psychological research on adult perspective taking has focused on people's judgments about other people who are in a similar, nonemotional situation as the self-for example, when others are faced with a similar decision (L. Ross, Greene, & House, 1977). given a similar personality test (Krueger & Clement, 1994), or asked a similar question about their cinematic preference (Gilovich, 1990). This research, represented by the horizontal dashed arrow in Figure 18.1, has generally shown that people tend to overestimate how similar other people are to themselves (Krueger & Clement, 1994). Much previous research has therefore sought to understand the causes of this overestimation.

Some research suggests, for example, that people overestimate the similarity between themselves and others because of the often reasonable assumption that the self is informative about others (Dawes, 1989, 1990; Hoch, 1987). People may also overestimate the similarity between themselves and others because they tend to selectively associate with similar others (Bosveld, Koomen, & van der Pligt, 1994; Sherman,

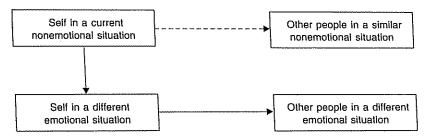


FIGURE 18.1 Graphical representation of perspective-taking process when other people are in a similar nonemotional situation (the rightward-pointing dashed arrow) and when other people are in a different emotional situation (the downward- and rightward-pointing solid arrows).

Chassin, Presson, & Agostinelli, 1984). Or people may inflate others' similarity to themselves out of a desire to be "normal" or to otherwise maintain favorable self views (Krueger & Clement, 1994; L. Ross et al., 1977). Finally, people may overestimate the similarity between themselves and others because they believe that they respond to the objective properties of the situations they encounter rather than to their subjective constructions of those situations, and assume, therefore, that others will respond similarly (Gilovich, 1990; Gilovich, Jennings, & Jennings, 1983; Griffin & Ross, 1991; L. Ross & Ward, 1995).

As noted, most previous research examines people's predictions of the behavior of others who are in similar, typically nonemotional, situations as themselves. By focusing on judgments about others who are in similar situations, previous research is ill equipped to explain emotional perspective taking, which entails predicting the reaction of people who are in emotional situations different from the situation the self is currently in (as indicated by the lower-right box in Figure 18.1).

We propose that such emotional perspective taking entails two distinct judgments, represented by the two solid arrows in Figure 18.1 (Van Boven & Loewenstein, 2003; Van Boven, Loewenstein, & Dunning, 2004, 2005). The first is a prediction of what one's own preferences and decisions would be in the other person's emotional situation (the downward-pointing vertical solid arrow in Figure 18.1). The second judgment is an assessment of how similar the other person is to the self, and, hence, how informative self-predictions are about the other person's reactions (the horizontal solid arrow in Figure 18.1).

According to this dual judgment model, the accuracy of emotional perspective taking depends importantly on both judgments. Previous research has amply documented that people tend to overestimate how similar they are to other people (Krueger & Clement, 1997; Marks & Miller, 1987) so that, even if they were perfectly calibrated in predicting their own reactions to emotional situations, people would probably make biased predictions about others' preferences and decisions. Notice, however, that even if people were perfectly calibrated in judging how similar they are to other people, the accuracy of their social predictions also depends on the accuracy of their self-predictions. Because people tend to view others as similar to themselves, if they mispredicted their own reactions to emotional situations, these biased self-predictions will produce biased social predictions.

We have recently tested two hypotheses derived form this dual-judgment model of emotional perspective taking. The first is that people should explicitly report using self-predictions as a basis for predicting others' reactions to emotional situations. The second is that people make biased judgments of their own reactions to emotional situations, and that these biased self-predictions lead to biased predictions of others' reactions to emotional situations. Specifically, because people in "cold," nonemotional states underestimate the impact of "hot," emotional arousal on their own preferences and decisions, people in cold states should also underestimate the impact of being in a hot state on others' preferences and decisions.

#### SELF-PREDICTION AS SOCIAL PREDICTION

Several studies demonstrate that people explicitly report using self-predictions as a basis for emotional perspective taking. In one, people were shown a picture of three hikers (the two authors and Douglas Harsch) trudging through an Alaskan mountain meadow (Van Boven & Loewenstein, 2003, Study 1). Participants read a scenario describing how, through an unfortunate encounter with a bear, a 12-day backpacking trip through the Alaskan wilderness went bad and the three hikers were forced to spend 4 days without food, navigating their way back to civilization—a trek that involved crossing a large glacier, traversing a raging river, and bushwhacking through a dense forest.

After a few minutes spent thinking about what the hikers felt during their ordeal, participants described in their own words "the processes and strategies you used to imagine what the hikers were thinking and feeling." Consistent with our model, most people (79%) explicitly described mentally trading places with the hikers, predicting how they would react to being in the hikers' situation. Furthermore, most people (69%) mentioned something about their own reactions to the hikers' situation ("I would be really scared and hungry...") before they mentioned something about the hikers' reaction ("so I bet the hikers were really scared and hungry"). In other words, when asked "How would the hikers feel?" people answered with "If I were the hikers, I would feel ...."

In many cases, of course, self-predictions are a good source of evidence when making judgments about other people (Dawes, 1989, 1990; Hoch, 1987). When little is known about others' reactions to an emotional situation, one's own anticipated responses are reasonable proxies for others' responses. In other cases, people may have sophisticated theories that guide their predictions of others they know well (e.g., "Doug seems unaffected by outdoor risks, so the bear probably wouldn't faze him"). Or people may rely on intuitions about how people generally respond to specific situations ("Any reasonable person would be terrified of a face-to-face confrontation with a bear, so the hikers were probably scared witless"). We suspect, however, that people are strongly inclined to use themselves as a basis for making predictions about others even

when they have evidence that their own reactions are anomalous (Krueger & Clement, 1994) and even when they should recognize that their own experiences are of limited relevance—for example, when others' experience is blatantly different from their own.

To illustrate this point, consider the following simple study (Van Boven, Loewenstein, & Dunning, 2004). Participants read about one of two protagonists. One was Tom, who experienced a near-death bout with testicular cancer. The other was Shelia, a young woman whose son nearly died during a difficult childbirth. Participants were asked to spend a few minutes thinking about the protagonist's thoughts and feelings. We expected participants' gender to moderate the degree that they viewed themselves as informative about the protagonist. Because females cannot (without major surgery) become males, and hence cannot suffer testicular cancer, we expected women to judge themselves as less informative about Tom's experience than males. And because males cannot (without major surgery) become females and give birth, we expected men to judge themselves to be less informative about Shelia's experience than women. Indeed, males reported mentally trading places with Tom (87%) more than with Shelia (74%); and females reported mentally trading places with Shelia (87%) more than with Tom (75%). These differences are rather small, however. In fact, the majority of people reported that they mentally traded places with the protagonist even when it was impossible for them ever to experience exactly what the protagonist experienced: most males traded places with Shelia, and most females traded places with Tom.

These results suggest that people are inclined to use themselves as a basis for predicting others' reactions to emotional situations even when their own experiences are not—without a large stretch of the imagination—relevant. The intuitive appeal of the self as a basis for judging others, we suspect, stems largely from the fact that people have well-developed and highly accessible, albeit often incorrect, theories of and knowledge about the self.

#### EMPATHY GAPS IN SELF AND SOCIAL PREDICTIONS

If people use their self-predictions as a basis for making predictions about others' reactions to emotional situations, then the accuracy of social predictions should depend critically on the accuracy of self-predictions. Previous research indicates that predictions of one's own reactions to emotional situations are systematically biased. In particular, people in a cold, emotionally unaroused state often have difficulty bridging the gap between their current preferences and decisions and what their prefer-

ences and decisions would be in a hot, emotionally aroused state (Loewenstein, 1996; Loewenstein, O'Donoghue, & Rabin, 2003). For example, men who are not sexually aroused predict they would be less likely to engage in sexually aggressive behavior than men who are sexually aroused (Loewenstein, Nagin, & Paternoster, 1997). People who are sated because they have just eaten are less likely than hungry people who have not eaten to choose a high-calorie snack to consume just after a future lunch (Read & van Leeuwen, 1998). And people who are hungry because they have not eaten expect to be more interested in eating a plate of spaghetti for breakfast than people who are sated (Gilbert, Gill, & Wilson, 2002). These *empathy gaps* occur largely because people believe that their preferences and decisions are based primarily on the inherent desirability of choice alternatives rather than affectively influenced constructions of those alternatives (Griffin & Ross, 1991; Pronin, Gilovich, & Ross, 2004; L. Ross & Ward, 1996).

Our dual-judgment model of emotional perspective taking implies that these empathy gaps in self-predictions produce corresponding empathy gaps in social predictions. We have recently tested this prediction in studies that involved bodily drive states and self-conscious emotions.

In one study, we asked people to read a description of three hikers lost in the Colorado mountains without food or water, to predict whether hunger or thirst would be more distressing to the hikers, and to predict which the hikers would regret more, not bringing water or not bringing food on their hike (Van Boven & Loewenstein, 2003). We also asked people to predict what would be more distressing to themselves and what they would regret more if they were in the hikers' situation. We randomly assigned people entering an exercise facility to answer these questions either immediately before or immediately after engaging in vigorous cardiovascular activity for at least 20 minutes, which we assumed would make them thirsty and warm.

Consistent with our model of emotional perspective taking, people's exercise-induced thirst influenced their predictions of how the hikers (and they themselves) would feel. Nearly everyone who had just exercised expected that both they themselves and the hikers would be more bothered by thirst and would regret not bringing water more than not bringing food. In contrast, only about half of the people who were just about to exercise predicted that they themselves and the hikers would be more bothered by thirst and would regret more not bringing water. Although we could not measure hikers' actual feelings, given that people die of dehydration more quickly than starvation, we strongly suspect that thirst would be more bothersome to the hikers than hunger (a suspicion supported by various informal and unintended personal investigations by the two authors).

People who were less thirsty because they had not exercised thus experienced an empathy gap when making predictions about the hikers that mirrored the empathy gap they experienced in predicting their own preferences. Additional path analyses indicated that, statistically speaking, the empathy gaps in self-predictions fully explained the empathy gaps in people's predictions of the hikers' feelings. After accounting for the impact of exercise on self-predictions, there was no residual impact of exercising on people's predictions of the hikers' feelings.

We have also shown that people experience empathy gaps when predicting how other people would react to situations that arouse self-conscious emotions. In particular, embarrassment and the desire to avoid it is a powerful psychological restraining force: many important failures to act can be attributed to fear of embarrassment, including nonintervention in emergency situations (Latane & Darley, 1970) and nonopposition to unpopular policies or social norms (Miller & McFarland, 1987; Prentice & Miller, 1993; Van Boven, 2000).

Despite the frequency with which people confront embarrassing situations, we have found that they systematically underestimate the impact that fear of embarrassment would have on their preferences and decisions. Specifically, when embarrassing public performances are purely hypothetical or in the psychologically distant future, people overestimate how willing they would be to perform, compared to when the performances are real and immediate (Van Boven, Loewenstein, Dunning, & Welch, 2004). According to our model of emotional perspective taking, these empathy gaps in self-prediction should contribute to underestimating the impact of fear of embarrassment on other people.

In one experiment, we asked half of the students in a large lecture class whether they would be willing to dance for 1 minute in front of the rest of the class to Rick James's 1981 funky song "Super Freak" in exchange for \$5 (Van Boven et al., 2005, Experiment 2). The other half of the class was asked simply to imagine that they had been given the option of dancing for \$5 and to predict whether they would dance if they were actually given the choice to do so. In addition, both groups of students were asked to predict the decision made by a randomly selected student (other than themselves) who actually faced the choice of dancing for money.

As in our previous research (Van Boven, Loewenstein, Dunning et al., 2004), a larger fraction of students facing a hypothetical performance predicted they would be willing to dance (31%), as compared with the fraction of students who were actually willing to dance (8%). More important for the present purposes, students who themselves faced a purely hypothetical performance predicted that other students would

be more willing to dance (30%) than students who themselves faced a real performance (16%).

As with the study of people's predictions of the hikers' feelings, these results indicate that people who themselves faced a hypothetical decision to dance, and were in a relatively cold state, experienced an empathy gap when predicting others' decision to dance. This empathy gap in social prediction mirrored an empathy gap in self-prediction. Furthermore, subsequent analyses indicated that empathy gaps in self-predictions statistically explained the empathy gaps in predictions of others' willingness to engage in an embarrassing public performance. After accounting for the influence of facing a real or hypothetical decision to dance on self-predictions, there was no residual impact of the real or hypothetical nature of the decision on people's predictions of others' decision to dance.

Notice that students who faced a real performance expected that others would be more willing to dance than they were themselves. This difference between predictions of self and others is consistent with previous research indicating that people tend to believe that others are less influenced by fear of embarrassment than they themselves are (McFarland & Miller, 1990; Sabini, Cosmas, Siepmann, & Stein, 1999; Van Boven, 2000). In terms of our model, people's intuitive theory that others are less influenced by fear of embarrassment than the self influences their assessment of the similarity between their self- and social predictions (the horizontal solid arrow in Figure 18.1). The fact that students expected others to be more willing to dance than themselves illustrates their assessment of similarity—or dissimilarity, in this case—between self and others.

Taken together, our studies indicate that people experience empathy gaps in emotional perspective taking that mirror empathy gaps in self-predictions. People who are in a cold, nonemotional state underestimate the impact of being in a hot, emotionally arousing situation on other people's preferences and behaviors, just as they underestimate the impact of being in a hot state on their own preferences and behaviors.

# **QUESTIONS AND CONSEQUENCES**

# **Predicting Feelings versus Choices**

Our results join a large and growing body of research on predicting the psychological impact of emotional situations. Other researchers have found that people overestimate the intensity and duration of their feelings in response to emotional events (Gilbert & Wilson, 2000; Wilson & Gilbert, 2003). This so-called impact bias result might seem inconsistent

with our findings that people underestimate the impact of emotional situations on their preferences and choices. This contradiction may be more apparent than real, however. The impact bias occurs when people in a cold state predict how being in an emotional situation would influence their feelings, whereas empathy gaps occur when people in a cold state predict how being in an emotional situation would influence their preferences and decisions. There is an important conceptual distinction between feelings, the phenomenological manifestation of emotional arousal, versus preferences and decisions, the selection of one alternative over other alternatives (Van Boven & Kane, in press). Because feelings, preferences, and decisions are conceptually distinct, there is not necessarily a logical inconsistency between differences in predictions of feelings versus preferences and decisions.

Still, an intriguing possibility is that people simultaneously overestimate the influence of emotional situations on their own and others' feelings while underestimating the influence of emotional situations on their own and others' preferences and decisions. Testing the veracity of this conjecture is an important task for future research. In any event, the complexities of emotional perspective taking would be substantially advanced by understanding the differences between empathy gaps and impact bias in self-predictions.

# Top-Down versus Bottom-Up Perspective Taking

Ames (Chapter 10, this volume) distinguishes between perspective taking from the bottom up and from the top down. In bottom-up perspective taking, perceivers use the raw data of physical actions and social behavior to infer others' mental states. In top-down perspective taking, perceivers use higher-level mental constructs such as theories, introspections, and stereotypes to infer others' mental states, with little or no reference to others' concrete actions. Our model is clearly of the top-down variety: People use their self-predictions as a basis for inferring others' preferences and decisions. Of course, participants in our studies were asked to make judgments about hypothetical or anonymous others, so there was little or no opportunity for them to make bottom-up inferences. An important question, then, is to what extent people use self-predictions as a basis for judging the preferences of other real, specific, "live" individuals who are in emotional situations.

This question, ultimately, is empirical. We suspect, however, that it is extremely difficult for people to set aside their self-predictions when making social predictions and that they are reluctant to do so even when provided with ample behavioral evidence about others' preferences. Self-knowledge is often more accessible than social knowledge: we simply

have a greater amount of more easily retrievable knowledge about our own personal history, preferences, attitudes, and beliefs. This differential accessibility may directly increase the weight of the self in emotional perspective taking (Ross & Sicoly, 1979; Taylor, 1982; Tversky & Kahneman, 1973).

## Behavioral Misinterpretation

Furthermore, when people are in different emotional situations from their interaction partner, they may have difficulty in taking others' behavior at face value, as it were. When other people are in an emotional situation, it may be difficult not to predict how oneself would react (Hodges & Wegner, 1997). This self-prediction, once made, is likely to serve as an (erroneous) expectation against which others' behaviors are judged (Reeder, Fletcher, & Furman, 1989). In our study of dancing for money, for example, a student facing a hypothetical choice may use her erroneous prediction that she would dance for \$5 as a basis for inferring that another's decision not to dance reflects the nondancer's dispositional shyness rather than a normal reaction to an embarrassing situation. Self-predictions may thus lead people in cold states to misinterpret the actions of people who are in emotional situations.

These misinterpretations, in turn, can cause people in nonemotional states to behave differently toward people in emotional states from how they would if they had a true appreciation of the power of emotion to shape preferences and behavior. Nonaddicted policymakers, for example, may misinterpret crimes induced by drug craving as caused by the perpetrators' dispassionate calculations of costs and benefits—a misinterpretation that could foster policies of deterrence and punishment rather than treatment and prevention.

#### CONCLUSION

Conventional psychological wisdom holds that social judgment is egocentric: judgments of others are made in comparison to the self, in service of the self, and in the direction of the self. Much of the conventional evidence for this wisdom is the strong correlation between judgments of the self and others (Krueger, 1998). The status quo has recently been challenged with the claim that correlations between self and social judgments are the spurious result of prototypes (Karniol, 2003) or implicit theories (Gopnik, 1993) about the way minds work. A central feature of these challenges is that both self- and social judgments are based on a single stable prototype or theory of how people feel, think, and behave in different situations.

The results of our studies present a strong case that social judgments can be truly egocentric. Our results indicate that arousing emotions in oneself influences predictions of others' preferences and decisions—evidence that is difficult to explain from a prototype or implicit theory point of view. Why would exercise affect people's theory or prototype of lost hikers' thirst? Why would facing a real, as opposed to hypothetical, embarrassing performance influence theories or prototypes of whether university students would dance for money? We concur that correlations between self- and social judgments are often misinterpreted as indicators of causal relationships when they may simply reflect judgments based on prototypes, theories, or response biases. But our model and, more importantly, the results of our studies indicate that genuinely egocentric social judgment, at least in the case of emotional perspective taking, is alive and well.

#### REFERENCES

- Bosveld, W., Koomen, W., & van der Pligt, J. (1994). Selective exposure and the false consensus effect: The availability of similar and dissimilar others. *British Journal of Social Psychology*, 33, 457-466.
- Dawes, R. M. (1989). Statistical criteria for establishing a truly false consensus effect. Journal of Experimental Social Psychology, 25, 1-17.
- Dawes, R. M. (1990). The potential nonfalsity of the false consensus effect. In R. M. Hogarth (Ed.), *Insights in decision making: A tribute to Hillel J. Einhorn* (pp. 179–199). Chicago: University of Chicago Press.
- Gilbert, D. T., Gill, M. J., & Wilson, T. D. (2002). The future is now: Temporal correction in affective forecasting. Organizational Behavior and Human Decision Processes, 88, 430-444.
- Gilbert, D. T., & Wilson, T. D. (2000). Miswanting: Some problems in the forecasting of future affective states. In J. Forgas (Ed.), Feeling and thinking: The role of affect in social cognition (pp. 178–198). Cambridge, U.K.: Cambridge University Press.
- Gilovich, T. (1990). Differential construal and the false consensus effect. Journal of Personality and Social Psychology, 59, 623-634.
- Gilovich, T., Jennings, D. L., & Jennings, S. (1983). Causal focus and estimates of consensus: An examination of the false consensus effect. *Journal of Personal*ity and Social Psychology, 45, 550-559.
- Gopnik, A. (1993). How we know our minds: The illusion of first-person knowledge of intentionality. *Behavioral and Brain Sciences*, 16, 1-14.
- Griffin, D. W., & Ross, L. (1991). Subjective construal, social inference, and human misunderstanding. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 24, pp. 319–359). San Diego, CA: Academic Press.

- Hoch, S. J. (1987). Perceived consensus and predictive accuracy: The pros and cons of projection. Journal of Personality and Social Psychology, 53, 221– 234
- Hodges, S., & Wegner, D. M. (1997). Automatic and controlled empathy. In W. Ickes (Ed.), *Empathic accuracy* (pp. 311–339). New York: Guilford Press.
- Karniol, R. (2003). Egocentrism versus protocentrism: The status of the self in social prediction. *Psychological Review*, 110, 564-580.
- Krueger, J. (1998). On the perception of social consensus. In M. Zanna (Ed.), Advances in experimental social psychology (Vol. 30, pp. 163–240). San Diego, CA: Academic Press.
- Krueger, J., & Clement, R. W. (1994). The truly false consensus effect: An ineradicable and egocentric bias in social perception. *Journal of Personality and Social Psychology*, 67, 596-610.
- Krueger, J., & Clement, R. W. (1997). Estimates of social consensus by majorities and minorities: The case for social projection. *Personality and Social Psychology Review*, 1, 299-313.
- Latane, B., & Darley, J. M. (1970). The unresponsive bystander: Why doesn't he help? Englewood Cliffs, NJ: Prentice-Hall.
- Loewenstein, G. (1996). Out of control: Visceral influences on behavior. Organizational Behavior and Human Decision Processes, 65, 272-292.
- Loewenstein, G., Nagin, D., & Paternoster, R. (1997). The effect of sexual arousal on predictions of sexual forcefulness. *Journal of Crime and Delinquency*, 32, 443–473.
- Loewenstein, G., O'Donoghue, T., & Rabin, M. (2003). Projection bias in predicting future utility. Quarterly Journal of Economics, 1209-1248.
- Marks, G., & Miller, N. (1987). Ten years of research on the false consensus effect: An empirical and theoretical review. *Psychological Bulletin*, 102, 72-90.
- McFarland, C., & Miller, D. T. (1990). Judgments of self-other similarity: Just like other people, only more so *Personality and Social Psychology Bulletin*, 16, 475–484.
- Miller, D. T., & McFarland, C. (1987). Pluralistic ignorance: When similarity is interpreted as dissimilarity. *Journal of Personality and Social Psychology*, 53, 298–305.
- Nickerson, R. S. (1999). How we know—and sometimes misjudge—what others know: Imputing one's own knowledge to others. *Psychological Bulletin*, 125, 737–759.
- Nickerson, R. S. (2001). The projective way of knowing: A useful heuristic that sometimes misleads. Current Directions in Psychological Science, 10, 168– 172.
- Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*, 64, 243–256.
- Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self versus others. *Psychological Review*, 111, 781-799.
- Read, D., & van Leeuwen, B. (1998). Time and desire: The effects of anticipated

- and experienced hunger and delay to consumption on the choice between healthy and unhealthy snack food. Organizational Behavior and Human Decision Processes, 76, 189–205.
- Reeder, G. D., Fletcher, G. J., & Furman, K. (1989). The role of observers' expectations in attitude attribution. *Journal of Experimental Social Psychology*, 25, 168–188.
- Ross, L., Greene, D., & House, P. (1977). The "false-consensus effect": An egocentric bias in social perception and attribution processes. *Journal of Experimental Social Psychology*, 13, 279–301.
- Ross, L., & Ward, A. (1995). Psychological barriers to dispute resolution. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 27, pp. 255–304). San Diego, CA: Academic Press.
- Ross, L., & Ward, A. (1996). Naive realism in everyday life: Implications for social conflict and misunderstanding. In E. S. Reed, E. Turiel, & T. Brown (Eds.), Values and knowledge (pp. 103-135). Mahwah, NJ: Erlbaum.
- Ross, M., & Sicoly, F. (1979). Egocentric biases in availability and attribution *Journal of Personality and Social Psychology*, 37, 322-336.
- Royzman, E. B., Cassidy, K. W., & Baron, J. (2003) "I know, you know": Epistemic egocentrism in children and adults. *Review of General Psychology*, 7, 38-65.
- Sabini, J., Cosmas, K., Siepmann, M., & Stein, J. (1999). Underestimates and truly false consensus effects in estimates of embarrassment and other emotions. Basic and Applied Social Psychology, 21, 233-241.
- Sherman, S. J., Chassin, L., Presson, C. C., & Agostinelli, G. (1984). The role of the evaluation and similarity principles in the false consensus effect. *Journal of Personality and Social Psychology*, 47, 1244-1262.
- Taylor, S. E. (1982). The availability bias in social perception and interaction. In D. Kahneman, P. Slovic, & A. Tversky (Eds.), Judgment and uncertainty: heuristics and biases (pp. 190–200). Cambridge, UK: Cambridge University Press.
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5, 207–232.
- Van Boven, L. (2000). Pluralistic ignorance and political correctness: The case of affirmative action. *Political Psychology*, 21, 267–276.
- Van Boven, L., & Kane, J. (in press). Predicting feelings and choices. In L. J. Sanna & E. C. Chang (Eds.), Judgments over time: The interplay of thoughts, feelings, and behaviors. New York: Oxford University Press.
- Van Boven, L., & Loewenstein, G. (2003). Social projection of transient drive states. Personality and Social Psychology Bulletin, 29, 1159-1168.
- Van Boven, L., Loewenstein, G., & Dunning, D. (2004). Changing places: A theory of empathy gaps in emotional perspective taking. Unpublished manuscript, University of Colorado, Boulder.
- Van Boven, L., Loewenstein, G., & Dunning, D. (2005). The illusion of courage in social-predictions: Underestimating the impact of fear of embarrassment on other people. Organizational Behavior and Human Decision Processes, 96, 130-141.

- Van Boven, L., Loewenstein, G., Dunning, D., & Welch, N. (2004). The illusion of courage: Underestimating the impact of fear of embarrassment on the self. Unpublished manuscript, University of Colorado, Boulder.
- Wilson, T. D., & Gilbert, D. T. (2003). Affective forecasting. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 35, pp. 345–411). San Diego, CA: Academic Press.