

UCSD psychologist Nicholas Christenfeld studies ins and outs of ums, ers and uhs

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UCSD PSYCHOLOGIST STUDIES INS AND OUTS OF UMS, ERS AND UHS

No matter how...uh...articulate and...um...erudite you consider yourself, don't bother trying to avoid ums, ers and uhs in your speech. The attempt could be futile.

"It is an interesting phenomenon. Almost everybody uses ums hundreds of times each day--with no obvious purpose," says psychologist Nicholas Christenfeld, who specializes in speech disfluency at the University of California, San Diego.

Ums, or filled pauses, warrant an investigation because "they're a public behavior that can occur up to 900 times an hour," he says. In fact, every culture seems to use some form of UM.

Christenfeld, who came to the UCSD Psychology Department last fall, received his Ph.D. from Columbia University last June, and his B.A. from Harvard in 1985. It was at Columbia that Christenfeld and his advisor Stanley Schachter first decided to grapple with the mystery of the ubiquitous um.

Accepting the view that ums and uhs signal time out while the speaker searches for the next word or phrase, they reasoned that the more options provided by the subject matter, the more often the speaker will utter an um. They expected the nature of the material to determine the frequency of ums.

To test their hypothesis, trained "um coders" sat in on lectures in ten academic disciplines and counted the number of times the instructors said um.

In a paper published last year in the Journal of Personality and Social Psychology, Christenfeld and Schachter reported that literature professors and art historians "ummed" three-and-a-half times more often than did biologists and mathematicians. Social scientists fell in between.

Natural scientists averaged 1.39 uhs per minute, social scientists, 3.84 and humanists, 4.85.

The results came as no surprise to the researchers. "The academic disciplines differ markedly in the extent to which...a speaker is required to choose among options. In the pure sciences...there are relatively few options," they wrote.

As an example, they cited $E = mc^2$, a formula for which there are no options. "In contrast, consider the statement, 'What Shakespeare probably meant in that passage from Lear was...'. The options seem limitless."

Along the same lines, certain terms in the hard sciences, such as molecule and atom, simply have no synonyms. However, alternatives abound for affection, class structure or beauty, terms one is likely to run across in humanities classes.

Although the findings supported their premise that subject matter governs the frequency of filled pauses, Christenfeld and Schachter sought to rule out other plausible explanations.

They turned their attention to differences in the use of teaching aids (blackboards, slides, films), differing demographic characteristics such as age, sex and teaching experience, and the amount of time and effort spent in preparing for lectures. None of these explanations had an impact on the disciplinary variation in the um rate.

Next, they considered whether various disciplines are likely to attract different types of people. They tested the speech disfluency of scientists and humanists outside the classroom engaged in informal discussions about teaching.

"It was immediately evident that, unlike the lectures, the members of different departments were virtually identical in the tendency to say uh during the interviews," the investigators concluded.

"Umning is mysterious," Christenfeld says. "But I have a hunch it has to do with automatic and unconscious speech (versus) deliberate step-by-step speech production. If you let your speech flow, it's more likely to be fluent. If it is done consciously, it suffers.

"Speech is a well-learned motor task. It's best not to think about it."

He is still waiting for the emergence of the "big picture" on these guttural phenomena. "We have some evidence to suggest that ums are not simply a product of anxiety (as many people have assumed)," he says. "Anxiety does make people less fluent, but not in terms of ums. It causes more repeated sounds, more fragments." Reflecting on unexpected findings in recent studies, Christenfeld is no longer certain that saying um is such a terrible thing.

"People don't seem to notice. It's conceivable that saying um makes one seem eloquent, more thoughtful."

Even though the frequent use of ums is commonly considered a mark of insecurity and "fuzzy-headedness," he says people appear to admire the speaker who stops to consider what he or she is about to say.

To test this assumption more fully, one of Christenfeld's undergraduate students has made two tapes of the same lecture, keeping the speaker's ums intact in the first and editing them out in the second.

"We'll let people listen to both and see if their impression differs...My bet is that the number of ums will have no effect on how competent and wise they perceive the speaker," says Christenfeld.

But the public's negative perception of ums persists, so Christenfeld is looking for ways to prevent them. So far he and his students have found two.

"One way not to say um is to babble--to say whatever pops into your head. Another way is to synchronize people's speech to a metronome. The ums are eliminated, but of course the person sounds like a robot. So the choices are to sound like a robot or an idiot."

Other aspects of human behavior under Christenfeld's scrutiny are the effect of stress on memory and procrastination and the timing of aversive events.

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