

The Trickiest Tongue Twister

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A tongue twister is a phrase which is difficult to say, especially when repeated multiple times in rapid succession. “She sells sea-shells by the sea shore” is one of the better-known English-language ones, but there are less complicated ones, such as “toy boat” (which quickly turns into “toy boy-t”) and “Irish wristwatch” (which becomes “I wish wish watch” or something like that). But is there something even harder to say? A tongue twister so difficult, even reading it slowly can be maddeningly difficult? In 2013, a team of researchers at MIT decided to find one – and they succeeded.

What did they come up with?

Pad kid poured curd pulled cod.

That’s not necessarily the most difficult phrase to articulate in the English language – testing that would be nearly impossible – but it’s pretty hard to speak coherently. The MIT team found that the six-word phrase was so difficult to say that, [per the Los Angeles Times](#), “many people gave up on saying the phrase altogether.” But don’t take their word for it – give it a try yourself. If you’re a native English speaker, it should be difficult; non-native English speakers or those who are fluent in multiple languages may find it easier.

While that phrase is meaningless, the study had a more serious mission. The lead researcher was a psychologist from MIT named Stefanie Shattuck-Hufnagel studies how brain glitches manifest in our speech. And it should go without saying that tongue twisters are an example of such malfunctions. The MIT team, according to a press release from American Institute of Physics (available [here](#)) started with some simple, common ones like the two noted above. And it turns out, tongue twisters are more complicated than they thought:

[W]hen scientists recorded the misspoken sounds and analyzed them,

they found that the errors were not always straightforward sound replacements. At least some of the time, the mistakes didn't seem to be quite one sound or another, but something in between. And there were different flavors of in between: in the "top cop" example, sometimes the "t" and the "c" seemed to arrive almost at the same time (sort of "tkop") and sometimes there was a delay between the two, with space for a vowel ("tah-kop"). Linguists refer to these double sound mistakes as double onsets.

That said, the researchers aren't entirely sure why the combination of sound replacement errors and double onsets are so difficult — not yet, at least. As the Times explains, more research is underway: "the scientists have already put tiny transducers on test subjects' tongues to measure their articulation as they struggle to say tricky word combinations. Ultimately, they would like to understand how the brain plans for these two different types of speech."

Until then, you may want to avoid speaking to pad kids about their curd pulled cod.

Bonus fact: Tongue twisters don't necessarily need to involve your tongue. Certain American Sign Language (ASL) phrases can trip up even those accomplished in signing, with "good blood bad blood" (seen in video [here](#)) being a relatively well-known one. The only difference is that they're not only "tongue twisters" — in addition, they're often referred to as "[finger fumblers](#)."

From the Archives: [The Silencer](#): The device that makes us unable to speak.

Related: "[Oh, Say Can You Say?](#)" a book of tongue twisters by Theodor Seuss Geisel, better known as Dr. Seuss. 99 reviews, 4.8 stars.