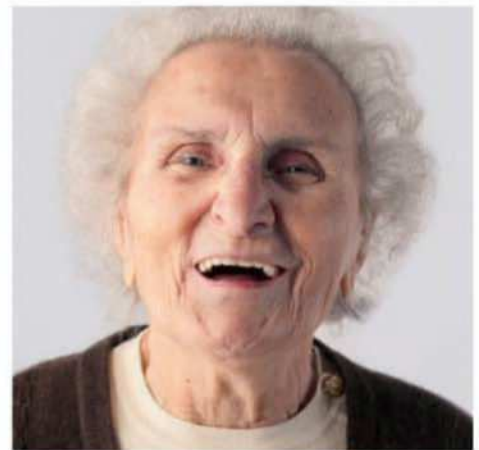
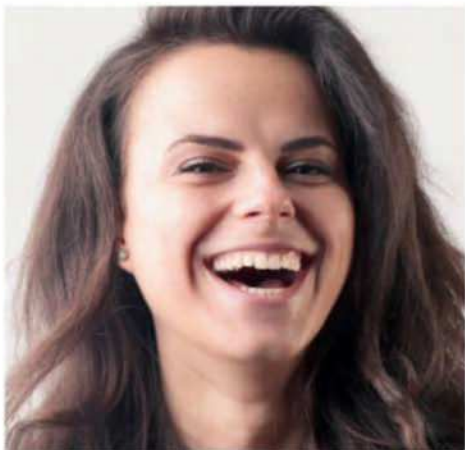


SPECIAL **TIME** EDITION

The Science of Laughter

Our Bodies. Our Minds. Our Souls



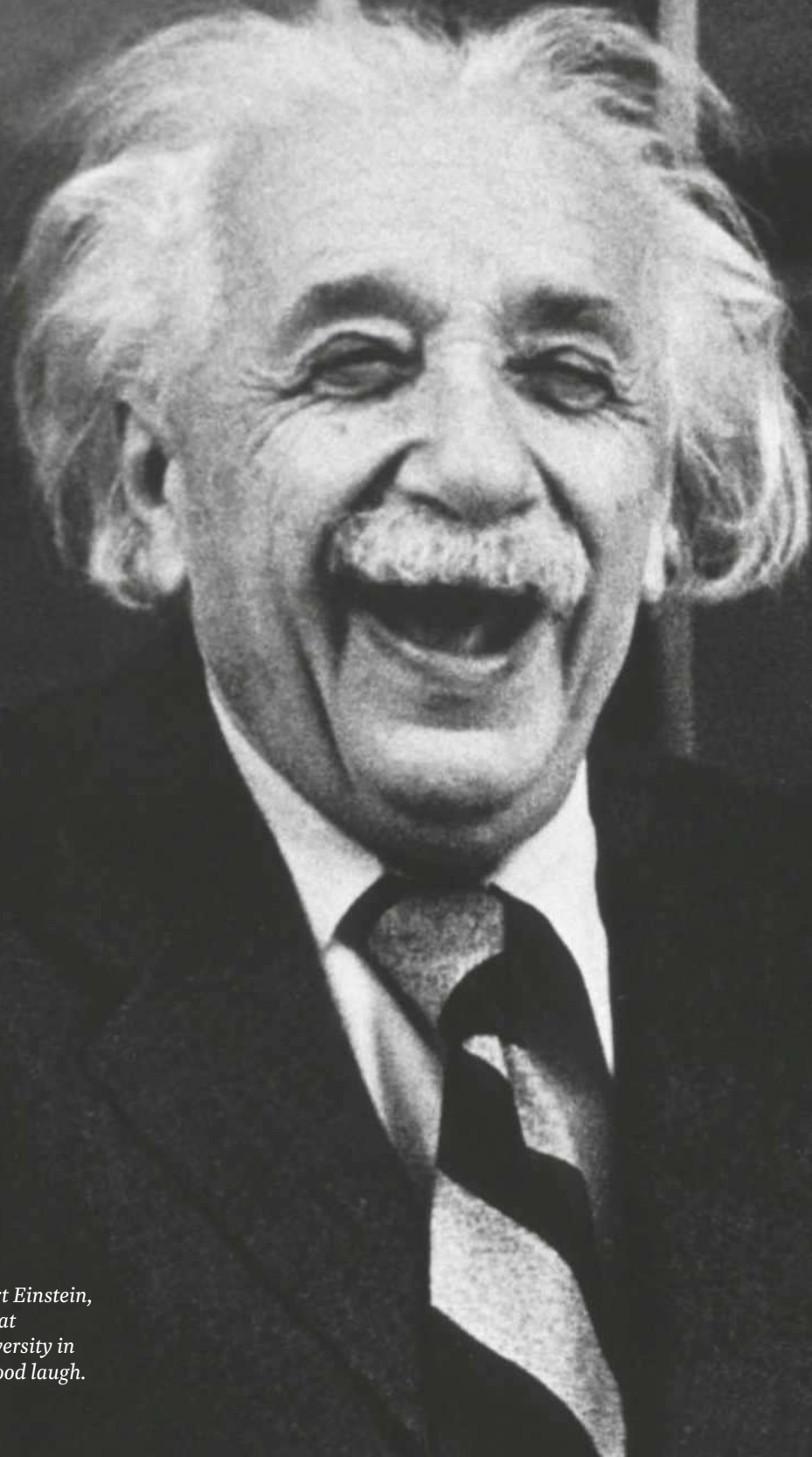
SPECIAL

TIME

EDITION

The Science of Laughter

Our Bodies. Our Minds. Our Souls



*Physicist Albert Einstein,
photographed at
Princeton University in
1953, liked a good laugh.*

Laughter is a social activity that allows people to communicate and to deepen alliances and friendships.

—“The Evolution of Laughter,” page 18





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Parts of this edition appeared previously in TIME and Real Simple.





INTRODUCTION

What's So Funny?

**Hint: it's not just a punch line.
The real reason we chuckle is
to communicate with others**

By Kostya Kennedy

A FEW YEARS AGO, I WAS TEACHING A COURSE ON journalism at New York University when I enticed a politician—Betsy Gotbaum, who was running what would be a successful campaign for public advocate—to address the class in a mock press conference. During Gotbaum's briefing, one student asked her an earnest question about then—public advocate Mark Green. Only the student mistakenly said Tom Green, as in the gross-out, goofball comedian. This forced me to stifle a laugh.

The student and Gotbaum continued their serious discussion, but each time he said "Tom Green," my laughter became harder to suppress. I was supposed to be a model of respectful behavior for my students, but instead I was losing it. My face

Chatterly teeth, originally called Yakkity Yak Talking Teeth, were introduced to the toy market in 1949.

reddened. I looked down. I clutched at my knees. I sputtered and tried to breathe through my nose.

Then I realized that others—Gotbaum, thankfully, included—had also begun to laugh. Within seconds we were all roaring, lost in laughter's contagious grip.

When I tell this story, some people find it hilarious. Others are quizzical: "What's the big deal? He said the guy's name wrong." To this, I respond with what I've come to understand is a chief axiom of laughter: "You had to be there."

•••

"Our laughter is always the laughter of a group . . . it must have social signification."

—HENRI BERGSON, IN HIS 1900 ESSAY "LAUGHTER"

When I set out to try to answer the question of why we laugh, one of the first things I realized is that unless you're reading or watching something, you don't laugh much by yourself. It's a social behavior—and whatever else, laughter is foremost a way to communicate.

"When you laugh, you're sending a message," says Robert R. Provine, a behavioral neuroscientist and a professor at the University of Maryland, Baltimore County. "You're telling the people around you something about yourself. In that way it's like speech. But there's one major difference: speech is almost always consciously controlled. Laughter is not under our control at all."

Provine, whose work is referenced several times in this special edition, is one of science's leading experts on laughter, as evidenced by his excellent and eclectic book *Laughter: A Scientific Investigation*. He devoted some serious time and research to the subject—he tickled chimpanzees, for one thing—but even Provine points out how confounding the field can be. "People don't know when they're going to

laugh. And when you talk to them afterward, you find that the reasons they give for why they laughed differ from what actually happened or was said," Provine says. "You get a brief, uncensored look at a person when he's laughing, but it can be very, very difficult to draw any conclusions from what you see."

That hasn't stopped great minds from trying. Plato said that we laugh out of malice and suggested banning laughter from his Republic; Darwin devised criteria for laughter that include surprise, joy and affection, and that hold for both apes and humans; Freud believed, not surprisingly, that laughter was a subconscious release of sexual tension.

Philosophers from Cicero to Hobbes, from Kant to Kierkegaard, have written treatises on laughter, and so has Allen Klein, a San Franciscan who goes by the professional handle Mr. Jollytologist. Some years back at St. Mary's College in Minnesota, Klein wrote his master's thesis on humor. Since then he's written a few books, hired himself out as a speaker to dozens of business conventions and devoted his career to convincing people that, as a way to alleviate stress, they should find humor in unfunny situations.

"Like what?" I asked.

"Well, tell me something in your daily life that you don't enjoy," said Klein. We were talking by telephone.

"I could live without my commute," I said.

"OK, try saying, 'I could live without my commute. Ha, ha, ha, he, he, he, ha, ha, ho, ho, ho!'"

I actually did this.

"You're laughing. I hear you!" Klein said.

It was true. Klein then suggested I could liven up the morning ride by blowing bubbles in the train, sporting a wacky hat and aping the ticket collector. (I appreciated his suggestions but decided to pass.)

Klein, like the pioneering Dr. Adams who was immortalized in the 1998 film *Patch Adams*, starring the late Robin Williams, is among the many who swear by laughter's medical benefits. Recent research has lauded laughter as a remedy for arthritis, backaches, Alzheimer's, itching, allergies, heart disease, muscle cramping and, of course, stress. One study, by a cardiology group in Baltimore, asserted that laughing can actually prolong your life. A paper out of the University of California showed that just thinking about having a good laugh can offer health benefits.

A university hospital in Pittsburgh runs a 24-hour television station devoted to humor. There's a Health and Humor Association in North Carolina, and sev-

I told Mr. Jollytologist that I could live without my daily commute. He suggested I liven it up by blowing bubbles in the train, sporting a wacky hat and aping the ticket collector.

eral hospitals affiliated with the University of California, Los Angeles, sponsor the much-celebrated Rx Laughter, a program that integrates funny movies while administering difficult medical treatments, such as chemotherapy and dialysis.

Maybe, then, the reason we should laugh is the same reason we should drink water: it's good for us. In addition to any psychological benefits (as one psychologist told me, "The bottom line is simple: when you laugh, you feel better. You just do"), hearty laughter is also a workout. You take a huge breath, you stretch and flex muscles in your face, torso and belly, and your whole frame works hard (if subconsciously) to control how the air is expelled. Through it all your heart rate soars.

If laughter appears to be good medicine, it's also true that we need to be wary of an overdose. Believe it or not, you really can die laughing, and people have. In 1882 the English novelist Anthony Trollope, then 67, was sitting with his wife and children listening to an after-dinner reading of F. Anstey's classic humor novel *Vice Versa* (son turns into father, father turns into son, hilarity ensues). Trollope laughed so hard he suffered a lethal stroke.

As far as we know, laughter is present in all human societies. India is home to thousands of "laughing yoga clubs," which were started in 1995 by Dr. Madan Kataria. (Similar clubs have since sprung up all over the U.S.) Kataria's program calls for people to laugh for 40 minutes a day in exercises with names like lion laughter, cocktail laughter and silent laughter.

In Africa, there was a famous epidemic in 1962 when a boarding school for girls in what is now Tanzania had to be shut down for several weeks because more than half of the 159 students were seized by uncontrollable laughter. The epidemic spread to nearby villages, and the cackling didn't die out for months.

In Japan, apprentices train for years to master the art of *rakugo*, a form of comedy in which the performer sits and acts as different characters in a story (the counterpoint to stand-up routines). And in the U.S., of course, sitcoms can carry prime time.

The subject and style of laughter varies from culture to culture and from person to person (a pie in the face makes people laugh everywhere; a crude joke might not), which points to a manifest truth: nothing is inherently funny. Events unfold, things are said, and we impose the concept of humor upon them. This subjectivity lies at the root of the message we're sending. It's not the tone or the quality of



Plato (left) and Aristotle in a detail from a 16th-century fresco by Raphael. Both philosophers considered laughter a form of scorn, though Aristotle appreciated wit.

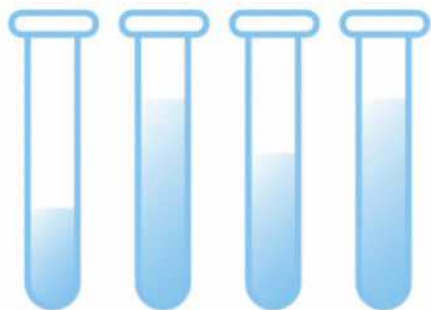
laughter that matters (there's no perceptible sonic difference between malicious laughter and joyous laughter), but rather what it is we're laughing at. You may be drawn to someone who laughs while playing with children. You may not like someone who laughs at ethnic jokes.

Thus, and on this Freud and Darwin would agree, laughter has a lot to do with how we choose our mates. The phrase "must have a good sense of humor" is a staple of the personal ads, but in reality it's not so much a "good" sense of humor the ad taker is seeking but rather his or her "sense." Provine's research showed that women are far more likely to laugh at men than men are to laugh at women, and that a guy who goes on dates armed with a good duck joke is helping his own cause.

Near the end of my research for this story I talked with Bill Scheft, a humor writer I've had the pleasure of editing. Scheft for years wrote monologues for David Letterman and has done quite a bit of stand-up, so I asked him why he wants to make people laugh.

"The simplest explanation is that it's a direct way for me to connect with people," Scheft said after a while. "I may not always know how or why a joke has affected someone, but when a roomful of people is laughing, I know I've reached them." □





CHAPTER 1

The Best Medicine

**Laughter may boost
immune function, pain
tolerance, cardiovascular
health and memory**



HA HA! HA
HA HA HA





Curing What Ails You

Laughter may not be the best medicine, but a growing body of work suggests it could be as important as diet and exercise

By Alice Park

BE HAPPY. THINK POSITIVE. SMILE MORE. WORRY less. There's no shortage of platitudes about the wonders happiness and a sunny demeanor can do for you, both physically and mentally. And what better way to bring more happy into your life than by laughing? The joyous ha-ha-ha that comes from deep in the belly, the mouth stretched open in delightful abandon, the tiny crinkles around the eyes all broadcast "This is a happy person."

For many of us, laughing also implies a healthy person. Laughing, for the most part, is a feel-good act, a vocal exclamation point on a positive mood, a gateway certainly to psychic wellness and, as studies are starting to suggest, to physical well-being too. Neuroscience researchers have documented deep connections between laughter and social relationships, as well as indications that laughter may be linked to various physiological benefits. For example, laughing changes the body's chemistry, both raising hormones responsible for happy feelings and lowering stress-related hormones. Because laughing causes a shift in the way people breathe, it may

also help the heart. There is even some suggestive evidence that laughter affects the immune system, by leading to a slight and temporary boost in certain immune cells.

To be sure, much of this research has been conducted in artificial lab settings, where it's hard to replicate real-world situations that prompt laughter and where it's impossible to track laughter's longer-term effects. But there is a growing body of work suggesting that even if laughter is not the best medicine, it is quite good for you. Some researchers think it may be as important as diet and exercise in keeping you disease free.

"Laughter appears to cause all the reciprocal, or opposite, effects of stress," says Lee Berk, an associate professor at Loma Linda University in California who studies laughter's impact on the brain and body. Berk points out that laughter has been associated with health benefits, including less inflammation and improved blood flow, and that it may improve certain neural activity, leading to improved memory. "Many of these same things also happen when you sleep right, eat right and exercise," he says.

THE MOST ROBUST scientific work on laughter so far involves looking at its impact on relationships and social interactions. Why do people laugh in the first place? Robert R. Provine, a neuroscientist and professor of psychology at the University of Maryland, Baltimore County, studied chimpanzees, man's close evolutionary cousin, to find out. When he tickled chimps, they laughed. But not in the same way people do. For chimps, laughing is more like panting, with short bursts of exhaled air. When Provine

played recordings of chimps laughing for people, they described the sound as anything from dogs panting to people having sex. But none thought it sounded like laughter.

Chimps also make this laughing sound when they are playing and roughhousing with each other. It's their way, says Provine, of declaring that they are not threatening their fellow chimps but are there to have some fun. "I think that's where laughter starts. It's a form of communication that I think is involuntary," he says. "One chimpanzee says to another, 'This is play, and I am not attacking you.' Heavy breathing is chimpanzee laughter. That *pant, pant* became the human *ha, ha*."

Remarkably, despite the thousands of languages and many thousands more dialects that the human species speak, the sound of laughter is practically universal. Play a track of French people laughing to Mandarin speakers in China, and they will have no problem recognizing it as laughter.

Provine proved this point by making recordings, often surreptitiously, of people laughing in public places. After analyzing all the laughs, he determined that human laughter has at its core a short burst of sound that lasts about 15 milliseconds and recurs every 200 milliseconds. "If everyone laughed in a different way, we wouldn't know what it was," he says of this commonality.

That stereotyping makes a strong case for laughter as essentially a way for animals—and people—to communicate to one another. "We think laughing can draw us closer together to other people and grease the wheels for better social interaction," says Sara Algoe, an associate professor of social psychology at the University of North Carolina at Chapel Hill.

And that's where laughter can affect health. In Algoe's work, she looked at laughter both among people involved in romantic relationships and among strangers. In one study, she and her team video recorded romantic couples who described how they first met. Researchers analyzed the time each person spent laughing and found that couples who laughed more also reported having higher-quality relationships and a better connection with each other. "We were able to show that laughing at the same time as a romantic partner was a really good signal of how the relationship was going," says Algoe. "These people said they felt more as one with their partner and felt more safe and secure."

"Laughter appears to cause all the reciprocal, or opposite, effects of stress," says Lee Berk, who studies laughter's impact on the brain. Among them: improved blood flow and memory.



People with ALS, also known as Lou Gehrig's disease, lose the ability to speak but can often continue to laugh, as demonstrated by these patients at an ALS clinic in Montreal.

To test whether laughter was strong enough to bring strangers together, she had volunteers come into the lab and watch humorous GIFs. The participants were then paired with someone they didn't know, who they were told had watched the same video. In reality, the strangers' laughter had been recorded earlier, and the researchers played the recordings for the study volunteers during either the funny GIFs or the less funny ones. Sure enough, in the same way that the romantic partners felt more in common with each other the more they laughed together, people who thought another person was laughing in sync with them felt they might have more in common with each other. These folks were more interested in spending time with the stranger than with people who weren't laughing at the same time. "That suggests that sharing a laugh can translate to how people might feel connected with each other," says Algoe.

Establishing connection is important for mental health, since study after study shows that people who are lonely or socially isolated tend to experi-

ence more health problems as well as depression and mental health issues. If someone has the capacity to connect to another human through laughter, even if it is just a texting conversation or a one-sided interaction such as watching television, he or she is less likely to feel so solitary.

And because laughter is a form of communication, it's also famously contagious. Algoe found that some partners in the romantic couples laughed just because their partner was laughing, even if they didn't know why. The laughter, she says, may be a way of communicating that you see the world in the same way and want to share the same experiences. Scientists speculate that something called the mirror neuron system may be involved in contagious laughter—it's an unconscious response for the body to mimic what the brain sees. Not surprisingly, this happens more often among people who know each other well, since they are more likely to think and respond in the same way to a shared experience. "It really doesn't matter what [the laughter] is about," says Algoe. "It's

about feeling more similar to someone than if you don't laugh with them."

The same goes for smiling. If a stranger smiles at you, try not to smile back. It's not easy; your brain reads the stranger's smile and wants to mimic it. It's possible that you're trying to pick up on that person's reason for smiling; as a fellow human being, you want to show that you can potentially share in whatever emotions the other person is feeling and empathize. Smiling back at someone you don't know could therefore be a dress rehearsal for times when someone you do know is extremely happy and wants to share his or her joy with you. Being able to read people's facial expressions is a critical part of communicating and connecting with others.

On the more physical side, researchers have documented that laughing changes the body's very chemistry, raising hormones responsible for happy feelings and lowering stress-related hormones. In one recent trial involving 20 healthy older adults, half watched humorous videos, while the other half sat silently for 20 minutes. All the participants then took a short memory test and had their saliva tested for stress hormones. The people who had watched the funny videos scored nearly twice as high on the recall test as those who had sat quietly, and they also showed lower levels of cortisol, the hormone responsible for triggering the body's stress response.

Lower levels of stress hormones can have wide-ranging benefits for the body. Stress is linked to higher blood pressure and a greater risk of heart disease, as well as increased levels of inflammation. Inflammation, or an overstimulation of the body's immune response, is associated with everything from arthritis to degenerative brain conditions like Alzheimer's.

Laughing may also do particularly good things for the heart. Because laughing causes a change in the way you breathe, it forces the heart to pump a little faster and a little harder, which can dilate the blood vessels and increase blood flow to the brain and body. Such changes, according to researchers at the University of Maryland Medical Center, are similar to the improved flow that exercise causes.

What's more, laughing may be a good way to lower pain. Watching comedy videos, for example, has been shown to decrease hospital patients' need for opioid painkillers. One Oxford University study, executed in laboratories and at the Edinburgh Fringe Festival, subjected participants to types of pain—a tightening blood-pressure cuff, a frozen wine-chilling sleeve

placed around the arm—both before and after watching funny videos. (Among them, episodes of *South Park*, *The Simpsons* and *Friends* and clips of Eddie Izzard and other stand-up comics.) The Oxford team concluded that there was a dose-related response to laughter: people who laughed more at the comedies felt less pain later.

Research out of Western Kentucky University has tied laughing to greater numbers and activity of "killer cells," which the immune system deploys to attack disease. In their conclusion, the study's authors suggested that using humor to stimulate laughter could be an effective complementary therapy to decrease stress and improve killer-cell activity in people with viral illnesses or cancer.

But it's important to remember that it's hard to separate out laughter and its effects on the body from other things that may be going on. For example, laughter's benefit to the immune system might be due to its ability to reduce stress. Stress can lead to a drop in certain antibodies and immune cells, so if laughter can lower stress hormones, it might indirectly contribute to a healthy immune system.

And laughing may have an analgesic effect simply by being a distraction; people watching a funny video or listening to a joke are less likely to be thinking about their pain—in the same way that someone having a conversation or singing or doing something else might feel less pain. Provine also points out that since people often laugh in the company of others, it's hard to attribute the health effects—on stress hormones, the immune system and the like—solely to the act of laughing. It's possible, for example, that those benefits are also related to the fact that social interaction and social connection can contribute to healthier minds and bodies.

However it works, scientists stress that, like other human behaviors, laughter and the positive feelings it represents are not the be-all and end-all for health and well-being. "Some of the frenzy over positive psychology can give the impression that we can just be happy all the time," says Robert Waldinger, a Harvard psychiatrist who studies happiness. "But having a positive outlook is a transient thing, just like laughter."

Even if there isn't the hard scientific proof for a prescription for laughter as medicine, researchers do agree that laughter is a rich experience that they are only just beginning to mine on the biological level. And in the meantime, it can make you feel better, so why not laugh a little more? □

13 Things You Probably Don't Know About Laughing

By **Sally Wadyka**



1. Contrary to popular belief, the No. 1 catalyst for laughter isn't a joke: it's interacting with another person.

2. Just listening to recorded laughter can evoke fits of giggles in subjects, according to research. In fact, a person is 30 times as likely to laugh when someone else is around as when he or she is alone.

3. The ideal number of words in a joke? 103.

4. Often what makes us laugh is when our brain is expecting one thing and then, in the space of a few words, that expectation is turned on its head, says Scott Weems, a research scientist at the University of Maryland, College Park, and the author of *Ha!: The Science of When We Laugh and Why*.

5. Ten to 15 minutes of daily laughing burns 10 to 40 calories.

6. Our appreciation for the unexpected starts as early as infancy, although on a very basic level. "Parents will notice that they can elicit a giggle from their baby by making a funny face, talking in a funny voice or playing peekaboo," says Merideth Gattis, a psychologist at Cardiff University in Wales.

7. Geography often plays a role too, says British psychologist Richard Wiseman. Americans, for example, tend to like jokes that include a sense of superiority. (Texan: "Where are you from?" Harvard grad: "I come from a place where we do not end our sentences with prepositions." Texan: "OK, where are you from, jackass?") Europeans tend to laugh at topics that are anxiety producing. (A patient to his doctor: "Last night I made a Freudian slip. I was having dinner with my mother-in-law and wanted to say, 'Could you please pass the butter?' But instead I said, 'You silly cow. You have completely ruined my life.'") In Japan, laughter is tied to the humorless samurai, the ruling warrior class that ruled the country for centuries. They took timing quite seriously and had little time for shameful comedy. "You are laughing at me, so I kill you," according to *The Humor Code*, a study of humor around the world.

8. An adult laughs an estimated 15 to 20 times a day.

9. "The same pleasure sensors in the brain that are activated when we eat chocolate become active when we find something funny," says Weems. "It's a natural high." In fact, a 2003 brain-scan study

published in the journal *Neuron* found that the dopamine reward centers and pathways in the brains of subjects lit up when they were treated to a funny cartoon but not when they were shown an unfunny version.

10. After a good, hearty laugh, your muscles will stay relaxed for up to 45 minutes.

11. A typical 10-minute conversation has an average of 5.8 bouts of laughter.

12. No sense of humor? Fake it. The human brain is unable to distinguish spontaneous laughter from self-induced, so pretending to laugh can produce the same health-related benefits as the real thing, according to a 2010 report in *Alternative Therapies in Health and Medicine* by Ramon Mora-Ripoll.

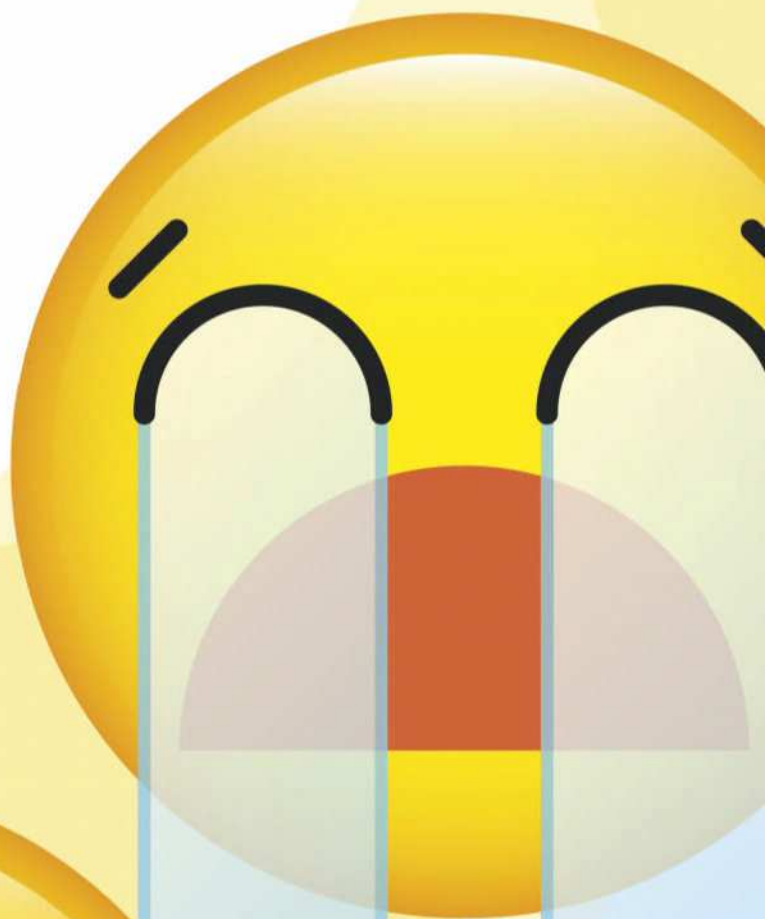
13. While humor is quite subjective, some things can make almost everyone laugh. Professor Sophie Scott, a British cognitive neuroscientist and stand-up comic, found that one of the best ways for getting people in her lab to break out in fits of giggles was to show them a clip of others trying not to laugh in a situation where it would be highly inappropriate to do so. □

Laughing and Crying: The Same Release?

**Some physiological
differences between the two**

By Courtney Mifsud

IN HER 1974 SONG "PEOPLE'S PARTIES," JONI Mitchell sang that laughing and crying are the same release. The assumption is not an uncommon one, but physiology paints a different picture. When you laugh, your body is both shutting down the release of stress hormones and releasing feel-good endorphins. When you cry so-called psychic tears, on the other hand, your body is reacting to intense emotions and the fight-or-flight response kicks in.



Laughing

Teasing the Brain

Laughter starts with a punch line or surprising ending to a thought, which forces the brain to interpret the surprise and problem-solve. Once the punch line is accepted and the brain registers humor, "the body sends a signal to the brain that says, 'Hey, that's clever, that's worth it,' and we laugh," says social neuroscientist Carl D. Marci.

Amazing Limbic Moves

The limbic system, in the center of the brain, is the same real estate that processes feelings like hunger and fear. You hear a joke or see something amusing and the limbic system is triggered. The motor region of the brain is stimulated.

The One-Two Punch

The muscles of the face begin to contract. Fifteen of them jump into action, including the zygomatic major, which lifts your upper lip. At the same time, your epiglottis, a flap at the entrance of the larynx, closes the passage to your lungs, which disrupts air intake and makes you gasp.

"Killer" Cells

When a good belly laugh disrupts the respiratory system, you begin to breathe diaphragmatically to help the release of air. As the diaphragm pumps lymphatic fluid through your system, lymph nodes filter out waste and trigger the production of white blood cells, which kill infected cells. This in turn strengthens the immune system.

Feeling Good

Laughter both helps shut down the release of cortisol, a harmful stress hormone, and releases endorphins, the brain chemicals known for their feel-good effect. It's not the joke that sets the reaction in motion but the physical act of emitting a hearty "ha, ha"—just as with exercise.

Crying

Typecasting

There are three kinds of tears: basal, which keep your eyes moist and nourished; reflex, which wash out irritations like onion fumes; and psychic or emotional tears, the ones that you shed when you're stressed, angry, happy or in pain. Psychic tears contain a natural painkiller, called leucine enkephalin, and can help boost your mood and relieve physical and psychic aches.

Danger Ahead

Your body processes intense emotions as a sign of danger. The amygdala, an emotion-processing component of the brain, sends a sign, and the fight-or-flight response kicks in. This is the body's way of keeping you out of harm's way, and salty tears are central to the body's strategy: they mean blurred vision, not ideal for battle. But if you do risk it, the viscous drops coat the eye, acting like shields.

The Messenger

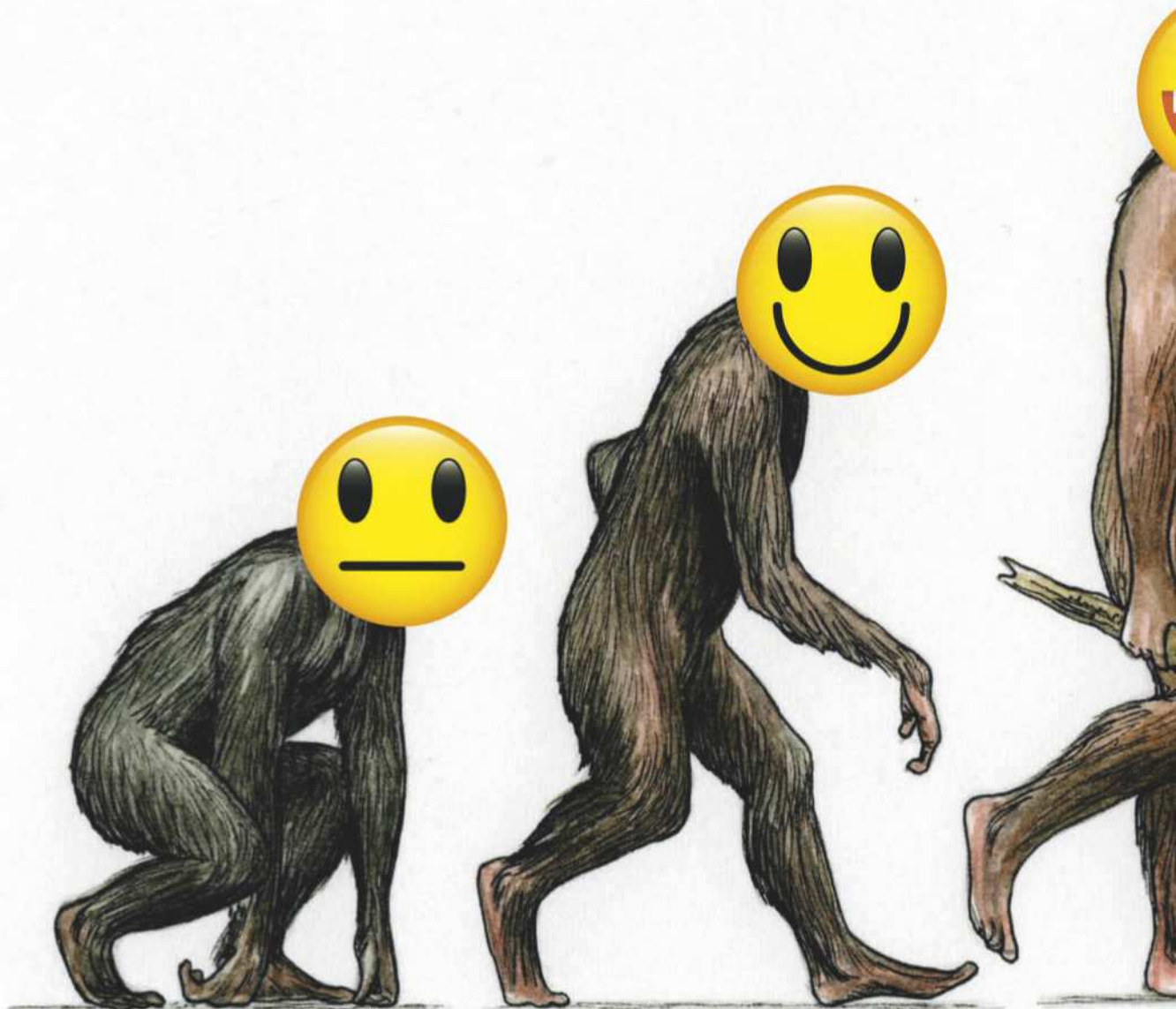
The hypothalamus is the part of the brain responsible for motivational behavior—it lets us know if we are hungry or thirsty, for example. When you experience an emotional moment, the hypothalamus produces a chemical that signals the lacrimal glands in the eyes, just beneath the rims. These glands produce tears.

Go with the Flow

It may be hard, but resist the temptation to hold back the tears. When you cry, your brain releases endorphins, which act like pain relievers to boost your mood.

Contradiction?

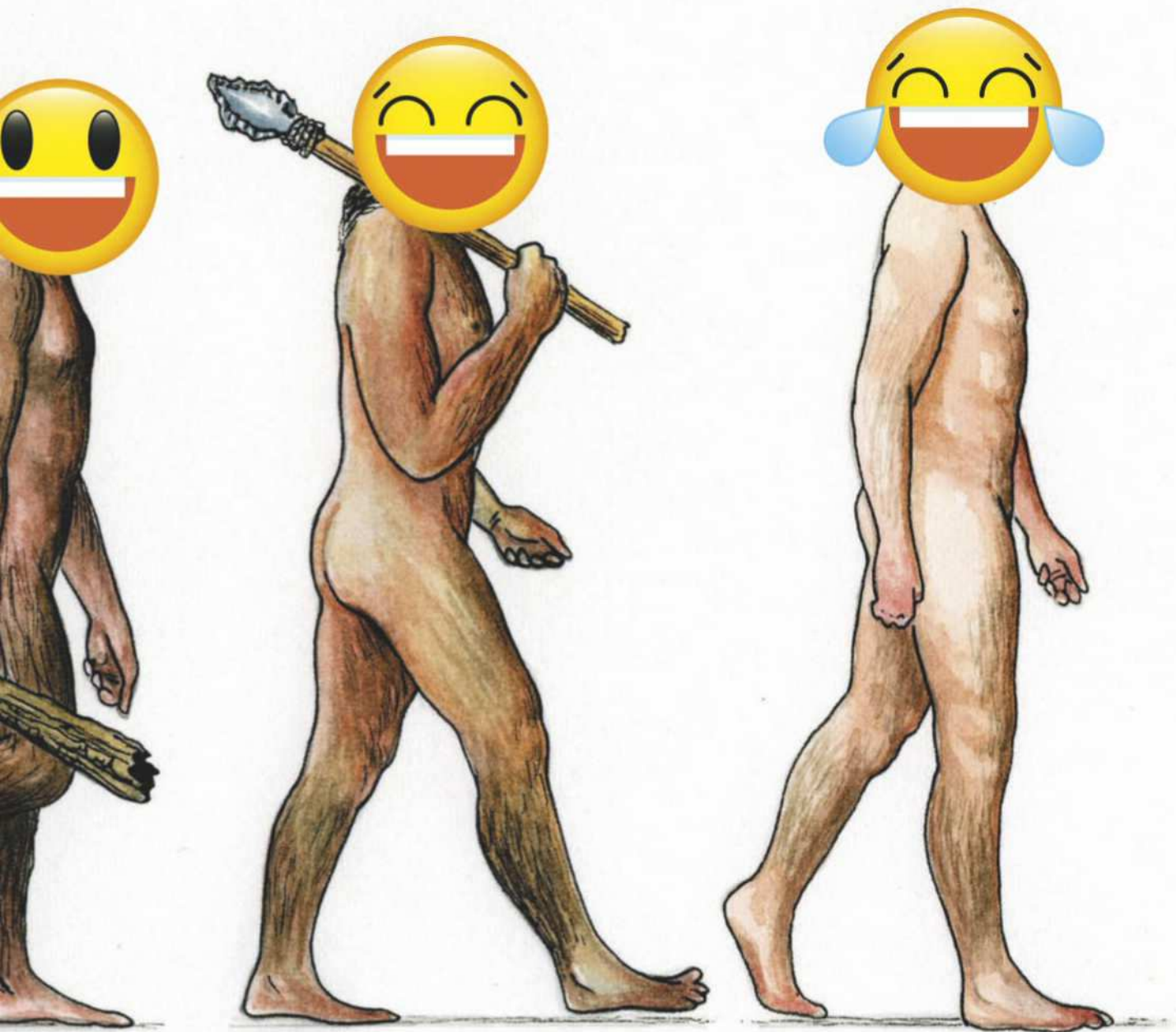
The hypothalamus can't tell the difference between which kind of emotions are "good" and which are "bad," which is why many may cry at a happy moment, like a wedding or when receiving some good news. □



The Evolution of Laughter

It all started when early humans could stand on two feet

By Richard Jerome



I CAN'T ABIDE THE SOUND OF LAUGHTER. IT'S NOT that I'm humorless, but more likely that I suffer from a touch of misophonia, hypersensitivity to certain noises. Some misophonics go positively ballistic over sniffing, lip-smacking or crinkling wrappers. My trigger is laughter, though there are exceptions: communal chuckling in an audience—no worries. And my wife's laugh because, well, she's perfect. But if I'm trying to sip a latte in peace at a Barnes & Noble café and a couple of teenage girls at the next table start tittering over their latest cellphone photos, it sets my teeth on edge. The beery "bro laughs" booming from the neighbors' terrace far too late on summer nights send plumes of rage billowing up from a dark place in my gut. On the subway I'll switch seats—or even cars—when in proximity to one of

those people (you know who you are) who end every other sentence with a Woody Woodpeckerish coda—e.g., "It's Tuesday, heh-heh-heh." Nothing, I rail to myself, can be *that* funny!

In fact, I may be onto something. According to a growing body of research, the evolution of human laughter, from our earliest ancestors to the present day, has had surprisingly little to do with humor and much to do with forming and deepening alliances, friendships and other interpersonal bonds. "Laughter is social," says the neuroscientist Robert R. Provine, an emeritus professor of psychology at the University of Maryland, Baltimore County. "It's about relationships." For his 2000 book *Laughter: A Scientific Investigation*, Provine conducted a unique field study—"sidewalk neuroscience," as he calls it.

“In the spirit of Jane Goodall, I stalked human primates in shopping malls and city sidewalks instead of chimpanzees in the forest of Gombe,” he wrote in the *Journal of Comparative Neurology*. Armed with tape recorders, he and his collaborators fanned out to a wide variety of public venues and placed themselves in all manner of social settings—parties, class reunions and so on. Meanwhile, dozens of student volunteers kept diaries notating every time they vocalized anything that could be classified as a laugh and describing the situations.

All told, Provine’s team captured some 1,200 “laugh episodes.” Strikingly, the research revealed that in less than 20% of incidents did people giggle, chortle or guffaw in response to something that could be construed as amusing. “You can test this finding at your next social event,” Provine says. “Laughter typically follows mundane comments such as ‘Where have you been?’ rather than formal attempts at humor.” Moreover, the study found, the person speaking was 46% more likely to laugh than the listener. In many cases, laughter serves as a kind of punctuation for the speaker. “Although laughter is largely involuntary, it’s not random but reliably occurs before and after phrase breaks—where punctuations would be placed in a transcript of conversation,” he explains. “Thus, we say ‘Where did you get that shirt?—ha-ha,’ not ‘Where did you—ha-ha—get that shirt?’”

Also, it’s clear that laughter is primarily a group activity. Reviewing students’ diaries, Provine found that the volunteers rarely yucked it up in solitude. “We laugh 30 times more often when with other people than when alone,” he says. “The essential stimulus for laughter is another person—the sociality of laughter is remarkable.”

We start developing laughter as a social muscle in the crib. The earliest sounds newborns make, coos and gurgles, are experiments in how to move mouths and tongues. At about 3 months, laughter joins the mix, albeit reflexively. When a baby laughs, so do Mom and Dad, delighting the child, who in turn begins to develop communication skills. As he ages, the baby will start to laugh as a physical reaction to something that feels good, like being tickled or having raspberries blown on the belly. This is socialization—junior isn’t laughing because he is being tickled but because he is being touched. And he likes it.

The phenomenon was little studied until 2012, when British developmental psychologist Caspar

Addyman launched the Baby Laughter project at Birkbeck, University of London. Addyman and his team began observing infants firsthand in the lab and in video submissions from parents around the world. What they found is that babies tend to laugh at interaction: that is why Mom-and-Dad silly faces get them rolling in their cribs. Then it gets more grown-up, when, like adults, they start to laugh at the surprising and unexpected.

Thus, the enduring appeal of peekaboo. “A young baby has no concept of time, so each time someone or something returns that has disappeared, it is a shock,” Addyman told the *Daily Mail*. “Because peekaboo has their much-loved parents ‘coming back,’ it’s a happy shock for the baby. Over time the game becomes more sophisticated because babies develop a sense that you will come back—so it becomes about anticipation, the fun that is still to come heightens their amusement.” Indeed, an infant’s experience with laughter points to the reason humans began to laugh in the first place.

Research by the psychologist Marina Davila-Ross of the University of Portsmouth in England suggests that laughter’s origins extend back between 10 million and 16 million years to our cackling primate forebears—behavior still displayed by today’s apes. For them, Provine says, “laughter is literally the ritualized sound of the labored breathing of tickle and rough-and-tumble play. Laughter signals that I’m playing with you, not attacking you.” The difference between labored breathing and laughter, he explains, is most apparent in chimpanzees, our closest primate cousins. “If tickled, chimps produce a panting sound, with one breathy pant produced per inward and outward breath—pant-pant-pant. The panting laughter of chimps evolved into the human chuckle—in which an outward breath is parsed, or chopped, into the familiar ‘ha-ha.’”

According to Provine, the key event in the evolution of human laughter—and human speech, for that matter—was bipedalism, the ability to walk upright on two legs, and the breath control that developmental advance made possible. “Breath control is the critical step,” Provine says. “Chimpanzee laughter is contained by its quadrupedalism. Like horses and other four-legged creatures, chimps have a one-to-one link between stride and breathing; a full thorax is necessary to brace the forelimbs during running. Ancestral humans and other bipeds were freed of the link between breathing and running and could



Babies find their mothers and fathers to be equally funny, according to research.

evolve the capacity to make complex sounds, such as human-type ha-ha laughter and speech.”

But what of the relationship between laughter and humor? Was there an australopithecine pratfall or some other prehistoric shtick that knocked 'em dead in Olduvai Gorge? According to Provine, humor actually evolved after laughter and was, again, a variation on play. “My candidate for the most ancient joke—and the only joke that you can tell both human babies and chimpanzees—is the feigned tickle,” he says. “The ‘I’m going to get you’ game.”

As for laughter in response to humor, one take on its evolution was offered in 2005 by Matthew Gervais, now a postdoctoral fellow at the University of British Columbia, and evolutionary biologist David Sloan Wilson of State University of New York, Binghamton. Publishing in *The Quarterly Review of Biology*, the researchers drew on the work of Guillaume Duchenne, a 19th-century French neurologist who made a study of the relation between facial expressions and human emotion. Duchenne applied electrodes to people’s faces and found two varieties of laugh. One—now known as Duchenne laughter—developed between 2 million and 4 million years ago, Gervais and Wilson suggest, as a response to something the laugher found amusing, and involves the zygomatic major muscles around the corners of the mouth and the orbicularis oculi muscles, which create crinkly crow’s feet around the eyes; the other variety of laughter (dubbed non-Duchenne) came along several hundred thousand years later and also involves the zygomatic muscles, but not the muscles around the eye. Such non-Duchenne laughter came

to occur in “aggressive, nervous or hierarchical situations,” Gervais and Wilson wrote, “functioning to signal, to appease, to manipulate, to deride, or to subvert.” It’s the volitional laughter—even fake laughter—we voice to be polite or to gain acceptance as part of a group.

As laughter has evolved in human society, apparent gender differences have emerged. The next time you observe a man and woman out on a date, see if their behavior matches up with Provine’s sidewalk neuroscience study, which found that females laughed 126% more than their male counterparts. It’s not that females are inherently more giggly—certainly a tired stereotype—but that males seem to be better at getting the laughs, even from other males. According to a 1990 German study, the more a woman laughed during an encounter with a man, the greater was her self-reported interest in her male conversational partner. Conversely, the men surveyed were most interested in the women who laughed in their presence. “This gender difference is not culture specific,” Provine says. “Worldwide, more boys than girls are class clowns.”

It’s also fairly obvious that children and adolescents of both sexes tend to laugh far more than adults. That’s not surprising—laughter, after all, is the sound of play. That point may reflect on my own laughter—or rather the lack of it. Not only do I bristle at the sound of other people’s giggles and guffaws, but I rarely LOL myself, scarcely managing more than a muted chuckle and more often merely a wry half-smile. “Well,” Provine asked me, “how playful are you?” Maybe I need to get out more. □

THE SCIENCE OF LAUGHTER

A Bad Case of the Giggles

Laughter is literally contagious, thanks to a neural mechanism that copies behavior it detects

By Robert R. Provine

THE SAYING “LAUGH AND THE WORLD LAUGHS WITH YOU” suggests one of the most remarkable properties of human laughter—its contagion. When we hear laughter, we tend to laugh in turn, producing a behavioral chain reaction. The contagious laugh response is immediate and involuntary, involving the most direct communication possible between people brain to brain. Laughter strips away our veneer of culture and language and challenges the hypothesis that we are rational creatures in full control of our actions. From these synchronized vocal outbursts come insights into the neurological roots of human social behavior and speech perception.

Epidemic Proportions

CONSIDER THE EXTRAORDINARY OUTBREAK OF CONTAGIOUS LAUGHTER IN TANGANYIKA (NOW TANZANIA) IN 1962. In late January, at a boarding school for girls in Kashasha, a village about 25 miles from Lake Victoria,

In 2007, when filmmaker Albert Nerenberg traveled to Tanzania, he found three students suffering from the laughing disease. Here, children from the Kashasha school re-enacted the 1962 incident.





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three students started laughing and crying. The symptoms quickly spread to 95 of the 159 students, forcing the school to close a few weeks later. Administrators reopened in May, but after 57 more students were stricken, they closed again. Individual laugh attacks lasted from minutes to a few hours and recurred up to four times. In a few cases, the symptoms persisted for more than two weeks. Teachers reported affected students to be highly agitated and unable to attend to their lessons for several weeks after a laugh episode.

The girls sent home became agents for the further spread of the epidemic. Within 10 days of the school closing, laughter attacks were reported at schools in two other nearby villages, Nshamba and Bukoba. Before finally abating in June 1964, the laughter plague forced the temporary shuttering of more than 14 educational institutions. A quarantine was enforced to block the epidemic's advance, and after excluding possibilities such as toxic reaction and encephalitis, medical personnel concluded the outbreak was psychogenic and hysterical in origin.

To consider the Tanganyikan episode as an exotic quirk of an alien culture is to miss the broader implications of the phenomenon. Have not we all experienced a lesser form of the epidemic? Recall your own experience with "fits" of nearly uncontrollable laughter. The neural mechanism responsible for laugh epidemics replicates behavior that it detects, producing a behavioral chain reaction. Similar mechanisms are involved in the infectiousness of yawning and perhaps crying, coughing and other simple, stereotyped acts that are replicated by group members. This is social behavior. In the animal kingdom, when one member of a group is spooked and runs, everyone runs; similarly, when one person laughs and others follow, the group is operating as a superorganism, with each individual contributing to the well-being of the whole and sharing in the experience.

Say Hallelujah

"Our mouths were full of laughter and our tongues sang aloud for joy." —PSALMS 126:2

DOES LAUGHTER BRING US NEARER TO GOD OR SIGNIFY being filled with the Holy Spirit? Exuberant worship, sometimes featuring laughter, has cycled in and out of favor with multiple denominations for centuries. Before the original Quakers of the mid-1600s Britain adopted the practice of quiet meditation, they actually quaked with emotion during sermons. The

Shakers of mid-1700s New England also shook in religious ecstasy, with services that included singing and jumping; some early Methodists observed Holy Humor Sunday, a day of merriment that fell the week after Easter.

Today these animated practices continue in the religious life of the Pentecostal and related "charismatic" churches, where the visitation of the Holy Spirit is signaled by the spread of laughter through the group, followed in some by falling to the floor, sobbing, shaking, twitching and speaking in tongues. The evangelicals are exploiting powerful psychological and physiological consequences of laughter in their religious services. The contagiousness and social bonding of laughter work to enhance the power of the laugh experience in a communal setting. Unlike the more subtle practices of prayer or meditation, worshippers can actually feel the physiological changes taking place within their bodies during laughter and assign this effect to the divine.

The immediate consequences of holy laughter are very appealing to those who are self-selecting for such experiences by attending Pentecostal church services. Holy laughter has much in common with glossolalia (speaking in tongues), the defining characteristic of Pentecostal churches. Both laughter and speaking in tongues signify being filled with the Holy Spirit. Since neither are presumed to be under voluntary control, they are accepted as empirical evidence of the divine: the tongue and voice of the spiritually "filled" are under His control. Following this rationale, laughter would be even better evidence of the divine than "tongues," because laughter is under less voluntary control than speech.

At this point, you may have noticed similarities between "holy laughter" and the Tanganyikan epidemic. The giggling girls sent home from school carried with them the laugh virus that spread to relatives, friends and neighbors. In a parallel fashion, the Western, evangelical version of the laugh epidemic is wildly infectious, being spread from congregation to congregation through a series of "anointings" where one worshipper may transfer his or her anointing to those at another church, in a spiritual chain reaction.

Laugh Tracks: What, Me Worry?

WE TURN NOW FROM LAUGH EPIDEMICS TO TELEVISION laugh tracks, which may seem unrelated but tap the same strain in human nature as holy laughter.

Canned laughter has accompanied most sitcoms since Sept. 9, 1950. On that evening, the comedy *The Hank McCune Show*, filmed in a studio without a live audience, appeared to the producer to be falling flat. To perk up the audio, the producer dubbed in some chuckles and yucks, creating the first laugh track. *Variety* noticed the faux laughs and was impressed: "Whether this induces a jovial mood in home viewers is still to be determined," the reviewer noted, "but the practice may have unlimited possibilities if it's spread to include canned peals of hilarity, thunderous ovations and gasps of sympathy."

As predicted, the laugh track was embraced by the television industry, even as audiences and media watchdogs expressed alarm. It was the Cold War era, with the McCarthy hearings, worries about brain-washing, hidden persuaders, subliminal messages and alleged communist infiltration of the media. Laugh tracks were seen as a suspect and inappropriate effort to control the television-viewing masses.

By examining the history of the laugh track, we discover clues to our relationship with entertainment media. Theatrical performance, especially comedy, involves a collaboration between actors and their audience. This is not precious academic musing about the theory of theater, but a very practical matter.

A successful comedian must be attentive to audience cues that govern timing: the audience must be given an interval in which to laugh or applaud. Comics in a play or a stand-up routine don't want to throw away a great punch line by reciting it while the audience is still digesting or applauding previous material. Audience feedback also influences pacing and the selection of improvised material—comedians go with what works. A small audience is likely to be an unresponsive audience.

Radio broadcasting transformed and depersonalized the relationship between actor and audience. The home-listening audience, far larger than that in the theater, was not physically present and thus incapable of interacting with the actors. However, the radio comedian typically did benefit from interactions with a live studio audience, whose laughter, applause and ambient noise were broadcast along with the comedy material. In a sense, the home listener was a member of an extended audience and laughed contagiously but did not interact with his remote audience mates in the studio.

One of the first steps toward canned laughter was taken in 1922 by vaudeville star Ed Wynn during a

live radio broadcast of his trademark skit *The Perfect Fool*. Wynn's delivery was crumbling under the stress of performing to a microphone on an empty stage without the benefit of audience feedback. To supply Wynn with crucial laughter and applause, the announcer assembled an impromptu audience of stagehands, technicians and other actors.

It didn't take radio producers long to realize the importance of a laughing live audience for their comedy shows. They presumed, reasonably, that home listeners would laugh along with the live studio audience. Just to make sure, many comedians took special measures to evoke laughs from the live audience, such as kicking another comic in the pants.



Why Keep Pretending?

If you're at a cocktail party and laughing at the joke of another guest just to be polite, will he know it? Chances are pretty good. In fact, according to research out of the University of California, Los Angeles, you've got only about a 30% chance of getting away with it. Being able to detect fake laughter, it turns out, is a survival mechanism. Genuine laughter releases a soothing hormone and promotes a feeling of cooperation and affiliation, so the human ear is conditioned to be able to detect fakers. Trip up in the social wilds and you may fall prey to a dangerous predator.

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With television came the next shift in the relationship between the actor and the audience. In many cases, the interactive link between the two was totally broken: the big cameras, bright lights, boom microphones and other bulky technology of early television usually forced a retreat to the studio. That meant shows were performed without audiences.

The technology of the modern television laugh track was primarily the creation of CBS engineer Charlie Douglass. His innovation was to move beyond the simple recording and playback of actual audience responses and instead employ numerous endless tape loops of prerecorded laughter that could be combined in various combinations and amplitudes to formulate unique “chords” of audience hilarity. The apparatus could be played like a musical instrument by pressing various keys and pedals.

For the next two decades, canned laughter continued its ascent, adopted by comedies from *The George Burns and Gracie Allen Show* to *M*A*S*H* and *The Mary Tyler Moore Show*. The technology peaked in popularity in the 1960s, but with the advent of socially conscious shows such as *All in the Family* and *Maude*, the trend reversed. Writers wanted live audiences for the feedback so they could compose better jokes. By the end of the 1990s, laugh tracks were so discredited, *TIME* magazine included canned laugh tracks in its list of the 100 Worst Ideas of the Century, along with prohibition, Muzak and aerosol cheese.

Today Americans barely register awareness of canned laughter. Instead, they are focused on violence in the media and video games, “fake news” and data mining. The phenomena that most fire our imagination, hopes and fears are social media platforms, computers and cellphones, not the television or radio of generations past.

Enter the Big Box

NOWHERE IS THE CONTAGIOUSNESS OF LAUGHTER demonstrated more effectively than with the laugh box. Push a button and these small, battery-powered playback devices provide a burst of prerecorded laughter that makes us laugh in response. We don’t decide to laugh, it just happens. Laugh boxes differ from laugh tracks in providing only the sound of naked laughter. These inexpensive gizmos from novelty shops provide a critical demonstration that in the absence of a joke or humorous remark, laughter by itself can evoke laughter.

Laugh-box science is like a lot of other laugh sci-

ence in being a highly democratic affair—get a laugh box and you are in business. Most cost about \$15 and vary in quality and funniness of the recorded laughter. The popular Tickle Me Elmo doll is a fancy, upscale laugh box, responding to a belly press with laughter, finally vibrating with a simulated tickle response after the third press, a tactile stimulus that triggers its own laugh and smiles. The incredible success of this doll indicates the potency and desirability of the laugh stimulus.

Some of my undergraduate students and I conducted a laugh-box test in three of my college classes. The 19-second burst of canned laughter produced by my laugh box was repeated 10 times, with the beginning of each trial separated by a one-minute interval. Students were asked to record on a note card whether they laughed and/or smiled on each trial. I was a bit nervous the first time I tried this experiment. Students can be a tough crowd, being reluctant to laugh or smile, even if tempted to do so, as a signal of their displeasure with being manipulated. My concern was unwarranted. The laugh box was a hit, a testimony to the power of the contagious laugh response.

On the first trial, nearly half of the 128 students laughed at the stimulus laughter, while more than 90% smiled. However, the effectiveness of the stimulus declined with each repetition, until only three of the 128 students laughed on the 10th trial. Laughter eventually lost its magic, taking a darker tone. By trial 10, about 75% of the students rated the laugh stimulus “obnoxious.” (The inquiry about obnoxiousness was made only on the last trial.) The ratings weren’t really necessary—student grimaces revealed their growing displeasure during the last few painful trials.

Neural Laugh Generators, Detectors and the Copycat Effect

THE ANIMAL CHORUS OF CONTAGIOUS LAUGHTER has its roots in the neurological mechanism of laugh detection and generation. Here we find the common link between the African laugh epidemic and Pentecostal holy laughter, laugh boxes and television laugh tracks.

The ability of laughter to elicit contagious laughter raises the intriguing possibility that humans have an auditory laugh detector—a neural circuit in our brain that responds exclusively to laughter. (Contagious yawning may involve a similar process in the



*Studio heads at CBS insisted on using a laugh track for M*A*S*H because they had never before tried to produce a comedy without one.*

visual domain.) Once triggered, the laugh detector activates a laugh generator, a neural circuit that produces the movement that we hear as laughter.

Previous accounts of contagious laughter by social scientists ignored the neurological basis of the phenomenon, focusing instead on whether audience laughter increased the likelihood that an individual would laugh at a joke or rate it as humorous. The power of naked laughter to trigger laughter got lost in a blizzard of baroque theorizing about such higher-order social processes as “deindividuation” and “release restraint mediated by imitation.”

Evidence for the neurological laugh detector and its associated laugh generator is indirect but compelling. Most of what we know about the laugh generator is based on its vocal output. We know, for example, that laughter is innate and present in all members of our species. These properties are consistent with the presence of a neural generator, whether the movement produced is laughter or walking. The same properties favor the evolution of a neurological detector for laughter. And laughter is the type of im-

portant species-typical vocalization for which a detector would be selected by evolutionary processes.

The search for the laugh detector offers more than the key to explaining communal laugh-fests. Knowledge of the laugh detector may aid the search for detectors of the complex and variable phonemic features of speech. On a more general level, the study of contagious laughter suggests an understanding of human group behavior that moves seamlessly between the neuronal and social levels of analysis. Humankind is at its most formidable and sometimes terrible when it acts en masse, whether in war against a common foe, in response to natural crisis or in heroic pursuit of a great ideal. In contagious laughter we have an example of how to examine such disparate threads of human group behavior and bring them into the fold of neuroscience. □

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THE SCIENCE OF LAUGHTER

What Happens When You Tickle a Rat

Neuroscientists implanted tiny electrodes in rodent brains to find out—and they laughed

By Jeffrey Kluger





THERE'S NOT A PR FIRM IN THE WORLD THAT COULD spin the reputation of the rat. The creatures are aggressive, they're destructive, and they're everywhere. The global rat population is estimated to be at least 7 billion—and likely much higher than that—meaning there's a rat companion for every single one of us. Naming yours is optional.

For all that, the mammal species we most love to hate does have at least one redeeming—even endearing—quality: rats, according to a study in *Science*, can laugh, and the best way to get them to do so is to tickle them.

Laughter as a whole—and tickling-induced laughter in particular—has always been something of a mystery. We are not the only species that laughs. The other four great apes—gorillas, orangutans, chimpanzees and bonobos—appear to laugh, especially when they're tickled. Dogs do too, though it's more of a pant. Forget the hyena and the laughing kookaburra of Australia. For the hyena, the signature vocalization is more a response to fear, and for the kookaburra it's a territorial call—nothing to laugh about here.

But rats may be different. Researchers have long observed the pleasure rats seem to take at playing with human beings—running to a human hand to elicit a sort of chasing game and seeming to delight in having their abdomens tickled. In both cases the animals appear to express pleasure via high-pitched vocalizations and excited jumping, the last known as *Freudensprünge*—which is the kind of delicious word you can go your whole life without hearing and then, once you do hear it, can't imagine how you lived without it.

Freudensprünge, however, is common among many animals; the laughter is rarer, and that's what researchers Shimpei Ishiyama and Michael Brecht of the Bernstein Center for Computational Neuroscience in Berlin wanted to study.

Ishiyama and Brecht began by implanting tiny electrodes in the animals' brains—specifically in the somatosensory cortex, both because it's the largest sensory center in the brains of mammals and because studies in humans suggest that it may be where tickle-induced laughter is processed. As a rule, of course, animals likely don't want anything at all implanted in their brains, which can go a long way toward wrecking any experiment. As the researchers themselves noted, Charles Darwin once observed that “the mind must be in a pleasurable condition” to respond to tickling with laughter.

To get around that problem, Ishiyama and Brecht gave the animals time to recover after the implant and only then began to familiarize them with play. "We put a lot of effort into handling the animals such that they were very comfortable with the experimental setting," wrote Brecht in an email to TIME, "because otherwise the animals do not enjoy the experiments and as a consequence are not ticklish."

Once the rats were prepared, the investigators stimulated them in three ways: with vigorous abdominal tickling, gentler tickling and chasing games. In all three cases, neuronal cells in the somatosensory cortex increased their firing rate—by 77%, 67% and 80%, respectively. Vigorous tickling also elicited the rats' signature form of laughter—ultrasonic vocalizations at a frequency at or above 50 kilohertz, which is higher than the range of human hearing. Gentler tickling did not elicit the laughter, but chasing games did—similar to the way small children start giggling in anticipation when parents chase them around the house. Electrically stimulating the rats' somatosensory cortex also elicited laughter, confirming that this was the region of the brain that was involved in producing the sound, though there is no way of knowing if the rats experienced pleasure laughter.

To confirm that the neural firing during play sessions was not a sign of alarm and the laughter wasn't a distress call, the researchers then tested Darwin's dictum by placing the animals in a nonpleasurable condition—or a so-called anxiogenic state—first. They did this by putting the rats on an elevated pedestal under lights, which is not a lot of fun for a species that spends so much of its time low to the ground and in the shadows. Their good mood sufficiently ruined, the animals showed far less brain activity and produced far less laughter when they were tickled. Finally—and decidedly even less pleasurably—the animals were killed, and their brains were dissected and stained to determine precisely where in the somatosensory cortex all the behavior had played out.

Just how understanding rat laughter advances the larger mission of expanding human knowledge is not immediately clear. The investigators, however, hope the work leads to a greater understanding of social and emotional processing in both rats and, importantly, humans. Less empirically, perhaps, it does help redeem the rat in our estimation—or it should. It will never be a species we will embrace, but it is one, we now know, that has the very humanlike capacity to feel. □

When the Animal Kingdom Gets the Joke

By Eileen Daspin

Rats may be able to laugh, but there's evidence that some nonhuman primates can actually tell a joke. Koko, a gorilla in Woodside, Calif., has learned more than 2,000 words and 1,000 American Sign Language signs. Once when she was asked, "What can you think of that's hard?" Koko signed "rock" and "work." What about the rest of the animal kingdom? Well, they may not emit audible laughter, but it seems that many animals—even the crayfish—can sometimes laugh on the inside.

Dogs

Does a wagging tail signify happiness? Maybe. Or maybe the dog is afraid. It depends on the tail's pattern of movement and position. As for laughter, your pet is most likely to produce what sounds like laughter when he is playing. It starts with a smile and then evolves into a sound close to panting, says *Modern Dog* magazine.





Apes

What did early human laughter sound like? Listen to chimpanzees, apes, orangutans and bonobos. According to Marina Davila-Ross, a researcher with the University of Portsmouth, the breathy outbursts the primates emit echo how humans' ancestral laugh would have sounded pre-language.



Dolphins

In 2005, Swedish researchers studying dolphins noticed that the animals emitted a peculiar set of sounds during play-fighting but not during actual confrontations. Their conclusion: the dolphins were having fun and wanted to prevent the play-fight from escalating—the reason laughter evolved in humans.

Crayfish

When given small amounts of cocaine or morphine in a particular place, crayfish associated the location with pleasure. "Given the chance, they will always return to that place, presumably in hopes of getting more," researcher Jaak Panksepp told *The Guardian*.





Hey, Baby, Can I Get You a Beer?

What I learned about making people laugh on the set of *America's Funniest Home Videos*

By Joel Stein

WHEN I WAS IN SECOND GRADE, I ASKED MY PARENTS what the vice president did. They told me that the second most important person in the country didn't have any responsibilities whatsoever. For the next five years, I told people that when I grew up, I wanted to be the vice president.

So back when Tom Bergeron announced he was stepping down as the host of ABC's *America's Funniest Home Videos* (AFV) after 14 years, I applied. I could be on network TV every week, introducing a

few clip packages while making tons of money and getting invited to lots of parties—many of which, admittedly, would have guest lists consisting of cats or men with ice packs on their groins.

I walked onto the AFV stage feeling surprisingly nervous, so I asked Bergeron for advice on how to be funny when hosting a family show. "Relax, have fun and remember your role is to service the videos. Which sounds dirtier than I intended," he said. In other words: make jokes that sound edgy but are

actually safe because they don't make sense.

To prepare, I watched Bergeron tape a show, during which I noticed many surprising details, like the fact that the show is an hour long. It turns out I'd never actually seen *America's Funniest Home Videos*, which made me even more anxious. When the show ended, I walked out to great applause, which—along with the bright lights and my loud, distracting heartbeat—made it hard to remember which cameras to look at, though I'm pretty sure there wasn't one in my shoes. Then I brought two audience members up for a game called "Pick the Real Video!" in which I asked them if I was about to show a clip of a housefly stuck to a frozen hot dog, a penguin swimming in a hotel fountain or a leprechaun falling down an escalator. One of the contestants picked the leprechaun. The show is not called *America's Smartest Home Video Watchers*.

Vin Di Bona, the show's creator and executive producer, told me he's leaning toward hiring someone famous and talented. Still, he said, while I was unpolished, I had some of that Bergeron magic, compared with the blunter skills of previous host Bob Saget. "He had to have laughter to know it was right," he said. "You didn't need that. You just presented and moved on." Yes. That is exactly what I was trying to do. I was not just being quiet because all the jokes I could think of with a fly, a penguin and a leprechaun were racist.

Di Bona, however, thought I might be a better fit as a writer. So a few weeks later I spent an afternoon working for head writer Todd Thicke, who has been with the show since 1989. He has the same good looks and deep voice as his brother Alan Thicke and nephew Robin Thicke and, I'm guessing, other Thickes. I sat at a table with three other writers, looking at walls covered with index cards, on which were written things like "A boy comments on how to impress the ladies in the car. Then suddenly screams in a panic when he sees a spider" and "A dog shows its teeth and growls while a woman rubs its butt with her foot indoors." This was going to be easy.

We stared at a screen and watched the very best 10% of submitted videos, as culled by screeners who I'm assuming work in Chinese prison camps. And they were still insanely boring—just cute pets, cute babies and uncute tweens dancing in their bedrooms. It took 90 minutes before we saw the first guy get hit in the testicles, which was the first time we laughed. "It's weird," I said. "As soon

I brought two audience members up for a game called "Pick the Real Video!" in which I asked them if I was about to show a clip of a housefly stuck to a frozen hot dog or a penguin swimming in a hotel fountain.

as someone gets hurt, people laugh." Writer Mike Palleschi looked around the room and said, "I think that's our fault."

The writers had an amazing ability to predict, within just a few seconds, what would happen in the clips we watched, all of which provided me with valuable life lessons: don't wear socks on kitchen tile; don't run near the buttocks of an obese woman; use extreme caution when weight lifting at home alone; don't leave flour in an area accessible to toddlers. Since *AFV* is a family show, the writers can't use a lot of the best stuff, like a baby smiling widely after tasting a beer. "You can barely give a monkey a cigarette, no less a baby a beer," said Erik Lohla. "The world has changed," agreed Jordan Schatz.

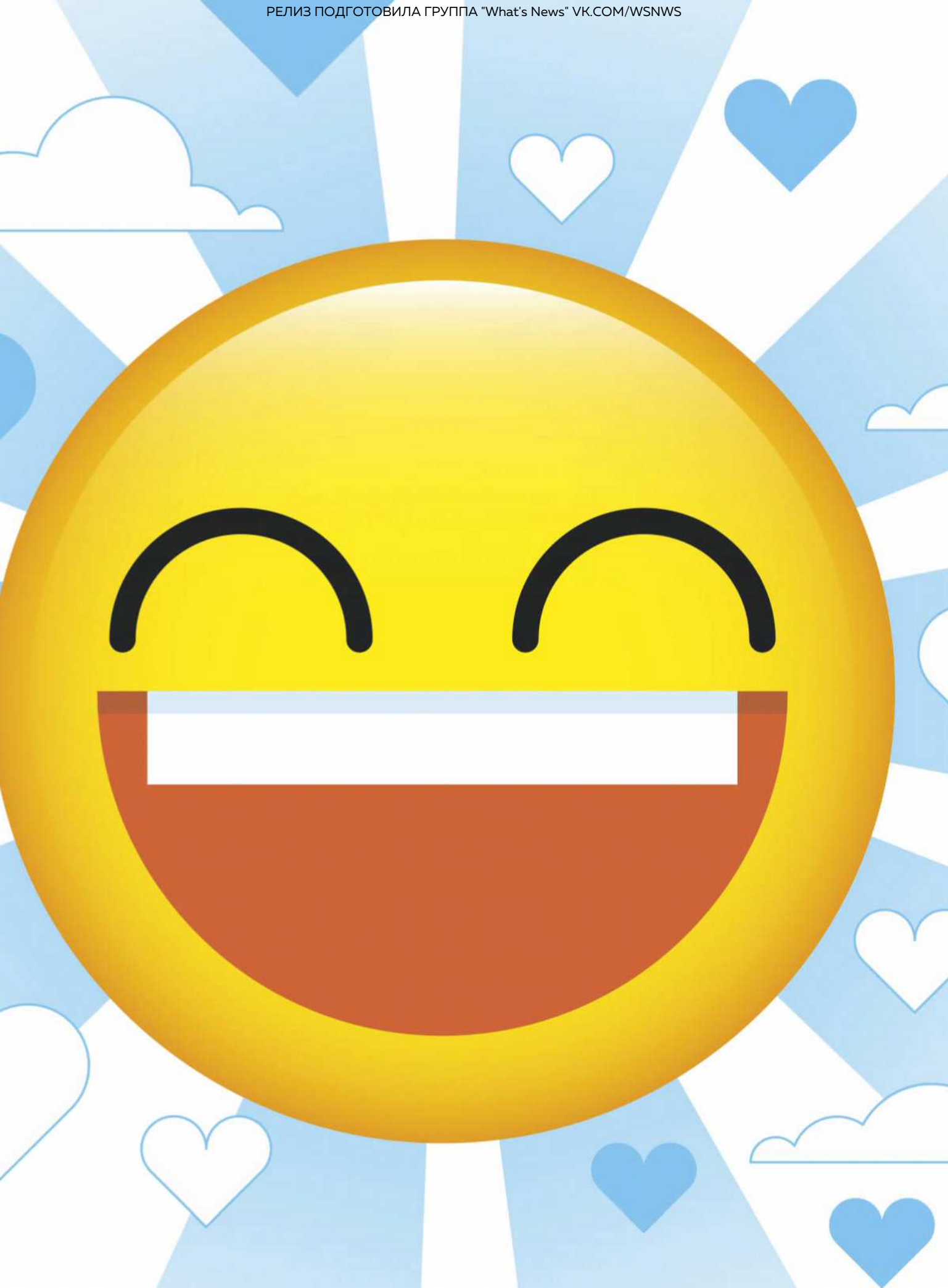
So to make the clips seem more exciting, they combine them using clever frames like "Failed football entrances vs. babies knocked over by sneezes." Thicke also set us to work creating alternative meanings for NSFW besides "not safe for work" that he could print below clips. At first I tried to write for clips we'd seen, such as "nice sprinkler fart, wanker" for the guy with the sprinkler stuck in his pants and "new style feline wevenge" for the cat who attacked a dog, but the other writers simply searched for new topics in their 25-year database of clips. They found me lots of guys falling off stripper poles for "never strip for women," but Thicke thought that it wasn't in great taste. And they didn't seem excited about my suggestion that we take absolutely any clip anyone submitted and just write "no sense from within."

It's been several months, and I haven't heard back about either job. Luckily, I have some pretty adorable footage of my son that I'm sure will win \$10,000. □

CHAPTER 2

Good for the Soul

**Spirituality, humor, love
and the belly laugh**



THE SCIENCE OF LAUGHTER

Let There Be Laughter

Does Jewish humor reinforce negative stereotypes? Celebrate strength? Or both? A professor and a son of Jewish immigrants explores

By Michael Krasny

A CREATURE WITH GREEN SKIN TOWERS OVER ALL the other Bloomingdale's shoppers and is conspicuously covered with fancy jewelry. An older Jewish woman walks up to him and exclaims, in disbelief, how tall he is and how his skin is so green and how much jewelry is covering him, and asks, "Where are you from?" He responds, in perfect English, "I am from Mars." The woman sighs and says, "Ah. That explains your green skin." She goes on staring at him, and her eyes veer up toward the ceiling, and she asks, "How tall are you?" Again, in perfect English and without missing a beat, he answers, "I am 8 feet 2 inches tall." The woman asks if all Martians have green skin and are as tall as he is, and he says, "Yes. We all possess green skin and are all within a few inches of each other in height." "And do all of you wear so much jewelry?" she asks. The Martian responds: "Not the goyim."

FOR YEARS, JEWISH JOKES were looked at as repositories of self-hatred or masochism and despair. Freud disciple Theodor Reik, in *Jewish Wit*, described them all as being about the "merciless mockery of weakness and faults and failing"; and psychoanalyst Martin Grotjahn, in a book-length essay titled "Psychoanalysis and the Jewish Joke,"





*Carl Reiner (left) and
Mel Brooks performed
the "2000 Year Old Man"
sketch on The Andy
Williams Show in 1966.*



In a 1992 Saturday Night Live skit, Jerry Seinfeld (in the beard) portrayed the prophet Elijah as an insult comic who crashes a family's Passover seder.

called them “masochistic aggression turned against the self” and said they were “derived from the prevailing Gentile view of Jews.” (Think Woody Allen seeing himself as a Hasid through Annie Hall’s WASP grandmother’s eyes.)

Yet many of these jokes are deceptive. While they might seem to reinforce stereotypes of Jews, they actually are celebrations of the ability to survive by whatever means necessary. With mordant humor, they show a dogged resilience in the face of dreadful, even lethal adversity. Consider the classic joke about the kindergarten teacher who offers \$10 to the student who can name the most famous man who ever lived. Only the Jewish child, Max, answers correctly, citing Jesus. As the teacher hands Max his prize money, she asks him how he figured out the right person, and he says, “In my heart I knew it was Moses, but business is business.” Seemingly, the joke is telling us that Jewish children, even at this rudi-

mentary stage of education, have adopted an ethic that valorizes making money over expressing honest convictions and beliefs. It is perhaps intimidating: “We learn this from the womb!” A scary thought? Yes. But on the other hand, there is also a kind of *naches*, or pride, in thinking Jewish children show money smarts early in their development.

The history of Jewish humor in America, then, is rich, complicated and slyly subversive, from the vaudeville and borscht belt performers like George Jessel and Fanny Brice to the comedic films of Judd Apatow. Jewish jokes canonize Jewish mothers but also display dismay and even rage at their overprotectiveness. Sex and marriage are celebrated and also mercilessly ridiculed. If ambivalence is the emotional currency of Jewish lives, then the humor of Jews embodies and even embraces it. Perhaps that explains why Jewish humor has become, in many respects, inseparable from American humor. Or even, in our global age, universal humor. A lot of Jewish jokes cross over to other nationalities and cultures and are indeed universal. But paradoxically, many stand utterly alone and nearly cry out repeatedly with three simple words: *we are different*.

As outsiders, Jews must fight to survive, even when their numbers are depleted or they are unsure where their next meal is coming from. Perhaps the longest-surviving of all Jews, Mel Brooks’s famous 2000 Year Old Man, claimed his longevity was the result of not eating fried food, not even touching it. He also took the idea of Jewish guilt to another

Henny Youngman often told self-deprecating jokes. To wit: “My doctor says to me: You’re sick. I say: I want another opinion. He says: OK. You’re ugly too.”

level in his complaint to Carl Reiner that he had more than 42,000 children and not one had ever come to visit him.

The source of Jewish humor has typically been located in suffering. It is self-deprecatory and self-lacerating, and it sees Jews as outsiders, marginal people, victims. Jewish jokes would become time capsules for the Jewish sense of being different and unique. "Isn't Jewish humor masochistic?" an old joke begins, followed by the line "No. And if I hear that one more time, I'm going to kill myself." Think of early comedians like Henny Youngman and the one-liners he made famous. "My doctor says to me: You're sick. I say: I want another opinion. He says: OK. You're ugly too." Or Woody Allen telling us, early in his career, that after he was born, the obstetrician slapped his mother. Or later on, saying that his parents rented out his room after he was kidnapped. And then there was Rodney Dangerfield telling us his mother wouldn't breastfeed him. She only wanted to be friends. He, too, had a tale about being kidnapped. The kidnappers sent his father a piece of his finger. His father, he said, wanted more proof.

This self-deprecatory joking inverts the old axiom that Jewish parents walk closer to their children than non-Jews. The comics all seem to be saying, "I'm such a loser even my parents didn't want me." Joan Rivers claimed she knew she was an unwanted child because the bath toys her parents gave her were a toaster and a hair dryer. But examined from a different perspective, the jokes can be seen as part of the Jewish tradition of celebrating food, family, wealth, success and sobriety; sex and *naches*; illustrious or heroic Jews; Jewish culture and Jewish mores; children; and, yes, even Jewish American princesses. All of these are at times stereotyped and ridiculed with sarcasm and aggression. Yet, notwithstanding even the darker and more acerbic side of Jewish jokes that poke merciless fun and make mincemeat of Jewish traits and Jewish neuroses, Jews celebrate that they are Jews and that they are alive.

A wealthy Jew lives next door to the famed banker and extraordinarily wealthy philanthropist J.P. Morgan. Both have enormous estates, and the Jewish neighbor has the same cars as Morgan, the same landscaping and a replica of Morgan's gigantic pool. This copycat behavior annoys Morgan, and one day he bluntly and angrily says to his Jewish neighbor, "Are you trying to be my equal? Do you actually believe you can be my equal by copying me?" The Jew

responds, "I am not your equal. I am better than you!" Morgan acidly asks, "And why is that?" "Because," says Morgan's Jewish neighbor, "I don't have a Jew living next to me."

This joke always fascinated me. J.P. Morgan, the banker and financier of Croesus-like wealth in the late 19th and early 20th centuries, actually had a real rivalry with Jewish bankers of his time. Morgan made many anti-Semitic comments in his correspondence to the effect that Jews were not white, this at a time when nonwhite immigrants could not



Isaac's birth

Sarah's Laugh

Laughter is often described as a gift from God, but the Hebrew Bible makes clear that it cannot be cynical. In Genesis, God promises Sarah, 90, and Abraham, 100, that they will soon conceive and that Sarah will become "the mother of nations." Hearing the vow, Abraham falls down in joyous laughter. Sarah instead chuckles, offending God. "Is anything too hard for the Lord?" he demands to know. Still, God makes good on his commitment, and when Sarah gives birth, the couple name their son Isaac, which means "laughs" in Hebrew. "God has brought me laughter, and everyone who hears about this will laugh with me," Sarah says.

become citizens. (It's all in Susie Pak's book *Gentlemen Bankers: The World of J.P. Morgan*.) The joke is striking in that, once again, we have a Jew of great wealth managing to get in the last word against a rival whom he is, nonetheless, emulating. The joke celebrates a quick-witted, highly successful Jew who succeeds in putting down a legendary tycoon, a so-called captain of industry, by using his own Jewishness and Morgan's anti-Semitism. Though the Jew in the joke is a copycat, he is one with chutzpah as well as capital.

The fear, of course, is that even joking about such stereotypes can reinforce them or cause pain. But what should be said of the freedom that comes with expressing, perhaps even owning and celebrating, them with humor? Money was associated by most immigrants with the American dream. The Chinese emigrated with the myth of America being a gold mountain, and many Jews who came from Europe and other parts of the world believed that American streets were lined with gold. Yes, many Jews in America and other developed nations have succeeded and are prosperous beyond the wildest dreams of their forefathers and foremothers. Many are also no longer mortally afraid of upsetting Gentiles ("What will the goyim think?") or stirring up anti-Semitism, bringing undue attention to the wealth of any in their tribe.

A Jewish man is sitting on a park bench eating matzo. He sees a blind man on a bench across from him. Out of kindness and concern, he goes over to the blind man and, assuming the man is hungry, hands him a piece of his matzo. The blind man slowly touches the matzo, feeling it all along its surface, even its ridges, and then exclaims, "You read this sh--?" On

the surface, the joke celebrates *tzedakah* (charitable giving) and makes us aware of what matzo feels like and its obvious connection to Passover. But matzo has been given other, far more baleful interpretations throughout history. The joke has a deeper undercurrent, beyond the allusions to braille and *tzedakah*, for Jews were persecuted for centuries in the false belief that matzo was made from the blood of Christian infants. The blunt "You read this sh--?" evokes a fecal association with matzo that challenges the real purpose of the man's generosity in giving the blind man food—an action that, on its own, Jews celebrate as a true mitzvah. On the other hand, to borrow from Freud, who said sometimes a cigar is just a cigar: sometimes a piece of matzo is just a piece of matzo. Sometimes a joke is just a joke.

AS FAR AS I CAN TELL, all Jewish holidays can be described in nine words: "They tried to kill us. We won. Let's eat." I call the nine-word summation of the Jewish past a great joke because it brings to the fore associations with Jewish holidays and eating, whether after fasting on Yom Kippur or sitting through a Haggadah service before a seder meal. It also serves to link Jews to their history, all set against the impatience of the non-Orthodox Jews of the contemporary period, who, like my father, rushed through seders to get to the meal.

Embedded in the nine-word joke is the joy associated with the communal Passover experience reflected in those last two words: "Let's eat." What is lost in tradition is made up for in the present with speed and abundance. The real essence is in the juxtaposition of the Jewish past with the immediacy of wanting to eat. Most major Jewish holidays, with the exceptions of Hanukkah and Purim, are, in fact, not about others trying to kill all of the Jews. In fact, in the ancient past, which is hallowed at Passover seders, it is God who does the killing—of the Egyptian firstborn. Thanks to God parting the Red Sea and Moses leading the children of Israel, the Bible teaches, Jews managed to escape to freedom. I remember one Passover seder when I first heard the quip that points out the real difference between Christianity and Judaism: "Jesus saves. Moses invests." And, speaking of Moses, remember, too, that Woody Allen in *Love and Death* says if only he could witness a miracle, like the parting of the Red Sea by God or Moses talking to the Burning Bush or his uncle Sasha picking up a check.

Jews and Egyptians both objected to the pairing of Omar Sharif and Barbra Streisand for the film *Funny Girl*. "Egypt angry?" asked Streisand. "You should hear what my Aunt Sarah said."



Rodney Dangerfield's jokes have poked fun at Jewish family life: "My parents got divorced. They had a custody fight over me. No one showed up."

Of course we have come to a point where the entire story of the Jews being enslaved in Egypt has been questioned by lack of archaeological evidence and the story of Passover posited as merely a myth. Fast-forward from pharaoh's time to 1967, and the making of *Funny Girl* and the Six-Day War between Israel and Egypt. The film faced serious obstacles brought on by the fact that Barbra Streisand's leading man was the Egyptian actor Omar Sharif. Streisand's Jewish mother was quoted as saying, "My daughter isn't going to work with an Egyptian." When a leading Egyptian newspaper, discussing Sharif's being cast as Streisand's leading man, screamed out the headline EGYPT ANGRY!, Streisand said, "Egypt angry? You should hear what my Aunt Sarah said." In 1992, Streisand would do a memorable walk-on as herself during a *Saturday Night Live* skit in which three cartoonish middle-aged Jewish mothers played by Mike Myers, Madonna and

Roseanne Barr all claim to be verklempt over her not winning an Oscar for *The Prince of Tides*.

Naches over Streisand's Jewishness is, of course, another clear example of Jews celebrating the success of one of their own. Will Jews ever celebrate having one of their own as the first Jewish American president of the U.S.? A singular truth separating Jews in America from Gentiles remains the fact that only Gentiles have been elected commander in chief. In spite of all the Jewish mothers, including mine, who told their sons any boy could grow up to be president, no Jewish boy ever has. When Connecticut senator Joseph Lieberman was nominated to run with then-Vice President Al Gore, the thought occurred to many Jews that there might one day be a Jewish president. Eliot Spitzer, once a New York governor and a tough Wall Street prosecutor, was considered a possibility to become the first Jewish president until a scandal with a hooker killed his political career. Soon after Vermont senator Bernie Sanders announced his run for the presidency, I asked him which he thought would turn away more voters—his being a socialist or a Jew. Bernie answered immediately, "A socialist," though he added that he was a democratic socialist like those in Scandinavia. A photo of Sanders went viral with the caption, "They tell me Bernie Sanders can't win because America won't vote for a Socialist Jew. I tell them America celebrates a Socialist Jew every December 25."

That day when a Jew sits in the Oval Office may one day come. But in the meantime, as many Jewish jokes reveal, there is much to celebrate. Perhaps most of all is celebration of *chai*, the Hebrew word for life, oddly enough often associated with Elvis Presley, who habitually wore a gold *chai* on a chain around his neck. The word is tied most of all to the life force and the tree of life, which is to say to God the creator. Sheldon Harnick's lyric in *Fiddler on the Roof* is key. Tevye sings, in his toast at his daughter's wedding, "Here's to our prosperity. Our good health and happiness. And most important, to life. *L'chaim!*" In life there can be laughter, and in laughter there is life worth celebrating. □

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Sally Field starred as a 90-pound sister whose weight allowed her to take to the skies in The Flying Nun, a sitcom that ran from 1967 to 1970.



Between Heaven and Mirth

As a Catholic priest and Jesuit, I've come across a surprising number of spiritually aware people who are, in a word, grim

By James Martin, S.J.

MANY OF MY FAVORITE JOKES ARE ABOUT CATHOLICS, priests and Jesuits. The Jesuits, by the way, are a Catholic religious order (for men who take vows of poverty, chastity and obedience and live in community) founded in 1540 by St. Ignatius Loyola, a Spanish soldier turned priest.

It's easy for me to tell jokes about Catholics, priests and Jesuits, since I'm all three. And a self-deprecating joke may be the healthiest brand of humor. Let me share with you one of my favorites.

The Silent Monk

A MAN ENTERS A STRICT MONASTERY. ON HIS FIRST day the abbot says, "You'll be able to speak only two words every five years. Do you understand?" The novice nods and goes away.

Five years later the abbot calls him into his office. "Brother," he says, "you've done well these last five years. What would you like to say?" And the monk says, "Food cold!" "Oh, I'm sorry," says the abbot. "We'll fix that immediately."

Five years later the monk returns to the abbot. "Welcome, Brother," says the abbot. "What would you like to tell me after 10 years?" And the monk says, "Bed hard!" And the abbot says, "Oh, I'm so sorry. We'll fix that right away."

Then after another five years the two meet. The abbot says, "Well, Brother, you've been here 15 years. What two words would you like to say?" "I'm leaving," he says.

And the abbot says, "Well, I'm not surprised. You've done nothing but complain since you got here!"

You might wonder why I start with a joke, but in a way, jokes are the point of this essay, which is that joy, humor and laughter are underappreciated values in the spiritual life and are desperately needed not only in our own personal spiritual lives but in the life of organized religion. Joy, for example, is what we'll experience when we are welcomed into heaven. We may even laugh for joy when we meet God. Joy, a characteristic of those close to God, is a sign of not only a confidence in God but also gratitude for God's blessings. Humor, too, is an essential but neglected requirement of spirituality. Most of the saints had a terrific sense of humor and could easily laugh at themselves. Finally, we must remember that laughter is essential even in the most "spiritual" or "religious" of places.

There are two ways to look at laughter from a spiritual vantage point: joyful, contented and playful or mocking, malicious, desperate and cynical.

Let's start with the last in our trio of gifts, laughter. The most comprehensive recent treatment of the place of laughter in Western spirituality is Karl-Josef Kuschel's short book *Laughter: A Theological Essay*. At the beginning of his enjoyable study, Kuschel, a professor of theology at the University of Tübingen in Germany, admits the "conceptual impossibility" of developing a theology of laughter, since there are so many varieties. Some are praiseworthy, others not. "There is joyful, comfortable, playful and contented laughter," he writes, "and there is mocking, malicious, desperate and cynical laughter." Kuschel thus identifies the two main ways of looking at laughter from a spiritual vantage point. "Like their Master from Nazareth," Kuschel writes, "Christians have to take into account both laughing and being laughed at." Laughter can heal or hurt.

In short, one school of spirituality condemns laughter; the other praises it. The condemnatory strain finds voice in the writings of the 4th-century theologian St. John Chrysostom, who suggested that true Christians should weep out of sorrow for their sins. Chrysostom explicitly stated that he does not wish to ban mirth, but rather aims to remind the world that tears more effectively bind us to God than does laughter. This predilection against laughter finds echoes in the thought of other early Christian theologians, who saw *risibilitas* (in Latin, the human ability to laugh) as dangerous in another way—it stood in opposition to reason.

Perhaps the most well-known fictional treatment of this condemnatory strain comes in Umberto Eco's novel *The Name of the Rose*. In Eco's best-selling book, first published in 1980, a Franciscan friar—playfully named William of Baskerville—investigates a series of gruesome murders in a 14th-century monastery. In the course of his sleuthing, William encounters Jorge de Burgos, a blind librarian who fulminates over the presence of clever drawings and doodles that decorate the pages of some of the books housed in the monastery's renowned library. Such *risibilitas* appalls Jorge.

Surely, counters William of Baskerville, those comical decorations—"humans with horses' heads, and horses with human legs, fish with birds' wings and birds with fishtails"—should make one smile. They may even have "edifying ends," that is, uplifting purposes. At first Jorge mocks William, but

then warms to the task of arguing against laughter. "What is the aim of this nonsense?" Jesus, counters the old monk, did not have to use such foolish things to make his point. "Christ never laughed," he says later, quoting Chrysostom.

THUS THE THEOLOGICAL objection: it is against the Christian ideal. "Laughter shakes the body," says Jorge, "distorts the features of the face, makes man similar to the monkey." Thus the philosophical objection: it is against reason. Jorge's crusade eventually takes a darker turn. In his beloved library is the only remaining copy of the second volume of Aristotle's *Poetics*, a work on comedy. To ensure that no one will read this terrible treatise—spoiler alert!—Jorge poisons the pages, so that any monk who dares pursue laughter and moistens his finger to turn the page will die.

My own theology of laughter, similar to what Kuschel calls his "jokological" approach, is at odds with that of Jorge de Burgos. As long as it remains firmly in that first category of "joyful" and does not transgress into "mocking," human laughter is a gift from God. Laughter has a long tradition among the saints and spiritual masters in many religious traditions as a necessary component of a healthy life. Most contemporary religious traditions, Christian and otherwise, disagree with Jorge's overheated condemnation of laughter. The catechism of the Catholic Church—hardly a frivolous book—includes a line in a chapter on "popular piety" that might have surprised many of the early church fathers, not to mention Jorge. At the core of the faith of believers there is, says the catechism, a "storehouse of values" that offers wisdom for the Christian life. Such wisdom "provides reasons for joy and humor even in the midst of a very hard life."

Kuschel, the German theology professor, has a twofold approach to laughter that is helpful when we look at humor from a spiritual vantage point. There is humor that builds up and humor that tears down, a humor that exposes cant and hypocrisy and a humor that belittles the defenseless and marginalized. Good humor and bad humor. Of course, most secular observers would agree with this: there is a morality to humor. But religious observers see these two sides of humor slightly differently, for they see the two in the light of God's desires for humanity. "Good" or "bad" depends not only on a moral sense but also on how the humor

deepens or cheapens the relationship with God.

The theological approach to humor—condemnatory or praiseworthy—depends, as with laughter, on its intention. The Roman soldiers who robbed Jesus in a purple garment, pressed upon his head a crown of thorns and placed a reed in his hand were engaging in a malicious humor, mocking him as a spurious king: "Hail, King of the Jews!" (On the other hand, the Gospel writers use this episode to their benefit, and the soldiers' terrible humor makes an ironic theological point. Jesus truly is a king, though the soldiers do not know this. The joke is on them.)

On the opposite end is Jesus's own use of humor. Many of his parables were most likely not only clever but overtly funny. His barbed comments to



A Biblical Lesson on Laughter

"Blessed are you who weep now, for you will laugh . . . Woe to you who laugh now, for you will mourn and weep."

In chapter six of the Gospel of Luke, laughing is both a promise and a warning. It also signals foolish doubt. Matthew, Luke and Mark all tell the story of when Jesus arrived at the home of a synagogue leader whose daughter had died and said, "Why all this commotion and wailing? The child is not dead but asleep." The leaders in the room laughed at Jesus. In response he told the 12-year-old to get up, and she did.

THE SCIENCE OF LAUGHTER **BETWEEN HEAVEN AND MIRTH**

Roman officials, some Jewish religious leaders, the wealthy and the complacent often seem designed not only to silence the higher-ups but to provoke some smiles among his listeners. It is usually gentle, but nonetheless effective.

This brings us to joy. When I started to study joy, I was overwhelmed. The theme of joy runs throughout almost all the major religious and spiritual traditions. In Hinduism, the higher form of joy is often called bliss or *ananda*, and is an essential attribute of divine reality. In the Old Testament, the people of Israel express their joy to God for having delivered them from slavery. In the Gospels, Jesus often uses that very word as a way of expressing a goal of discipleship. Later, St. Paul encourages the early Christians to “rejoice always.” Joy is one of the traditional “fruits of the Holy Spirit,” that is, gifts from God given to build us up.


St. Thomas Aquinas, the 13th-century theologian who carefully distinguished between different kinds of joy and happiness, wrote at length on joy. He described *delectatio* (“delight”) over sensory things, but he reserved the term *gaudium* (“joy”) for the attainment of an object that one regards as good for oneself or another. Later Thomas connected joy with love, “either through the presence of the thing loved, or because of the proper good of the thing loved,” wherein one rejoices over the good fortune of another. The highest joy, said Thomas, is seeing God “face to face,” since one has attained all that one’s heart can desire.

St. Thomas’s writings helped me perceive more clearly the difference between a religious understanding of joy and a secular one. The more I thought about Thomas’s distinctions and researched the question of joy, the clearer the answer became. In popular terminology, joy is happiness. For the religious person, joy is happiness in God.

In contrast to the more secular definition of joy, which may describe one’s emotional response to an object or event, religious joy is always about a relationship. Joy has an object, and that object is God. Contemporary Christian theologians, such as Donald Saliers, a professor of theology and worship at Emory University, often make this point. In *The Soul in Paraphrase: Prayer and the Religious Affections*, Saliers notes that joy is a fundamental disposition toward God. What characterizes Christian joy in contrast to happiness, he says, lies in its ability to exist even in the midst of suffering,



St. Ignatius of Loyola, the founder of the Jesuit Order, was shown ascending to heaven in this 17th-century French painting.



In American Catholic culture, suffering is linked to spirituality far more often than joy is. Joy has a disreputable reputation in some religious circles. And that's odd.

because joy has less to do with emotion and more to do with belief.

Joy does not ignore pain in the world, in another's life or in one's own life. Rather, it goes deeper, seeing confidence in God—and for Christians, in Jesus Christ—as the reason for joy and a constant source of joy. Pope Paul VI, in an extraordinary 1975 papal letter called *Gaudete in Domino* (“On Christian Joy”), touched on this distinction. Why, in a culture of plenty in the West, he wondered, where there is so much to satisfy us—wealth, clean water and readily available food, medical achievements, technological advances—is there so little joy?

It is, said Paul, because we are missing what joy really is. “This paradox and this difficulty in attaining joy seem to us particularly acute today,” Paul wrote. “This is the reason for our message. Technological society has succeeded in multiplying the opportunities for pleasure, but it has great difficulty in generating joy, for joy comes from another source. It is spiritual.”

Here is one example of what leads me to think that many modern believers often fail to link spirituality with anything joyful or even lighthearted. For the past 20 years, I've worked for a Catholic magazine called *America*. One of our regular features is “Faith in Focus,” mainly stories about a writer's spiritual life, and each week we get dozens of submissions. Guess what the most common topics are: sickness, suffering and death. How my illness led me to God. How losing a job led me to God. How my pain led me to God.

Now, you might say, “Suffering is a way to God.” And often that's true. We can sometimes experience God more intensely during times of suffering, since we are more vulnerable and therefore perhaps more open to God's help. But in my 20 years

at *America*, I've rarely seen a funny or even mildly humorous submission for that section.

This is just one indication that, at least in American Catholic culture, suffering is linked to spirituality far more often than joy is. Joy seems to have a disreputable reputation in some religious circles. And that's odd, because joy is a necessary component for a healthy emotional and spiritual life. In fact, we are drawn to joyful people, I believe, because joy is a sign of God's presence, which is naturally attractive to us. God's joy speaks to the joy that dwells sometimes hidden in our hearts. “Deep calls to deep,” as Psalm 42 says.

Or, as St. Augustine wrote, “Our hearts are restless until they rest in you, O Lord.” Augustine, a 4th-century North African theologian, understood something fundamental about human beings: we naturally desire God, the source of all joy. We are drawn to joy because we are drawn to God.

It's difficult to measure the extent joy and laughter have been denigrated, downplayed or deemed inappropriate throughout religious history or how this setting aside of lightheartedness may have occurred. But it's not hard to see the *effects* of this downplaying. If you're Catholic, you may know priests who make you wonder how they can “celebrate” (the official term) the Mass when they never crack a smile. If you're a member of another Christian denomination, you may know pastors, ministers or elders who exemplify the “frozen chosen.”

At one church I attended, always seated in the front pew were two middle-aged laywomen who were sisters. They arrived early every Sunday, never greeted anyone, sat in precisely the same spot and stared dead ahead at the altar during Mass. When it came time for the Sign of Peace, the moment when everyone shakes hands as a sign of Christian fellowship, the two sisters unsmilingly shook one another's hand, and they never, ever turned around to greet anyone else. They seemed deadly serious about their faith. And when you're deadly serious, you're seriously dead. A better goal for believers is to be joyfully alive. That seems obvious, doesn't it? ▣

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THE SCIENCE OF LAUGHTER

First Comes Laughter, Then Comes Marriage

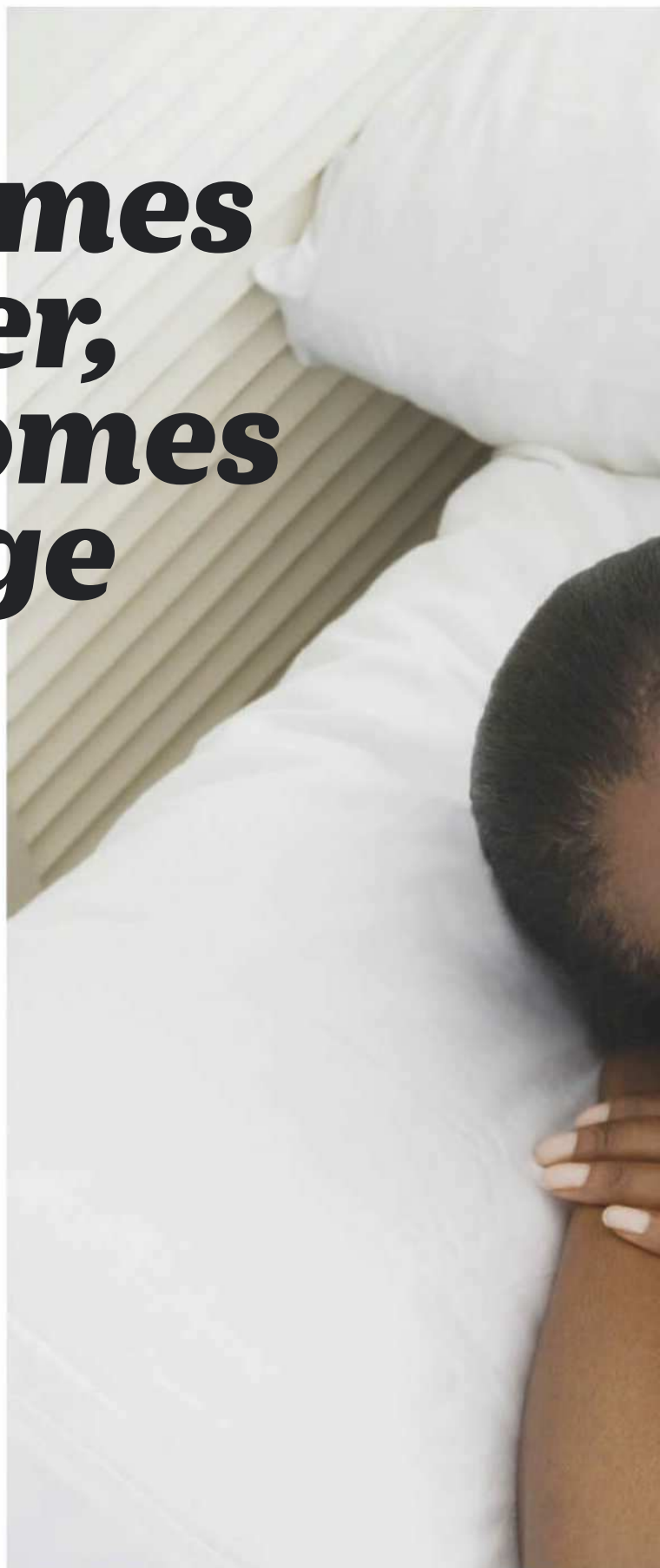
Research shows that heterosexual women prefer men who make them laugh and that men want an audience

By Dan Bova

YEARS AGO, DURING JURY SELECTION, A LAWYER asked me what I did for a living. As I was under oath and compelled to tell the truth, I answered, "I ask attractive women silly questions." See, back then, I was an editor at *Maxim* magazine, which regularly featured famous and aspiring-to-be-famous actresses and models. Among my typical line of Pulitzer Prize-winning questioning was this query: "What do you look for in a guy?" And 99.99999% of the time, the subjects answered the same thing: "The most important thing to me is a sense of humor." And 99.99999% of the time, I had to stop myself from coughing, "Bull@#\$!"

From where I sat, most of the men on the arms of these women had either tons of cash or tons of abs, or sometimes both. I mean, come on, Anna Nicole Smith, you married 89-year-old billionaire J. Howard Marshall because of his ability to tell a killer knock-knock joke?

Men tend to use humor to compete with other men, but women are more likely to use jokes to connect with other people of either sex.





Well, it turns out that my BS detector was in need of a tune-up. Research out of the University of Kansas based on the pairings of 51 random heterosexual men and women found that women are in fact drawn to men who make them laugh and that men tend to gravitate toward women who crack up at their dumb jokes. Why is that? Did the laugh track of all of those *Three's Company* episodes that we watched in our youth permanently warp our brains, or is it something deeper? If you guessed something deeper, you're probably right.

It likely has something to do with the theory of sexual selection that noted smart person Charles Darwin came up with in the 1800s while studying peacocks. Darwin observed that girl peacocks' requirements for a mate went beyond reproductive equipment. The peahens instead were greatly influenced by male displays of brightly colored feather tails, catchy courting songs and other things that peacocks are into (hey, no judgment here). Apparently figuring that the show-off dude peacocks had good genes and were capable of producing healthy offspring, the females reached a conclusion: "My biological clock is ticking—don't go wasting my time with some puny plume!"

In the human realm, a guy also has stuff he uses to try to get women to think that spending time with him will be worth it. His good looks. His bank account. His sense of humor—and it is that last arrow in the quiver that may be the most potent of all. According to the data from the Kansas study, "The number of humor attempts that a female laughed at was positively associated with her dating interest in her male partner." Or, as a University of Kansas press release recommended in layman's terms, "Men might want to ditch the pickup lines and polish their punch lines in their quest to attract women."

So laughs before looks. I'm willing to accept that. I can see that there are lots of funny men who are happily attached to women who, I'm sure they'd agree, are totally out of their league: there are model Beth Ostrosky and Howard Stern, concert pianist Natasha Rubin and Cheech Marin, and Woody Allen and Mia Farrow. (OK, so that last one wasn't the best example.)

Seems as if a guy's ability to deliver big laughs implies that he has a big something else. Yep, I'm talking about intellect here! A sense of humor is a hard-to-fake sign of brains, creativity and mental health, experts say. Do the math. If a woman thinks you're smart, she may be open to the idea of procreating with you be-

cause that means that the combination of your DNA and her DNA will produce smart children. We've been hardwired this way since caveman times, writes Gil Greengross, an evolutionary psychologist, who observes that intelligent men are more likely to succeed and accrue goods, whether they're top hunters or killer quant analysts. "High-status men are considered more attractive in every society in the world," he says.

Greengross didn't mention chemistry, but that enters into the equation, and big-time. When you laugh, endorphins, the body's natural painkillers, get released to the brain, and you're flooded with euphoric feelings. A woman on the hunt for a mate will subconsciously imagine that a future with this guy will be euphoric too. So if we break out our Darwinian calculators, we find a funny guy = brainy guy = successful guy = guy who will be a good father and provider. "We all know that life gets so hard sometimes, and we're always searching for ways to lighten it up," says relationship and intimacy expert Marla Mattenson. "That's why we watch these funny YouTube videos over and over again on a loop. It brings us a genuine sense of joy and with that comes relief."

That all seems to make sense, but here's a little tidbit that might throw you for a loop. Let's return to the paper showing that a majority of females are attracted to men who made them laugh. The same study found just the opposite in men: "Humor production by females was not associated with males' dating interest." So if guys don't value women who can make them laugh, to paraphrase Freud, what do they want? Answer (and spoiler alert, it's not much of a shocker): a pretty face. In fact, in another study, women who scored equally on physical attractiveness but who were brainiacs consistently ranked lower than their less-intelligent competition. So guys appreciate a mate who is smart and funny, sort of, and given the option, choose looks instead. This is ego, explains Mattenson. If a man has any insecurities about himself—his looks, his level of success, his abilities to take charge—the prospect of dating a funny woman is terrifying, she says. "All of those things are going to be in the spotlight with a quick-witted woman."

If I can take a minute and speak to these guys directly: man up, dudes! Just because a woman is funny doesn't mean you're dating a Don Rickles who will mercilessly mock you day in and day out.

There is plenty of evidence that funny guys can mate with super-funny women without leaving their manliness at the front door. Jimmy Kimmel is



Male peacocks are highly attuned to their competition. A recent study that used advanced eye-tracking technology found that the birds spent 30% of their time assessing other males in their lek.

married to Molly McNearney, the hilarious former head writer of his late-night show. Director and comedian Jordan Peele is married to comedian and actress Chelsea Peretti, whom he has called “the funniest person in the world.” Jerry Stiller was married to his comedy partner, the late Anne Meara, for 61 years, and said she was both a loving mother and as “funny as anybody who was considered a giant in comedy back when we started.” (And on a personal note, my wife Lisa’s sense of humor is the only thing that has kept me from jumping off a bridge during numerous home-renovation projects that cost more and looked worse than we could have ever expected.)

The key is laughing *with* someone, not *at* them. “In general, couples who laugh more together tend to have higher-quality relationships,” Laura Kurtz, a social psychologist from the University of North Carolina who has studied the phenomenon, told TIME. I was discussing Kurtz’s findings with my friend Joanne Nosuchinsky, an actress, a former Miss New York USA and a co-host of the very funny *Mornin’!!! w/Bill Schulz & Joanne Nosuchinsky*, a subscription comedy talk show on Compound Media. Nosuchinsky told me the story of her parents, Jim and Marianne, married for almost 35 years. When the

couple were first dating, Jim sent his lady love a postcard with a Jimmy Buffett lyric on it: “The weather is here. Wish you were beautiful.” That sealed the deal, Nosuchinsky told me. “She ate it up! So I have Jimmy Buffett to thank for my conception!”

Speaking of conception, Nosuchinsky brings up the elephant in the room. If laughter is a great way to get people into the bedroom together, what about laughter inside the bedroom? If women want guys who make them laugh, and guys want women who laugh at their jokes, should couples share guffaws between the sheets?

Science says yes! When we laugh and smile, as mentioned above, a neurotransmitter is released, increasing activity in our brain’s pleasure center. Our bodies have physical reactions similar to those we experience when having sex: uncontrolled facial movements, raised body temperatures and more sensitive skin. It’s kind of like a two-for-one special. What better prescription for sexual chemistry? “You’re literally just having a conversation” while you’re together intimately, observes comedian Chuck Nice, host of a podcast that analyzes advice columns and blogs. “You might be laughing and joking around, and I have to say, that’s a very special connection.” □

The mime dates to ancient Greece and takes its name from a masked dancer, Pantomimus.



Is the Funniest Person in the Room Also the Saddest?

Research undermines the popular assumption that many comedians suffer from depression

By Alexandra Sifferlin

WHEN BELOVED ACTOR AND COMEDIAN ROBIN Williams committed suicide in 2014, it brought the conversation of depression and artistry to the fore. Williams, who lived with manic depression brought on by bipolar disorder, was candid about his struggles with his mental health and how throughout his life he had turned to substances such as alcohol to cope.

Mental illness continues to be a difficult problem to share publicly, but since Williams's passing, many people within the comedy community have begun confronting the issue head-on. Comic Sarah Silverman often talks in interviews about growing up with depression, seeing a therapist and taking antidepressant medication. "Spark of Madness," one of the hour-long entries in *The History of Comedy*, CNN's recent documentary series, featured personal stories from comics such as Richard Lewis, Rachel Bloom and Maria Bamford. Similarly, comedian Chris Gethard turned his emotional struggles into a special for HBO, *Career Suicide*, in which he joked about his darkest thoughts.

"I didn't know when I was 11 years old that this thing had a name, depression," Gethard said

on the program, which originated as a one-man off-Broadway show. "I just thought everybody in fifth grade had an internal monologue like the guy from *Taxi Driver*."

Depression is a highly common disease, with national estimates suggesting that about 16.2 million adults in the U.S. have experienced at least one major depressive episode in the past year. So it's fair to assume that in any profession, there's likely a number of people who deal with depression. A commonly referenced trope in comedy is the idea of the sad clown—both literally and figuratively—as someone who presents him- or herself as light and cheerful while masking pain. And it is not uncommon for people to be curious about the relationship between depression and comedy. Comics work to make us laugh, and there can be dissonance when faced with the fact that the funniest person in the room might be the unhappiest. While research on the connection between comedy and depression has been inconclusive, many find comedians' openness about their struggles to be humanizing and instructive and to even provide relief. The audience may feel: *that person is like me.*

“Depression doesn’t care if you’re ordinary or superlatively gifted,” says Deborah Serani, a psychologist and professor at Adelphi University who says she often works with patients in the arts, including comedy. “Depression cuts across socioeconomic statuses, is found in every culture and in every country around the world. . . . Using humor is a great way to push away painful emotions and experiences,” she adds. “And some of the people I work with are quick to take something painful and find the funny in it.”

During therapy sessions, Serani says, she tries to help patients explore their sadness, which can be difficult for those who would rather tell jokes than dig deep. “Learning how to explore your life without hitting the punch line or slipping on the banana peel can test their comfort zone,” she says.

Not all researchers agree that comedians are especially—or even often—depressed and troubled when compared with the rest of the population. “People think comedians have these really dark personalities, but a lot of people have dark personalities and most of them don’t become comedians. You actually have to be pretty well-adjusted to be successful in the world of entertainment because it’s so competitive,” says Peter McGraw, a psychology and marketing professor at the University of Colorado at Boulder and the author of *The Humor Code: A Global Search for What Makes Things Funny*.

“Most people have demons. The folks in the audience may be alcoholics, or they’ve been divorced. They just don’t have the spotlight,” he says. “Our research has shown that the act of trying to be funny makes people seem more troubled than they might actually be. We hear about the Belushis and the Pryors, but we ignore the Seinfelds,” says McGraw.

McGraw’s research, which remains unpublished, looked at how humor influenced people’s impression of a given person. He and a team of

researchers had a group of comedians and non-comedians write either a funny story or an interesting one. Then a separate group of people read the narratives and shared their assumptions of the story writer’s psychology. Those who wrote the amusing accounts were rated as more troubled. “Humor plays on taboos. It talks about things that are wrong. You have to act a little foolishly and disclose information that makes people laugh,” says McGraw.

It can be emotionally taxing for people who make their living doing comedy to constantly put themselves at risk for judgment. While working with creative individuals, Serani says, she often finds that patients feel only as great as their last joke, their last book or their last song. “This kind of thinking makes it hard to find long-lasting happiness,” she says. “It’s more of an in-the-moment contentedness followed by a fear of ‘How do I do this again, but with something different?’ While the goal to keep creating can be seen as passion, for some it can feel like an obsession or an endlessly competitive loop they feel locked into.”

One thing that is unique about comedians in the entertainment industry is that they not only write their own material but often star in it as well. That makes them potentially more vulnerable. “Writers and composers create material, whereas actors, dancers and musicians interpret or perform what’s been created,” says Serani, adding that comedians may be more prone to negative feedback “because their creations and their performances are singularly tied to their personal essence. To their identity both as a comedian and as a person.”

The professor recommends that creative people try to find ways to measure their happiness besides their art, adding that such experiences can help people develop a more balanced sense of well-being, rather than placing all their success on getting a laugh or crowd reaction.

A 2009 study examined the personality traits of 31 professional comedians and then compared them with nine amateur comedians, 10 humor writers and 400 college students. The study found that while stand-up comics enjoy extroversion while they perform, they are often introverted in day-to-day life. “Being onstage is liberating and empowering for the comedian, but offstage may be filled with deep thinking and preferences to be alone,” says Serani.

The results of studies looking at the relation-

“People think comedians have dark personalities. A lot of people have dark personalities, but most of them don’t become comedians.”



On the animated Netflix show Bojack Horseman, a washed-up sitcom star (and horse) voiced by Will Arnett suffers from depression.

ship between comedy and depression are mixed. A 2015 paper found that comedians tend to live shorter lives than non-comedians, but the researchers looked at only 53 comics, which was too small a sample size to come to any definitive conclusions. Although some social scientists have suggested that comedians have difficult relationships with family members, a 2012 study found the opposite: that comedians' parents were in no way notably different from the parents of their peers. Overall, there's no consensus on the link between humor and depression, but the fact that someone who brought people so much joy could be so unhappy underlines the complexity of depression, a disease that can affect anyone at any time.

Comedy may give people an outline to speak about their demons publicly; after all, it has the ability to make light of certain situations and vulnerabilities. Often self-deprecation is used in comedy, for better or for worse. A study from 2014 looking at comedians and circus clowns reported that comedians often make more negative remarks about themselves. That's not necessarily a bad thing. A study published in the journal *Personality and Individual Differences* examined more than 1,000 adults between ages 18 and 65, and found that people with a higher tendency to make fun of themselves scored higher on measurements of happiness and sociability.

In January 2017, comedian Gary Gulman

THE SCIENCE OF LAUGHTER

appeared on *The Late Show with Stephen Colbert* and performed a stand-up routine about how long it took him to get up in the morning. "The thing that got me out of bed yesterday was I made a promotion in my head. It was: everybody who gets out of bed by 3 gets a doughnut," joked Gulman. "And I got the doughnut."

Gulman has said that talking about depression in his skits is a relatively new but effective approach for dealing with his illness. In college, he often slept for long bouts, until a family member suggested he might need help. Gulman did get treatment and eventually was hospitalized. Only later did he start talking about his depression on-stage. "Luckily there was feedback, positive feedback, that I got in the form of laughter," Gulman told WBUR, Boston's NPR news station.

The laughs, of course, are what compel comedians to go into the business in the first place. "Laughter is much more important than applause," said Carol Channing, echoing a sentiment expressed by many of her fellow comics. "Applause is almost a duty. Laughter is a reward."

There's no denying that levity can be beneficial. "Laughter can help strengthen your immune system and heart rate, reduce stress, pain, blood pressure and loneliness," says Serani, adding that she thinks making people laugh can be a great coping mechanism for some people. "Comedy can be a powerful antidote to sadness. A good laugh can brighten your mood, give you a new perspective, lighten your burden and ground you."

There is less research on the tangible benefits of laughter for people dealing with depression or anxiety, but there have been some small studies. A 2011 study published in the *International Journal of Geriatric Psychiatry* reported that among 70 older women with depression, laughter yoga was more effective at alleviating the symptoms of depression than normal exercise. Regardless, finding reasons and ways to laugh is a simple and cost-effective way to brighten a person's day.

Ultimately, the work being done by comedians to help lessen the stigma of mental illness may improve outcomes for anyone dealing with the disease. "Depression demands you to see it for what it truly is—an illness," says Serani. "And it's an illness that can be treated. Don't let stigma or misinformation keep you or someone you love from getting help for a depressive disorder." □

Speaking Openly About Fighting Mental Illness

By **Eileen Daspin**

After Jim Carrey finished shooting a documentary about the making of *Man on the Moon*, a biopic in which he starred as the late comedian Andy Kaufman, he became depressed. The comic told *Variety* he had gotten so into character that he felt he had disappeared: "If it's so easy to lose Jim Carrey, who the hell is Jim Carrey?" For a period, he took Prozac, but today he instead paints and practices Transcendental Meditation.





The moon-faced Jonathan Winters inspired a generation of improv comics with his manic, unhinged antics, but he also suffered from, and was institutionalized for, bipolar disorder. He sometimes referred to illness in his stand-up and said it fueled his creativity. "I need that pain, whatever it is, to call upon it from time to time, no matter how bad it was," Winters told NPR in 2011.

In a 2010 interview

with Marc Maron, Robin Williams discussed his depression and made light of it in a mock interior monologue with his depressed self: "Can I ask you, What are you doing right now? You are sitting naked in a hotel room with a bottle of Jack Daniels. Yes. Is this maybe influencing your decision? Possibly. . . Who is that in the bed there? I don't know. Well, don't discuss this with her. She may tweet it."



Lena Dunham, creator and star of the hit comedy *Girls*, made the character she plays, Hannah, endlessly anxious, though Dunham says she has many more issues than her small-screen alter ego. She detailed her mental-health issues in her best-selling memoir, *Not That Kind*

of *Girl*, and has been known to make light of them. Before a recent speaking event, Dunham joked to *Vogue*, "I just took half a Klonopin. I'll be fine."

The co-creator and star of CW's *Crazy Ex-Girlfriend*, Rachel Bloom has long battled anxiety and OCD thoughts and spoken about them openly. Her life has served as fodder for *Ex-Girlfriend*, praised for its accuracy of mental illness, and in one much-discussed episode, Bloom's alter ego on the show, Rebecca Bunch, is diagnosed with borderline personality disorder.



When Ellen DeGeneres came out as gay in 1997, she broke multiple barriers, but she also lost her agent, her show and her sense of self-worth. Last year the comic for the first time began opening up about the backlash and depression that followed her announcement. "The bullying I endured after I came out made up for the lack of it during my childhood," DeGeneres told *Good Housekeeping*.



Practice Makes Perfect: From Om to Ha, Ha, Ha

A mind-body therapy started by a doctor in India claims to cure physical, psychological and spiritual ailments

By Eileen Daspin

MUMBAI IS FAMOUS FOR ITS TERRIBLE TRAFFIC. Gnarls of cars clog the city's thoroughfares, which are too few to accommodate the close to 3 million vehicles, in turn testing the patience of drivers and passengers. Among them, one particularly congested morning, was director Mira Nair, who was late to an appointment. As Nair sat stewing in the back of a taxi, she wondered, How could traffic have gotten even worse?

Then she spotted the culprit: a procession of 2,000 women, dressed in white, marching across the street toward the ocean. All were laughing. Irritated but curious, Nair ditched the cab and caught up with the women, who she discovered were adherents of laughter yoga, a fairly new movement at the time, committed to bringing more joy to the world. "My anger melted away," she later told a journalist. "It was like being in a Fellini movie."

Nair went on to make *The Laughing Club of India*, a documentary about the group, which came out in

1999. But even today, her description of laughter yoga holds up. Attend a class and you'll see. A group of strangers engage in quirky role playing, a form of mind-body therapy intended to confer the same purported benefits as a belly laugh: improved blood flow, lower levels of the stress hormone cortisol and a more efficient immune system. They may form a laughter train, march around the studio and giggle to "I've Been Working on the Railroad"; they may play "Great Balls of Laughter," in which they throw balls to one another while cackling out loud.

Just as traditional forms of yoga have been embraced by the public—more than 37 million Americans practice today, up from 20 million in 2012—laughter yoga has grown in popularity, though in much more modest numbers. An exact accounting is impossible to come by, but the website of the movement's founder, Madan Kataria, estimates that there are 10,000 laughter-yoga clubs worldwide. He has said there are 6,000 clubs in India alone. A few



Followers of Madan Kataria joined in a laughter-yoga class in a park in Patna, in eastern India, in 2016.

years ago in Iran, Tehran's city council decided to promote a network of the organizations, and within seven months, 20,000 people had signed up. Today, if there's not a laughter club near you, you can Skype into a session.

Kataria is a practitioner of allopathy, a branch of holistic medicine that seeks to treat illness through suppressing symptoms; it is often contrasted with homeopathic medicine, which uses the body's response to an ailment as part of the cure. He claims that laughter and laughter yoga can cure just about any ailment—physical, psychological or spiritual—and has been endorsed by an unlikely cross section of fans, including Goldie Hawn, Oprah and CNN's Dr. Sanjay Gupta and Dr. Mehmet Oz. Still, the more mainstream medical establishment remains skeptical of any definitive link between laughter and laughter yoga and improved health. More likely, the benefits of laughter yoga, if there are any, result from being with a group of people laughing, says Sophie Scott, a neuroscientist who studies laughter.

"What we don't know," Scott told NPR, is whether the benefit comes from the laughter, "or the fact that

pretty much always the laughter is being elicited in a social context. So was I feeling great because I'd been laughing all afternoon, or was it actually because I'd been laughing with two friends all afternoon? And it's very hard to start separating that, because if I hadn't been with my friends, I wouldn't have laughed that much."

Kataria founded laughter yoga in 1995 when he was working at a hospital in Mumbai and writing papers for medical journals. While researching, he came across the memoir of Norman Cousins, an American magazine editor whose memoir, *Anatomy of an Illness*, about recovering from a life-threatening condition through laughter, was a best seller in the 1970s. (Cousins's self-administered therapy consisted of watching back-to-back episodes of *Candid Camera* plus massive doses of vitamin C.) Kataria was intrigued by the possibility that laughter could be beneficial to mental and physical health and assembled a small group of colleagues, dubbed the Laughter Club, to test the theory. The group met in a park to share jokes, with the teller standing in the center of a circle of members.

Going for the Comedy Burn

10 yoga exercises to get your laugh in shape

1. COCKTAIL-PARTY LAUGHTER:

What do you imagine people talk about at cocktail parties? How do people stand? How do they sound? What do you talk about? Pick one topic. Group into threes and snicker with each other over imaginary drinks. Grasp one another's fingers as if you had been told something just too precious.

2. EMBARRASSING-SCENARIO LAUGHTER: Recall an embarrassing incident and retell it, laughing at the end or throughout. For example, demonstrate a story of

raising your hand in the middle of a very large meeting and say: "I want to say something . . . but I seem to have forgotten what," then laugh hysterically out of embarrassment or nervousness.

3. APPRECIATION LAUGHTER:

Look at others as you laugh and appreciate each other. This is a value-based laughter, reminding participants how important it is to appreciate each other. The tip of the index finger is joined with the tip of the thumb, making a small circle. The hand is moved forward and backward in jerks

while you look at different members and laugh gently, appreciating your fellow beings.

4. ARGUMENT LAUGHTER: The leader presents an absurd scenario and seeks a number of volunteers. Two volunteers begin by arguing with each other with laughter and pointing at each other. Substitutes can take their places, or eventually two teams can argue against each other, pointing index fingers. Alternatively, you don't need a scenario and you can argue hypothetically.

Before long, the Laughter Club ran out of jokes, but Kataria, operating on the theory that the body cannot differentiate between real and fake laughter (there is no science to back this up), suggested that his friends simply pretend to laugh. A yoga devotee, he added breathing exercises, then role playing. Thus was born laughter yoga. “When you start laughing, your chemistry changes, your physiology changes, your chances to experience happiness are much greater” is the pitch Kataria gives today in sessions to train teachers. “Laughter yoga is nothing more than prepping the body and mind for happiness.”

As the clubs spread around India, members adapted a routine. They would gather every morning at 7 a.m. in public spaces and chuckle for 40 minutes. Today the focus has shifted, at least in the U.S., where laughter-yoga sessions are held indoors, in senior centers, gyms, yoga studios and hospital cancer wards. There are no mats or downward dogs to hold, no Lululemon dress code. Instead, students wear comfortable clothing and follow a teacher’s lead in executing poses

such as “no-money laughter,” in which the teacher pretends his pockets are empty and then laughs. Other variants include the “Visa-bill laughter,” in which they point to an imaginary credit card bill in their palm and laugh; and “milk-shake laughter,” in which they pretend to pour milk back and forth between two cups and laugh.

“Children laugh hundreds of times a day. And as adults, we laugh only 12 times a day,” Francine Shore, an instructor with the Laughter Yoga Salon NYC, told the *Huffington Post*. “That’s because children live in their hearts and as adults we’re in our heads.” The actual figure is a bit hard to pin down; laugh expert Robert R. Provine estimates that the average adult laughs about 20 times a day, but Shore’s point is taken.

Does it work? Newcomers to laughter yoga tend to be struggling with emotional or physical difficulties—depression, spiritual listlessness, chronic pain—and often describe the exercises as transformational. They frequently remark how classmates smile, make eye contact and in general conduct themselves in playful ways. Not a bad way to start the day. □

5. BREAK-MARCH LAUGHTER:

A “sergeant major” leads a group of “soldiers,” directing them to “march left, left, left, right, left” and then, “ha, ha, ha, ha, ha.” The officer instructs the troops to “break march” when crossing a bridge, that is, everyone steps at his or her own random pace. The sergeant-major takes the soldiers on a march where laughter is structured at first and then becomes more spontaneous when they break march while crossing the bridge.

6. CELEBRATION LAUGHTER:

Get everyone in the group to come close together and then tell a secret—for example, “no work tomorrow”—and then give high fives and jump around celebrating.

7. FALL-DOWN-DEAD LAUGHTER:

Similar to the childhood game of pretending to shoot a person dead, where the victim overdramatizes the death while falling to the ground. Alternatively, the victim is “poofed” by throwing imaginary magic dust; victim laughs self to death.

8. INTIMACY LAUGHTER: Hug each other and laugh by feeling the vibrations in each others’ bodies. As an alternative, you can hold hands and laugh. The participants come closer and hold each others’ hands and laugh with compassionate eye contact.

9. LION LAUGHTER: Stick your tongue out; pose with hands

held like lions’ paws; roar and laugh from the belly—no gagging. This exercise helps open up and stretch our psychological boundaries and barriers.

10. SILLY LAUGHTER: This goofy laughter helps us identify and confront our personal limitations and uneasiness in acting and appearing silly. Act like you did as a child and observe whether it is enjoyable and comfortable for you. Explore the absurd, the ridiculous and the unbelievable.

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Man vs. Mantra

**Am I mindful of my wife's meditation?
Oh yes, I mind it quite a bit**

By Joel Stein

MEDITATION HAS MADE MY LIFE A LOT MORE stressful. That's because it's my wife who's meditating. Having once researched meditation for a TIME cover story, I believe all the studies that prove it conditions your brain to focus and reduces anxiety. What no one has bothered to study,

however, is how bad meditation is for the people who live with you.

My lovely wife, Cassandra, felt like she needed to calm her mind after getting so stressed by parenting that she started a fight with me, after which she admitted I was completely right. Personally, I

thought she just needed to keep doing whatever she did that made her realize I was right. But she decided she needed a whole course on meditation and signed up for one given over four consecutive days, taught by a guy named Théo Burkhardt. I was surprised that she found an instructor with just one accent in his name.

Théo taught Cassandra how to close her eyes and think about nothing, undoubtedly while he stared at her. Because there's only one reason a man becomes a meditation instructor: to get laid. I know this because getting laid is the only reason men do anything. I just didn't choose my career wisely—no woman gets turned on when you tell her you're going to make hilarious but mean-spirited jokes about her and her meditation practice in a newsmagazine. Proving my point, Théo's Facebook page is full of photos of him posing with hot chicks. It also informed me that before he taught meditation, Théo was an actor. I was surprised his past jobs didn't also include bachelorette-party organizer.

In addition to teaching her how to do nothing, Théo gave Cassandra a mantra. She refused to tell me what her mantra was, which made me relatively sure it wasn't "Joel." Now she and Théo had a secret, and she was going to repeat their secret silently to herself for 40 minutes a day.

But beyond dangerously introducing jealousy into our marriage, Cassandra's meditation causes me stress because she now sits in a room alone with the door closed, chanting her secret with Théo twice a day, at exactly the times I need her help the most: in the morning, when we're getting our 4-year-old son, Laszlo, ready for school, and at night, when we're making dinner and Laszlo wants to be entertained. "You're supposed to do it shortly after waking up. Then you can't do it after dinner, because digestion gets in the way, so before dinner is the best time to do it," she explained. "I don't know if I'm supposed to give this stuff away, by the way. Don't quote me." This is from a woman who encouraged me to write about the time she ate her placenta.

Théo also sent Cassandra to a session with two Ayurvedic specialists who, upon meeting her, argued about whether she was an air or a fire before massaging her. When Cassandra came home, she told me that we should stop using olive oil, canola oil and butter and instead cook only with ghee and

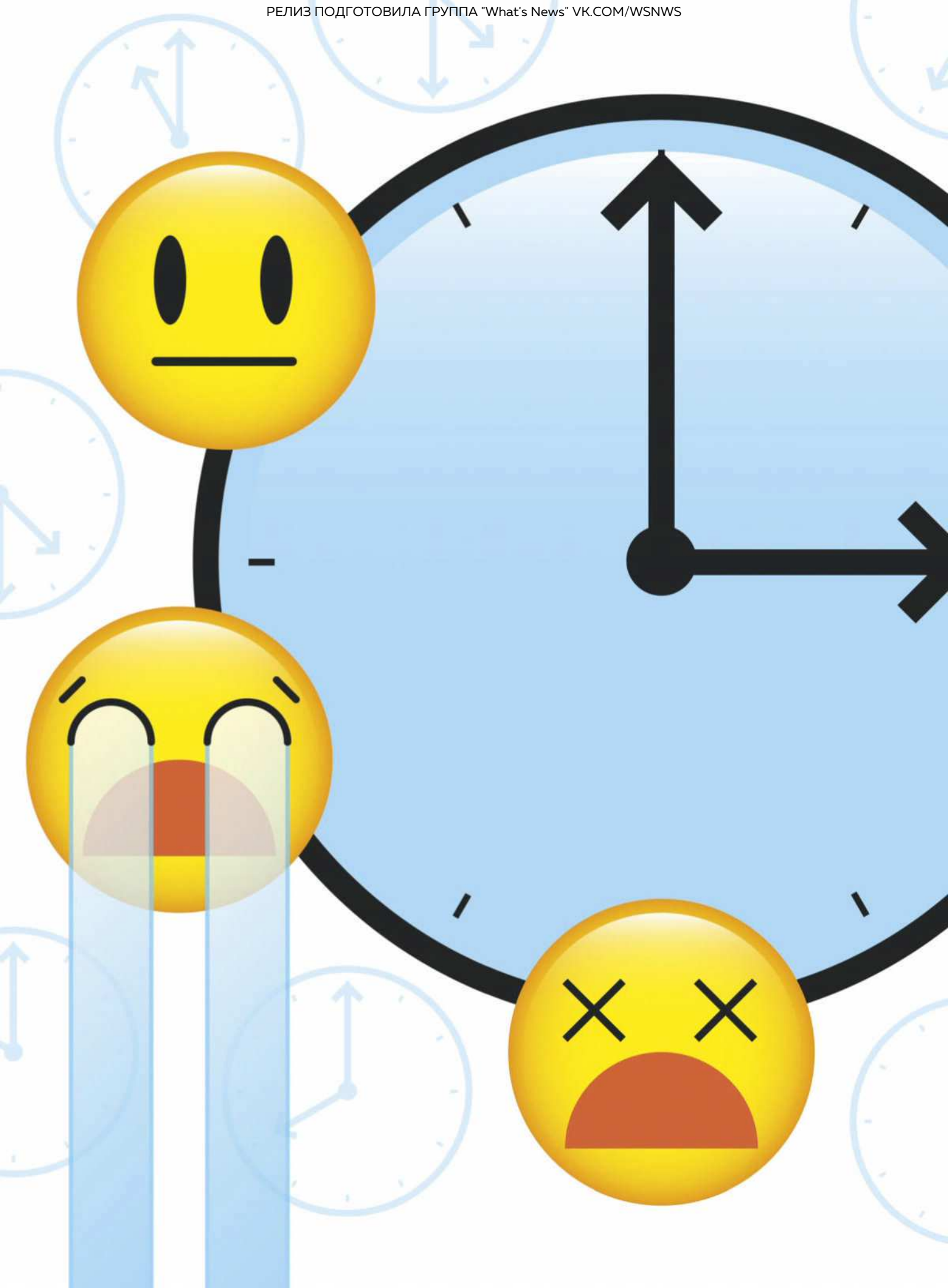
In addition to teaching Cassandra how to do nothing, Théo the meditation teacher gave her a mantra. She refused to tell me what her mantra was, which made me relatively sure it wasn't "Joel."

coconut oil. This wouldn't have been a big deal if we mainly cooked Polynesian food and enjoyed the smell of burning everything.

I thought I was being open-minded and non-judgmental about all this until I asked Cassandra if she was impressed with my attitude. "The only annoying thing is that after I meditate, you're like, 'Ohhhhhhm. Are you centered now?' And you make a namaste gesture," she said. "Then I'll say something totally normal, and you'll say, 'Whoa! Whoa! You're not being centered! Are you sure you were even meditating? Don't talk so loud!' It makes me wish I never told you I meditated." Other than that, though, she says it has indeed calmed her mind. I don't think meditation is making her more attuned to the universe, however, or she would have received the energy I sent to her that says, "Why can't you just take pills like normal women?"

In December, Cassandra started planning a weeklong meditation trip to India with a bunch of fellow meditators. This was not a particularly convenient time, since I had a sitcom pilot and movie script due, in addition to more Facebooking of Théo. I asked her why someone needed to go all the way to India to close her eyes and think about nothing. She explained it was the spiritual center of meditation. This made as much sense as me going to Vegas to masturbate to porn.

In the end, Cassandra decided not to go to India and has even compromised by agreeing to meditate on a full stomach. So I'm a little less stressed. But it's still difficult to have someone in the house so focused on getting focused. Unless she gives up on this soon, I'm going to have to start meditating too. □





CHAPTER 3

All in the Timing

Too soon? Too late?
Parsing the mechanics of funny

THE SCIENCE OF LAUGHTER

The Joke Was Wild

A former staff writer for David Letterman mulls the finer points of humor and the question of Don Rickles

By Bill Scheft

BEFORE WE BEGIN, LET'S ALL AGREE THAT THERE is nothing less funny than some old white guy explaining why something is funny. But let's give it the old-white-guy try.

I came up with 11 things, and then I got tired.

Surprise

ACTUALLY, THIS IS INCORRECT. IT'S NOT JUST SURPRISE, but expectation, then surprise. It's not just never seeing it coming but also anticipating the satisfying payoff and still never seeing it coming. Comedian Martin Mull used to do a tremendous bit about the difference between wit and comedy by giving examples. Wit, he said, was Emerson visiting Thoreau in jail. Emerson says, "What are you doing in there?" And Thoreau says, "What are you doing out *there*?" And comedy is, "OK, a German hooker is having sex with 10 guys from Buffalo . . ."





After a 10-year hiatus from stand-up, comedian Dave Chappelle returned to the stage in 2015. Here, he entertained a Radio City Music Hall audience in 2017.

Comfort

THIS IS THE OPPOSITE OF THE ILLICIT NAUGHTINESS and shock and all that escape release *taboo rasa* they might lay on you at some graduate seminar that James Franco would get photographed falling asleep at. These are expectations met. And met. And met.

The stand-up John Mulaney doesn't sell out Radio City Music Hall for seven shows because his dad owns the theater. He just walks out and opens his mouth, and everyone knows everything is going to turn out just fine. He has a premise about how he doesn't like any new songs because every new song is "Tonight is the night and how we only have tonight . . ." I want to write a song for 30-year-olds that goes, "Tonight is no good. How about Wednesday? Oh, you're in Houston on Wednesday? Well, let's not see each other for six months and it doesn't matter at all . . ."

Exaggeration

ON *SATURDAY NIGHT LIVE*, IS MELISSA MCCARTHY AS Sean Spicer funny because she's funny? Sure. Or is it because long after the sketch ends, you were still thinking about Donald Trump going nuts because the makeup job was just flawed enough for him to not get past that it was a woman playing one of his guys?

On the other side of the aisle, do we laugh at Kate McKinnon's Hillary Clinton on *SNL* because it is uncanny political satire knitted by deft dialogue? Maybe you do, but not me. I laugh at her crazy bulging eyes and the constant feverish smile, both wordless choices. Go ahead. Fire up the YouTube machine, punch in a Hillary sketch and mute it. Then thank me.

The Delivery System

THERE ARE TWO TYPES OF JOKES YOU DON'T WRITE. The first is the joke you hear and think, "Sure. Why didn't I think of that?" The second is the joke you hear and think, "In a million years with a million monkeys and a million typewriters, I wouldn't come up with that payoff."

I am reminded of a joke I most definitely did not write 25 years ago that Dave Letterman did in what we used to call his opening remarks. (It was not a monologue. It was three jokes. Johnny did a monologue.) "Well, the book *Final Exit* just came out. I think I'm gonna wait for the paperback before I kill myself."

Wordplay

CIRCA 1955. ORIGINAL *TONIGHT SHOW* HOST STEVE Allen goes into the audience with a mic. There's a little girl sitting in the aisle. Here is the exchange.

Steve: "What's your name?"

Girl: "Sharon."

Steve: "Where are you in school?"

Girl: "I'm not in school. It's the summer."

Steve: "What do you do during the summer?"

Girl: "I go to the beach."

Steve: "And what do you do at the beach?"

Girl: "I dig."

Steve: "I'm hip . . ."

Commitment

LAST YEAR I WROTE A PIECE FOR ANOTHER OUTFIT after Don Rickles died that was all about his commitment to the material. How most of the things he said were funny only because he was saying them. I included many verbatim lines from his two-dozen appearances with Letterman. Lines that made absolutely no sense, followed no logic except when uttered by him. And yet always, always got laughs. Seriously. Explain this to me: "*The mob guys used to sit ringside in Vegas with their mouths open in case they had to catch the bullet. . . . And these were the guys who went to college!*"

Climate

JOURNALIST ALISTAIR COOKE ONCE SAID THAT every generation thinks of itself as the creator of the modern sexual revolution. And really, forget Kevin Hart, who can detonate an LOLROF quicker than Alistair Cooke?

The point is that the earth is warmer, and what was allowed to make us laugh in the last millennium is no longer cool. I don't have an explanation here, just a question. Why was the misogynistic, anti-Semitic, homophobic character Borat a comic genius 20 years after the misogynistic, homophobic, pro-Semitic character Andrew Dice Clay was equated with Hitler?

Identification

I HAPPENED TO BE THE GUEST STORYTELLER AT the Upright Citizens Brigade Theatre one Sunday night in August 2015 (that's right. They had run out of famous people) when Anthony Atamanuik debuted his impression of Trump. It arose, as improv do, as a suggestion from the audience.



Melissa McCarthy won an Emmy nomination for her skits lampooning White House press secretary Sean Spicer on SNL, but Spicer called them "malicious."

Others sounded more like Trump and (pre-makeup) looked more like Trump. But every single piece of nonsense out of Atamanuik's mouth that night received giant, giant laughs, and not one of them was based on anything in the news, any of the then only three dozen points of parody. Backstage, I asked him, "How did you keep responding? It was hilarious, but it wasn't really Trump." And Atamanuik said, "I just pretended I was my crazy uncle at Thanksgiving." And with that, he got the man's essence without slaving to accuracy. Everyone in the audience had heard of Trump, but not everyone was familiar with him. Everyone has a crazy uncle at Thanksgiving. The guy you cannot not hear.

Hyperbolic Delusion

(SPOILER ALERT: THIS HAS NOTHING TO DO WITH Trump.) I read an ad for the new musical adaptation of *Mean Girls* that contained the following blurb from Ben Brantley, chief theater critic of the *New York Times*: "I was laughing before it started!" Two points: Tina Fey, who wrote the musical, is brilliant, but she is not a hypnotist. Second, Ben? Mr. Brantley? Your excellency? Maybe next time don't go to the theater straight from the dentist's office.

Voluntary vs. Involuntary

DO WE MAKE THE CHOICE TO LAUGH? IS THE BEHAVIOR conscious or unconscious? I know we can ask the same thing about a toxic co-worker, but that's not the point. The times when we make the choice are easy to pick out. Hear joke, process joke, respond. The times when we laugh in spite of our deeply held beliefs that we are sophisticated or tasteful or evolved are not so easily identified or owned up to. Reload the YouTube machine and punch in "cat video" and see how long it takes you to laugh, then be embarrassed by the thought you will never see anything funnier.

Here's a much uglier example of my point. In the summer of 1998, *Saturday Night Live* had a staff-only memorial for the brilliant Phil Hartman after his tragic death. It was, as you might have deduced, incredibly somber. Mike Myers went up in the middle of the memorial. He was sobbing. "This is so awful," he began. "Phil was the best cast member we ever had. Everyone loved him. What a wonderful man. I cannot believe he's gone. This is so horrible. He was shot to death by his wife, who then shot herself, with their kids in the next room . . ." And from the back of the room, Jon Lovitz yelled out, "You're making it sound much worse than it was!"

Urban (or Rural) Legend

A BIGGER-THAN-LIFE "KNOWN FACT" THAT SURVIVES because oral tradition dictates it must for comedy's sake. There are now five generations who know nothing about Milton Berle except that he was freakishly well-endowed. "I saw Milton Berle naked in the steam room," comedian David Brenner once said. "It looked like he was there with his kid."

Image Forever Stuck in Your Head

MILTON BERLE IN THE STEAM ROOM.

OK, my work here is done. □



What Made Us Laugh

100 years of American humor

1918

Charlie Chaplin pulled off what Hollywood thought impossible: *Shoulder Arms*, a farce about World War I

1920s

Sullivan County, New York, earned the nickname the borscht belt for its Jewish resorts and the Jewish comedians they popularized. Among them: Buddy Hackett, Rodney Dangerfield, Henny Youngman and Sid Caesar



1929

With the stock-market crash came screwball comedies: *The Front Page* to *It Happened One Night*, *His Girl Friday* and more

1934-36

The knock-knock joke peaked

1922

Debut of the slapstick team led by Ted Healy, later known as the Three Stooges

1928

In his most famous gag, Buster Keaton, in the movie *Steamboat Bill, Jr.*, emerged unfazed and unscathed after a house facade fell on top of him



1930

The Marx Brothers' *Animal Crackers* opened. Best Groucho line: "One morning I shot an elephant in my pajamas. How he got in my pajamas, I don't know"

1938

The Big Broadcast of 1938 marked the introduction of Bob Hope in his first feature film and his signature tune, "Thanks for the Memory"



1937

"Who's on first?"
For the answer, see
Bud Abbott and Lou
Costello



1950s

Comics kids ruled: the hapless Charlie Brown, as well as the wholesome Dennis the Menace and his antidote, Alfred E. Neuman in *MAD* magazine

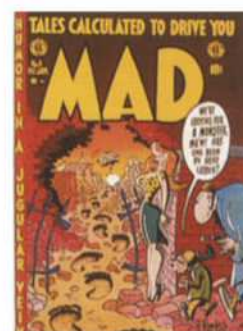
1936

Ventriloquist Edgar Bergen and his puppet, Charlie McCarthy (left), appeared on radio's *Rudy Vallee Show*



1948

Candid Microphone, Allen Funt's radio program, moved to television



1946

Bozo the Clown recorded his first storytelling record album and read-along book set

1950s

Couples' comedy: Burns and Allen; Lucy and Desi; Ralph and Audrey; and Ed and Trixie



1940s

Canned laughter came of age on *The Bing Crosby Show*



1948

Mugger to Jack Benny: "Your money or your life!" Benny: silence. Mugger to Benny: "Your money or your life!" Benny, exasperated, to mugger: "I'm thinking it over!"

1948

Milton Berle, kooky costumes (Milton Chiquita Banana Berle and Cleopatra Milton Berle) and *Texaco Star Theatre*





1956

Redd Foxx's *Laff of the Party* album, so raunchy parents would play it only after their children went to bed



1961

The ur-sitcom *The Dick Van Dyke Show*, with Rose Marie, Mary Tyler Moore, Dick Van Dyke and Morey Amsterdam

1967

Subversive and sketch television comedy came of age: *The Smothers Brothers*, *The Carol Burnett Show*, *Rowan & Martin's Laugh-In*, and *Monty Python's Flying Circus*



1961

Mel Brooks's 2000 Year Old Man's explaining his longevity to interviewer Carl Reiner: "I never run to catch a bus"

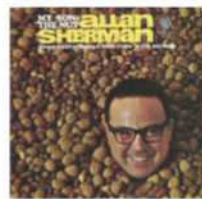


1962

"Herrre's Johnny!" *The Tonight Show Starring Johnny Carson*

1959

Lenny Bruce joked on *The Steve Allen Show* about the recent marriage of Elizabeth Taylor to Eddie Fisher, wondering, "Will Elizabeth Taylor become bar mitzvahed?"



1963

"Hello Muddah, Hello Fadduh," Allan Sherman's single parodying summer camp—from the album *My Son, the Nut*—went to No. 2 on the *Billboard* Hot 100 list



1964

Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb, Stanley Kubrick's black-comedy paean to Cold War fears

1970

Flip Wilson blamed Satan—"The devil made me do it"—on his variety show, and Oscar (Jack Klugman) blamed Felix (Tony Randall) on *The Odd Couple*





1968

Yale student Garry Trudeau started *Doonesbury*, a comic about a Yale football player and a onetime campus radical

1970

National Lampoon was spun off from *The Harvard Lampoon*

1978

"I'm a zit"—John Belushi in *Animal House*, forerunner to *Superbad*, *Porky's*, *The Hangover* and other gross-out films



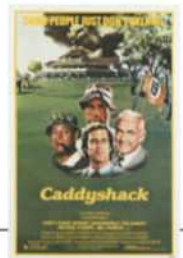
1978

"What'choo talkin' 'bout, Willis?"—Gary Coleman on *Diff'rent Strokes*



1971

Archie Bunker, America's favorite bigot, as the paterfamilias in *All in the Family*



1980

Caddyshack: a late-career Rodney Dangerfield, Bill Murray, Chevy Chase and a dancing gopher

1978

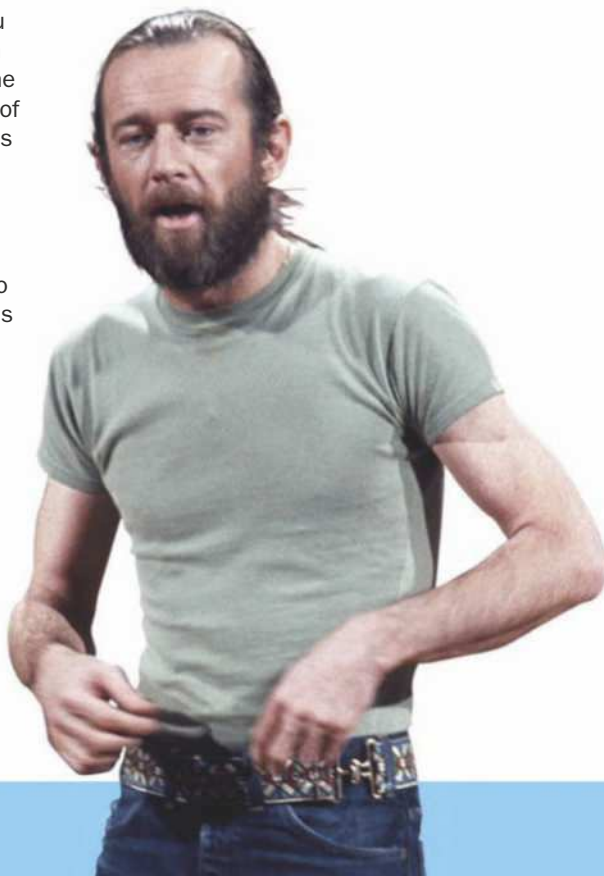
Mork & Mindy—Happy Days plus an alien, Robin Williams

1975

"Live from New York! It's Saturday night." A few of SNL's greatest hits: Gilda Radner's Roseanne Roseannadanna, Eddie Murphy's Velvet Jones, Steve Martin's King Tut, the bromance between the Wild and Crazy Guys, Chris Rock as Nat X, and Melissa McCarthy's Sean Spicer

1972

"Seven Words You Can Never Say on Television." With the exception perhaps of "piss," these words still don't appear in print in family magazines. That didn't stop comic George Carlin, who got arrested for this routine





1986

Garry Shandling broke the fourth wall with *It's Garry Shandling's Show*

1990s

Obnoxious got its 15 minutes. Some stars: stand-up comedian Andrew Dice Clay, dim-witted Beavis and Butt-Head ("Heh, heh, heh!") and *South Park*, judged by the conservative Media Research Center "so offensive, it shouldn't have been made"



1988

Roseanne, the Archie Bunker of the 1980s



1998

More than 76 million tuned in for the last episode of *Seinfeld*. Seinfeldian humor got a reprise in 2000 when its producer Larry David got his own show, *Curb Your Enthusiasm*

1982

Mr. Oddball, *Late Night with David Letterman*



1986

The snarky *Spy* magazine



1990

America's Funniest Home Videos moved to a full-time slot on ABC



1999

Tyler Perry's play *I Can Do Bad All by Myself* introduced his alter ego, the sassy Madea



1986

"Anyone? Anyone?" Teen comedies came of age with *Ferris Bueller's Day Off* with actor Ben Stein pulling off the impossible: getting laughs out of the Smoot-Hawley Tariff Act

1989

The Simpsons, colored yellow so audiences would remember them



1989

"I'll have what she's having." Meg Ryan and Billy Crystal in *When Harry Met Sally*. Props to Nora Ephron



2007

In *Vanity Fair*, Christopher Hitchens opined that women weren't funny and was proved wrong by Amy Poehler, Tina Fey, Amy Schumer, Sarah Silverman, Maya Rudolph, Chelsea Handler, Kristen Wiig, Melissa McCarthy, Tiffany Haddish, Kate McKinnon et al.



2013

FLOTUS humor. Michelle Obama, besting her husband, traced the evolution of mom dancing on *The Tonight Show* with Jimmy Fallon

2016

Donald Trump achieved the unlikely: ratings boosts for late-night comics Stephen Colbert, John Oliver, Jimmy Kimmel and Trevor Noah

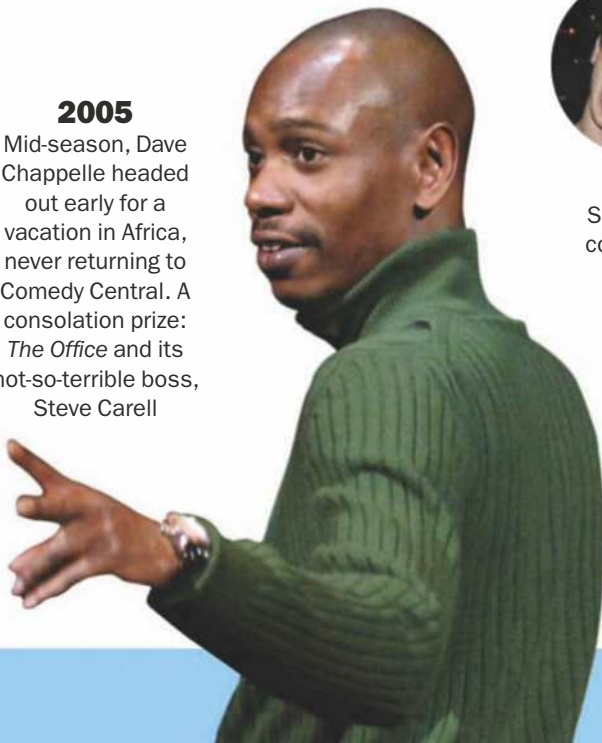
Late '00s

Viral kiddie videos: *Charlie Bit My Finger—Again!* (boy nipped brother), *The Landlord* (foul-mouthed toddler and Will Ferrell) and the baby who jammed to Beyoncé's "Single Ladies"



2005

Mid-season, Dave Chappelle headed out early for a vacation in Africa, never returning to Comedy Central. A consolation prize: *The Office* and its not-so-terrible boss, Steve Carell



2013

Six-second comedy via Vine



2015

James Cordon's mash-up of karaoke, carpooling and celebrities for *The Late Late Show*

2018

Comedy kerfuffle over Correspondents' Dinner stand-up routine

Why did the chicken cross the road?

Why?

To get to the other side!

Too soon, dude.

#TOOSOON

On Sick Humor and the Art of Laughing at Tragedy

Jokes that surface in the aftermath of a terrible event play off of incongruity but are not necessarily callous

By Scott Weems

"Man alone suffers so excruciatingly in the world that he was compelled to invent laughter."

—FRIEDRICH NIETZSCHE

"Other than that, how did you like the play, Mrs. Lincoln?" —UNKNOWN

IF SEPT. 11, 2001, WAS THE DAY THAT FOREVER changed American politics, then Sept. 29, 2001, was the day that forever changed humor.

Most people don't think of that day as particularly special, but New Yorkers know better. It wasn't the day that marked the U.S. invasion of Afghanistan, which wouldn't happen for another week.

And it wasn't passage of the Patriot Act, which was still more than a month away. No, Sept. 29, 2001, was the premiere of *Saturday Night Live's* 27th season.

Just as we all remember the tragic events of 9/11, we also recall the somber mood that followed. Television stations stopped showing sitcoms. Musicians canceled concerts. Professional football and baseball games were suspended. As stand-up comedian Gilbert Gottfried discovered when he tried to joke

about the tragedy at a Hugh Hefner roast, the country wasn't yet ready to laugh.

The challenge facing Lorne Michaels, the producer of *Saturday Night Live*, was enormous. Eighteen days after the attacks, he was supposed to air a show whose sole purpose was comedy. Michaels knew that *Saturday Night Live* represented the city itself, and if the premiere didn't roll out on time, an unacceptable message would be broadcast to the entire country. He decided the time had come and that *SNL* would open with New York City mayor Rudy Giuliani standing center stage, surrounded by two dozen members of the New York City Fire and Police Departments. Everything went as planned, with Giuliani thanking the responders, Paul Simon singing "The Boxer," about New York City, and the camera returning to Michaels, who paused.

"Can we be funny?"

Though Giuliani wasn't a comedian, he certainly knew how to work a camera. His delivery was as deadpan as you get.

"Why start now?"

People didn't laugh out loud, but everyone remembers the joke. We desperately wanted permis-

sion to laugh again—and only approval from the mayor of the city could have made that possible.

I have started with the story of *Saturday Night Live's* return because it demonstrates how sensitive laughter can be. The show that night wasn't even particularly cutting edge. For example, the opening monologue was supposed to begin with host Reese Witherspoon telling a joke about a polar bear cub:

There once was a polar bear couple who had a beautiful polar bear baby. He was the cutest baby, and he could run really fast and talk very early. His first question to his mother was "Mom, am I a real polar bear?" And his mother says, "Of course you're a polar bear. I'm a polar bear, and your daddy's a polar bear, so of course you're a polar bear."

So the baby bear keeps growing, learning how to fish and making his parents very proud. Then, after a few months, again he asks, "Mom, are you sure I'm a polar bear?" "Yes, honey, we're polar bears," answers his mom. "Your grandma and grandpa are polar bears. You're pure polar bear." And he says, "OK."

Then, on his first birthday, his parents throw him a huge party, telling him how proud they are of him, and just as he's about to blow out the candles on the cake, he asks, "Mom, are you sure that I'm 100% pure polar bear?" The mother, flustered, asks, "Why do you keep asking that? Of course you're pure polar bear!"

"Because I'm f---ing freezing!"

Up to the moment Witherspoon stepped out on stage, she worried about the ending. Michaels pleaded with her to tell the joke as written, profanity and all, as proof to viewers that New York City was back. Witherspoon understood his point, but she still changed the punch line. Instead of the f-word, she ended with:

Plato outlawed humor in *The Republic*, claiming that it distracted people from more serious matters. He wasn't alone; the ancient Greeks believed that laughter was dangerous because it led to a loss of self control.

"I'm freezing my balls off!" The audience laughed, and nobody knew she had censored the joke.

Humor is about emotion as much as surprise. When jokes go too far or use offensive language, we feel uncomfortable. That discomfort is why the crowd booed Gottfried at the Hefner roast, and why Witherspoon chose not to say "f---" on national television. But sometimes a little discomfort is a good thing. It's useful not just for solving insight problems and getting punch lines but also for turning our stress and negative emotions into something positive, like laughter.

Humor Gets a Bad Rap

SURPRISINGLY, FOR MUCH OF HISTORY HUMOR HAS been quite unpopular. Plato outlawed humor in *The Republic*, claiming that it distracted people from more serious matters. He wasn't alone; the ancient Greeks believed that laughter was dangerous because it led to a loss of self-control. Thomas Hobbes was a bit more practical, claiming that humor was a necessary part of life, but only for people of inferior intellect.

Why has humor been treated so harshly throughout history? One reason is that humor is inherently subversive. Some jokes are innocuous, with topics like chickens crossing roads, but most humor treats serious subjects with frivolity, and sometimes with rudeness and inconsideration too. Consider the following joke, which I heard many times during my childhood but is probably new to the current generation:

What does NASA stand for? Need another seven astronauts.

MOST PEOPLE DON'T get the punch line until I tell them that this joke was popular in 1986, following the explosion of the space shuttle *Challenger*. Seventy-three seconds after the ship took off from Cape Canaveral, Fla., an O-ring in its rocket booster failed, causing a fuel leak and the breakup of the aircraft. All seven passengers perished.

It turns out that immediacy is a big issue when it comes to humor. In the weeks following the tragedy, there were plenty of *Challenger* jokes, most taking just over two weeks to reach campuses and playgrounds. That comes to about two and a half days of grieving per lost person. The death of Princess Diana had a shorter latency period. The World Trade Center disaster had a much longer one.



When comedian Gilbert Gottfried joked about the difficulty of getting a flight to New York shortly after the Sept. 11 attacks, he was booed and hissed.

Surprisingly, whole generations of jokes have outlived the tragedies that spawned them. When I was growing up, everybody had a favorite “no arms or legs” joke. What do you call a kid with no arms and no legs nailed to the wall? Art. What do you call a kid with no arms and no legs floating in a pool? Bob.

What many readers may not realize is that there was once an entire generation threatened by this very affliction. Thalidomide, frequently prescribed for morning sickness by doctors in the 1950s and 1960s, had a terrible record of causing birth defects such as phocomelia, the congenital absence of limbs. Thousands of children were affected. The survival rate of phocomelia was about 40%, so there probably were babies born without arms and legs, and their names could have been Art or Bob.

Some people claim that these jokes highlight the worst aspect of human behavior. AIDS jokes, they

say, are nothing more than an excuse for homophobia. Thalidomide jokes make fun of the handicapped. But others believe the truth is more complicated than that. “I’ll tell you one thing. [These jokes are] not a form of grieving,” said Christie Davies, a British humor researcher and author who has given dozens of presentations on the topic and even testified before the Supreme Court. “The second thing they aren’t is callous. The explanation, I believe, is incongruity.”

Davies’s theory, and the one supported by most humor researchers, is that despite the cruel nature of sick jokes, the teller’s intention doesn’t have to be vile. In fact, to understand the true message in sick jokes, we have to explore the incongruous feelings behind them. When tragedy strikes, we may have many reactions. We may feel sadness, pity, even despair. We may also feel frustration over the manipulation of our emotions by news reporters. We laugh



Jokes about the attacks on the World Trade Center quickly surfaced online. Today, 9/11 jokes tend to target conspiracy theorists.

at jokes about groups or events because without those reactions we'd have no other way to respond.

THE BEST EVIDENCE that sick humor doesn't have to be perceived as offensive comes from a study of jokes that seemingly made fun of their subjects. Conducted by the psychologists Herbert Lefcourt and Rod Martin, the research involved 30 peoples with disabilities who were asked to view a series of cartoons about people with disabilities. For example, one cartoon showed an elevated gallows. On one side was a set of stairs leading up to the noose, and on the other was a wheelchair ramp next to a handicap placard. Another cartoon showed a cliff with a sign reading SUICIDE LEAP. Next to the ledge was a wheelchair ramp and a handicap sign.

The experimenters didn't want the subjects to know that the purpose of the study was to assess their sense of humor, so they showed the cartoons

casually while preparing the room for interviews that were to follow. After surreptitiously noting the subjects' reactions, they administered a series of questionnaires about their feelings regarding having disabilities.

Lefcourt and Martin found that the subjects who laughed most at the jokes were also the ones who were better adjusted to their condition. Compared to other subjects, they exhibited higher levels of vitality, more self-control and better self-concepts.

These results aren't surprising in light of other research showing that bereaved widows and widowers who are able to laugh about their loss are observed to be happier, better equipped to deal with stress and more socially adapted. Women who use humor as a coping mechanism after undergoing surgery for breast cancer also demonstrate reduced postsurgical distress.

Further evidence that sick jokes don't have to be


offensive in order to be funny comes from the manipulation of sick jokes themselves. These jokes vary in a number of ways, not just in their targets but also in their degree of cruelty and fit—and by manipulating each of these factors, researchers can determine whether using vulnerable targets makes jokes too offensive to be appreciated.

Just such experiments have been conducted—for example, by Thomas Herzog of Grand Valley State University in Michigan—and from them we see two interesting things. First, cruelty doesn't improve funniness. Jokes perceived as most vile are usually seen as least funny. But so are jokes rated especially low for cruelty, many of which aren't emotionally engaging at all. So cruelty doesn't make the jokes funnier; it only provides a means for introducing emotional conflict. Too little edginess—too little emotional conflict over whether a joke is appropriate or not—and the punch line fails. Too much edginess, and there's no conflict because the inappropriateness is clear from the start.

Second, we see that the biggest predictor of humorousness is fit. That's defined by how well the punch line leads to both incongruity and resolution. In other words, the more effectively the punch line leads to a surprising ending, the funnier it is. It's not enough that we be shocked or surprised. Our humor must bring us someplace new, emotionally as well as cognitively.

Part of the reason there are so many kinds of sick jokes is that our minds are confronted with mixed emotions in so many ways. For example, we feel empathy for people with handicaps, but we also want to empower them and treat them as they should be treated—like everyone else. And though we grieve the victims of natural disasters, we may simultaneously feel manipulated by the media for telling us how to feel. "The television will try to convince you on the spot of the emotional impact of the situation, and the rhetoric is all about the immediate," said Davies. "But you can't feel through the television what people are feeling at the scene right away."

By the *Challenger*-joke ratio—two and a half days of waiting per person lost—more than 7,000 days, or 19 years, should pass before anybody laughs about the attacks on the Pentagon and the World Trade Center. Though I suspect we can't trust such a simple formula, it might not be so far off. The movie *Flight 93*—which wasn't even a comedy but



**Although we grieve
the victims of natural
disasters, we may
simultaneously feel
manipulated by the media
for telling us how to feel.**

a dramatic re-creation—didn't hit theaters until almost five years after the tragedy.

Still, many jokes did appear right after 9/11—not within mainstream media but on the internet. These were also some of the most jingoistic and violent. Consider, for example, the Photoshopped picture of the Statue of Liberty holding a decapitated head of Osama bin Laden. Or the picture of a 747 being flown into the heart of Mecca with the caption "Don't get mad—get even." It's hard to mistake the emotional messages these pictures were meant to convey.

The really important aspect of these 9/11 jokes is that they reveal our true feelings about the incident. There's anger, of course, but also frustration and occasionally irreverence. One cartoon that comes to mind portrays several Teletubbies jumping from the burning Twin Towers, with the caption "Oh no!" Another depicts a mouse cursor hovering over the World Trade Center next to a computer message window asking, "Are you sure you want to delete both towers?" These jokes didn't make fun of terrorists. They made fun of the grieving process itself. They reflected what people wanted to say: "Don't tell me how I'm supposed to feel. I can recognize a tragedy when I see one without around-the-clock news coverage."

Such jokes reveal something new and remarkable about the human mind—namely, that being told we can't laugh makes us want to laugh. It makes us want to Photoshop a picture of a huge gorilla grabbing planes from the sky near the Twin Towers with a caption reading, "Where was King Kong when we needed him?" □

Adapted from the book Ha!: The Science of When We Laugh and Why by Scott Weems. Copyright © 2014 by Scott Weems. Reprinted by permission of Basic Books, New York, NY. All rights reserved.

Dr. Peter McGraw, an assistant professor of marketing and psychology at the University of Colorado, directs the Humor Research Lab.



Test-Tube Comedy: Solving for Funniness

The University of Colorado's Humor Research Lab is trying to isolate the components of a good joke

By Eileen Daspin

IF COMEDY HAS A FOUNDATIONAL AXIOM, IT IS THIS: humor is tragedy plus time. But why, then, do comics face an almost sure comedy fail if they wait too long for an event to recede? Why is "Springtime for Hitler" funny but the Civil War isn't?

In October 2012, these were the questions plaguing Peter McGraw, a behavioral psychologist and the director of the Humor Research Lab at the University of Colorado at Boulder. In McGraw's view, a better predictor of funny would pinpoint the comic sweet spot between impertinence toward an event and distance from it. What he needed was a disaster to test his theory. Then came Hurricane Sandy.

The superstorm was still two days off the Atlantic coast when McGraw e-mobilized a team of collaborators to scour the internet for Sandy-related jokes. When the group discovered @AHurricaneSandy, a parody Twitter account tweeting as the storm herself, McGraw knew he had the research material he needed. "That's the beautiful thing about the internet," says the professor. "The moment a tragedy happens, just search for 'too soon' and you are going to find a ton of inappropriate jokes."

The typical academic behavioral-research lab operates in the service of marketing—to understand variables that impact human habits, how consumers spend money and why they purchase certain products. Not so for the nine-year-old Humor Research Lab (HuRL). This one-of-a-kind laboratory is dedicated solely to understanding funniness. To that end, McGraw and his colleagues have studied the effect of pot smoking on humor (inconclusive results), determined what it takes to build an effective comedy club (low ceilings and sardine-like confines) and published numerous academic papers ("Humorous Complaining" and "Making Immoral Behavior Funny"). They're working on an algorithm to recommend humorous content [see "Funny or Dreck" on page 86], and most significantly they developed a universal theory of funny, benign violation theory (BVT).

Benign violation holds that humor emerges when something seems wrong or unsettling (a violation) but actually isn't (i.e., it's benign). You might ask, What is the point of a universal theory? What is funny to you might not be funny to me. But McGraw and his HuRL colleagues argue that benign

violation encompasses every kind of humor, from Shakespeare's puns to the Marx Brothers' pratfalls and the raunchy humor of Andrew Dice Clay. And while BVT has its detractors—some humorists maintain there is no such thing as a universal theory of humor—HuRL must be getting something right. The TEDx Talk that McGraw gave on benign violation in 2010 has gotten more than half a million views, and HuRL has partnered with a number of businesses, including mShopper, to see if BVT-tested humor can help sell products.

The University of Colorado's Humor Research Lab is not a laboratory in the traditional sense. There's no room full of whoopee cushions where McGraw conducts his studies, and there's no staff of eager graduate students who aid in their execution. McGraw works out of a regular-size professor's office on campus and recruits study participants through Mechanical Turk, Amazon's job platform. HuRL instead is what McGraw describes as "a collection of people and minds" who collaborate on the fly. His web includes undergrads, graduate students and a few professors at the universities of Arizona, Maine and Melbourne. The operation is bare-bones, he says. "It's amazingly difficult to grant money to study humor. Imagine you're on a committee and a humor application comes along. It's not like the grant is going to cure depression."

Deciding what is funny and what makes it so are matters that have bedeviled some of history's greatest thinkers. In ancient Greece, Plato and Aristotle formulated the superiority theory of humor, the idea that people laugh at others' misfortunes or shortcomings. The incongruity theory, associated with 18th-century German philosopher Immanuel Kant, posited that we laugh at surprise or when our expectations are violated. And in the 20th century, father of psychiatry Sigmund Freud offered his relief the-

ory of humor, arguing that humor serves as a release for inner desires.

Missing from this body of work, at least to McGraw's mind, was a unified theory that explained everything: why we laugh at a friend falling down the stairs (superiority), slapstick (incongruity) and dirty jokes (relief). Enter benign violation theory. In 2008, McGraw discovered a decade-old journal article by a Stanford University researcher, Thomas Veatch, who came up with the idea that humor emerged when something seemed simultaneously transgressive and benign. The theorem had been overlooked by the comedy world, but McGraw recognized its potential. He renamed the idea benign violation theory and began refining it.

His timing was spot-on. The study of laughter and humor started in the 1960s but had come into its own only in the early '00s as research scientists began investigating possible connections between laughter and health. McGraw was more interested in the mechanics of laughter, a related but different field of inquiry.

In 2009, McGraw started up HuRL to sort out all the questions he had about what makes something funny, why it is funny, what is too late and what is too soon and the issue of distance in comedy. He knew that the major factors included the idea of physical distance—the fact that it is easier to joke about a tragedy unfolding halfway around the globe than one in your backyard. Also relational distance—that it is easier to make fun of someone you don't know who has been affected by a tragedy rather than a friend or loved one. And temporal space, how something further away in time becomes an easier target.

That was the work McGraw was engaged with when Hurricane Sandy made landfall on the Atlantic seaboard. For 100 days, at regular intervals McGraw and his team collected @AHurricaneSandy tweets. (One example: JUS BLEW DA ROOF OFF A OLIVE GARDEN FREE BREADSTICKS 4 EVERYONE.) They categorized them and submitted them to a panel for analysis, publishing the results in a paper, "The Rise and Fall of Humor: Psychological Distance Modulates Humorous Responses to Tragedy." Their conclusion? The equation "humor equals tragedy plus time" needed an update. A more accurate formula would be "Transforming tragedy into comedy requires time, not too little yet not too much." □

At the HuRL, there is no room full of whoopee cushions where McGraw conducts his studies and no staff of eager graduate students who aid in their execution.

The 10 Funniest Cities in America

A sort-of-scientific survey from the Humor Research Lab

1. Chicago

The Home of Improv

"Favorite joke? I don't have one. But let's go look for funny situations."

Chicago was our funniest city, but its residents spent less time per visit on comedy websites than any other city's, which was consistent with its fast-paced, improv-oriented taste in comedy.

2. Boston

Balancing Brains and Booze

"Two fish swim into a bar. The first fish says, 'I'll have some H₂O.' The second fish says, 'I'll have some H₂O too.' The second fish dies."

Across all types of media (movies, television, books and live entertainment), Boston preferred humorous content more than any other city.

3. Atlanta

Where (Racial) Worlds Collide

"What do you call a black pilot?"

A pilot, you racist."

4. Washington, D.C.

Politicians and Cynics

"Knock, knock." "Who's there?" "KGB." "KGB who?" (Knocker smacks the responder.) "We will ask the questions!"

Washington, D.C., and Atlanta give birth to more top comedians per capita than any other cities on our list, with Washington, D.C., producing one top comedian for every 158,000 residents.

5. Portland, Ore.

Quirky, Absurd and Just Plain Weird

"If God dwells beside us like some people say, I sure hope he likes enchiladas, because that's what he's getting."

Portland was the only city in the study where respondents rated themselves more whimsical (spontaneous, unpredictable, quirky) than their surroundings.

6. New York City

High Speed and High Stress

"I was at the library today. The guy at the desk was very rude. I said, 'I'd like a card.' He said, 'You have to prove you're a citizen of New York.' So I stabbed him."

7. Los Angeles

Showbiz Satire

"Have you heard of the movie Constipated? It's not out yet."

"How do you wake up Lady Gaga? Poker face."

8. Denver

Laid-back and High . . . on Life?

"A piece of string walks into a bar. Bartender says, 'We don't serve string.' String leaves, ruffles his cut end and returns to the bar. Bartender says, 'Aren't you the string that was just in here?' The string replies, 'No, I'm a frayed knot.'"

9. San Francisco

Liberal Zany Meets Smart Techie

"What does a gay horse eat? Heeyyyyyy."

"An electron and a positron walk into a bar. The positron says, 'This round's on me.' The electron says, 'Are you sure?' The positron says, 'I'm positive.'"

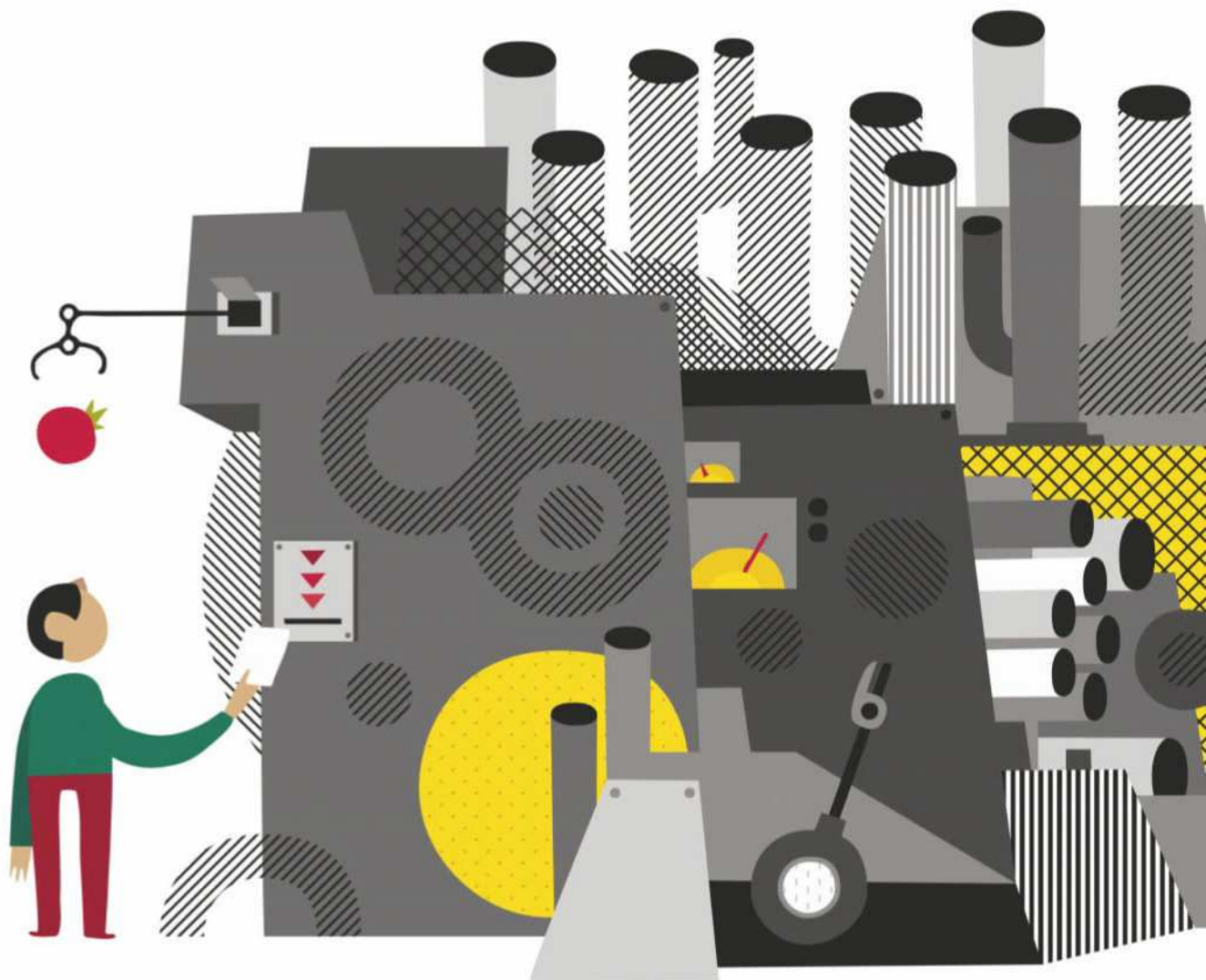
10. Seattle

Young Intellectuals

"What does one computer say to the other? 0101010101010101."

"Why does California have all the lawyers and New Jersey have all the hazardous waste dumps? New Jersey got first choice."





Funny or Dreck

**I submitted my jokes to a humor algorithm.
I didn't find the results very amusing**

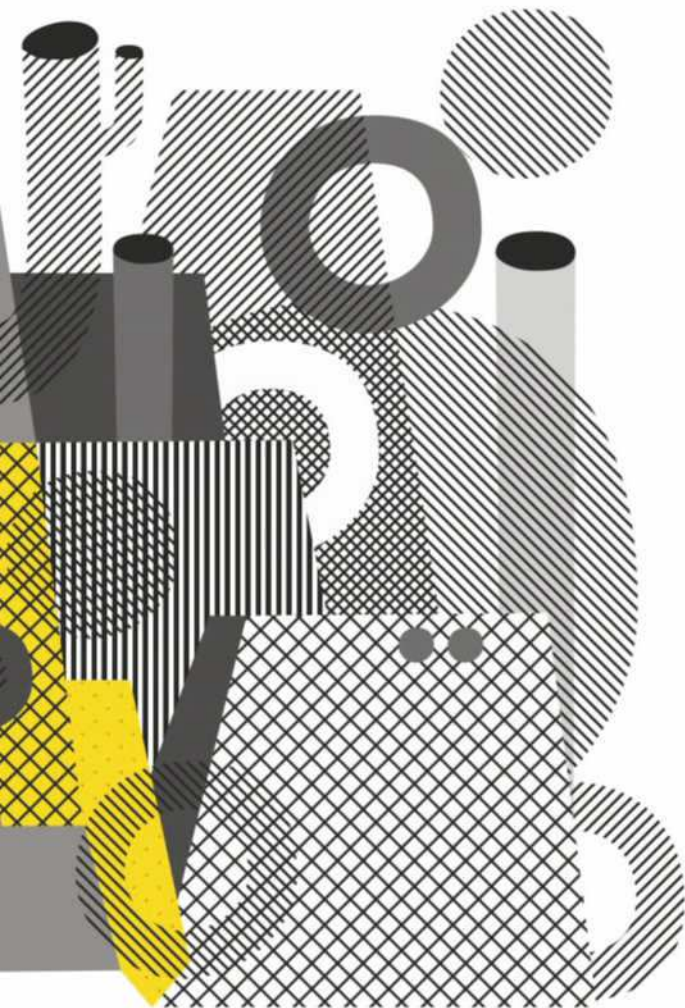
By Joel Stein

I AM A MAN OF SCIENCE. BY WHICH I MEAN I DON'T believe in God. But I'm not that crazy about science either. I would much prefer to live in a world without God or science, where we just didn't ask so many boring questions about everything.

But if I want to stay employed in the age of big data, I have to use metrics to improve my content so it might go viral on social media, thereby bringing in tens of dollars to my multinational corporation. So I read *The Humor Code: A Global Search for What Makes Things Funny*, a book by Peter McGraw and

Joel Warner. McGraw is a professor at the University of Colorado at Boulder, where he launched the Humor Research Lab (HuRL) in 2009. I think Boulder may have been a bit ahead of the rest of Colorado in being totally fine with marijuana.

McGraw invented the "benign violation theory," which states that something is funny only when it lands in the overlap of a Venn diagram of shock and acceptability. Tickling is funny because it's an attack from someone you trust who won't actually hurt you. Though, to argue against McGraw's theory,



I find tickling funniest when a sketchy stranger is being paid to do it to a dude with a fetish. Over coffee, Warner and McGraw explained that according to the theory, failed jokes either bore or violate. “Oh, I’ve both bored and violated at the same time,” I told them. “That violates mathematics,” McGraw said. “You broke the Venn diagram.” I also broke the record for number of letters to the editor.

To gather the data I needed to improve my column’s humor efficiency, McGraw went to HuRL to run a test on three jokes from previous pieces that I had struggled with so much, I’d offered several punch-line options to my editor, Radhika Jones. He then had his co-author, Warner, who is a very funny journalist, submit his own punch lines. At the lab, McGraw got 314 self-identified TIME readers to rate all of them in return for 25 to 30 cents. Other than the tiny number of people who bought the hardcover copy of my book, this is the most anyone has ever directly paid for my jokes.

On a scale of 1 to 5, my jokes all fell within the range of 2.19 to 2.88, which McGraw defined academically as “a somewhat funny level.” Mathematically, my scores mean that much of the time I’m further from a great joke than I am to not having made a joke at all. Worse yet, my editor had failed to pick the best option one-third of the time; once, she actually picked the third-best option, depriving my readers of a joke about Colorado’s pot legalization, a situation I rectified in this column’s second paragraph.

In his report, however, McGraw said my editor is doing a great job. “If we can do better than random, we’re doing well when it comes to predictions,” he said. This is exactly why we need to replace my editor with big data, assuming big data doesn’t use its vast power to go over my expense reports.

Worst of all, my offensiveness ratings were super low: 1.37 to 2.34. And that’s by TIME readers, who are often miserable from toiling for 25 to 30 cents. If I want my columns to go viral, I need to have the freedom to take much greater risks. “You’re so low, it’s almost not a risk,” said McGraw of upping my offensiveness ratings. “You can tell your editor I said it.” I don’t have to. I can tell her big data said it.

My challenge, McGraw explained, is that his studies show that finding a joke funny doesn’t lower how much people are offended by it. So it’s safer, if harder, to pull a Seinfeld and pick something benign to violate than to try a Sarah Silverman and make an offensive topic approachable. The former is harder, but the latter is more respected because of the risk.

McGraw warned that if I don’t take some new risks, my humor scores will continue to dip. “You can stay on top in music and in movies, but how do you stay on top in comedy, where people are expecting newness? At some point, will people say, ‘That’s so tired?’” That point for me was 1999.

The only good news is that my jokes beat Warner’s every time. “I traveled all over the world. I read nearly everything there is to read about the science of humor. I know more than almost anybody about how humor works,” Warner said. “I thought hard about these. And you still did better than me every time.” When I asked McGraw if the results mean that he’ll dump Warner and hire me to co-write his next book, he said, “No comment,” which is academic speak for “All you Jews are the same to me.” See, I’m already trying to get those offensiveness numbers up. □

THE SCIENCE OF LAUGHTER

Never Goes Out of Style



The Nutty Roommate ▼

For a 1966 episode of *The Lucy Show*, Carol Burnett (left) played Lucy's shy new roommate, Carol. When Mary Jane (right) suggested a party to get Carol "out of her shell," the exchange was classic. Lucy: "She might belong in a shell."
Mary Jane: "Why?" Lucy: "Because I think she's some kind of nut."



◀ An Ingenue Among the Pigeons

Elizabeth Taylor was just 17 in this picture, taken in London's Trafalgar Square. She was feeding the pigeons for a photo shoot and burst out laughing when a few of them flew into her hair. Taylor quickly regained her poise and stood so still one bird posed with her, standing on the actress's head.





▼ Smokin'

Rat Pack members Dean Martin (second from left), Sammy Davis Jr. and Frank Sinatra joked with comedian Jan Murray (left), following a 1961 benefit performance at Carnegie Hall in honor of Martin Luther King Jr. Davis was instrumental in getting the friends involved in the event, which poet Maya Angelou helped organize.



◀ A Dickensian Feast

In 1964, Welsh singer Shirley Bassey (left), English actor Michael Caine and Anglo-Hungarian fashion designer Edina Ronay dined together at the Pickwick Club. The members' club in London is for people interested in Charles Dickens, who once observed, "There is nothing in the world so irresistibly contagious as laughter and good humor."

THE SCIENCE OF LAUGHTER **NEVER GOES OUT OF STYLE**▼ **Hello Giggles**

Actress Goldie Hawn, often in a bikini and a painted midriff, tittered her way into America's living room as a regular on the variety show *Rowan & Martin's Laugh-In*, with a ditzy catchphrase, "I forgot the question." Here, Hawn was interviewed by *Tonight Show* host Johnny Carson in 1970.

► **Uncle Miltie's Funny Joke**

The Cocoanut Grove, inside Los Angeles's Ambassador Hotel, was a hangout for A-list actors such as Tony Curtis and Janet Leigh, shown here as they watched Milton Berle.





THE SCIENCE OF LAUGHTER **NEVER GOES OUT OF STYLE****▲ The Newcomer**

Actors Shirley MacLaine and Dick Foran (far right) backstage on the set of *Shower of Stars*, a monthly musical-comedy show that ran on CBS from 1954 to 1958. MacLaine got her break on the revue in 1955 when regular cast member Betty Grable was sidelined in a car accident.

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Carroll O'Connor as Archie Bunker and Jean Stapleton as his wife, Edith, during an episode of All in the Family

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Last Laugh



***“A day without laughter is like
a day without sunshine, and a day without
sunshine is like . . . night.”***

— STEVE MARTIN

