

Practical Humor

cross the creaking floorboards of a stuffy attic, you find an odd abstract painting. The black and white enamel background looks familiar, as if someone famous had fashioned it. In the 1940s, the legendary abstract expressionist Willem de Kooning produced comparable works when he couldn't afford colored paints. But atop the background of the painting are green splashes, as if Jackson Pollock had paid de Kooning a besotted visit and spilled some crème de menthe on it. One splotch looks a bit rabbitlike and the others are little ovals. You head to the local gallery and tell the art dealer it's called "Easter on Mars." Bargaining with the dealer turns frustrating quickly, despite your assertions that this work is probably a groundbreaking one. You gesture toward the painting, cite a price, and say, "That's my last offer, but I'll throw in my pet frog." The dealer laughs and you leave with a pocket full of cash.

The gag that accompanied your final bid might have earned you a few more dollars than you'd otherwise have gotten. An experiment that had participants haggle with a confederate on

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From: Humor 101 107

DOI: 10.1891/9780826106094.0006

CHAPTER

the sale of a painting showed that this same frog joke (if you can call it a joke) led folks to shell out more for a painting than they paid in a jokeless situation (O'Quin & Aronoff, 1981). The participants were the buyers in this experiment, but the result was the same; a joke helped move the final price in the joker's direction. (I'd rather begin this chapter with an example of you making extra money with a quip than with an example of getting ripped off because of one.) A similar experiment conducted via e-mails revealed that beginning a negotiation with a bit of humor led to a more equitable deal in the end. In addition, the funny e-mails led to more trust in the other person and more satisfaction with the outcome (Kurtzberg, Naquin, & Belkin, 2009). Bargaining can be a stressful experience, but humor seems to create more pleasure about the final agreement. Extending this bargaining research to more general and diverse applications of humor has led to some intriguing findings. As this chapter reveals, this research provides a peek into the workings of negotiation, interactions on the job, persuasion, memory, education (the ultimate form of persuasion), and even creativity. But most of all, it tells us a lot about humor.

BARGAIN-BASEMENT HUMOR

Much of human life requires cooperation and compromise, which often means that few of us always get exactly what we desire but many manage to get something we want. The negotiation literature is huge, but the role of humor in this process is underinvestigated. Although we often play at give and take with spouses, children, friends and lovers, negotiating moments are particularly common in business. Studies of formal bargaining can reveal a lot about humor's function that might not appear in other contexts. Vendors often behave as if humor helps the entire process of their trade. Those who still hawk wares in open markets frequently rely on a witty patter to attract potential

customers and make the final sale (Morgan & De Marchi, 1994). I shouted many a joke about butterfat and chocolate when I was an ice-cream man, and I don't know for sure if I sold more cones, but it definitely relieved my boredom. Advertising of various sorts can use humor for this first step of attracting buyers, as I'll discuss later in this chapter as a form of persuasion. In addition, humor can send the message that it's time to move from bringing a buyer and seller together to settling on a price. Humor frequently appears at times of transition like this in business meetings (Consalvo, 1989). Once the relevant buyers and sellers move to the negotiating stage of the interaction, humor can establish the parameters of the bargain, facilitate communication without confrontation, and diffuse tension.

Bargaining can be uncomfortable. It is one domain that often involves a delicate dance between affiliative and aggressive humor. A comedic offer can help negotiators fish for information about how far the other party might be willing to go in the process. Any such offer can be withdrawn as "just a joke" if the other person perceives it as an attempt to bargain outside the realm of the reasonable. Each joking comment can send a hidden message that could alter outcomes. Haggling over "Easter on Mars" might begin with a collegial quip that connects the people involved, as if to say, "We're just a couple of art lovers here. I'm sure we can find some common ground." But negotiation emerges from disagreement. Buyer and seller must start with different ideas or there would be no need to negotiate. Direct confrontation at this initial stage can blow the deal. In this part of the process, a joke might deride the painting or imply that someone isn't bargaining in good faith, but it has to do so indirectly. "My kid could paint that," a buyer might say with a grin, particularly about some modern art. A remark like this one implies that the work might not justify a high price. Playing this comment as a joke allows the statement to sound more like an attempt at wit than the beginning of a quarrel.

As the negotiators approach an agreement, jokes might diffuse tension by encouraging participants to notice how small

the distance between them appears. The suggestion that a pet frog might seal the deal has a specific implication. What buyer and seller are offering is essentially the same. They're no farther apart than the price of a fly-eating amphibian. It's as if to say "We're very close here. Let's not worry about a few measly dollars." In some ways, this joke can communicate the fact that both parties have done a good job of negotiating. No one has lost face. In contrast, without the joke, negotiators might get drawn into a hostile competition. Once bargaining becomes more about domination and winning than compromising, there's often no deal. Neither participant can compromise, for fear of appearing like a pushover.

Qualitative studies confirm this pattern of using jokes and humor in negotiating. Qualitative research usually requires extensive, detailed data to gain insight into a process. Qualitative work of this type essentially asks why people use humor in negotiations and how they do so. It's great for getting a feel for what's going on, especially when a phenomenon is complex and multifaceted. As its name implies, qualitative research rarely reduces these interactions to numbers and statistical calculations, focusing instead on descriptors of complicated processes. In contrast, quantitative research focuses on a few variables that can reduce to numbers of some sort—hence the name. Quantitative work often relies on larger samples to find out when, and under what circumstances, humor might alter negotiations. It's great for testing if hypotheses generated from qualitative research hold up in bigger experiments.

The study of the frog joke is a quantitative one. Multiple participants each negotiated a dollar amount that's easily reducible to a number. One qualitative study of humor and negotiation examined tape recordings of business transactions, focusing on exchanges that ended in laughter (Adelsward & Oberg, 1998). These investigators found that joking and chuckles consistently signaled the transition from initial discussion to serious bargaining. Another qualitative study looked at videos of a salesperson and a potential buyer at a camera store (Mulkay, Clark, & Pinch, 1993). These same two people met multiple times and repeatedly used humor to establish the parameters of the bargain, facilitate communication without arguing, and diffuse tension after they declined offers. Further work on this topic can help illuminate humor's role in setting the stage for bargaining and conducting negotiations. Each of these topics actually relates to many general issues of humor in the workplace.

HUMOR AT THE OFFICE

Humor consultants assert that joking on the job will soon have us all performing at 110% as we whiz around cubicles with our jet packs. These consultants frequently appear, clown nose prominently attached, as motivational speakers to big companies. They discourage the obviously troublesome gags—the sexist, racist, ageist, and hostile jokes. But they encourage a loosening of inhibitions via forced laughter, juggling, and balancing pennies on your forehead. (As if that's not hostile.) Their tacit assumptions include the idea that humor is some sort of tool to whip out as needed, like a portfolio of cartoons to share during breaks or a shaggy-dog story to tell over sandwiches. The thought that humor might actually point out the company's inconsistencies or foibles receives little, if any, attention. Humor consultants want employers to see comedy as an inexpensive enhancer of employees' motivation, morale, productivity, and satisfaction. After all, the employers pay the consultant's fee. I'm sure that employees don't mind a little time away from their everyday routine to watch some jokers spout the latest business jargon, especially if they do it while juggling between wholesome guips about bosses and paperwork. If these consultants can keep the promotion of their Web sites and newsletters to a minimum, the presentations will probably be more fun than a day full of cold calls and spreadsheets. The data on humor in

the workplace, however, are a wee bit less impressive than these consultants often imply.

Some of the emphasis on humor in the workplace has appeared as part of attempts to make occupations more pleasant, a movement described as "the culture of fun." Lightening up the office certainly has potential benefits. Meetings could become more tolerable and repetitive tasks might appear less dull. But blurring the distinction between work and fun can come at a cost. If a naturally witty team of people happens to work together in an environment where they aren't too pressured, humor can give the day a little verve, help people communicate on difficult topics, and enhance creativity. Nevertheless, campy attempts to make work fun can have mixed results at best. One company with a team devoted to assisting an African airline decorated the walls in a jungle theme that included paintings of wild animals. Trainees sang a song by The Muppets and completed colorful crossword puzzles to learn the company's slogans and guidelines. On some days, employees were encouraged to dress up like superheroes. (I'm not making this up.) These activities generated an unsurprisingly large share of cynicism (Fleming, 2005). They also tempt me to attend faculty meetings in my Batman underwear. A look at this literature suggests that it is less definitive than some might believe, but humor clearly has a function in multiple domains of work.

Is Work Really Humorless?

Despite the concerns of humor consultants, even those of us who don't write for sitcoms still have fun at work. Not all jobs are a laugh a minute, but many are a laugh per every three or four minutes (Holmes & Marra, 2002a). In contrast, groups of friends generate humor about twice per minute (Hay, 2000). Work isn't as funny as a night with the pals, but it does have its moments of wit. The function of the wit, however, may be more varied at work than it is in our social lives. Some of it can maintain hierarchies or keep groups cohesive. Anecdotes,

banter, and gentle teasing can be a great part of friendships. In the workplace, a lighthearted approach can help socialize new employees into the culture of the company (Vinton, 1989). Jokes on the job tend to pop up during transitional moments, when a group moves from one task to the next. These moments might be the only ones when a joke wouldn't interrupt the flow of work. Alternatively, humor and laughter at these times appear to say, "We're all in this together," as if to send a message to the team that everyone's on board (Consalvo, 1989).

But some jokes provide teams more of a whack with a board. A great deal of the humor at work is subversive, a socially acceptable way to challenge the hierarchy within a small team or an entire organization. These jokes often undermine status or threaten the values of the business, instead of signaling a supportive attitude for collegial relationships. Over 30% of the humor in meetings appears to be subversive, markedly more than what appeared in groups of friends (Holmes & Marra, 2002b). These jokes often deride working conditions, the skills of managers ("Here comes Captain Efficiency!"), or the capriciousness of regulations. Management often attempts to use jokes to divide their workers if they seem to be ganging up. Teasing comments also have a way of communicating unspoken norms about dress codes or other behavior without turning critiques into a full dressing-down (Collinson, 1988; Dwyer, 1991). ("Nice tie!")

OUR FEARLESS LEADER: HUMOR IN LEADERSHIP

The leadership literature is enormous, with literally thousands of studies published (see Mumford, 2010). Humor in leadership has also received a fair bit of research. Much of the work we've seen on humor in relationships also applies to leaders. People report that good leaders have a pleasant humor style (Priest &

Swain, 2002). A leader's positive humor correlates with other positive leadership characteristics, like intelligence and competence, as well as with greater job satisfaction in the workers (Decker, 1987). In contrast, negative humor, particularly aggressive jokes, leads workers to perceive their leaders as less capable and effective. These results seemed even larger for female leaders than for male leaders, with positive humor improving perceptions and negative humor decreasing impressions more for women than for men (Decker & Rotondo, 2001).

A lot of recent work focuses on transformational leadership, a style that contrasts with transactional leadership. I'm oversimplifying a bit, but transactional leadership involves a concrete focus on goals, dishing out rewards, and meting out punishments. Transactional leaders can be great at creating a clear set of expectations. Their subordinates know what goals to achieve, by what point in time, and what will happen if they succeed or fail. They often emphasize duty to the company as a source of motivation. In contrast, transformational leaders attempt to focus more on the individual needs of the employees, emphasizing some kind of intellectually stimulating way to look at tasks and goals in the hope of enhancing relationships and inspiring creativity. Transformational leaders tend to do these things by spending more time coaching and teaching employees, sharing a "big picture" vision, and getting workers to see problems from multiple viewpoints. As you might guess, the transformational approach leads to better job satisfaction and performance than does the standard carrot and stick. A dash of humor in these transformational leaders helps this style inspire more trust. The workers seem more willing to let these witty, transformational leaders make the big decisions, handle big tasks, and be in charge of their future in the company. The humorous transformational leaders also get more commitment to the organization from their workers. These workers feel more like they belong in the organization and express more dedication to their jobs (Hughes & Avey, 2009). These data suggest that humor plays a familiar

and important role in leadership. It might also apply to one of a leader's key tasks: persuasion.

HUMOR AND PERSUASION

Everything from plugs for Pot Noodles to pleas for make-up tests can strain for comedy in an effort to persuade. In advertising, one of the most ubiquitous forms of persuasion, humor has had every conceivable impact. Some studies show it helps. Some show it hurts. Others find no effect at all (Weinberger & Gulas, 1992). Humor is clearly good at capturing attention, as research on television commercials confirms (Beard, 2007). It can make prospective buyers like a product more, too. Oddly enough, humor can alter our perception of a product without our knowing what's happening. We often can't articulate why we like certain merchandise, even if it has been paired with something delightful in our lives. Many folks leap from this idea to outrageous concerns about subliminal advertising, but that's another issue. In subliminal advertising, people can respond to an ad logo or a simple message presented outside their own awareness, but only if they are properly motivated for the product. Experiments on subliminal effects usually flash a word or image on a computer screen quickly—so fast that folks can't identify it. The logo alters behavior later, even in folks who can't recall seeing it. For example, people who saw the name of an iced tea preferred it to other drinks later in the experiment, but only if they were thirsty (Karremans, Stroebe, & Claus, 2006).

Humor's impact is a bit different, but it can also function outside awareness. Instead of a company flashing the name of a brand or product by itself, the product gets paired with something funny. In the everyday world outside the laboratory, advertisers place products next to almost anything alluring, even if it makes no sense that the two should be paired. How many beer commercials show bottles of brew and stereotypically

glamorous women? Acquiring a feeling for something simply because it's been paired with something good (or bad) is known as "evaluative conditioning." For example, a product paired with our favorite music might acquire some of the good feelings that we have about the tune. At least one way that humor can persuade people involves this evaluative conditioning process. In one crafty study, experimenters designed their own online magazine. Amid all the articles, they placed images of products like energy drinks, pens, or scissors near witty cartoons or next to bland drawings. The cartoons had nothing to do with the products; they just happened to be close to them on the page. Participants consistently liked products paired with cartoons more than they liked products paired with the bland drawings. They even claimed that they'd prefer the product paired with a cartoon as a prize to take home (Strick, Holland, Van Baaren, & Van Knippenberg, 2009). This seems a curious effect given that the cartoon wasn't related in any way to the drinks, pens, or scissors. Perhaps advertisers will now pay extra to appear on pages near cartoons. Other mechanisms behind humor and influence are less automatic, but they're hard to understand without a more general model of persuasion.

A Comprehensive Theory of Persuasion

The impact of a persuasive communication depends on the audience as well as the message, much like the impact of jokes. One of the most comprehensive theories of persuasion is the Elaboration Likelihood Model (Petty & Cacioppo, 1986). As its name implies, it's all about the chance that someone will elaborate on a message, think about its content, and examine its logic. The model emphasizes that messages can persuade via two different routes: central and peripheral. Central processing concerns careful consideration of the rational argument behind a message. Motivated listeners who have an active interest in the topic and the desire (and ability) to weigh a message's points are most likely to engage in central processing. It usually includes

more elaboration and thought, and can lead to stronger attitudes or dramatic changes in beliefs.

In contrast, peripheral processing is the default for those who aren't particularly interested in a topic, don't understand the message, or lack the motivation needed to examine the logic of an argument. In peripheral processing, people might rely more on an overall feeling rather than rational thought—going with the gut, in a sense. They might focus on their impression of the message sender's expertise rather than the form or content of the argument. In addition, during peripheral processing, listeners might react more based on how much they like the messengers, rather than on the points that they make. People can use each of these in different circumstances. If I'm going to purchase an expensive car, I'm motivated to get all the info, so I'll process messages centrally. I might check out Consumer Reports and weigh and measure different data extensively. I should arrive at a rational decision in this way. If I'm just picking a candy bar, I might not give it a lot of thought and end up choosing the one with the colorful wrapper or the catchy jingle.

Humor and Peripheral Processing

Humor alters persuasion via peripheral processing. Few of us say to ourselves, "I'm going to vote for new marijuana laws because of that hilarious radio spot," or even "I'm going to buy that brand of soda because the commercial was so funny." As we've seen before, humor can put people in a good mood, increase how much we like the humorist, and distract our attention. All of these provide opportunities for persuasion via the peripheral route. They don't do much for central processing of detailed arguments, though. A humor-induced good mood can persuade us in interesting ways. Generally, folks in a neutral mood will use central processing. They'll appreciate the quality of an argument, think it through, and come to a logical conclusion. They won't get distracted by the expertise of the arguer. In contrast, folks in a good mood tend to rely on peripheral

processing. They'll pay less attention to the quality of an argument and, instead, rely on the arguer's degrees or qualifications. This approach can lead to fallacious conclusions. People who look like experts will seem more persuasive, even if their arguments are ridiculous.

Humor seems to work peripherally, perhaps by inducing a good mood (Mackie & Worth, 1989). In one experiment, participants either watched a witty clip from Saturday Night Live or a documentary film. Then they had about 1 minute to read a message about gun control. The message was either for or against gun control, but always the opposite of the participants' own views. (Participants who said that they wanted more gun control read arguments supporting less gun control, and vice versa.) The message contained arguments that were relatively weak or relatively strong, either for or against gun control. For example, a weaker argument against gun control might be that some people like to hunt. A weaker argument in support of gun control might be that guns are loud. A stronger argument against gun control would be that the second amendment guarantees the right to bear arms. A stronger argument in support of gun control would be that victims of crimes involving guns are more likely to die than if the perpetrator of the crime has another weapon.

In addition to varying the strength of the argument, the experimenters also varied the credibility of the person presenting the argument. He was either an expert (a legal scholar from a neighboring university) or an average Joe (a freshman from another town). Sure enough, attitudes of happy folks, the ones who had watched the comedy, changed with the prestige of the arguer, not with the strength of the argument. Happy participants who heard an argument from Dr. Big Shot changed their attitudes more than happy participants who heard an argument from Joe College. This result is exactly what we'd expect from peripheral processing. The attitude change for happy folks relied on the prestige of the arguer even if the arguments were weak. In contrast, those in a neutral mood, the ones who watched the documentary, responded to the quality of the argument, not the expertise of the arguer. This result is what we would expect if the participants used central processing. (See Table 4.1.) It didn't matter if Dr. Big Shot or Joe College made the points. The quality of the argument is what's important, as it should be.

It's possible that humor worked by improving mood. The experimenters measured mood; the folks who watched the funny film clip reported a more positive one. But there could still be something about comedy that altered persuasion that the experimenters simply didn't measure. Perhaps the cognitive changes associated with getting jokes altered processing of the subsequent messages. To buttress the argument that a good mood was the critical mechanism, Mackie and Worth (1989) did a follow-up experiment. Even when they manipulated mood another way, they still got comparable results. (Participants won a couple of bucks in a rigged lottery to make them happy.) This second experiment supports the idea that mood is clearly critical, even if it's not the only path from humor to persuasion. It also suggests that cognitive changes associated with humor probably aren't essential to persuasion. After all, winning a mini-lottery probably doesn't require resolving incongruities or appreciating puns. Other studies show that commercials

TABLE 4.1 HUMOR LEADS TO PERIPHERAL PROCESSING
ONLY WHEN PARTICIPANTS HAVE LITTLE TIME
TO CONSIDER ARGUMENTS

Rushed condition—1 minute to read the argument:	
Funny Flick First	Documentary First
Attitude change depends on the arguer's credibility (peripheral processing).	Attitude change depends on strength of argument (central processing).
Unrushed condition—ample time to read the argument:	
Attitude change depends on strength of argument (central processing), regardless of film.	

that create a positive mood themselves can influence people's impressions about products—even getting underage kids to tell researchers about the beer they wish that they could buy (Chen, Grube, Bersamin, Waiters, & Keefe, 2005)

The results above, with central processing appearing during neutral moods and peripheral processing occurring during happy moods, arose when the participants had only about a minute to read the message on gun control. The experimenters also ran all of the same conditions with humor, message strength, and credibility of the arguer in a situation where the participants could read the message for as long as they wanted. (Again, see Table 4.1.) With more time to process the message, humor and the positive mood didn't lead participants into peripheral processing. Instead, the happy participants behaved more like folks in a neutral mood. Their attitudes changed with stronger arguments more than with weaker arguments. In addition, the prestige of the arguer had little impact. Unlike in the rushed, one-minute conditions, participants engaged in central processing rather than peripheral processing. In short, if you're happy and you need to make an important decision, take your time. In fact, taking your time may be a good idea for any important decision.

The fact that humor functions via peripheral processing can make it an ideal approach for changing attitudes about topics that people don't want to think about. A great deal of health psychology focuses on getting people to face facts about illnesses—I don't mean the common cold, but the spooky ones like cancer and AIDS. Discussions of these topics tend to make people shut down. They don't process the arguments and rarely do the things that might keep them from developing these dreaded diseases. An innovative study took advantage of humor's impact on peripheral processing to alter people's attitudes toward putting on sunscreen (to avoid skin cancer) and condoms (to avoid AIDS).

The researchers looked at how much people hated feelings of discomfort. They predicted that a humorous message

would work better than a less humorous message for people who are averse to distress (Conway & Dube, 2002). In contrast, the humor of the message wouldn't matter for the people who could tolerate distress. The humorous message about sunscreen included a cartoon of a giant truck filled with the stuff. The humorous message about AIDS included a cartoon character that hummed and grinned as he walked along with his testicles and donned a condom. I'm not making this up. Results supported the hypothesis that humor worked peripherally and helped change attitudes in those who could not stand distress. What's funny was the measure of tolerance for feelings of distress: masculinity. Much as men like to think of themselves as butch and tough, people who claim that they're forceful, dominant, and aggressive (including women) can't stand discomfort. In these more masculine, distress-intolerant people, a funny message was more persuasive than a less funny one. In short, the absurd truck filled with sunscreen was more likely to get them to claim that they'd wear the stuff, and the cartoon penis got them to say they'd use a condom. For the less masculine folks, the humorous content didn't have any impact on the persuasiveness of the message. The truckload of sunscreen and the funny penis were unnecessary.

Another path leading from humor to persuasion involves how much an audience likes the persuader. On one hand, people like witty messengers, and the fact that they like them can alter their persuasiveness. On the other, if an audience views a funny messenger as "only joking" on a topic, they are likely to discount the argument and take it less seriously. So being funny makes people like you more, but it can also lead them to take your message less seriously. A nifty experiment on this topic took jokes from the popular comedians Bill Maher and Chris Rock (Nabi, Moyer-Guse, & Byrne, 2007). The researchers selected jokes from these comics that had specific, political messages. The researchers reworded some of their jokes to make them less funny. Some participants read the funny versions and some read the unfunny ones. They also either knew

or didn't know that the messages were from these comedians. More humor increased the liking of the sender of the message. Nevertheless, any impact of this increased liking ended up getting washed out. Even though the humor made people like the messenger more, it also made participants discount the argument and take it less seriously. The impact of the humorous message reached statistical significance only when the participants reported their attitudes a week later. But immediately after the experimenters presented the message, attitudes hadn't changed. Clearly, it took time for humor's impact to kick in.

This gradual increase in attitude change over time is known as the "sleeper effect" (Hovland & Weiss, 1951). In most persuasion experiments, an argument changes attitudes at first, but then the attitudes drift back toward their original position. In the sleeper effect, people discount an argument for some reason and show little change in their attitude initially. After some time, though, they seem to forget the rationale for their discounting the argument and only remember the argument itself, leading to a greater attitude change later. Most studies of humor and persuasion have focused only on immediate attitude change; they missed the chance to see if humor increased persuasion days later. It's possible that humor's impact is greater than we realize but that it doesn't have much of an effect for a week or so. Further work on this idea seems warranted. Other applications of humor seem to rely on comparable effects on thought and action. A popular topic involves creativity.

HUMOR AND CREATIVITY

One aspect of humor that might have some practical implications concerns its link to creativity. Both comedy and creative ideas can rest on questioning assumptions, seeing things in multiple ways, or generating unique perspectives. Both can require a playful attitude and a propensity toward taking risks. Some theorists think of humor as a subtype of creativity (e.g., see Murdock & Ganim, 1993); others view them as distinct but overlapping ideas (O'Quin & Derks, 1997). Are funny people more creative? In a word, yes, but we have to keep all the cautions of the previous chapter in mind. A good sense of humor can correlate with creative flair, but both also vary with other aspects of personality and intelligence. Despite this correlation, we don't want to assume that humor causes creativity, or vice versa, until we rule out all of the alternative explanations for any link between the two.

The research on these topics gets a bit convoluted. Defining creativity may be even more difficult than defining humor. (At least humor tends to make people laugh.) What is creativity in the first place? Entire books are devoted to this question, and some damn good ones, too (Kaufman, 2009). Most researchers in the field agree that a novel, useful idea is a creative one. Some investigators focus on creativity as a skill or a trait that might be easy to measure in general. That is, creativity might be something we could assess independently from performance in the arts or sciences. Perhaps there's something that all creative folks have in common and that we could tap in a few simple laboratory tasks, a questionnaire, or an interview. These researchers might hope that the broad ability could apply in many domains.

Think of William Blake, the splendid poet and exquisite painter. Perhaps some test could show that Blake is outstandingly creative in the way that he thinks or solves problems. The test wouldn't rely on years of acquiring skill with a brush or a pen. Tests that aim to find creativity independent of the development of a technical skill often ask people to generate novel ideas or associations. One such test might ask people to list all of the things that they could do with a shoestring. High scorers generate more answers, answers that few other people provide, and answers that aren't the same idea over and over. So providing many answers tends to mean more creativity. Rare answers are also considered more creative. "I could use a shoestring

to tie my shoes" is an answer that would score lower than the answer "I could shred a shoestring to make confetti." Answers that are essentially variations on the same theme would show up as less creative than lots of answers that are different. Thus, someone who listed only "I could use a shoestring to hang my brother" and "I could use a shoestring to strangle my least favorite aunt" might have a low score because these both are essentially the same idea. In contrast, someone who mentioned "I could stretch a shoestring and play it like an instrument" and "I could slip a shoestring into a plate of noodles to surprise a friend" would get a higher score because these two answers are so different from each other.

Generally, tests like these and tests that require generating humor correlate (see Kaufman, Kozbelt, Bromley, & Miller, 2008). For example, those who did well on paper-and-pencil tests of creativity also made up funnier captions for cartoons (Brodzinsky & Rubien, 1976; Treadwell, 1970). Self-reported humor also correlates with self-reported creativity. Folks who claim that they're innovative also report that they're particularly witty. A study of this type used the Situational Humor Response Questionnaire (Martin & Lefcourt, 1984), which asks about smiles and giggles in response to oddball situations like skidding harmlessly on ice or getting a drink spilled on you by a waiter. Folks who claimed to laugh and grin while in these predicaments viewed themselves as more creative (Wycoff and Pryor, 2003).

Note that none of this correlational work proves that chuckles enhance creativity or that ingenuity improves humor. We've seen that humor production correlates with extraversion and IQ before (Howrigan & MacDonald, 2008). At least in some studies, creativity does, too (see Kaufman, 2009). The correlations between trait measures of one's sense of humor and creativity might arise simply because each is also linked to intelligence or personality. That said, experimental work reveals that exposure to humor increases scores on creativity tests, suggesting that laughter leads to ingenuity. For example, high school students who listened to a popular comic scored higher on a subsequent test of their creativity than their peers who didn't listen to the comic (Ziv, 1976). Watching a funny film clip produced comparable results. College students who viewed five minutes of television bloopers did a better job of solving problems creatively than those who watched a film about math (Isen, Daubman, & Nowicki, 1987). Not that math isn't funny sometimes, but the bloopers led people to think of novel and interesting solutions more often. Simple instructions that encouraged students to answer in a funny way increased creativity scores, too (Ziv, 1983). The moral is: If you're ever asked to do a creativity test, think funny and you'll probably score higher.

Humor's impact on creativity might stem from its influence on mood. Happiness leads to more creativity, at least up to a point (see Davis, 2009). In a handful of situations, a positive mood can actually impair creative problem solving (Kaufmann & Vosburg, 1997). Generally, a mildly positive mood is a big help if you have to generate new ideas in a relatively unstructured task, like thinking up novel uses for shoestrings. It might be less helpful, though, if you have to find a specific solution to a specific problem, like how to decarboxylate an ester. Extreme moods are also less useful than mild ones. Unparalleled joy probably just makes people want to dance, shout, and open a bottle of champagne. Humor has not been applied to all of these tasks in all of these circumstances. When you've got a creative task ahead, a few minutes of humor or anything else that'll make you happy (and not impair your brain function!) can be a big plus.

HUMOR AND MEMORY

Much of humor's role in education, persuasion, and other applications could rest on its influence on one's memory. If funny material stays in people's heads longer, it has the

potential for a greater impact. A ton of work in advertising and instruction relies on this idea. People definitely remember aspects of funny stuff better than less funny material, but only in certain contexts and with limited amounts of detail. Some of the results are inconsistent, so we're still figuring it all out. Our memories might only favor humorous material if it stands out—a saliency effect. When a mixture of funny sentences and less funny sentences appears in a list, participants remember the amusing sentences better than the dull ones. (The result where the same person sees both funny and unfunny statements in a mixed list is called a "within-subjects effect." The memory results for the funny and the unfunny come from within the same person. The investigator compares memory results from within the same person who saw both kinds of sentences.) Humor enhances memory for sentences within subjects. In contrast, if one group of people gets a list of sentences that are all pretty funny and another group gets a list of sentences that are all pretty mundane, both recall about the same. (This comparison is "between subjects." The memory results for the funny sentences come from one group of people and the results for the unfunny ones come from another group. The investigator looks at differences between the two groups.)

In addition, in the within-subjects conditions, where folks get the mixed list, enhanced recall of the funny sentences appears at the expense of the unfunny ones. Compared to the betweensubjects conditions, where folks had lists that were either all funny or all unfunny, the mixed-list group generally did better on the funny material but worse on the unfunny sentences (Schmidt, 1994). Apparently, we remember witty material at the expense of routine information, and it happens only when both are present to create a bit of contrast. This selective memory for funny material at the expense of other material can undermine education and advertising. It's great to be a witty professor, but if students remember the jokes but not the material, that's a disappointment. Funny commercials can also capture attention,

but if viewers don't remember the product, perhaps the ads are not helping to sell anything.

In addition, in the study of lists of sentences, humor enhanced people's memory for the general impressions of the sentences, but didn't help much for exact details. Folks could recognize the sentence if they saw it again, but didn't do a good job of recalling it word for word. This might be why people can have such a hard time retelling jokes even if they remember them. If humor only improves people's memory for the gist of a sentence but not for the details, people might form a memorable impression of the joke but forget the essential wording that makes it funny (Schmidt & Williams, 2001). My favorite example of this loss of details occurs during the credits of the movie *Diner*. Paul Riser's character begins a detailed yarn about a man in a bar. As he approaches the punch line, he realizes he has neglected to mention a critical point to the joke: the man is a quadriplegic.

In contrast to these results with funny statements, humor might improve memory for pictures with captions in both between- and within-subjects arrangements. One of these experiments used Gary Larson's Far Side cartoons as the funny material, and then wrecked their humor by making the caption a literal description of the picture. To get a feel for the stimuli, imagine another infamous Larson cartoon. This one shows three amphibious creatures immersed in the water at the edge of a pond. One holds a baseball bat while all three gawk at the ball that has landed on the ground just outside the water. The original caption reads, "Great moments in evolution." There's a bit of incongruity resolution when you catch Larson's implication that our ancestors made the transition from sea to land thanks to a frog's pop fly. The bastardized, unfunny caption might read, "Three fish lost their baseball." I don't think anyone will confuse that one with the funny original. One experiment using pictures like these replicated the results with the sentences; humor enhanced memory within subjects but not between subjects (Schmidt, 2002). This shouldn't be a huge surprise—the experiment was done in the same lab by the same researcher.

Another experiment using pictures found that humor enhanced memory even in the between-subjects conditions. This experiment used "droodles" as stimuli. Although they sound like drooling poodles, droodles are actually a combination of doodles and riddles—little designs that don't make much sense until you see the caption. Roger Price invented them (Price, 2000), the same guy who helped develop Mad Libs. Imagine you saw this: 000ME000.

It came either with the label "I work with a bunch of zeros" or the label "numbers and letters." Investigators manipulated the captions of comparable pictures to make funny and less funny versions. Participants remembered the funny droodles better than the less funny ones. This time the enhanced memory appeared both between and within subjects. Folks who saw a mixed bunch of droodles, some funny and some not, remembered the funny ones better. But folks who saw only funny ones remembered them better than those who saw only unfunny ones (Takahashi & Inoue 2009). It's unclear why the droodles didn't work the same way the Larson cartoons worked, but the authors suggest it might have something to do with the recall task. For the Larson cartoons, Schmidt (2002) had participants describe the picture and caption in the memory task. (What are they going to do, draw like Larson?) For the droodles, Takahashi and Inoue (2009) asked participants to scribble the squiggles and write the caption. Perhaps something about the differences in these tasks contributed to the different results.

Humor's impact also might vary with another aspect of context: foreknowledge of the memory test. In the droodles experiment, participants who looked at the pictures but didn't know they were going to be tested on them later showed humor-enhanced memory. In contrast, participants who were warned that they would be tested on the droodles didn't show better memory for the funny ones. Perhaps funny droodles naturally captured more attention or led to more rehearsal on

the participants' part when they weren't expecting to have to recall them later, but the threat of a test got them to attend to or rehearse all the droodles, wiping out the humor-enhanced memory. We can keep these results in mind as we look at one of the biggest fields dependent on memory: education.

HUMOR IN EDUCATION

Many guides for instructors imply that comedic moments are the key to a joyous lecture. Some suggest that jokes will fill the classroom with the unparalleled motivation and creativity that will undoubtedly bring world peace, a cure for cancer, and better Pot Noodles. Most of these effusive endorsements of humorous instruction rest on anecdotes. I hate to let data get in the way of such enthusiasm. No one wants to see a return to the somber days of frightened students quaking in fear of an instructor's rap on the knuckles with a ruler. Nevertheless, the ubiquitous demand to make learning fun seems to undermine the idea that some material worth mastering actually requires effort. Although it's nice to see classrooms lighten up, I don't relish the thought that my neurosurgeon learned the order of the cranial nerves from a witty ditty (Simpson, Biernat, & Marcdante, 2002). It seems as if humor could make learning more fun. It's easy to hope that it could even increase learning. But what would motivate an instructor to increase the comedy of a class? Perhaps we should look at the dreaded teacher ratings.

Humor and Teacher Ratings

The brief evaluation forms that students complete at the end of each semester might be more important than many undergraduates realize. They can influence a professor's salary, promotion, and tenure; they definitely influence mood. One snarky comment can dishearten the best instructors more than a dozen

positive ones can encourage them. These evaluations often contribute to decisions about teaching awards, too. I love to complain that few teaching awards include a cash prize, but they do influence raises. I recently received the Chancellor's Award for Excellence in Teaching, which supposedly marks me as a top teacher among all the instructors in the SUNY system. There was no check, but I did get a medal that looks remarkably like one I got for winning a wrestling tournament in junior high. As odd as it sounds, this silly decoration is actually a real source of pride and happiness, especially when research is going badly. And teaching rarely requires a headlock. If humor could help improve teacher ratings, most instructors would like to know about it.

End-of-the-semester teacher ratings correlate with a host of variables other than humor. The amount of research devoted to predicting these little numbers is staggering, until you remember that most of the researchers who publish this work also endure teaching evaluations every term. One of the most haunting findings in this literature relies on brief video clips-amounting to a mere 10 seconds or less of a lecture. Ratings from people who watch as little as 6 seconds of an instructor's lecture in the classroom correlate significantly with the ratings that teachers receive from students who have known them for a semester. This fact might mean that students make up their minds about a professor very early during the first lecture—a thought that fills some of us with dread. Clearly, a great deal of nonverbal and potentially unconscious behavior contributes to student evaluations. For example, fidgeting is the kiss of death for any teacher. Instructors with lower ratings made antsy hand motions, toyed with pens, and fumbled with chalk. They were also more likely to frown or sit down during lectures. In contrast, instructors with high teacher ratings were more likely to nod, laugh, and show warmth (Ambady & Rosenthal, 1993), but they had to do it without fidgeting.

The idea of warmth is important to psychotherapy, as we'll see in the chapter on psychological well-being. In the case of instruction, both humor and warmth appear to be part of what

we call "immediacy." Immediacy involves that sense that a lecturer is right there with you, connected, following your understanding as the instruction progresses—the instructors indeed seem to be thinking along with the students as they progress through the material. There's no sense of a canned, memorized presentation. It's the difference between lecturing at students and lecturing to them. Immediacy might explain why university administrators haven't replaced all classes with videotaped lectures from experts—at least not yet. At first it seems as if a taped version of a lecture given by an award-winning teacher ought to be a great idea. In fact, a semester's worth of these lectures could show up on the Web somehow. Universities could use these over and over, even in a long-distance learning arrangement. These recorded presentations could generate lots of cash even after a professor has long been dead. They could also free up faculty members so that they could spend more time on research and the innumerable meetings devoted to vital decisions about general education requirements and paper clips.

But these taped lectures lack immediacy. Good teaching requires a relationship, not just a presentation. (Even a provost can understand that!) Measures of immediacy correlate with just about everything good. Immediacy increases teacher ratings as well as attitudes about the class and the topic of the course. It raises students' impressions of how much they think they've learned (Allen, Witt, & Wheeless, 2006), improves attendance (Rocca, 2004), and even makes professors look more attractive (Rocca & McCroskey, 1999). (Perhaps I should have my wife sit in on a lecture or two.) Most people believe that a clever presentation style is bound to improve teacher ratings, but it's not clear why. Several studies show that undergraduates' reports on a professor's use of humor correlated with course evaluations. As you'd guess, the type of humor is critical. Hostile and self-deprecating humor can hurt. Anything that appears clownish can undermine an instructor's credibility (Gruner, 1976). Affiliative humor helps (Gorham & Christophel, 1990). In addition, humor's impact seems to work indirectly through immediacy (Wanzer & Frymier,

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1999). Instructors who can sprinkle discussions with a few ad lib jests must seem as if they are attending closely to students and making a personal connection. A joke in the moment can clarify that an instructor isn't simply regurgitating a memorized speech. This approach makes students claim to like the instructor and the material more. But how much do they actually learn?

HUMOR AND LEARNING

Improving teacher ratings is great, but increased learning would beat that with a stick. Anything that can get people to learn more and faster would be tremendously valuable. Early work on humor's impact on actual new knowledge was pretty discouraging. Adding jokes to a speech did little to enhance a listener's memory for content (Gruner, 1967). Reviews of studies that compared clever lectures to serious ones showed no meaningful effects, either (Gruner, 1976). Subsequent work with children showed more promise. Kids preferred educational TV programs if they included fast-paced jokes (Wakshlag, Day, & Zillmann, 1981). In addition, kids who watched instructional videos that contained witty cartoons remembered more information than peers who watched the same videos without the cartoons (Davies & Apter, 1980). These brief studies looked promising, but drew the ire of a prominent humor researcher who criticized their artificiality: Ziv (1988) emphasized that results like these would not generalize well to a situation where a real instructor teaches a semester-long course. Unlike most critics, Ziv actually proceeded to remedy the problem.

He trained an instructor to use three or four relevant cartoons, jokes, or stories to illustrate central ideas in a 14-week statistics class. This is no easy feat. (Hear the one about the binomial distribution?) Few undergraduates ever sign up for statistics classes because of an inherent love of hypothesis testing. Finding witty examples of mathematical concepts undoubtedly took a tremendous effort. The key here was that the humor

was pertinent to the topic, consistent, and long-term. The same instructor taught the same course without these witty aids as well. Final-exam grades were almost 10 percentage points higher in the funny class—a difference that must have meant a lot to those who passed when they would have failed in the other situation. A replication of this experiment used two classes of Introductory Psychology (a course that instructors often dread almost as much as statistics) and found comparable results. These data offered compelling evidence that appropriate humor used over an entire semester genuinely could increase learning. They also imply that infrequent gags germane to the topic might be better than beginning every class with a funny tale or joking constantly with irrelevant asides. These results also seem consistent with the data on humor and memory, too.

Funny Exams

Many instructors attempt to fashion an amusing test in the hope of alleviating a bit of student anxiety. Unfortunately, professors may overestimate the magnitude of their wit, much like everyone else does (e.g., see Allport, 1961). (I once gave a test where all the response options were either "True," "False," or "Your mother." For one question, "Your mother" was actually the right answer, but many students missed it.) These purportedly funny exams can be hellish for international students who might not understand references to American pop culture. They aren't particularly funny to people who haven't studied for the exam, either. Many examinees find this approach distracting. In addition, humorous tests don't appear to improve scores even though many students claim to like them. One study found that funny directions improved scores on a subset of items, but only by 2% (Berk & Nanda, 2006). Most other studies on exam humor randomly assign students to one of two situations: a multiplechoice test with, or without, some droll options included (see McMorris, Boothroyd, & Pietrangelo, 1997). Scores on the funny versions rarely exceed those on the unfunny versions. I've tried



this myself with over 600 students and found no improvement in grades, even when test takers laughed aloud or thanked me for the jocular items. One study of grade-school students showed that humorous math items actually made them perform worse (Terry & Woods, 1975). One experiment with eighth graders revealed that a funny test improved performance only if examinees actually thought that it was funny (Boothroyd, McMorris, & Kipp [in press; cited in McMorris et al., 1997]). This result might underscore the need to ensure that the humorous test is genuinely humorous. Of course, what students would think a test was funny if they had just failed it? Perhaps those who are confident about their test performance are in more of a paratelic state, one where they can appreciate the jokes.

Several investigators hypothesized that humor might improve performance for anxious test takers. A funny test question or two might lighten up the testing situation, decrease nervousness, and let an anxious examinee relax and focus. Although the idea is great, the data aren't compelling. One study (Smith, Ascough, Ettinger, & Nelson, 1971) found the predicted interaction: The humorous test led to higher test scores among anxious students. Two others found the exact opposite effect, with humor helping the less anxious students but not the more anxious ones (Brown & Itzig, 1976; Townsend & Mahoney, 1981). Four others found that humor's impact either didn't amount to much or didn't vary with students' test anxiety (Boothroyd, McMorris, & Kipp, in press; Deffenbacher, Deitz, & Hazaleus, 1981; Hedi, Held, & Weaver, 1981; McMorris, Urbach, & Connor, 1985). The effect does not seem robust enough to make it easy to identify the conditions necessary for humor to decrease test anxiety. There are probably more efficient ways to battle test anxiety than ending each multiple-choice question with the option "banana."

Funny Textbooks

Overdressed, chatty book reps knock on my door almost every day, trying to get me to switch from the texts I've already written

my lectures for. Some occasionally mention that a new text is particularly engaging because of its humor. Hope springs eternal that a slick hardback, filled with witty comic strips, will captivate undergraduates so much that they will not only read each page, but also treasure the book too much to sell it back at the end of the term. Data suggest that this hope is probably a fantasy. Initial studies on the impact of humor in textbooks have shown such meager effects that few have attempted to replicate or extend this work.

Illustrations of key concepts can enhance learning under the right circumstances (Mayer, Bove, Bryman, Mars, & Tapangco, 1996)—a fact that most instructors knew implicitly since Pythagoras drew triangles in the sand. It seems only natural that a clever picture or two might help explain key concepts. Given the literature on humor and memory, one could hope that making these illustrations particularly funny might also help them stay with readers. Alas, no such luck. Readers of text chapters that contained cartoons found the witty chapters more appealing, but on a test of the content, they failed to outscore their peers who read an unfunny version of the chapter (Bryant, Brown, Silberberg, & Elliott, 1981). Those who read the funny texts did claim that they were more enjoyable, but they also found the funny chapter less persuasive. This finding seems to parallel the work on humor and persuasion, with jokes increasing the liking of the material but hurting the credibility. Perhaps the impact of the humor in the textbooks would show a sleeper effect of some sort, with those reading the witty chapters finding them more persuasive over time. Maybe even their memory for the content would decay less in a week or two, too. No one has yet published data on this possibility. A second study found that readers enjoyed humorous books more but did not think that they would inspire more reading, learning, or interest than a less humorous text (Klein, Bryant, & Zillman, 1982).

Despite these results, authors and reviewers continue to emphasize humor in textbooks. Statistics and introductory texts seem to harp on it the most, perhaps, as my editor mentions, in

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the hope of gaining more sales. Instructors might harbor some vague wish that a few panels of some familiar characters could make the book easier to open when the time has come for study. In fact, a better strategy might be to encourage students to recall the textbook information prior to trying to remember it for an exam. Once students have read a chapter thoroughly, they get little benefit from immediately rereading it (Callender & McDaniel, 2009). In contrast, they will recall it better for a test if they have attempted to recall it before (Butler & Roediger, 2007). Those who have written their own little summaries of sections or done other things to organize the material in their minds will flourish on the exams. Responding to short-answer questions about the material might help students learn better than all of the chuckles in the world.

SUCCESSFULLY APPLYING HUMOR

Folks in both education and business often turn to humor in an attempt to captivate, inform, and persuade. Despite effusive anecdotes, research shows that cartoons and gags help education and business only in some specific circumstances. Qualitative research and quantitative work reveal that humor appears frequently during bargaining. Quips often accompany transitions from initial discussions to serious negotiations. Banter can help establish the limits of offers. Continued teasing can communicate difficult ideas—like the thought that a product is not of supreme quality—without creating a quarrel. Comparable jolly gestures can soothe competitors as offers are declined. Jokes can often reveal that bargainers think they're approaching an agreement. They also seem to work in a jester's favor, leading to more money at the end of a negotiation.

Although many think of the workplace as supremely serious, organizational research confirms that plenty of jokes fly around in a business day. The humor in the office works the same way it does in bargaining or other interpersonal interactions. A droll story can ease tension and set a better mood. A gag can communicate that it's time to get down to business, without making anyone seem like an evil taskmaster. The occasional tease can communicate office norms, letting new workers know the rules, without requiring a big lecture. Good managers can use humor as part of a host of interpersonal skills. A witty style can increase the effectiveness of leaders who are willing to coach supervisees, share a vision with common goals for the employee and the company, and spend time encouraging innovation and creativity with more than bribes and beatings. Of course, the dark side of humor in the office is still evident. Prejudiced jibes and hostile wisecracks can undermine cohesiveness in a team. Banal or campy attempts to give a workplace a lighthearted feeling can make employees cynical and suspicious.

Humor's persuasive power appears in multiple places in the workplace and education. Advertisements can benefit from humor by mere association. Simply placing a picture of a product near a funny cartoon can make the product more desirable. Humor can create a happy mood, leading people to process messages peripherally—relying on their gut impressions rather than complicated reasoning. Funny messages also can persuade, but only in a handful of situations. A joking rendition of an important message can make people like the messenger more, but it might also make them take the message less seriously. A funny approach can help messages that folks might not want to hear, particularly threatening information about illnesses like cancer and AIDS.

Humor's impact on thought tells us a lot about comedy but even more about our own minds. Creativity and humor appear to go hand in hand. Some researchers view humor as another form of innovative, inspired flair. Creative folks are funnier, perhaps because of links among each of these, intelligence, and extraversion. A few minutes of comedy, if it leads to genuine guffaws, can make folks happy and innovative. A good mood enhances creativity anyway, at least up to a point. Telling people

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to think funny can also improve creative performance on many tasks, particularly unstructured, open-ended ones (but probably not changing a tire or performing a vasectomy.) Humor alters memory in a couple of ways. People remember the gist of funny material well, though they don't often recall it word for word. This may be why we can recognize a joke once someone starts telling it even if we can't tell it perfectly ourselves. Better memory for funny material can sometimes come at the expense of forgetting the unfunny stuff. This result might help explain why humorous educational material doesn't always lead to improved learning.

Humor appears to have a role in learning more generally. Funny instructors get higher teacher ratings, perhaps because of humor's effect on immediacy—the sense that an instructor is present and attentive with students. Small studies of humor's impact on learning aren't always supportive of wit in the short run, but a full semester of instruction that includes relevant jokes that illustrate key concepts leads to better scores on final exams. Hostile humor of any sort can breed fear in the classroom and undermine motivation and learning. Despite their popularity, funny exam questions don't seem to help performance much. In a subset of students, they can be distracting and infuriating. Others seem to like them, but probably only when they know the material well. Students seem to enjoy jocular textbooks more than staid ones, but these books don't seem to lead students to learn more in the short run. No studies have examined whether or not a humorous text leads to better learning over a whole semester. Obvious extensions of this work to physical health and psychological well-being seem warranted. Some of these have already been done. Take a look at these in the following chapters, and I'll throw in my pet frog.