

You Don't Know Me, But I Know You: The Illusion of Asymmetric Insight

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People, it is hypothesized, show an asymmetry in assessing their own interpersonal and intrapersonal knowledge relative to that of their peers. Six studies suggested that people perceive their knowledge of their peers to surpass their peers' knowledge of them. Several of the studies explored sources of this perceived asymmetry, especially the conviction that while observable behaviors (e.g., interpersonal revelations or idiosyncratic word completions) are more revealing of others than self, private thoughts and feelings are more revealing of self than others. Study 2 also found that college roommates believe they know themselves better than their peers know *themselves*. Study 6 showed that group members display a similar bias—they believe their groups know and understand relevant out-groups better than vice versa. The relevance of such illusions of asymmetric insight for interpersonal interaction and our understanding of “naïve realism” is discussed.

What, reduced to their simplest reciprocal form, were Bloom's thoughts about Stephen's thoughts about Bloom and about Stephen's thoughts about Bloom's thoughts about Stephen?

—James Joyce, *Ulysses*

Oh wad some power the giftie gie us
To see oursels as ithers see us!

—Robert Burns, *To a Louse*

Everyday experience teaches that while people sometimes show deep insight about themselves and their peers, they also can display remarkable ignorance or delusion. Research similarly documents both our capacity for interpersonal and intrapersonal accuracy (e.g., Albright et al., 1997; Kolar, Funder, & Colvin, 1996; Levesque, 1997; Malloy, Albright, Kenny, Agatstein, & Winquist,

1997) and our susceptibility to various systematic sources of inaccuracy and bias (e.g., Kruger & Dunning, 1999; Lord, Scott, Pugh, & Desforges, 1997; Ross & Ward, 1996; Vorauer & Miller, 1997). Less attention, however, has been paid to the focus of Joyce's and Burns's concerns—that is, people's perceptions and beliefs about each others' interpersonal and intrapersonal insight.

The origin of the present thesis lies in part in reflection about everyday social interaction. We often feel that our behavior has been misinterpreted or our character and motives misperceived. Furthermore, we have grave doubts that anyone can know us who has not “walked in our shoes,” “seen the world through our eyes,” or “looked into our heart and mind.” At the same time, while we know from experience that we sometimes misjudge our peers, we continue to feel that there are at least some important respects in which we may know them better than they know themselves. We insist that our “outsider perspective” affords us insights about our peers that they are denied by their defensiveness, egocentricity, or other sources of bias. By contrast, we rarely entertain the notion that others are seeing us more clearly and objectively than we see ourselves. Although one may muse that, “sometimes Jean knows me better than I know myself,” such a statement generally is less a concession about any overall lack of self-insight or a penchant for self-delusion than a tribute to the closeness of the relationship one enjoys with a trusted and sympathetic friend—someone with whom one has shared one's deepest thoughts and feelings. Before proceeding to the studies conducted to support these ideas, however, a brief review of some earlier theorizing and research dealing with the limitations of interpersonal and intrapersonal perception, and with people's ability to recognize these limitations, is in order.

Impressions About Interpersonal Knowledge and Insight

A generation of social psychologists has explored the tendency for observers to make social inferences that the relevant actors

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would find inaccurate and unwarranted. In particular, there is considerable evidence that observers, at least in Western society, tend to make dispositional attributions for behavioral choices or outcomes that the actors' personally would attribute to situational pressures and constraints (e.g., Jones & Davis, 1965; Jones & Nisbett, 1972; see also Gilbert & Malone, 1995) and, furthermore, that in such cases it is the observers who are more likely to be in error (Nisbett & Ross, 1980; Ross, 1977; Ross & Nisbett, 1991).

Observers' inadequate allowance for relevant situational influences can give rise to hasty and inaccurate, or at least overconfident, interpersonal inferences. In overlooking situational forces, observers may rely on implicit personality theories (Bruner & Tagiuri, 1954; Schneider, 1973) that lead them to infer particular traits on the basis of what they already know or assume about a person. Unwarranted inferences may further arise from reliance on inaccurate or overly broad stereotypes (e.g., Brodt & Ross, 1998) or overestimation of group homogeneity (e.g., Quattrone & Jones, 1980). Such inferences, moreover, are apt to arise quickly and easily, even unconsciously (see Winter, Uleman, & Cunniff, 1985; see also Bargh, 1997; Fiske & Taylor, 1991; Greenwald & Banaji, 1995; Uleman, Hon, Roman, & Moskowitz, 1996). All of these factors, in turn, contribute to the tendency for individuals to make interpersonal assessments with a degree of confidence that is in excess of what might be warranted by their objective accuracy (e.g., Dunning, Griffin, Milojkovic, & Ross, 1990).

Although people may often be oblivious to errors in their assessments about others, they are quick to note errors in inferences and attributions made by others about them. In fact, there is evidence that people tend to overestimate the extent to which their peers are guilty of unwarranted dispositional inferences (Van Boven, Kamada, & Gilovich, 1999). People also tend to view themselves as more variable across situations (Sande, Goethals, & Radloff, 1988), and hence more difficult to know—or at least to describe in terms of broad dispositional traits, than their peers (Nisbett, Caputo, Legant, & Marecek, 1973). These tendencies, along with the fact that people sometimes are unaware of how they are being perceived, and that they may refrain from correcting each other even when they are aware, leave all concerned with the impression that their judgments about others are more accurate than others' judgments about them.

The doubts we harbor about others' knowledge of us may in part reflect convictions about our "knowability." Most of us feel that our true nature lies "beneath the surface" or "backstage" (Goffman, 1959), reflected most faithfully in unobservable aspects of the self such as thoughts, feelings, motives, goals, and formative memories (Markus, 1983). However, our convictions about the diagnosticity of private versus public manifestations of the self seem less strong when it comes to assessments we make about our peers (e.g., Andersen, 1984; Andersen & Ross, 1984). That is, we may be inclined to feel that our peers largely reveal themselves by their overt words and deeds, that public and private manifestations of self are less incongruent for others than for ourselves (e.g., Miller & McFarland, 1987; Miller & Prentice, 1994; Prentice & Miller, 1996; see also Johnson, 1987; Johnson, Struthers, & Bradlee, 1988) and that others' internal selves are more likely than our own to "leak" out even in acts that are subject to strong situational pressures and constraints (Lord et al., 1997). Such an asymmetry, *it should be noted*, may arise not from explicit beliefs about the

relative diagnosticity of public and private events for self versus others, but from mundane availability biases that give us less access to our peers' private thoughts and feelings than our own, and (unless we are looking in the mirror) a better vantage point in observing their behavior than our own (Jones & Nisbett, 1972).

The claim that people believe themselves to be more accurate in assessing their peers than vice versa can also be seen as a special case of *naive realism*. That is, we feel that our own perceptions reflect the true nature of things, and thus assume that, to the extent that others perceive events or objects of judgment (including "us" and "them") differently, those others reveal the impact of various perceptual, cognitive, or motivational biases (see Ichheiser, 1949; also Pronin, Puccio, & Ross, in press; Ross & Ward, 1996).

Impressions About Intrapersonal Knowledge and Insight

Laypeople and social psychologists alike are aware that assessments people make about themselves, like those they make about others, can be biased. Experiences with the foibles of peers, and ample research, leave little doubt that people tend to make overly charitable self-assessments (see Greenwald, 1980; Taylor & Brown, 1988, for reviews; see also, Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Dunning, Perie, & Story, 1991). Research further suggests that while we may be blind to such self-enhancement tendencies in ourselves, we are well aware of those tendencies in others (Friedrich, 1996). Indeed, we may overestimate the degree to which others self-enhance (Kruger & Gilovich, 1999). Such overestimates, coupled with obliviousness to our own biases, foster the conviction that our self-knowledge exceeds that of our peers'—and that our insights about our peers, particularly about their shortcomings, may sometimes exceed their own self-insight.

Lack of self-awareness may reflect something more fundamental than motivated self-enhancement. It may reflect the limited value of introspection itself—at least when it comes to discerning the causes and implications of one's behavior (Nisbett & Wilson, 1977b; see also, Gergen, 1987; Nisbett & Wilson, 1977a). Although the unique and rich set of information available to the actor can foster self-insight, it can also foster error—insofar as such information generates explanatory "red herrings," or clues about possible motivations that are more salient than probative (e.g., Buehler, Griffin, & Ross, 1994; Nisbett & Ross, 1980; Wilson, Hodges, & LaFleur, 1995; see also, Kahneman & Lovallo, 1993).

These introspective shortcomings compromise the accuracy of our self-knowledge more than most of us recognize. In fact, the tendency for people to make predictions with greater subjective confidence than is warranted by their objective accuracy appears to be just as pronounced in predictions about self as in predictions about others (Vallone, Griffin, Lin, & Ross, 1990). Indeed, Kolar et al. (1996) presented evidence that an individual's self-assessments have less predictive value than the pooled assessments of two acquaintances.

There is one set of findings we should note that may appear to constitute a counterexample to the research reviewed thus far. We refer to research on the *illusion of transparency* or heightened salience of self (Gilovich, Savitsky, & Medvec, 1998; Miller & McFarland, 1987; Vorauer & Claude, 1998; Vorauer & Miller, 1997; Vorauer & Ross, 1999). This research shows that people sometimes feel as though their internal feelings and motives are

transparent to observers or that they are in the “spotlight” of others’ attention (Gilovich, Medvec, & Savitsky, 2000), particularly when they find themselves in embarrassing circumstances or engaging in behaviors that heighten self-consciousness. We would argue, however, that such feelings do not create the sense that others are accurately discerning one’s essential qualities. On the contrary, the discomfort that one feels in such circumstances arises in large measure precisely because one fears that *erroneous* inferences are being made.

The Present Research

Our research review thus suggests that people’s blindness to the biases that compromise their assessments of others is complemented by considerable insight about the role that such biases play in compromising others’ assessments about them. Lack of awareness regarding limitations in our knowledge about ourselves and about the factors controlling our judgments and decisions is similarly complemented by considerable insight, or at least strongly held beliefs, about the limitations in self-insight shown by our peers. Two hypotheses and a corollary follow from such characterizations of the beliefs laypeople hold about interpersonal and intrapersonal knowledge:

1. People think that they know others better than others know them (interpersonal knowledge hypothesis).
2. People think they know themselves better than others know themselves (intrapersonal knowledge hypothesis).
3. As a consequence of these two hypothesized biases, people think that the discrepancy between how well they know themselves and how well their peers know them is greater than the corresponding discrepancy between their peers’ self-knowledge and their knowledge of their peers. Indeed, people may sometimes think they know their peers better than their peers know themselves, but they rarely if ever feel that their peers know them better than they know themselves.

Five studies were conducted to examine the postulated illusions of asymmetric insight. A sixth study extended these hypotheses from interpersonal to intergroup perceptions by exploring the possibility that individuals see their own group as more accurate and insightful in its perception of the other group than vice versa.

Study 1: Close Friends’ Assessments of Interpersonal Knowledge

In our first study, we sought to test the interpersonal knowledge hypothesis by determining whether study participants believed they knew their close friend better than he or she knew them. We further sought evidence for a postulated underlying mechanism: that is, the tendency for the individual to believe that his or her personal nature was less “visible”—and more “hidden beneath the surface”—than that of his or her close friend.

Method

Participants. A total of 125 undergraduates from Williams College and the University of Illinois earned psychology course credit for their participation. (No significant between-school differences were found, and responses from the two schools are combined in our analyses.)

Procedure. Participants completed a questionnaire instructing them to think of a friend and answer several questions with this person in mind.

Specifically, participants were asked to “think of a friend who is very close to you . . . this person may be your best friend, someone from high school, a friend from college, or anyone you think of as a good, close friend” and to write his or her initials. Next, they answered a series of questions asking about their knowledge of their friend and vice versa (with order of questions about self versus other counterbalanced). Thus half the participants were first asked how well they knew their friend (using a scale anchored at 1 [*I don’t know him/her at all*] and 11 [*I know him/her perfectly*]), then to rate the extent to which they felt they understood their friend’s thoughts, feelings, motives, and personality (using a scale anchored at 1 [*friend is tragically misunderstood by me*] and 11 [*friend is completely understood by me*]) and finally to indicate the degree to which their friend’s essential nature was observable to them versus hidden beneath the surface. Participants responded to the latter measure by circling 1 of 10 partially submerged icebergs pictured on the questionnaire instrument (see Appendix). The measure was introduced as follows:

Everyone has some part of them that others do not know, understand, or “get.” In this way, people are like icebergs—part of us is visible and known to others, and part of us is hidden beneath the surface. Of course, exactly how much is above the surface and how much is below the surface varies from person to person. What we would like you to do is think about how well you know your friend. How much of whom your friend is do you “see,” and how much is hidden?

This group of participants then answered these same questions with respect to their friend’s knowledge of them and the degree to which their essential nature was observable to their friend versus hidden beneath the surface. The remaining participants answered the same questions, but they made assessments about their friend’s knowledge of them before assessing their knowledge of their friend.¹ Finally, all participants explicitly compared their knowledge of their friend and vice versa using a bipolar scale anchored at –5 (*friend knows me much more than I know him/her*) and 5 (*I know friend much more than he/she knows me*) with a midpoint of 0 (*we know each other equally well*).

Results and Discussion

Our primary analyses compare participants’ ratings of their knowledge of their friend versus their friend’s knowledge of them. As predicted, participants estimated that they knew their friend ($M = 8.89$) better than their friend knew them ($M = 8.64$), $t(124) = 2.26, p < .03$. Similarly, participants were more likely to feel that they understood their friend ($M = 8.23$) than vice versa ($M = 7.95$), $t(124) = 2.05, p < .05$. A similar pattern emerged when participants assessed their knowledge of their friend relative to their friend’s knowledge of them on a single bipolar scale. Responses exceeded the midpoint of the scale (indicating a claim of greater knowledge of one’s friend than vice versa) by about 1/3 of a scale point, $t(124) = 2.94, p < .005$. Furthermore, whereas 48 of the 125 participants claimed to know their friend better than vice versa, only 24 participants made the opposite claim, $Z = 2.83, p < .005$.

Finally, and particularly relevant to our claims about the source of the perceived asymmetry in knowledge, it is noteworthy that participants selected a more deeply submerged iceberg when de-

¹ Participants tended to show more of the predicted bias when they first rated how well they knew their friend than vice versa. Because this order effect reached the conventional .05 significance level for only one of the four measures included in the study, and is not found in any of the subsequent studies in this article, it is not discussed further.

scribing how visible they were to their friend ($M = 7.67$, for which 1 represented a totally submerged iceberg) than when describing how visible their friend was to them ($M = 8.02$), $t(124) = 3.19$, $p < .003$. In other words, participants seemed to feel that more of whatever it was that made them who they were lay hidden beneath the surface (unobservable even to a close friend!) than was the case for their friend.

The results of our first study thus provide at least tentative evidence both for the interpersonal knowledge hypothesis (i.e., the belief that one knows others better than others know oneself) and for a specific mechanism hypothesized to underlie this bias (i.e., the belief that one's "true self" is less observable and therefore less knowable than that of others). Although the relevant mean differences were small in absolute terms, the results of this study are provocative. They also raise several questions. First, does this perceived asymmetry pertain uniquely to assessments about self versus friends, or does it apply more generally (indeed, might it apply more strongly) to assessments of other people with whom one interacts? Second, could this perceived asymmetry simply reflect a tendency for psychology students to believe (perhaps justifiably) that they are more insightful than less "psychologically inclined" peers? Finally, to what extent is the perceived asymmetry regarding interpersonal awareness accompanied by a similar one regarding intrapersonal awareness? It is to these questions, as well as some further questions about the sources and domains of the postulated biases, that we turn in Study 2.

Study 2: Roommates' Assessments of Interpersonal and Intrapersonal Knowledge

Study 2 investigated the postulated biases in assessments of both interpersonal and intrapersonal knowledge by presenting college roommates with a questionnaire in which they were asked to make the following four judgments with respect to a variety of domains: (a) "How well do I know myself?" (b) "How well do I know my roommate?" (c) "How well does my roommate know me?" and (d) "How well does my roommate know himself or herself?" By using roommate pairs as the unit of analysis, we were able to directly compare symmetric actor and observer assessments within a given dyad. This procedure also precluded any selection bias (of the sort possible in Study 1) that could lead to an overrepresentation of individuals who did in fact possess, or at least had reason to believe that they possessed, greater interpersonal or intrapersonal insight than the individual they were assessing.

Beyond allowing us again to test the postulated asymmetries in perception of intrapersonal and interpersonal knowledge, the questionnaire items used in Study 2 allowed us to make a number of theoretically relevant comparisons. One comparison again involved a distinction between relatively private or internal manifestations of self (wherein we expected the postulated asymmetries to be most pronounced) versus relatively public or externally observable ones (wherein we expected the postulated asymmetries to be least pronounced). A second comparison involved the valence of the relevant manifestations of self. Previous research in our laboratory suggested that individuals are apt to see their peers as more susceptible than themselves to various judgmental biases, including ones that bolster positive views about the self (e.g., Pronin, Lin, & Ross, in press; Pronin et al., in press; see also Friedrich, 1996). Accordingly, we expected individuals in Study 2

to doubt others' self-knowledge more (relative to their own) when the response domains in question pertained to behavior that could reflect badly on the relevant actor.

The third comparison of interest in Study 2 involved the intimacy of the relationship between the individuals assessing themselves and each other. Although Study 1 participants had been asked about a close friend, evidence from previous research suggests that the postulated illusions of asymmetric insight might actually be less likely to occur among such individuals than among individuals who are not linked by close friendship. Specifically, intimates or close friends have proven more likely than nonintimates both to agree in their perceptions of each other (e.g., Funder & Colvin, 1988; Kenny & Kashy, 1994; McNulty & Swann, 1994) and to be blind to each other's negative qualities (e.g., Murray, & Holmes, 1994; Taylor & Koivumaki, 1976). We thought it reasonable, accordingly, to assume that intimates would also be less likely than nonintimates to claim greater interpersonal and intrapersonal insight than their partners.

Our final concern in Study 2 (raised by reviewers of this article) involved the possibility that people might simply prove unwilling or unable to offer judgments about their peers' self-knowledge. Such assessments are not uncommon in casual conversations (in which one hears comments that a particular colleague is deluded about her talents or even about her motives, or that some respected elder has attained a high level of "self-awareness"). Rather than relying solely on such observations, however, we conducted a brief survey to assess whether our research participants would be willing to offer judgments—in fact, make *distinctions* rather than simply check the midpoint of the relevant scale—with regard to the intrapersonal knowledge displayed by other individuals. Specifically, we had undergraduates ($N = 63$) familiar with the then-popular TV show *Seinfeld* rate their own self-knowledge and that of two characters ("Jerry" and "Elaine") in the show. Most importantly in terms of our immediate concerns, they showed themselves willing not only to make the relevant assessments but also to distinguish between the level of self-knowledge shown by Jerry ($M = 4.86$) versus Elaine ($M = 4.15$), $p < .0001$. (Incidentally, they saw their own self-knowledge [$M = 5.56$] as superior to Jerry's and Elaine's, $p < .0001$.) With these encouraging pilot data on hand, we proceeded to address our hypotheses regarding perceptions of intrapersonal, as well as interpersonal, knowledge.

Method

Participants. Forty-five same-sex pairs of college roommates were recruited from three Stanford University dormitories predominantly occupied by 1st-year students.² Participants received free pizza for their efforts.

Procedure and questionnaire. Participants in each pair were assured that their roommate would not see their responses. They were also directed to complete the questionnaires at opposite sides of their dormitory common areas. Questionnaire items varied both in the domain addressed (e.g., behavioral, motivational, dispositional, affective, or moral) and in the level of generality of the inquiry (ranging from frequency of the specific act of looking in the mirror to overall knowledge about the individual). With

² Of this total, 19 pairs were men, 21 pairs were women, and 5 did not indicate their gender. Preliminary analyses revealed no significant gender differences relevant to the postulated assessment biases; accordingly, subsequent analyses were conducted combining data for male and female pairs, and gender receives no further attention in this article.

respect to each domain (i.e., shyness, messiness, competitiveness, propensity to take risks, susceptibility to flattery, way of handling stress, weight given to moral considerations, frequency of looking in the mirror, doing things to "fit in," and doing things "just to make others happy") participants were asked both about self (e.g., "How shy a person are you?") and about their roommate (e.g., "How shy a person is your roommate?") using appropriately anchored 9-point scales (e.g., *not at all shy* and *very shy*).

More important, the questionnaire also posed the two questions about interpersonal knowledge (e.g., "How well do you know how shy your roommate is?" and "How well does your roommate know how shy you are?") and intrapersonal knowledge (e.g., "How well does your roommate know how shy he or she is?" and "How well do you know how shy you are?"), on 9-point scales anchored at *not well at all* and *very well*. Finally, the same knowledge questions were posed with regard to two broader assessment domains—knowledge of motives for action, and knowledge of "real" feelings about things—and two general assessment domains—knowledge about specific domains addressed in the earlier part of the questionnaire, and overall knowledge, "all things considered."³ All items except for the two general ones (which were examined separately) were combined to form a 12-item composite for purposes of analysis.

The questionnaire concluded by asking the roommates to indicate their gender and academic year and to characterize their relationship with their roommate as just acquaintances, friends, close friends, or "other" (with room provided for elaboration).

Results and Discussion

Study 2 provided evidence supporting each of our three hypotheses. Table 1 presents means and standard deviations for the four types of knowledge ratings, and for the postulated discrepancies, using both the 12-item composite and the single item rating overall knowledge. Results for the composite (with dyad as the unit of analysis) reveal that, overall, participants believed that they knew their roommate (SkR) better ($M_{SkR} = 5.74$) than their roommate knew them (RkS; $M_{RkS} = 5.50$), $t(44) = 2.96$, $p < .005$. Furthermore, they thought that their own self-knowledge (SkS; $M_{SkS} = 7.39$) exceeded their roommate's self-knowledge (RkR;

$M_{RkR} = 6.70$), $t(44) = 5.54$, $p < .0001$. As a result, and as predicted, they thought that the discrepancy (d) between their own self-knowledge and their roommate's knowledge of them ($M = 1.89$) was greater than the corresponding discrepancy between their roommate's self-knowledge and their knowledge of that roommate ($M_d = 0.97$), $t(44) = 5.51$, $p < .0001$. (This pattern of data is illustrated for the item measuring overall knowledge and for three other specific items in Figure 1.) Our three hypotheses were also supported by the item calling for ratings of overall knowledge, all $ps < .001$ (see Table 1).

Beyond providing evidence of the three postulated biases in perceptions of intrapersonal and interpersonal knowledge, we were interested in further exploring when they occur and thus gaining a better understanding of why they occur. In particular, we sought to determine whether, as our conceptual analysis (and the results of our "iceberg measure" in Study 1) suggested, these biases would be more pronounced for judgments involving knowledge about private and unobservable qualities of self rather than for judgments involving public and observable ones. We further sought to determine whether the relevant biases would be more pronounced for judgments involving relatively negative qualities rather than positive or neutral ones and would be less pronounced when the roommates in question were also close friends.

Public-private nature of domain. To pursue the issue of domain "observability," we simply categorized the knowledge domains addressed in our study as relatively *observable* or relatively *private*, and examined the relevant rating discrepancies for each category. The observable category included four items associated with obvious behavioral correlates (i.e., messiness, susceptibility to flattery, risk-taking, and frequency of looking in the mirror). The private category included four items associated with internal feelings or motives that would be difficult to observe (i.e., "real" feelings, motives for actions, doing things for the purpose of fitting in, and doing things just for the purpose of pleasing others). Four items that were ambiguous with respect to this categorization or that involved both observable and private responses (i.e., shyness, competitiveness, giving weight to moral considerations, and ability to handle stress) were excluded from these analyses.

Not surprisingly, participants rated interpersonal knowledge as weaker in the case of more private characteristics than more observable ones, for both their knowledge of their roommate ($M_{private} - M_{observable} = -0.51$) and their roommate's knowledge of them ($M_{private} - M_{observable} = -0.71$). More relevant to present concerns, and as predicted, participants saw this relative inferiority in knowledge of private characteristics relative to public ones as

Table 1
Participants' Ratings of Own Versus Roommate's Interpersonal and Intrapersonal Knowledge: Study 2

Knowledge assessed	Assessments of knowledge held by		Difference
	Self	Roommate	
Interpersonal			
12-item composite			
<i>M</i>	5.74	5.50	0.24*
<i>SD</i>	0.92	0.83	0.54
Overall knowledge item			
<i>M</i>	6.21	5.69	0.52***
<i>SD</i>	1.46	1.71	0.73
Intrapersonal			
12-item composite			
<i>M</i>	7.39	6.70	0.69***
<i>SD</i>	0.66	0.80	0.83
Overall knowledge item			
<i>M</i>	7.86	7.42	0.44**
<i>SD</i>	0.83	0.94	0.80

Note. $N = 45$ dyads. Means are based on ratings provided on 9-point scales.

* $p < .01$. ** $p < .001$. *** $p < .0001$.

³ Two versions of the questionnaire were administered. In one version, participants first rated themselves and their roommate with respect to each domain (shyness, messiness, etc.), then immediately provided the relevant interpersonal and intrapersonal knowledge assessments for themselves and their roommate in that domain before proceeding to the next domain, and concluded by providing the relevant knowledge assessments for the three more general domains. In the second version, participants first responded to a randomly ordered set of assertions about self and roommate in the various domains (e.g., "I am shy," "My roommate is messy," etc.) and then to a randomly ordered set of assertions about the relevant types of knowledge for all the domains (e.g., "I know how competitive I am," "My roommate knows how messy she is," etc.). The two versions yielded very similar results, and analyses reported present data combined across them.

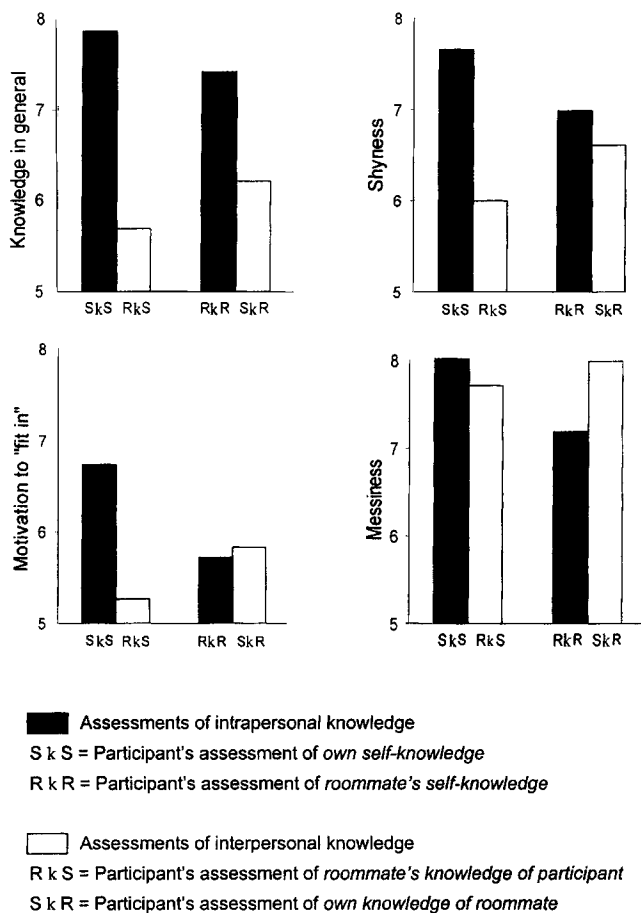


Figure 1. Perceived discrepancies between intrapersonal and interpersonal knowledge for self versus other (Study 2).

more substantial when it came to their roommate's knowledge of them than when it came to their knowledge of their roommate, $t(44) = 2.26, p < .05$. That is, the tendency for participants to think their knowledge of their roommate exceeded their roommate's knowledge of them was more pronounced for more private aspects of the self ($M_d = .33$) than more public ones ($M_d = .06$), $t(44) = 2.26, p < .05$.

Negative characteristics. To test our prediction that perceived differences in accuracy would be greatest with respect to perceptions of knowledge about personal faults or shortcomings—that is, in domains within which our participants thought that their roommates fell short—we relied on a correlational analysis. That is, we examined the correlation between participants' assessment that their roommates manifested a given negative trait and their assessment or assertion that they knew their roommates better with respect to that trait than their roommates knew themselves.⁴

The relevant correlations proved to be statistically significant for virtually all of the clearly negative characteristics that were rated, that is, for messiness ($r = .36, p < .001$), frequent looking in the mirror ($r = .37, p < .001$), susceptibility to flattery ($r = .34, p < .005$), handling stress (poorly) ($r = .32, p < .005$), competitiveness ($r = .29, p < .01$), and shyness ($r = .22, p < .05$). The only item for which the relevant correlation was not significant

was doing things just to fit in ($r = .13$). By contrast, no such correlations were apparent in ratings that pertained to positive or neutral characteristics, that is, propensity for taking risks ($r = .00$) and giving (heavy) weight to moral considerations ($r = .02$).⁵ It is also noteworthy that our participants generally showed no such correlation between their willingness to assert that they possessed a particular negative trait and their willingness to concede the possibility that their roommate might know them better than they knew themselves with respect to that trait (all correlation coefficients nonsignificant, except for doing things just to fit in, $r = -.22, p < .05$).

Relationship closeness. To determine whether intimacy of relationships might moderate the relevant biases, we simply classified relationships as *close* (if both participants rated each other as friends rather than acquaintances and either or both rated their roommate as a close friend) or *not close* (if the foregoing criteria were not met). As we had anticipated, nonclose pairs claimed a larger gap between how well they knew themselves and how well their roommates knew them ($M_d = 2.16$) than close pairs ($M_d = 1.53$), $F(1, 42) = 5.04, p < .05$. Roommates who were not close also claimed a slightly larger gap between their own self-knowledge and their roommate's self-knowledge ($M_d = .89$) than close roommates did ($M_d = .43$), $F(1, 42) = 3.55, p = .07$. The main source of both of these closeness effects was the tendency for participants to rate their roommate's self-knowledge as higher in close relationships ($M = 7.01$) than in nonclose relationships ($M = 6.43$), $F(1, 42) = 6.30, p < .05$.

Ruling out a simple self-serving bias interpretation. Some of our readers no doubt have entertained a different and in some way simpler account of the results we have reviewed thus far—one involving the general and much documented motivation for self-enhancement. To address this issue, we examined roommates' assessments on a number of personal characteristics unrelated to perceptions of knowledge. These ratings showed no consistent pattern of self-enhancement. Participants rated themselves as no better able to handle stress ($M = 6.44$) than their roommate ($M = 6.23$), and as no less shy ($M = 4.39$) than their roommate

⁴ We could not simply compare discrepancies for positive versus negative characteristics because we expected the relevant assessment to occur only in cases in which roommates were perceived to show a reasonably high degree of a given negative quality (because rating an individual low with respect to a negative quality, such as messiness, conveys something positive rather than negative about the individual in question). Our hypothesis accordingly was that our participants would rate their roommates as lacking in self-knowledge with respect to a given negative trait to the extent that they believed that their roommates did in fact possess that trait.

⁵ One other item, about "doing things just to please others," created some ambiguity. We initially thought this characteristic was clearly negative in its connotations (being inauthentic, not true to one's convictions, etc.). Moreover, the item did produce the relevant correlation between the tendency to characterize one's roommate in such terms and the tendency to claim to know one's roommate better than that roommate knows himself or herself, ($r = .36, p < .001$). Some colleagues, however, pointed out that the item could refer to simple kindness or altruism rather than inauthenticity, and two of the three research assistants we asked to interpret the item (both, perhaps not coincidentally, Asian Americans from relatively collectivist cultures) agreed. Although we thus did not treat the results for this item as a confirmation of our general prediction, we nevertheless thought our readers might find those results to be of some interest.

($M = 4.04$), both t s < 1 . Furthermore they rated themselves as more competitive than their roommate (M s = 6.72 vs. 5.60), $t(44) = 4.98$, $p < .0001$, and reported that they looked in the mirror more frequently than their roommate did (M s = 6.16 vs. 5.03), $t(44) = 4.78$, $p < .0001$.

We give further consideration to the issue of response domains later in this article. We suggest that the same public-private distinction featured in our conceptual analysis may help us to understand when and why self-enhancement is likely to occur in particular domains. For now, we merely note that postulation of a self-enhancement bias manifesting itself in a general tendency for individuals to claim superiority to their peers in personal traits and abilities, including interpersonal and intrapersonal insight, offers a less satisfactory account of our findings than the one we have offered. Our account points to observability of domain, the perception of particular blindness of others to their faults, and intimacy of relationship as potential mediators.

In summary, the results of Study 2 provide further evidence for the interpersonal knowledge hypothesis (i.e., that individuals think their knowledge of their peers is more accurate than vice versa) and new evidence for the intrapersonal knowledge hypothesis (i.e., that individuals think their own self-knowledge is greater than that of their peers) and for the corollary of these two hypotheses postulating a greater gap between the two types of knowledge for self versus others. Moreover, these asymmetries could not readily be explained in terms of any general self-serving motive. The results of Study 2 further suggest that these asymmetries are more pronounced with respect to perceived personal flaws than neutral or positive personal characteristics, more pronounced in the context of relatively distant relationships than close ones, and more pronounced with respect to more private aspects of self than more public ones.

The relevance of the public versus private dimension in our findings is worth further emphasis. To the extent that people consider private thoughts and feelings to be more accurate reflections of themselves than of their peers (and more public and observable responses more accurate reflections of their peers than themselves), they are essentially asserting that they are less knowable than their peers are. This suggestion (buttressed by the findings on the "iceberg measure" from Study 1 suggesting that individuals believe the true self to be more hidden and beneath the surface in their own case than that of a close friend) is pursued further in Study 3.

Study 3: Beliefs About the Observability of One's Own Versus Others' "True Self"

To some extent, beliefs about the superiority of one's own self-perceptions and social perceptions may reflect undue confidence about one's powers of observation and inference and a failure to recognize that one is prone to the same sources of error, bias, and self-deception as one's peers. But claims of such superiority may also arise from the conviction that one is in fact less "knowable"—at least from the behavioral observations that people rely on in making interpersonal inferences—than one's peers. Our third study explicitly addressed the possibility that people believe that although their essential qualities can only be discerned from knowledge of private thoughts and feelings, the essential qualities of their peers are discernible from words and deeds that occur in

interpersonal contexts (see Andersen, 1984; Anderson, & Ross, 1984).

Method

As part of an omnibus questionnaire, 200 introductory psychology students responded to an item requiring them to complete one sentence about themselves (i.e., "I am most like myself when I . . .") and a parallel sentence about a friend whose initials they were asked to specify (i.e., "My friend is most like himself or herself when he or she . . ."). They were asked to complete each sentence with a thought, feeling, or action that they believed most reflective of who they are (or who their friend is) "as a person" and what they are (or what their friend is) "really like." Sentence order was counterbalanced (and was not a significant factor).

Results and Discussion

Two raters, both undergraduate research assistants uninformed of our hypotheses, independently assessed the public versus private nature of the manifestations of self that respondents specified in answering the two questions. They used a 5-point scale, on which 1 denoted *completely private*, such that only the self would have access to the experience (e.g., an unexpressed emotion), 2 denoted *privileged access*, such that the experience was quite private but someone with privileged closeness could observe it (e.g., confiding to a best friend), 3 denoted *semipublic*, such as a response that might occur in the presence of a group of friends, 4 denoted *public*, such as a response that might occur regardless of who might observe it, and 5 denoted *public performance*, such that the response was intentionally directed to an audience.

High interrater agreement ($r = .81$) was obtained, suggesting that the relevant distinctions were reasonably clear to the raters. (For individual responses on which raters did not initially furnish the same rating, they were asked to resolve the relevant discrepancy and agree on a single rating.) The main finding that emerged from this coding involved a distinction between the first two categories (see Figure 2). As hypothesized, most of the claims that it was completely private contexts that were most diagnostic occurred when participants were answering the question about themselves (72%) rather than a close friend (28%), and, conversely, most of the claims that it was contexts observable to close friends or other "privileged" intimates occurred when participants were answering the question about a close friend (66%), rather than themselves (34%), $\chi^2(1, N = 200) = 17.45$, $p < .001$. The

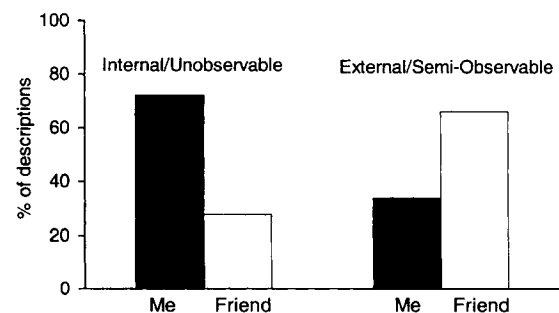


Figure 2. Percent of private (unobservable) and semi-observable descriptions offered as indicative of participant's own versus his or her friend's "true self" (Study 3).

same self–other contrast was also statistically significant when the analysis in question distinguished the completely private responses from those in all of the other five categories, $\chi^2(1, N = 200) = 8.76, p < .01$.

This simple study supports the notion that while we see private thoughts and feelings as more diagnostic of ourselves than our friends, we believe that more public behavior—especially the kinds of revelations that are offered to others (including, presumably, us) in relatively intimate situations—is more revealing of our friends than ourselves. Accordingly, it is reasonable to expect that asymmetric assessments of interpersonal insight are likely to arise when people interact with each other in face-to-face settings in which they are trying to get to know each other. This hypothesis was investigated in our next study.

Study 4: Assessments of Interpersonal Knowledge After Face-to-Face Interactions

Study 4 examined interpersonal impressions formed in the context of ongoing one-on-one interactions. More specifically, we sought to demonstrate that previously unacquainted individuals would feel that they had come to know the other person more completely and accurately through such interactions than the other person had come to know them.

Previous research offers additional bases for this specific version of our broader hypothesis regarding perceived asymmetry in interpersonal knowledge. There is considerable evidence that the impressions and predictions formed on the basis of interviews and other brief interactions are likely to be made with greater subjective certainty than is warranted by their objective accuracy (Dunning et al., 1990; Nisbett & Ross, 1980; see also Hunter & Hunter, 1984). More directly pertinent to our asymmetry hypothesis, Robins, Spranca, and Mendelsohn (1996) found that participants engaged in a “getting-acquainted” task tended to see their own behavior as caused by their partner but saw their partner’s behavior as caused by his or her own personality. The perception that both one’s own and one’s partner’s behavior have been determined primarily by (and therefore are reflective of) that partner’s personality is tantamount to the perception that one has learned more about one’s partner than vice versa.

In the present study, individuals were first given a 1-min opportunity to introduce themselves and exchange some personal information in a brief get-acquainted session and then asked to assess how well they had come to know the other person and vice versa. The participants then were asked to exchange a larger, more prescribed sample of information and given a second opportunity to make those same assessments.

Method

Participants. Previously unacquainted same-sex pairs of Stanford undergraduates (10 male pairs and 7 female pairs) received introductory psychology course credit or \$7 for participating in the 1-hr study.

Procedure. On arriving at the laboratory and completing the required consent form, participants were introduced to each other and to the study. The experimenter explained, “Some people have said that we make judgments of other people within *ten seconds* of meeting them. Today, we are going to give you a *whole minute*.” The experimenter then gave participants the promised minute to “get acquainted,” without providing any further instructions about how to spend that period. After this interaction,

which generally involved an exchange of names, plus information about campus residences, year in school, academic major, family/background, and the like, participants were ushered to separate rooms where they completed questionnaires that asked how much knowledge they felt that they had gained about their partner and vice versa.

The relevant questionnaire items featured pairs of 9-point scales asking participants how well they had come to know various things about the other person and how well that person likely had come to know these things about them (i.e., how shy, intelligent, and sincere the person is; the nature of the person’s political views in general and how liberal or conservative those views were on various specific issues; how much the person would participate in a class “section;” what is *really* important to the person; how concerned the person is with fitting in). The relevant items pertaining to knowledge in specific domains were combined to form measures of perceived interpersonal knowledge gained by self about partner and vice versa.⁶

After completing the questionnaire, participants were asked to list, on two separate lined pages, all the things they thought they learned about the other person and all the things they thought the other person learned about them (see M. Ross & Sicoly, 1979, for a similar free-response measure of bias). The order of presentation for the two pages was counterbalanced (and because this factor did not influence our results, we ignore it in presenting our analyses).

On completing these tasks the participants were brought back together and given “more time to get to know each other.” During this phase of the experiment, participants were instructed to alternate in asking each other 10 questions of their own choosing, “in order to try to get to know the other person as well as possible.” They were told that their questions should be specific and designed to help them better understand and predict how the other person would behave in a variety of situations. Thus, rather than asking general questions such as, “What are you like?” they were to ask specific questions such as, “If you could take a week’s vacation from Stanford and spend it anywhere from a crowded city to a deserted island, where would you want to go?” After this round of questioning, they were again ushered into separate rooms where they completed a new questionnaire posing the same questions they had answered after their minute-long conversation. On completing the questionnaire, participants were debriefed, and the experimenter made certain that the two participants had not previously met. (None had.)

Results and Discussion

Analyses were based on combined ratings for all items dealing with knowledge gained by self about other and vice versa. Separate analyses were performed for responses pertaining to the initial 1-min session and to the longer question-and-answer session. As in our study with roommates, the dyad was the basic unit of analysis. Furthermore, because no relevant effects of gender were found, data for male and female dyads are combined in our analyses.

The initial 1-min interchange led to a difference between participants’ ratings of how well they thought they had come to know their partner ($M = 3.04$) and how well they thought their partner had come to know them ($M = 2.90$) that was only marginally significant, $t(16) = 2.01, p < .10$. The relevant bias may have been attenuated at this time by participants’ concerns about making “snap judgments.” Indeed, a number of participants spontaneously

⁶ Additional items also asked participants several other questions about particular respects in which they might have come to know and like their partner and predict his or her behavior. Little of interest emerged from our subsequent analyses of these items, and they are omitted to avoid lengthening an already long article.

expressed such concerns when first told that they would have 1 min to get acquainted. Participants' open-ended responses revealed similarly modest differences in assessments of knowledge gained by self versus partner in the interaction. In particular, the number of lines participants wrote when asked what they thought they had learned about the other person ($M = 8.24$ lines) did not differ significantly from the number of lines they wrote when asked what they thought their partner learned about them ($M = 7.18$ lines), $t(16) = 1.28$, *ns*.

The longer, more structured, exchange of questions and answers typically took about 20 min. Questionnaire responses provided by the participants at the conclusion of this period revealed the predicted self–other difference more clearly than responses for the 1-min session did. Participants now reported that they knew significantly more about their partner ($M = 5.30$) than their partner knew about them ($M = 5.05$), $t(16) = 3.35$, $p < .005$.⁷ Furthermore, 14 of the 17 participating dyads displayed a rating discrepancy in the predicted direction, whereas only 2 dyads exhibited a bias in the opposite direction (and 1 dyad reported no asymmetry), $p < .01$ by signed-rank test.

The predicted asymmetry in assessments of knowledge gained from the longer interchange was further apparent in the length of the individuals' free-response assessments. Participants' accounts of what they thought they had learned about their partner were significantly longer ($M = 14.6$ lines) than their accounts of what they thought their partner had learned about them ($M = 11.0$ lines), $t(16) = 4.93$, $p < .0001$. The increase in this self–other discrepancy from the short first session to the longer second session (shown in Figure 3) was also statistically significant, $t(16) = 2.61$, $p < .05$.

In summary, the results of Study 4 demonstrated that asymmetric assessments of one's own knowledge of others versus others' knowledge of oneself could be created in the course of brief interactions between previously unacquainted individuals. Our results further suggest that this illusion of asymmetric insight grows over the course of an interaction, as partners hear and observe each other while keeping their private thoughts and feelings to themselves.

Beyond confirming our focal hypothesis, the content of the interviews and our participants' open-ended reports suggested a

further source of the relevant phenomenon. Participants' impressions of each other often seemed to be the product less of answers to questions about academic majors or other direct requests for information than of body language and odd responses to odd questions (such as, "If you could swim in a pool filled with anything, what would you want it to be filled with?"). In a sense, our participants appeared to function as naive Freudians, willing to infer the deeper significance of each other's incidental gestures, tone of voice, or offhand remarks. This observation sets the stage for Study 5, in which we hypothesized that people have the illusion that they can gain more insight from the incidental, relatively unmonitored responses of their peers than vice versa.

Study 5: Perceived Diagnosticity of Own Versus Others' Responses to a Projective Test

Our fifth study asked participants to complete a series of word fragments and then to indicate how revealing each individual fragment, and the set as a whole, was about their personal characteristics. Participants also were able to see and to assess another participant's word-fragment completions. Our working hypothesis was simply that participants, armed with knowledge about their own private thoughts, feelings, motives, and associations, would see their own responses as less revealing or "diagnostic" than those of their peers.

Method

Participants. A total of 21 male and 13 female Stanford undergraduates received introductory psychology course credit for undertaking the relevant word-fragment completion and rating tasks.

Procedure. After signing a written consent form, all participants received the following brief introduction from the experimenter:

If you've participated in other psych. studies, you might have done something like this before because it is a pretty common task that psychologists use. It's called "word-fragment completions," and right now we're pre-testing some word fragments just to make sure none of them are too difficult. They have all been selected because they have multiple possible completions, so we are just checking to make sure that they indeed are solvable by our participants. Also, since it is part of a larger study, we need to make sure that the whole thing takes relatively little time. The nature of the task is that you write the first word that comes to mind, so it generally goes fairly quickly.

The participants in one group ($n = 18$) then were asked immediately to furnish a series of completions. They were told specifically that, "None of them should take more than 15 seconds," and "since we would like to get a sense of how long this takes, we ask that you write the *first* word that comes to your mind, and then move on to the next item." When they had furnished the relevant completions, they were thanked for their effort and invited to consider and rate the diagnosticity of those completions as follows:

One of the reasons why we are interested in the word-fragment completion task is that a long tradition of psychologists have argued that the way people complete these words reveals something about

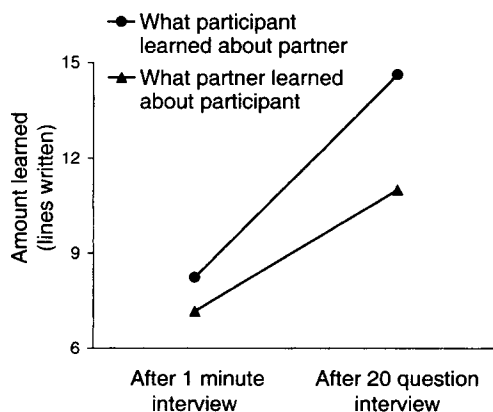


Figure 3. Amount participants wrote in reporting what they learned about their partner, and vice versa (Study 4).

⁷ This significance level may seem surprisingly large in light of the small absolute difference reported between mean ratings. The relevant statistic, it should be noted, was based on a within-subject comparison, for which the relevant error term was very small.

their personality, desires, goals, and motives. At this point, we really do not know whether we agree or disagree with this hypothesis, but it is an intriguing one. What we would like for you to do is to rate the extent to which each word that you completed reveals something about who you are and what you are like.

Participants were asked specifically to first copy the words that they had written and then rate how revealing each word was, using 7-point scales (anchored at *not at all revealing* and *very revealing*) provided next to each word. After completing these individual ratings, they were also asked to answer 3 more general questions requiring them to indicate how much the word completions as a whole revealed about their "motives for doing things," about "what sorts of things [they] think about," and about them "overall" (in each case using a 7-point scale anchored at *not very much* and *a great deal*). Finally, they were asked to write anything that occurred to them about what the relevant word completions might reveal about "who [they] are and what [they] are like as a person."

After providing and rating their own word-fragment completions, these participants were invited to "look at another participant's responses and make the same sort of judgments that [they] had made about [their] own responses." The experimenter then furnished a photocopy of the handwritten word-fragment completions that had been provided by the immediately preceding same-gender participant, with that participant's identity concealed. (In the case of our very first male and very first female participant, the responses provided were ones that had been furnished by same-sex pretest participants.) Participants were asked first to copy the completed words on a new form and then to provide the relevant ratings on scales identical to the ones that they had used in rating their own responses—except that the relevant scales referred to "the person [who completed the fragments]" rather than to "you."

A second group of participants ($n = 16$) completed the same set of tasks in the opposite order. After receiving the introduction to the task, they were first furnished with a set of fragment completions that had been provided by a previous participant then asked to copy each completed word on a rating sheet and assess how revealing each individual completion and the set of 21 completions as a whole were about their author. Only after completing these ratings of the earlier participant's responses were they asked to provide, and then assess, their own set of completions.

The following two different sets of fragments were used in the study:

Set A: G__L__TER, S__RE, P__N, TOU__, ATT__, BO__,
FL__T, SL__T, STR__, GO__, CHE__, __OR, SL__,
SC__, __NNER, B__T, PO__, BA__, RA__, __EAT.
Set B: CRE__, S__RT, HO__, __EN, RO__, __TING,
ST__, __VE, B__K__, __EM, G__L__, __TER, S__RE, __EST,
STR__, __NNER, __OING, FLO__, PA__, __AIL, W__R__.

Half of the participants in each order completed Set A for themselves and saw a peer's completions for Set B, and half completed Set B and saw a peer's completions for Set A.

Results and Discussion

All of our measures (see Figure 4) provided evidence of the predicted tendency for participants to rate their peer's fragment completions as more revealing or diagnostic than their own (or perhaps to feel that they had been able to learn more about their peer from his or her completions than some other individual would be able to learn about *them* from *their* completions). When we conducted within-subject comparisons, this self–other discrepancy proved to be significant for composite ratings that combined assessments for the 21 individual items, $t(30) = 2.29, p < .03$, as well as for more global assessments concerning the amount the entire set of completions revealed about the respondents' motives,

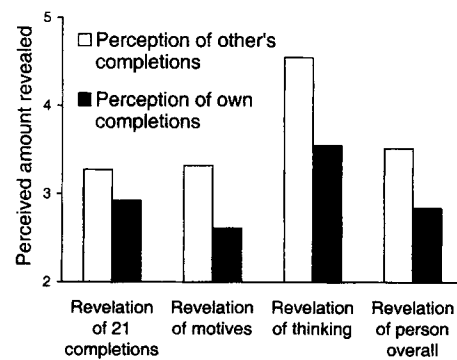


Figure 4. Perceived amount revealed in participant's own versus another participant's word-fragment completions (Study 5).

$t(30) = 2.66, p < .02$, and thinking, $t(30) = 3.45, p < .002$, and about the respondent overall, $t(30) = 2.57, p < .02$.

Participants' own open-ended responses also suggest that while they saw the other person's responses as revealing of personality or character, they saw their own responses as situationally determined and relatively unrevealing. (See Table 2 for samples of participants' written evaluations of their own versus their partner's word completions.) Their own responses, they felt, had either been demanded by the word-fragment stimulus presented, cued by their state of mind at the moment, suggested by their previous completion, or just "random." A more quantitative analysis of participants' open-ended responses supported this observation. Whereas participants specifically cited an average of about 4 of their partner's completions ($M = 3.94$), they typically cited only about 1 ($M = 1.23$) of their own in explaining the basis for possible inferences, $t(30) = 4.02, p < .0001$.

Further analysis revealed an interaction effect involving task order. Specifically, participants showed the relevant asymmetry in ratings of self versus other quite clearly when they first rated the other person's completions before providing and rating their own, but not when they rated their own completions first, $F(1, 30) = 5.19, p < .03$. Thus, on the 21-item composite, participants who rated their peer's fragment completions first saw their peer's responses as more revealing ($M = 3.54$) than their own ($M = 2.93$), $t(18) = 2.95, p < .009$. But, participants who rated their peer's responses only after providing and rating their own saw a similar (and relatively low) amount as having been revealed in their peer's responses ($M = 2.86$) and in their own ($M = 2.92$), $t < 1$. Apparently, the task of completing the word fragments, and reflecting on their own responses, caused participants to doubt the diagnosticity not only of their own word completions, but also of word completions in general. (Recall that participants read and/or provided responses to a different set of fragments for self and other.) However, the didactic value of actually doing the word-completion task apparently did not transfer to the more global assessments. None of the F values for the relevant interactions involving task order approached conventional significance levels for the more global items, all $ps > .5$.

In summary, participants clearly thought their own responses to a set of ambiguous stimuli (in a sense, to a "projective test"), like their overt responses during the unstructured get-acquainted session in Study 4, had been less revealing of themselves than their

Table 2

Participants' Interpretations of Their Own and Their Partners' Word Completions (Representative Examples): Study 5

Participant	Analysis of own completions	Analysis of partner's completions
A	"I'm almost convinced that these are not at all revealing."	"He doesn't seem to read too much, since the natural (to me) completion of B__K would be 'book.' <i>BEAK</i> seems rather random, and might indicate deliberate unfocus of mind."
B	"I don't agree with these word-stem completions as a measure of my personality."	"I get the feeling that whoever did this is pretty vain, but basically a nice guy."
C	"These word completions don't seem to reveal much about me at all ... random completions."	"The person seems goal-oriented and thinks about competitive settings." [GOAL, SCORE, STRONG, WINNER]
D	"Some of the words I wrote seem to be the antithesis of how I view the world. For instance, I hope that I am not always concerned about being <i>STRONG</i> , the <i>BEST</i> , or a <i>WINNER</i> ."	"I have a feeling that the individual in question may be tired very often in his or her life. In addition, I think that he or she might be interested in having close personal interactions with someone of the opposite sex. The person may also enjoy playing games." [SNORE (2 times), SLEEP; GIRL, PORN, TOUCH; GOLF, CHESS, WINNER]
E	"I don't really think that my word completions reveal that much about me ... occurred as a result of <i>happstance</i> ."	"I think this girl is on her period ... I also think that she either feels she or someone else is in a dishonest sexual relationship, according to the words <i>WHORE</i> , <i>SLOT</i> (similar to slut), <i>CHEAT</i> ..."
F	"Not a whole lot ... they reveal vocabulary."	"Not a whole lot ... not everybody would've thought <i>PORN</i> , though."
G	"I really don't think there was any relationship ... the words are just random."	"I guess there is some relationship ... He talks a lot about money and the <i>BANK</i> . A lot more correlation here."
H	"I think word completions are limited in this ability ..."	"He seems to focus on competition and winning. This person could be an athlete or someone who is very competitive." [ATTACK, STRONG, CHEER, SCORE, WINNER, DEFEAT]
I	"For nearly every word-stem, only one possible solution came to mind."	"If I had to guess, I'd say that this subject is a nature lover type." [GILL, WATER, BARK]
J	"A number of words appeared simply because they were on the last [i.e., other participant's] test. Thus ... yielding less validity to their reflection, if any, to my thoughts."	"It seems this individual has a generally positive outlook toward the things he endeavors. Most words, such as <i>WINNER</i> , <i>SCORE</i> , <i>GOAL</i> , indicate some sort of competitiveness, which combined with the jargon, indicate that he has some athletic competitive nature."
K	"The words <i>PAIN</i> , <i>ATTACK</i> , and <i>THREAT</i> seem similar, but I don't know that they say anything about me."	"Perhaps words like <i>SMART</i> , <i>BEST</i> , <i>CREATE</i> , and <i>STRONG</i> show that the person is a positive thinker."

Note. Capitalized words in italics are actual completions cited by participant. Capitalized words in brackets are actual completions that were not cited in the participant's account, but are relevant to his or her analysis.

peers' responses had been of *themselves*. It is no coincidence that when Freud purportedly said, "Sometimes a cigar is just a cigar," it was he who was the cigar-smoker in question!

Study 6: Asymmetric Assessments of Intergroup Knowledge and Understanding

Our final study shifts the focus from interpersonal perceptions to intergroup perceptions. More specifically, it deals with people's beliefs about what their group knows about relevant out-groups and what those out-groups know about their group. Most of us have experienced frustration in social or political debates. We feel that the "other side" just "doesn't get" our point of view, and that agreement could be reached if only we could somehow make those views, and the basis for those views, clear to them. Indeed, we think that their group members must not understand our views because if they did understand they would cease to be on that other side. By contrast, we think we get their point of view; we simply reject it as invalid, so that little would be gained from hearing them expound those views in more detail. The present hypothesis is that such convictions about intergroup understanding are likely to be symmetrical. That is, the members of each group feel that they understand the other group better than vice versa—that they are the

ones being misunderstood, misinterpreted, or stereotyped, and that it is the other group that stands in need of enlightenment.

Some support for a related hypothesis exists in demonstrations of the "out-group homogeneity" effect, whereby people appear to think that the group to which they belong is somehow more variable or heterogeneous than the corresponding out-group (Quattrone & Jones, 1980; see also, Jones, Wood, & Quattrone, 1981; Linville, Fischer, & Salovey, 1989; Ostrom & Sedikides, 1992; Park & Rothbart, 1982). In related work Linville, Fischer, and Yoon (1996) describe an "out-group covariation effect," whereby individuals perceive, or at least assume the existence of, a higher degree of covariation among out-group characteristics than among in-group characteristics. Such findings are reminiscent of earlier findings involving "implicit personality theory" at the individual level (Bruner & Tagiuri, 1954; Schneider, 1973). That is, people who are privy to a relatively small amount of information about a given individual—for example the jut of his chin or the type of coffee she buys—assume (usually erroneously) that they now can make reasonable inferences about other characteristics of the individual in question (e.g., about his honesty or her thriftiness). Similar views about homogeneity and covariation at the group level, we argue, lead people to believe that they (and

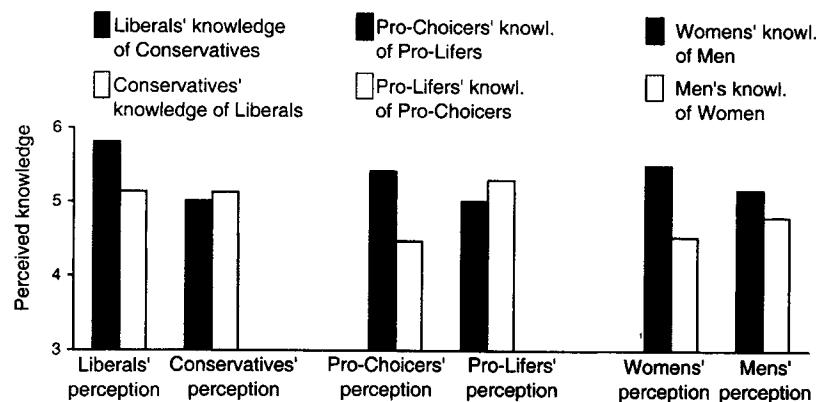


Figure 5. Participants' assessments of how well groups to which they belong know relevant out-groups, and vice versa (Study 6). knowl. = knowledge.

other members of their in-group) can more readily make inferences and predictions about members of relevant out-groups than vice versa.

Study 6 tested this hypothesis by asking members of three pairs of groups (i.e., *liberals* and *conservatives*, "*pro-choice*" and "*pro-life*" advocates, and *women* and *men*) how well the members of their group knew the other group and vice versa.

Method

Participants. A total of 80 Stanford undergraduates, all enrolled in introductory psychology, participated in the questionnaire study for course credit.

Procedure. At the beginning of the academic quarter, participants completed a background-information questionnaire that included items asking them their general political orientation and their stance on several social-political issues including abortion, as well as their gender and ethnicity. Several weeks later, the same participants completed a questionnaire asking them how well members of three specific pairs of groups (liberals and conservatives; pro-choice and pro-life advocates on the abortion issue, and women and men) knew each other.

Thus liberals and conservatives answered specific paired questions asking how well liberals and conservatives understand each other, how well they can predict each others' views, and how well they understand why those on the other side take the political positions they do. Similarly, pro-choice and pro-life advocates were asked how well the two groups understand each other, how well they know each others' positions, and how well they know what motivates each other to hold their particular views on abortion. In the case of women and men, five pairs of items asked respondents how well the two sexes understand each other, know what is important to each other, know what makes each other happy, know what makes each other angry, and can imitate each others' way of walking and talking. All items pertaining to a given pair of groups appeared together on the questionnaire, thereby making the relevant comparisons (and quite possibly the object of our investigation) explicit.⁸

Results and Discussion

Of the 80 participants in the study, 39 indicated that they were female and 40 indicated that they were male (one person did not report gender). Political orientation was measured on a 9-point scale anchored at 1 (*very conservative*) and 9 (*very liberal*), with the midpoint appropriately labeled (i.e., *middle of the road*). Par-

ticipants with scores below that midpoint were categorized as conservative ($n = 32$), and those with scores above the midpoint were categorized as liberal ($n = 35$). (The 13 participants classifying themselves exactly at the midpoint were excluded from subsequent analyses involving political orientation.) Abortion stance was measured on a 9-point scale anchored at 1 (*very pro-choice*) and 9 (*very pro-life*), with the midpoint labeled *undecided or ambivalent*. Participants with scores below the midpoint were categorized pro-choice ($n = 54$), whereas those with scores above the midpoint were categorized pro-life ($n = 22$). (The 4 participants classifying themselves as undecided or ambivalent were excluded in the analyses involving this variable.)

As predicted (see Figure 5), participants tended to believe that their group's knowledge of the other group exceeded the other group's knowledge of their group. One-way analyses of variance, which treated group as the relevant independent variable, were conducted on differences in composite rating scores of the two groups' knowledge of each other. These analyses confirmed the statistical significance of our findings for all 3 pairs of groups in the study.

Thus liberals and conservatives both claimed to know the other side better than the other side knew them, $F(1, 65) = 6.22$, $p < .05$. More specifically, while liberals thought their group knew and understood conservatives considerably better ($M = 5.81$) than vice versa ($M = 5.14$), $t(34) = 3.10$, $p < .005$, conservatives showed

⁸ Two versions of the questionnaire were administered. In one, items were phrased as questions about each group's level of knowledge about the other group (e.g., "How well do conservatives understand liberals?") featuring scales anchored at 1 (*not well at all*) and 9 (*very well*). In the other version, items were presented as assertions about which participants were to indicate their level of agreement (e.g., "Conservatives understand liberals"), with scales anchored at 1 (*strongly disagree*), and 9 (*strongly agree*). Question order also was varied, such that some participants furnished ratings for liberals before conservatives, for pro-choice advocates before pro-life advocates, and for men before women, whereas the remainder answered questions about the two relevant groups in each pair in the opposite order. Preliminary analysis revealed no effects either of question version or item order, and neither factor receives further attention in our article.

a slight (but not statistically significant) tendency to think they knew and understood liberals ($M = 5.13$) better than liberals knew and understood them ($M = 5.01$), $t(31) < 1$. Pro-choice and pro-life participants showed the same bias in estimating the relevant groups' knowledge about each other, $F(1, 74) = 7.09$, $p < .01$, although there again was a difference in the strength of this tendency for the two groups. While pro-choice advocates thought they knew pro-life advocates much better ($M = 5.42$) than vice versa ($M = 4.47$), $t(53) = 4.09$, $p < .0001$, pro-life advocates thought that their group knew their pro-life opponents only slightly better ($M = 5.30$) than their opponents knew them ($M = 5.01$), $t(21) < 1$.

Women and men similarly displayed the predicted bias in rating the knowledge that the two sexes had about each other, $F(1, 77) = 4.04$, $p < .05$, although this effect was masked somewhat by the tendency for both sexes to agree that women knew men better than vice versa. That is, women saw the gap in knowledge and understanding to be great ($M_d = +.96$), $t(38) = 4.04$, $p < .0005$, while men perceived the gap to be modest ($M_d = +.38$), $t(39) = 2.18$, $p < .05$.

In summary, members of all three types of groups displayed a bias in assessing intergroup knowledge parallel to the bias our earlier participants had shown in assessing interpersonal knowledge. Each in-group thought it was more knowledgeable and accurate in assessing the out-group than vice versa.

Can asymmetric assessments of intergroup knowledge, like such assessments of interpersonal knowledge, depend on unique access to private mental events, or on the conviction that while other groups can be known reasonably well from their observable behavior the in-group cannot be known by anyone lacking access to the group's private thoughts and feelings? Members of a group obviously do not have direct access to these private experiences. But, they may believe that only one who shares their status, their group's experiences, or the type of formative experiences that gave rise to their political convictions can truly "know" them. Group members may feel that they are misunderstood, indeed bound to be misunderstood, by out-group members who have never experienced what it is like to be "one of us," and thus make judgments solely on the basis of the group's actions without regard to the reasons why group members feel as they do about the situations they face. The insight that is lacking, of course, is that members of one's own group are likely to be similarly misled and uncharitable in their attributions if they judge members of other groups solely on the basis of *their* behavior. Furthermore, as group members, we are well aware that members of our group often present themselves to others as more united in sentiment than is really the case, especially when group status is salient to the out-group. Once again, however, we may be unaware, or may forget, that members of other groups do likewise.

General Discussion

Participants in five studies judged their own degree of accuracy in interpersonal perception to be greater than that of their peers. One of those studies (Study 2), which examined the responses of roommates, showed a similar illusion of asymmetry in assessment of intrapersonal knowledge or self-insight. The perceived asymmetry in interpersonal knowledge was apparent both in assessments made on the basis of substantial sustained interpersonal

experience (i.e., assessments made about friends or roommates) and in assessments made on the basis of the fragmentary evidence provided by strangers (i.e., information provided in brief encounters or word completions). A related bias was also apparent in assessments of intergroup knowledge; that is, participants thought that people belonging to their own in-groups possessed superior knowledge about relevant out-groups than vice versa.

Sources and Domains of Perceived Asymmetry

Data from these six studies provide evidence about the processes and mechanisms that may underlie the conviction that we know others better than they know us, and the related conviction that the gap between actor and observer insight is somehow smaller when we observe our peers than when they observe us. One important source of these convictions is the belief that access to private thoughts and feelings is more critical (and access to overt public actions less sufficient) when it is oneself rather than a peer who constitutes the object of scrutiny. Participants in Study 1 claimed that more of their own essential nature than that of friends lay "hidden beneath the surface." Similarly, participants in Study 2 reported that the discrepancy between their knowledge of their roommates and their roommates' knowledge of them was more pronounced in the case of unobservable private qualities than in the case of more observable or public ones. Participants in Study 3 provided further evidence of this proposed mechanism by providing self-descriptions that gave relatively more weight to thoughts, feelings, and other private nonobservable events, and relatively less weight to behavior that might be accessible to intimates or other observers, than their descriptions of friends. Finally, Study 5 participants thought that peers' word-fragment completions were more diagnostic of private and unobservable personal qualities than their own word-fragment completions were.

Another mechanism suggested in this research involves perceptions about our own versus others' susceptibility to specific biases. Thus, the greater the degree of a given negative trait ascribed to a roommate by Study 2 participants, the stronger the doubts they expressed about their roommate's self-knowledge (i.e., the greater the amount of motivated self-deception they perceived to be operating). But, participants did not similarly doubt their own self-knowledge in these cases. Furthermore, participants in Study 5 seemed to be well aware of the possibility that their peers might show the correspondence bias in interpreting their word-fragment completions—but not of the possibility that they were showing the same bias themselves (unless they first had examined and noted the nondiagnostic nature of their own completions).

The two mechanisms we have cited are linked. That is, individuals feel that their self-assessments are generally accurate (but doubt the accuracy of assessments that others might make about them) in part because they are aware of the internal thoughts, feelings, and motives that are associated with, and may in some cases even belie, their overt behavior. For example, in assessing her susceptibility to stinginess or lack of compassion for others, Joan is aware not only of her refusal to give money to the solicitor for the Cancer Fund who knocked on her door, but also of her ethical commitment to help the needy, her reservations about door-to-door solicitations, and her intention to make a substantial contribution to a battered women's shelter as soon as she has time to investigate which shelter has the best reputation. She also knows

that others who simply observed or heard about her rejection of the Cancer Fund solicitor would be likely to make an erroneous inference about her (and, on introspecting, is confident that her reasons for that rejection were not mere rationalizations). However, she is not likely to give similar weight to internal factors like "good intentions" in others (Epley & Dunning, 2000; Kruger & Gilovich, 2001), and she is likely to suspect rationalization on the part of others when it comes time for them to make assessments about their character.

Potential Alternative Explanations and Artifacts

Beyond providing some evidence for these two sources of perceived asymmetries in interpersonal knowledge, our studies have also helped to cast doubt on an obvious potential alternative interpretation of our findings involving the familiar and much-documented self-enhancement bias (or *Lake Wobegon effect*). That is, because the majority of people claim to be "above average" on a large number of abilities or desirable qualities, it therefore becomes incumbent on us to show that our participants' claims of superior interpersonal and intrapersonal insight are more than a special case of this bias.

In part, our rebuttal of such an interpretation hinges on the specificity of our findings. That is, the tendency for participants to claim superiority over their peers was most apparent precisely where our conceptual analysis suggested it should be—notably, in cases in which participants willingly made inferences about their peers on the basis of overt behavior alone, but felt that accurate assessments about *them* would require access to private thoughts and feelings as well. Indeed, we were able to provide direct evidence from several measures in which our participants claimed that they were simply less knowable on the basis of overt responses alone than their peers were. Further evidence of specificity was provided in Study 2, where we found that participants claimed that they were as guilty as, if not guiltier than, their roommates with respect to a number of negative traits such as competitiveness or frequent inspection of one's appearance by looking in the mirror. These traits, not coincidentally, are ones for which privileged access to one's own private thoughts and actions likely leads to intrapersonal assessments that are "self-diminishing" rather than "self-enhancing."

The more general theoretical point to be made is that a variety of cognitive and perceptual factors may produce assessments of self relative to others that, more often than not, are self-enhancing in their consequences. But, in some contexts or with respect to some particular domains of assessment, these same factors may also result in unwarranted self-doubt or self-censure. Rather than prematurely attributing claims of personal superiority to an all-encompassing self-serving motivation, we think it might be more useful for researchers to develop a finer-grained analysis of the way in which cognitive and perceptual factors interact with motivational ones in determining when and why individuals are likely to feel more positively or more negatively about themselves and their capacities than might be "objectively" warranted.

There is also a methodological artifact we must consider—one that involves no such weighty theoretical issue but is troublesome nevertheless. Might responses by our participants that seemed to claim a lack of knowledge or insight on the part of their peers *actually have conveyed their own reluctance to make judgments*

about such nonobservable matters? Although some of our measures (i.e., those in which participants might have been disposed to check the midpoint of scales to indicate their uncertainty rather than any particular assessment) were perhaps susceptible to this criticism, we are confident that it was not an important source of our main findings. First, on a priori grounds, one would expect the default judgment about another person's interpersonal or intrapersonal insight to be "same as my own." That is, one would expect this unless, as we postulate, people have come from their social experience to feel that they are more aware of their peers' strengths and shortcomings, and less susceptible to various forms of defensiveness or self-delusion, than those with whom they interact. It is especially noteworthy that participants in Study 1 claimed their own knowledge of their close friend to be greater than vice versa when responding to a single scale calling on them to make a direct comparison (a scale on which the easy-to-select midpoint asserted "equal" knowledge).

Our iceberg measure from Study 1 offers further assurance in this regard. First of all, it did not involve a scale with a convenient midpoint to indicate lack of certainty about one's judgment. More importantly, responses on this measure reveal the basis for the perceived asymmetry in the knowledge one has about a friend and vice versa. That is, participants seemed to feel that, aside from any self-other differences that might or might not exist in overall social perspicacity, their own essential nature was simply more hidden beneath the surface and less knowable from observable manifestations than that of their designated friend. Finally, analyses of variability in all our studies provided additional evidence that participants were not simply resorting to a default measure in making assessments of their peers' interpersonal or intrapersonal insight. That is, participants' ratings of others' knowledge were just as variable as their ratings of their own knowledge (i.e., standard deviations were statistically similar for both types of ratings).

Finally, it is worth recalling the pilot results we reported regarding assessments made about two fictional characters in a then-popular television sitcom, *Seinfeld*. That is, participants not only were willing to claim that they possessed more intrapersonal insight than "Jerry" or "Elaine," they also were quite willing to distinguish between the two characters on this dimension. Thus both our variance measures and our *Seinfeld* study show that respondents are not reluctant to make assessments, in fact differential assessments, about other people's interpersonal and intrapersonal accuracy. They simply are convinced that those other people are less insightful than they are.

Significance of Impressions About Interpersonal Accuracy for Social Interaction

Impressions about interpersonal insight or lack of insight obviously play an important role in the way that people deal with each other. Such impressions in part determine how much time and energy we devote to discerning and correcting others' impressions about *us* and *our group*, as opposed to testing and correcting our impressions about others and *their group*. The conviction that we know others better than they know us—and that we may have insights about them they lack (but not vice versa) leads us to talk when we would do well to listen and to be less patient than we ought to be when others express the conviction that they are the

ones who are being misunderstood or judged unfairly. The same convictions can make us reluctant to take advice from others who cannot know our private thoughts, feelings, interpretations of events, or motives, but all too willing to give advice to others based on our views of their past behavior, without adequate attention to *their* thoughts, feelings, interpretations, and motives. Indeed, the biases documented here may create a barrier to the type of exchanges of information, and especially to the type of careful and respectful listening, that can go a long way to attenuating the feelings of frustration and resentment that accompany interpersonal and intergroup conflict.

But as previous research (Taylor & Brown, 1988) has pointed out, illusions can also be helpful. The feeling that one knows another better than is really the case can increase readiness to trust, cooperate, or seek greater intimacy, which can sometimes serve one well. This same illusion, however, can also increase one's susceptibility to exploitation or at least to unwise investments of time, resources, or affection. In this regard, it is worth noting that an illusion quite different from the ones documented in this article also can make its influence felt. This is the illusion that one is known and understood *better* than is really the case, that one's thoughts, feelings, intentions, and even true dispositions are somehow transparent to others in general and to intimates in particular. Once again, this illusion has costs as well as benefits. We may feel that words are unnecessary when they actually would be helpful to those who seek to offer us guidance, elevate our mood, or spur us to necessary action. In any case, the present findings suggest that the illusion of transparency is far from a general one. More common, it seems, is the illusion that while we see others clearly, others generally see us "through a glass darkly."

Intrapersonal and Interpersonal Perception Biases in Cultural Context

To some extent our present analysis and hypotheses are predicated on the assumption that people seek to perceive themselves, and to be perceived by others, as possessing a distinct, indeed unique, self—one that is different from and independent of those of the other individuals with whom we transact our everyday social lives. Markus and Kitayama (1991) have argued that such motivation may be distinctly Western, or at least that members of Western cultures are unmatched in their concern with "discovering and expressing their unique inner attributes" (p. 224). If this is the case, people from non-Western cultures should be less inclined than the participants in our research to hold well-defined self-concepts that are independent of specific situational or relational contexts. Consistent with this contention, Campbell and her colleagues (1996) reported that Japanese participants exhibited lower scores than Canadian participants on a construct measuring clarity, stability, and definition in the self-concept. Accordingly, we might expect participants in less individualistic cultures to be less inclined to reject others' views about them, and less inclined to treat discrepancies in their own self-perception versus the perceptions of their peers about them as evidence that their peers have given too much weight to public, context-specific behavior and too little weight to private thoughts, feelings, intentions, and other nonobservable manifestations of their real nature.

Although cultural differences may attenuate the biases we have described with respect to assessments of interpersonal and intra-

personal insight, such differences should actually magnify biases in intergroup perceptions. Thus, one might predict that in more interdependent (Markus & Kitayama, 1991) or collectivist (Triandis, 1995) cultures than the United States, cultures wherein group identity may be relatively more central and individual identity less central to the self, people would show somewhat different biases. Specifically, collectivists might be less inclined to claim greater interpersonal or intrapersonal insight than peers and more inclined to claim (a) that in-group members know them much better than out-group members, (b) that their in-group knows its own characteristics better than out-group members know *their* characteristics, and (c) that their in-group knows relevant out-groups better than vice versa.

Some Final Observations and Directions for Future Research

Our findings regarding invidious assessments of interpersonal and intrapersonal knowledge leave an interesting question unanswered. To what extent do the relevant discrepancies in assessment of accuracy for self versus others reflect a tendency for people to overestimate their perceptiveness in assessing their own characteristics and those of their peers, and to what extent do such discrepancies reflect a tendency for them to underestimate the perceptiveness of others? Research both on the limits of our self-awareness (e.g., Nisbett & Wilson, 1977b) and on specific sources of inaccuracy or overconfidence in our assessments of others (e.g., Dunning & Hayes, 1996; Gilbert & Malone, 1995; Zebrowitz-McArthur, 1996) is obviously relevant here. However, much work remains to be done in specifying the processes and domains that promote particular biases and perceptions of self—other asymmetries in accuracy and error.

We have noted that the conviction that our own intrapersonal and interpersonal knowledge is better than our peers' can be seen, to some extent, as simply another manifestation of *naïve realism*. That is, in perceiving social actors, as in perceiving other objects of judgment, we have the sense that our own perceptions and judgments are reflections of some objective reality. We feel that when others fail to share our assessments, those others must be seeing matters in an inaccurate or biased manner. To some extent, however, self-perceptions and social perceptions, and assessments of their accuracy, are subject to unique sources of bias. The people we perceive, in contrast to other objects and events about which we make judgments, have vested interests—sometimes in being perceived accurately, sometimes in being perceived not as they are but as they would like to be perceived. Understanding the interplay among relevant cognitive, perceptual, and motivational determinants of accuracy and inaccuracy in the way we perceive each other, and in the way we perceive ourselves (and, as our opening quotation from Joyce suggests, in the way we perceive ourselves perceiving, and the way we perceive ourselves being perceived), will remain an everyday challenge for laypeople and an enduring challenge for empiricists and theorists alike.

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(Appendix follows)

Appendix

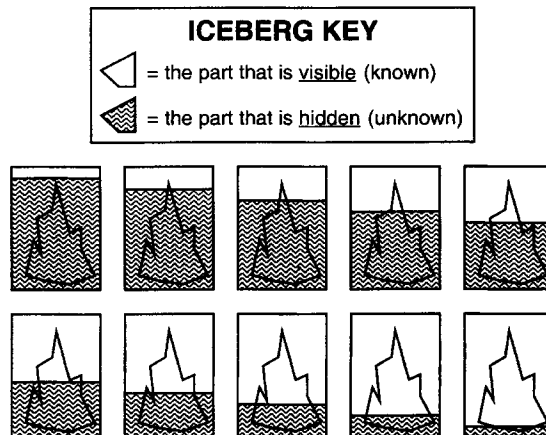


Figure A1. Participants were asked to circle the iceberg that best represented how much of their friend was “visible” to them, and how much of them was “visible” to their friend (Study 1).

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