

## What is love, actually? The world's languages describe emotions very differently

December 23 2019, by Amina Khan



Credit: CC0 Public Domain

Is the meaning of love truly universal? It might depend on the language you speak, a new study finds.



Scientists who searched out semantic patterns in nearly 2,500 languages from all over the world found that emotion words—such as angst, grief and happiness—could have very different meanings depending on the language family they originated from.

The findings, described in the journal *Science*, shed light on the diversity of human feeling expressed around the globe—while still mapping some common linguistic landmarks among the languages' internal emotional landscapes.

"We walk around assuming that everyone else's experience is the same as ours because we name it with the same word, and this suggests that that might not be the case," said senior author Kristen Lindquist, a psychologist and neuroscientist at the University of North Carolina at Chapel Hill. "I think there are some real implications for how we understand the emotional and social behaviors of people around the world."

Many languages have words whose meanings seem so specific and nuanced that there's no way to translate them; they can only be imported wholesale. Consider the German "schadenfreude," the pleasure derived from another's misfortune, or "sehnsucht," a sort of deep yearning for an alternative life.

Those kinds of emotion words often feel rooted in the culture from which they emerged, said Asifa Majid, a cognitive scientist at the University of York in England. She pointed to the feeling of "awumbuk," which Baining people in Papua Guinea experience when their guests depart after an overnight stay. It leaves people listless, she wrote in a commentary that accompanies the study, something akin to a "social hangover."

Yet many languages also have words that English speakers might think



of as "basic" emotions—love, hate, anger, fear, sadness, happiness. Early theories, influenced by Charles Darwin and pegged to shared biological structures in humans, suggest there are certain universal emotions that serve as the source material for all others, as primary colors might be blended to create many new shades.

But just as later work has suggested that different cultures do not always categorize color in the same ways, there's a growing understanding that even those supposedly "primary" emotions may hold their own meanings and nuances in different cultures that aren't directly translatable.

That raises an intriguing question: Are the supposedly "basic" emotions truly universal, or are they fundamentally specific to a culture and its language?

"This is also a huge debate in linguistics and cognitive science and philosophy," Lindquist said. "How much does language reach down in your experience and shape it?"

Answering this question is really hard because cross-cultural studies on emotion often compare just two groups; even when more are involved, they're usually from industrialized and globalized nations. It's also hard to avoid certain kinds of bias among both experimenters and study participants.

So Lindquist and her colleagues tried a different approach. They put together a database that drew from translation dictionaries and word lists for 2,474 spoken languages across 20 major language families. Their sample included roughly a third of the world's languages, including some spoken by millions of people and others used by only a few thousand.

The more than 100,000 words they collected featured 2,439 unique concepts, including two dozen for emotions. They took advantage of a



phenomenon called colexification, where languages tend to use one word to cover more than one concept. (For example, in Russian there is a word that names both hand and arm, and in many languages the same word can mean bark, skin or leather.) These overlapping meanings give the scientists a better sense of the core ideas underlying the words.

For each language, the researchers used <u>statistical methods</u> to create a network of shared or overlapping meanings for words expressing concepts of emotion. That helped them see which feelings speakers of a given language considered similar to one another—and how those judgments of emotional similarity differed depending on the language they spoke.

The scientists found that all studied languages seemed to differentiate emotions based on two key factors: valence (how pleasant or unpleasant an emotion is) and activation (the level of physiological arousal associated with an emotion). These, Lindquist said, are likely linked to physiological states—a nod to the role biology may play in emotion.

Beyond those two major factors, however, the researchers found that language families encoded feelings in a wide variety of ways.

Take the Persian word "ænduh," which is used to express the English-conceptualized emotions of "grief" and "regret." The Sirkhi dialect of Dargwa, in contrast, uses "dard" to convey both "grief" and "anxiety." Persian speakers, it seems, may think of grief as more related to regret while Dargwa speakers may see it as more similar to anxiety.

"Anger," another emotion English speakers might think of as basic, also revealed its share of complexities.

In Indo-European languages (a huge group that includes such disparate tongues as English and Hindi-Urdu), it was closely linked to the



emotional concept of "anxiety." But in Austroasiatic languages (which include Vietnamese and Khmer), "anger" was related to "grief" and "regret." Nakh-Daghestanian languages (which include Northeast Caucasian languages such as Chechen) connect anger to "envy," while Austronesian languages (a family that includes Tagalog and Maori) linked anger to "hate," "bad" and "proud."

"We interpret these findings to mean that emotion words vary in meaning across languages," the study authors wrote, "even if they are often equated in translation dictionaries."

The researchers also found that languages whose speakers historically lived in geographic proximity tended to share similar networks of meaning. Whether this is because they share a linguistic inheritance or because they borrow liberally from their neighbors remains to be seen, the scientists said.

Majid called the breadth of languages and wide array of emotional concepts covered in the paper "unprecedented."

"I thought it was really exciting," she said in an interview. "That's a new way to try and look at how emotions are expressed."

Anna Wierzbicka, a linguist at Australian National University who was not involved in the work, praised the study for describing the vast array of emotional meanings embedded in different languages.

But Wierzbicka, who has written several books on language, culture and meaning, also warned of the dangers of using English as the default <a href="mailto:language">language</a> while analyzing the meanings of these emotional concepts.

"If we want to understand emotional experience in other cultures," she said, "we should really forget these English categories like sadness, grief



and so on, and try to look at what other people experience outside of this English vocabulary of emotion."

Instead, she pointed to other methods that could take advantage of universally used word concepts—such as "good" and "bad" and "before" and "after"—to carefully construct definitions of these emotional concepts with a lower risk of bias.

As for the researchers, Lindquist said she and her colleagues hoped to use their method to study not just emotions, but also other cognitive states, such as memory, and bodily states such as hunger.

"What is so powerful about this method is that it allows us to really examine what people think about a number of different concepts on an unprecedented scale," she said.

**More information:** J.C. Jackson el al., "Emotion semantics show cultural variation and universal structure across languages of the world," *Science* (2019). science.sciencemag.org/cgi/doi ....
1126/science.aaw8160

©2019 Los Angeles Times Distributed by Tribune Content Agency, LLC.

Citation: What is love, actually? The world's languages describe emotions very differently (2019, December 23) retrieved 19 April 2024 from <a href="https://medicalxpress.com/news/2019-12-world-languages-emotions-differently.html">https://medicalxpress.com/news/2019-12-world-languages-emotions-differently.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.