

Laughing Matters

Why we love a good chuckle TIM JOHNSON



Laughter is a funny thing. It can make you feel better — and it can be contagious. A good belly laugh can completely turn your day around. But the ebullient emanations of laughter are strange. Why do we laugh? Is there some purpose behind our chuckles, chortles, cackles and guffaws?

Dr. Robert Provine thinks so. The University of Maryland-Baltimore County behavioural neuroscientist and author of *Laughter: A Scientific Investigation* has spent much of his professional life studying the topic, and his findings may surprise you. “The common view is that laughter and humour are essentially synony-

mous. But observations of everyday behaviour suggest that they’re very different,” he says. Provine notes that, in most cases, laughter does not follow jokes, and that laughter and humour did not evolve at the same time. “Humour is a cognitive, linguistic contrivance to make other people laugh. But there was laughter a long time before there was humour.”

Early on in his research, which at the time focused on analyzing the sound of laughter and the way it’s produced, Provine brought subjects into his lab and showed them comedy videotapes. The only thing he learned from this method

was that he had to look elsewhere. “It told us that laughter really wasn’t about jokes — rather, it’s about relationships between people. And the best way to approach this is to get out of the lab and look at what people do.” Provine and his colleagues, notebooks in hand, went out and observed people interacting at their leisure — in food courts, at the student union, during airport reunions — and documented what seemed to be causing the laughter. “The operation was covert. We would stand in line at the theatre with our notebooks, listening to what the people in front of and behind us were doing. It was very

What happens when we laugh?

Like yelling and singing, laughing is a vigorous activity involving many body systems, Provine says. According to Martin, the physiological profile during laughter resembles that during arousal, stress and exercise, in which there is an increase in sympathetic nervous system activation. Any relaxation, says Provine, comes after laughter stops and physiology returns to baseline. "In fact, asthma can be triggered in some people during the act of laughing." Laughter is literally the sound of laboured breathing during rough-and-tumble play, in which the ancestral primate *pant pant* sound evolved into the modern ha ha.

Furthermore, says Martin, the respiration pattern in laughter is not the slow, rhythmic inhalation-exhalation pattern of deep-breathing exercises. Instead, it involves, first, a very quick initial exhalation to functional residual lung capacity. That is followed by more exhalation accompanied by the *ha ha* sounds produced by the rhythmic opening and closing of the glottis, and then a normal inhalation.


much like Jane Goodall going into the forest to study chimpanzees. We were studying humans in their natural environment." He's found that people laugh 30 times more often in the company of others than when they're alone.

Provine also researched the evolutionary development of laughter. He notes that it grew out of the panting noises made by primates playing. "*Ha ha* is really *pant pant*. It's the sound of primates at physical play. That's where laughter came from." Provine has concluded that laughter is all about social behaviour, forming relationships, communication and how we connect with one another.

In agreement is Dr. Rod Martin, a professor of psychology at the University of Western Ontario in London and author of *The Psychology of Humour: An Integrative Approach*. "Humour and laughter have a very important social function — of bonding and connection. When groups of people laugh together, they feel a sense of connectedness." He adds that his research has led him to conclude that laughter is the non-verbal expression of a joyful emotion he calls mirth. Just as one might convey anger through a red face, a scowl and a shaken fist, a

person expresses mirth through laughter. Moreover, simply hearing the sound of laughter can generate mirth in others. "There's a bit of research looking at what happens in the brain when people hear laughter, and the suggestion is that the sound of laughter actually triggers the emotional response of mirth in the listener. It's sort of an automatic response," he says. "So the function of laughter is communication and social influence, I think."

And while Martin is skeptical of the easy answers and impacts on health often posited by pop psychologists in the media, he nonetheless believes that laughter and humour can have a very positive impact on our mental and physical well-being. After all, good and meaningful relationships, positive mood and the ability to cope with difficult situations are all wrapped up with good health and can reduce the impact of stress and its negative consequences.

"People who are able to find humour in their problems just aren't as bothered by them," says Martin. "I think it's a basic, fundamental coping skill we have as humans — to be able to step back and laugh at things rather than be totally overwhelmed by them." 



SUBSCRIBE TODAY!
NOT AVAILABLE
ON NEWSSTANDS

Brought to you by the Canadian Medical Association, *Canadian Health* magazine is your best source for:

- * Proven health and wellness tips
- * The latest advances in medicine
- * Tools for disease prevention and management
- * Nutrition information and healthy recipes
- * Doctors' advice on medical issues
- * Fitness and safety
- * Personal health profiles

And so much more — all presented in a format that is accessible and reader-friendly.

A one-year subscription includes six issues of *Canadian Health* magazine (published bimonthly) — for **ONLY \$12** (plus applicable taxes).

Available in English or French.

Subscribe online at
www.canadian-health.ca

or by calling
1 888 855 2555

AMC
MÉDIA
FILIALE DE L'AMC



CMA
MÉDIA
A CMA SUBSIDIARY