Awfully Funny

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Mankind has endured no greater tragedy than the Holocaust, but that hasn't stopped comedians from joking about it over the years, nor audiences from laughing. Take a classic 2004 episode of *Curb Your Enthusiasm*, the comedy series by Larry David, that centers on a Holocaust survivor named Solly. One night Solly comes to a dinner party expecting to meet a fellow survivor. There's been a mix-up, though, and the person who arrives is Colby Donaldson — a contestant from the *Survivor* reality show. One thing leads to another, and Solly and Colby get into a heated debate over who is the tougher survivor.

"You never even suffered one minute in your life compared to what I went through," says Solly.

"I couldn't even work out when I was over there," says Colby. "They certainly didn't have a gym."

The fact that people can find some humor in a tragedy of genocidal proportions suggests there's nothing we *can't* find a little funny — at least when it's presented right. Great thinkers throughout history have recognized this unusual tendency to poke light at dark times. Plato felt humor was the mixture of pleasure and pain; Mark Twain once said, "Humor is tragedy plus time." What's become clearer to psychological scientists lately is just *why* we have the ability to find comedy in tragedy, and just how well humor helps us cope with the various stressors of existence.

“Humor arises from potentially negative situations,” says behavioral scientist Peter McGraw of the University of Colorado. “That’s counterintuitive for obvious reasons: why does something so good originate from something potentially bad or wrong?”

McGraw and colleagues attempt to answer that question in two recent papers published in *Psychological Science*. The researchers propose an explanation of humor called the “benign-violation theory.” The theory is grounded in the idea that people are amused by moral violations — threats to their normal worldviews, for instance, or disparaging statements — but only so long as those violations are harmless. When the tone of the threat is playful, or the setting safe, a violation that might otherwise elicit sadness or fear instead leads to laughter.

What transforms these threatening violations into harmless jokes, according to the theory, is psychological distance. That distance comes in four varieties. It can be spatial (a tragedy on Mars isn’t likely to haunt many minds on Earth), or social (if your grandparent is a Holocaust survivor, that *Curb* episode might be more disturbing than amusing), or temporal (yesterday’s hardship is different from one that occurred decades ago), or mental (hypothetical events aren’t as threatening as real ones). In the benign-violation theory, a joke fails or succeeds depending on its unique blend of moral threat, emotional safety, and psychological distance.

“There’s some sweet spot to comedy where you need the right degree of threat,” says McGraw. “Humor fails in two ways: it can offend or it can bore. Psychological distance is one way by which to hit that sweet spot.”

In their initial *Psychological Science* paper, published in 2010, McGraw and a colleague established that situations involving benign violations were funnier than those involving either plain old benign actions or malicious violations. They found evidence for this tendency across five experiments. For one test, they showed pairs of scenarios to study participants who rated each situation for its level of threat and humor.

One of these scenarios involved a young girl who knows that her father has lost his job and that her family is having money problems. In response, the girl decides to sell her virginity on eBay. About 78 percent of study participants found that behavior “wrong,” but 45 percent still said it made them laugh. In the paired scenario, the same girl responds to this crisis by selling her jewelry on eBay. Virtually no test participants considered this behavior a violation — but none considered it funny either. Simply put, people were much more likely to find a situation funny if it simultaneously threatened their conventional notions without striking them as too severe.

In the follow-up paper, published in 2012, McGraw and a bigger research team demonstrated how psychological distance shapes a moral violation into benign form. What they discovered is that distance governs humor in two ways. For grave tragedies, lots of psychological distance is needed to render the situation harmless enough to be funny. Smaller mishaps, which start out relatively benign, must have only a *little* distance to maintain enough threat to be humorous.

Once again McGraw and colleagues ran five experiments to study their theory. One test, a thought experiment, focused on the temporal component of psychological distance. The researchers first asked test participants which situation they were likely to find funnier: being hit by a car five years ago, or

being hit by a car yesterday. Sure enough, considering the severity of a car crash, 99 percent said they needed the five years of distance to find this event funny. Next the researchers replaced the car accident with stubbing a toe. Now four out of five participants said this harmless little event was more likely to be funny if it happened yesterday, when the threat was still fresh in mind.

Another test focused on the social element of psychological distance. This time McGraw and company told test participants about a woman who accidentally donated about $2,000 to a relief effort via text message. The participants found this rather costly mistake much funnier when they imagined that the woman was a distant stranger than when they thought she was a friend. When the accidental text only cost $50, however, the results were reverse. Now the rather innocuous mistake was only funny when it happened to someone close.

“The role that psychological distance plays is as a moderator of the degree to which something is wrong and the degree to which something is okay,” says McGraw.

Coping With Laughter

In addition to suggesting a cause of humor, the benign-violation theory also goes a long way toward explaining one of its common *effects* — namely, that jokes help people cope with the hard times in life. An ability to laugh at rough moments can reduce the negative emotions surrounding a stressful event and also create the positive feelings associated with amusement in general. Put together, those two affective swings can enhance a person’s coping powers.

“To the extent you can use humor to change your perspective on things, to see something that is potentially threatening as less threatening, then that allows you to be more efficient in your coping,” says Arnie Cann of the University of North Carolina at Charlotte. “From a very psychological level, just being able to use humor to change the way you interpret a situation — so it doesn’t seem quite as threatening — seems very important.”

The idea that humor has healing powers goes back to the Bible — “a merry heart doeth good like a medicine,” Proverbs 17:22 — but its direct effect on stress wasn’t investigated in the lab until the early 1980s. Canadian researchers Rod Martin and APS Fellow Herbert Lefcourt, writing in the *Journal of Personality and Social Psychology* in 1983, reported initial evidence that “humor permits one to cope better with the aversive experiences of life.” Since then empirical studies have shown, time and again, that humor can ease our stressful times.

Cann entered the field after he was asked to do some training with emergency medical workers whose jobs routinely exposed them to stressful, somewhat tragic situations. He and a colleague discovered that the workers frequently dealt with the emotional strain of their work by resorting to humor. (They were always careful never to do so in front of patients, Cann points out; again, psychological distance is relative.)

“Sometimes you might make a joke that helps everyone get over the fact that they’ve just dealt with a very difficult situation,” says Cann. “Humor was, in their view, essential to their survival and their occupation.”

In one of Cann's early studies, published in the journal *Humor* in 2000, he and some colleagues showed test participants two videotapes. One was a compilation of graphic fatality scenes called "Faces of Death"; the other was a stand-up comedy routine. (A control group watched a neutral video instead of the comedy.) Afterward, the test participants reported their impressions of the videos and assessed their moods and emotions.

The results suggested that the coping effects of humor are remarkably flexible. When test participants saw the funny video before the disturbing one, the comedy not only elevated their positive mood, it also seemed to inoculate them to the stressors of the violent scenes. When participants watched the stand-up sketch *after* the graphic video, their good mood still rose, though some of the anxiety remained. Cann and colleagues concluded that humor can either prevent stress *or* cure it — though it's a bit more effective in the preventive role.

"Even things that are not hilarious, that are simply amusing, that might just lead you to smile — the very act of smiling puts people in a more positive frame of mind," says Cann. "That's a benefit."

Now, there's certainly a limit to the popular belief that "laughter is the best medicine." In a 2002 paper in *Current Directions in Psychological Science*, Rod Martin reviewed the evidence linking humor to physical effects like pain tolerance, blood pressure reduction, longevity, and illness — and found it tenuous at best. Overall, Martin reported in his literature review that the physical health benefits of humor and laughter were "less conclusive than commonly believed."

Still, the *psychological* coping mechanism that helps humor relieve anxiety and stress continues to show up strong in empirical studies. "Having a good laugh is sort of inconsistent or incompatible with anxiety and fear," says Thomas Ford of Western Carolina University, whose work centers on the relationship between humor and coping. "I think if people are able to find humor in their personal difficulties, they certainly are better off."

In one recent study, published in a 2012 issue of *Humor*, Ford and colleagues found a novel way to measure how effective humor is at inhibiting personal anxiety. The researchers gathered test participants into a lab and stressed them out by telling them they'd be taking a difficult math exam as part of the experiment. Then some participants read 10 comics from the "Close to Home" newspaper series by John McPherson, while others read 10 poems (or nothing at all).

The participants exposed to humor not only reported less anxiety about the test — they scored significantly better than the others. There's a long way from the stress of a math test to the stress of something like the Holocaust, of course, but the basic protective value of humor remains quite clear.

"So I think, to extrapolate from that study, that we cope with tragedy — stress on a much larger scale — through humor just as a way to reduce the negative anxiety-related emotions associated with it," says Ford. "Over time we can make light of almost anything."