# False Impressions

**In the social world, what you see is not always what you suspect**

By BRUCE BOWER

As the clutch of mourners files out of the cemetery, they pass a neatly attired man approaching a grave. He kneels by the headstone, pulls a rubber chicken from his overcoat and props it against the burial marker. A strained chuckle escapes from the pit of his stomach.

Puzzled looks cross the mourners' faces. By the time they reach their cars, each has an explanation for the bizarre scene.

"What a disrespectful young man," says one woman. "How would you like someone to throw a dead chicken on your grave and then laugh about it?"

Her husband nods. "He did look a little funny. Could have been gloating over the death of a business competitor."

Another woman shakes her head. "Who knows, the chicken might have meant something to the dead person. Still, that guy was odd, wasn't he?"

Meanwhile, the mysterious poultry bearer pays his last respects to his departed friend, a comedian whose favorite prop was a rubber chicken.

This tombside tale may seem a bit unusual, but it offers a glimpse of the ease with which someone's behavior gets transformed by others into misjudgments about his or her intentions and character, asserts psychologist Daniel T. Gilbert of the University of Texas at Austin. Emerging evidence suggests that ruminations about social encounters — whether pondering the meaning of a foreign guest's unfamiliar body language or mentally rehearsing one's behavior for an upcoming meeting with the boss — can create major misreadings of why others act as they do.

"We may strive to see others as they really are, but all too often the charlatan wins our praise and the altruist our scorn," write Gilbert and University of Texas colleague Patrick S. Malone in an article reviewing research on such judgmental mishaps, slated for publication later this year in PERSONALITY AND SOCIAL PSYCHOLOGY BULLETIN. "People are drastically overconfident about their judgments of others," Gilbert adds.

For 25 years social psychologists have studied the tendency of people to assume that another person's behavior reflects primarily his or her underlying personality traits, rather than the influence of the situation in which the behavior occurs. To a lesser extent, people evaluate their own behavior in the same way, according to a number of studies.

Many attempts to explain this error in judgment begin by assuming that an external situation and a person's internal disposition — the individual's enduring personality traits — influence actions separately. For instance, a U.S. hostage denounces his country on Iraqi television because he finds himself in a life-threatening situation, while a college activist denounces her country's Middle East policy because of her deeply held political beliefs.

This assumption that disposition and situation operate independently leads many theorists to argue further that the most noticeable actions of other people often generate inferences about their enduring psychological traits. In other words, the former hostage can expect sympathy for his ordeal but plenty of questions about his character upon returning home.

This theoretical scenario relies on an artificial separation between situations and personal dispositions, Gilbert and Malone argue. The hostage must have thoughts, feelings and goals that contributed to his recitation of propaganda, they note, and the student surely finds her political speech shaped by peers, teachers, audience response and other situational factors. Other evidence contradicts the traditional theories. Several studies show that increasing the "noticeability" of what someone does — for example, by presenting progressively clearer views of an actor performing the same behavior — does not elicit stronger personality inferences from observers.

Instead of searching for a dividing line between situations and individual dispositions, Gilbert and his coworkers focus on how increasing demands on conscious thought produces erroneous social judgments. Consider someone whose actions defy an observer's expectations of reasonable behavior in a particular situation — the rubber-chicken mourner, for instance. All sorts of inaccurate personal qualities get

## Keeping people in

Each of us stores in his or her memory representations of specific people that shape our judgments about individuals and groups, often unconsciously, according to a report in the January PSYCHOLOGICAL REVIEW. A mental representation of an individual, called an exemplar, carries positive or negative qualities that color our impression of flesh-and-blood folks who in some way match that exemplar, assert Eliot R. Smith of Purdue University in West Lafayette, Ind., and Michael A. Zárate of the University of Texas at El Paso.

Exemplars range from detailed representations of parents or close friends to sketchy images of individuals seen on television or read about in newspapers, Smith and Zárate contend, based on a review of more than 100 research reports and books. For example, an older woman's mental representation of a teenage mugger constructed from a newspaper article may spark her panicked reaction to a teenager sauntering down a dark, deserted street. And a man may consider Saddam Hussein particularly dangerous not because of current events, but because the dictator's moustache and apparel consciously or un-

assigned to the grieving man, Gilbert maintains, because confused observers expend so much conscious effort trying to figure out what his behavior means that they fail to consider why it occurred.

Under ideal circumstances, social judgments rely on three stages of conscious thought, Gilbert holds. First, observers categorize a behavior (polite, rude, bizarre), then characterize corresponding traits of the actor (pleasant, unpleasant) and finally correct those inferences with information about the situation. Thus, the statement "Nice to see you" gets categorized as a friendly overture, the speaker gets characterized as genuinely affable and this inference undergoes correction for the fact that the speaker works for the recipient, whose presence requires polite affability.

"Blurry words and fuzzy deeds" often mire observers in the categorization phase and prevent them from correcting inferences about another's personality, Gilbert contends. In the January JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, he and several colleagues present laboratory findings supporting this theory.

One experiment involved 78 female university students who listened to a recording of what they thought was a "dating game," in which a man answered questions posed by a woman with whom he hoped to win a date. An experimenter first cautioned the student volunteers that male contestants often "bend the truth" to get a date with an attractive woman. The students then made judgments about the man's true attitudes toward women.

Some participants heard the woman ask questions implying a preference for men with a traditional approach to relationships, such as believing that men should always ask women out. Others heard the woman ask questions implying a fondness for "modern" men who, for example, welcome a woman asking them out. In both cases, male contestants professed to hold the views implicit in the woman's questions.

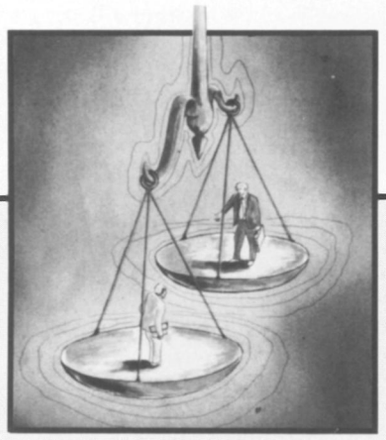
Half the participants heard the entire tape at normal volume, while the rest heard the man's responses at a barely audible level, ostensibly because the man's microphone had been short-circuited.

At the conclusion of the "game," students in the full-volume group felt that the male contestants revealed little about their attitudes toward women, relationships or dating. Volunteers apparently corrected their initial inferences about contestants' attitudes by considering the men's tendency to say whatever it took to get a date, Gilbert maintains. On the other hand, students who had to strain to hear the responses believed the men revealed much about their attitudes toward women. The difficulty in hearing the men's responses interfered with the students' categorization process and prevented them from correcting their inferences about the men, Gilbert asserts.

Several related studies conducted by Gilbert's group indicate that social observers distracted by any of a variety of activities, such as pressing a button at the sound of a tone, fail to correct their inaccurate inferences about others and often accept false statements as true (SN: 1/5/91, p.14).

Although actions may often speak for themselves, momentary distractions can easily muddle the meaning of what someone says or does, according to the Texas psychologist. At that point, contemplation of what's going on may undermine the discovery of why it took place. A similar process occurs during interactions with people from different cultures or ethnic groups, Gilbert adds. An observer must work hard to understand a culturally novel way of expressing certain attitudes or emotions — such as the British inclination to present a stoic smile when unhappy or the Japanese preference for nodding despite strong disagreement — thus allowing many erroneous impressions about someone from another culture to go uncorrected.

## mind



Even the prospect of interacting with someone may strengthen the hold of biased impressions about that person, according to research conducted by Gilbert and psychologist Randall E. Osborne of Phillips University in Enid, Okla.

If an upcoming interaction calls for undertaking an extraordinary activity (a businessman presenting sales figures and policy recommendations to his boss), pursuing an unfamiliar goal (an inexperienced lawyer cross-examining a shifty witness) or dealing with a particularly unusual person (a psychotherapist treating a severely paranoid client), preoccupation with one's own behavior prevents the mental correction of biased impressions about the other person, Gilbert and Osborne contend. On the other hand, if an upcoming interaction calls for assuming a passive role (a student receiving advice on graduate programs), performing a well-learned task (a veteran physician taking a medical history) or dealing with a familiar person (a woman having coffee with an old friend), behavior occurs largely without premeditation and more attention gets paid to revising impressions of the other person, they argue.

In one experiment, described in the

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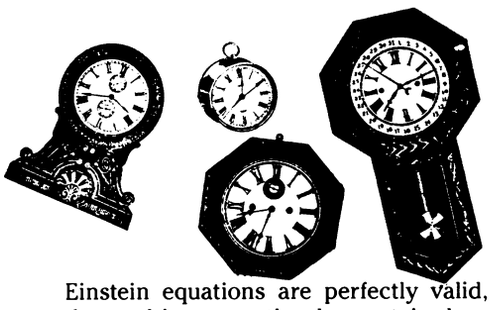
consciously remind him of Adolf Hitler.

Most other theories of social judgment assume that a perceiver totes up personally relevant attributes of another person, places that individual in a social category (such as a teenager or Middle Eastern dictator) and then elaborates on that impression with general knowledge or stereotypes about the social category.

Much recent research supports the idea that exemplars influence social judgment, Smith and Zárate maintain. In a 1986 study conducted by psychologist Pawel Lewicki of the University of Tulsa, volunteers encountered an experimenter who denigrated their intelligence and hurled other insults at them as they filled out a questionnaire; another group worked on the questionnaire without such affronts. Later, all participants received instructions to take the completed form to whichever of two assistants in the next room was not busy. When they got there, both assistants were free. Previously insulted participants tended to avoid the assistant whose hairstyle resembled that of the rude experimenter, even though they denied that the earlier encounter had affected their behavior.

Exemplars may offer insight into people whose racial prejudice flares up in some situations and vanishes in others, the researchers assert. For example, a white man who sits next to a black man on the bus may immediately focus on skin color and other physical features associated with race because he does not personally know any black people and expected to encounter white people in this situation. He categorizes the randomly encountered black man with available exemplars of black people, such as representations of black criminals learned through the media. Yet when watching Bill Cosby on television, the same white man finds himself in a familiar situation and employs a different set of exemplars — other comedians rather than other black people — thus enhancing his enjoyment of the show without stirring up racial prejudice.

This theory of exemplar-mediated prejudice awaits thorough testing, Smith and Zárate remark. — *B. Bower*



Einstein equations are perfectly valid, the resulting space-time has certain characteristics that put it beyond the realm of physical possibility, they contend.

"Gott's solutions lead to closed time-like curves that are nonphysical," Deser states.

Gerard 't Hooft of the Institute for Theoretical Physics in Utrecht, the Netherlands, has since written a paper purportedly proving that a closed universe – one filled with sufficient mass to reverse its expansion – would necessarily collapse to a size smaller than any route one would need to take to circumnavigate two oppositely directed, speeding particles along a closed time-like curve.

"You start way back in time when there are no closed time-like curves, and then you show that it is impossible for the universe to evolve," Deser says. "As far as we're concerned, this result really drives the nail in. The case is closed. Classical general relativity passes another test."

Stephen W. Hawking of the University of Cambridge, England, has gone a step further by proposing a "chronology protection" conjecture to express his belief that quantum effects would prevent closed time-like curves from happening in general.

"That's certainly a possibility," Guth says.

But for some physicists, the case remains open, albeit just a crack. A number of nagging questions have yet to be resolved.

For example, Gott had noted the possibility that a finite, rapidly shrinking cosmic string in the form of a greatly stretched-out loop could also provide a setting for time travel. On some scale, such a distended loop would be difficult to distinguish from a pair of infinitely long cosmic strings.

"It's like a giant rubber band under a lot of tension," Gott says. Roughly parallel segments of a rapidly contracting loop could pick up sufficient speed to allow time travel.

However, it's not easy to solve the equations describing a cosmic rubber band. "Once you start talking about finite-size loops that pass each other, it becomes essentially impossible to solve the problem exactly," Guth notes. Moreover, a simplified Flatland space-time model provides little guidance.

Gott suggests the possibility that shrinking finite loops could easily end up as black holes. Thus, any closed time-like curves present would be invisible to an observer in the world outside the black hole's boundary.

"Several different things can happen," Gott says. For example, "you might see a loop collapsing. You fly in. You fly around the two strings just as they're passing. You visit your past, but when it comes time to get back out, you're killed when the whole thing collapses."

What actually occurs in such a case remains unclear. "Maybe you could go around and still get out in time to brag," Gott says. "We simply don't know what the solutions look like."

Ultimately, pondering the byways of time travel tests the boundaries of the laws of physics.

"We want to see whether or not closed time-like curves are prevented by general relativity," Gott says. "Maybe quantum mechanics comes in and somehow prevents them. If so, we'd like to know why. That would be very interesting."

Farhi adds, "We'd like to know: What is it about the theory that prevents this from happening, besides the fact that it's weird? How does the general theory of relativity know that it shouldn't allow a time machine?" □

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February JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, 59 female college students watched a silent videotape of an anxious-looking woman talking to another woman. Half the participants were told that the woman was discussing the anxiety-provoking topics of sexual fantasies and public humiliations; the rest were told that she was describing mundane aspects of her hobbies and ideal vacations. Half the students in each of these groups mentally rehearsed an eight-digit number while viewing the videotape.

Volunteers who watched the videotape without numerical distraction rated the speaker as a generally anxious person only when they had been told she was discussing mundane topics; knowledge that she was discussing anxiety-provoking topics apparently spurred them to revise their initial characterization of the woman as anxious, the researchers say. Students kept mentally busy with the number task assigned an anxious personality to the speaker regardless of the topics they thought she was discussing; although they recalled the topics, they did not use them to revise their impressions of the woman.

Next, an experimenter told half the students to prepare to interview the woman in person and the other half to prepare to be interviewed by the woman. All participants then spent five minutes writing down their thoughts about the upcoming encounter.

At that point, formerly distracted students who expected to take a passive role as an interviewee corrected their inaccurate impressions formed while watching the woman talk about anxiety-provoking subjects. But those who expected to take an active role as an interviewer continued to ignore the influence of discussion topics and did not correct biased inferences about the woman.

In follow-up experiments employing the same videotape, distracted volunteers corrected their initial mistaken impressions when told that they would meet with the woman (a relatively familiar person) or that they should prepare to chat amiably with the woman (a familiar task). Biased impressions lingered when students were instructed to elicit disdain from the woman (an unfamiliar task) and when they were told that the woman would meet them in a room that would accommodate her wheelchair (an unusual person).

The findings sound a note of irony, Gilbert points out. "Interactions that are most important to us, with people we most want to impress, provoke a lot of self-preparation and seem most likely to lead to unwarranted inferences about those people," he maintains.

Other factors undoubtedly lead social appraisals astray, Gilbert adds. In Western cultures, the desire to predict and control the world gets translated into inferences about the inner traits of others, he suggests. And unrealistic expectations about human behavior, often fostered by a lack of appreciation for the ways in which situations shape behavior, further contribute to biased impressions. Finally, even realistic expectations about a situation (such as awareness of the power of a terrorist's threat to coerce a hostage into reading propaganda) sometimes lead to unrealistic perceptions of behavior (a sense that the hostage spoke more forcefully than was necessary).

Laboratory experiments cannot determine the day-to-day frequency of such misjudgments, but Gilbert holds that people may often navigate their social world without noticing that they have veered off course. Even psychologists who track the tricky mental currents tugging at judgments about others form their share of biased impressions, he acknowledges.

"Just because physicists study gravity doesn't mean they don't fall down," he observes with a laugh. □