

# Ancient texts reveal how Mesopotamian humans experienced emotions in their bodies

December 4 2024

---

Love



Modern



Mesopotamian

Modern and Mesopotamian people experience love in a rather similar way. In Mesopotamia, love is particularly associated with the liver, heart and knees. Credit: Modern/PNAS: Lauri Nummenmaa et al., Mesopotamian: Juha Lahnakoski.

From feeling heavy-hearted to having butterflies in your stomach, it seems inherent to the human condition that we feel emotions in our bodies, not just in our brains. But have we always felt—or at least expressed—these feelings in the same way?

A multidisciplinary team of researchers studied a large body of texts to find out how people in the ancient Mesopotamian region (within modern day Iraq) experienced emotions in their bodies thousands of years ago, analyzing one million words of the ancient Akkadian language from 934–612 BC in the form of cuneiform scripts on clay tablets.

The results of the research were [published](#) in the *iScience* journal on 4 December.

"Even in ancient Mesopotamia, there was a rough understanding of anatomy, for example the importance of the heart, liver and lungs," says Professor Saana Svärd of the University of Helsinki, an Assyriologist who is leading the research project. One of the most intriguing findings relates to where the ancients felt happiness, which was often expressed through words related to feeling 'open,' 'shining' or being 'full'—in the liver.

"If you compare the ancient Mesopotamian bodily map of happiness with modern bodily maps [published by fellow Finnish scientist, Lauri Nummenmaa and colleagues [a decade ago](#)], it is largely similar, with the exception of a notable glow in the liver," says cognitive neuroscientist

Juha Lahnakoski, a visiting researcher at Aalto University.

## Anger



Modern



Mesopotamian

Modern man experiences anger in the upper body and hands. In Mesopotamia, anger was associated specifically with the feet. 2024. Credit: Modern/PNAS: Lauri Nummenmaa et al., Mesopotamian: Juha Lahnakoski.

Other contrasting results between ourselves and the ancients can be seen in emotions such as anger and love. According to previous research, anger is experienced by modern humans in the upper body and hands, while Mesopotamians felt most 'heated,' 'enraged' or 'angry' in their feet. Meanwhile, love is experienced quite similarly by modern and Neo-Assyrian man, although in Mesopotamia it is particularly associated with the liver, heart and knees.

"It remains to be seen whether we can say something in the future about what kind of emotional experiences are typical for humans in general and whether, for example, fear has always been felt in the same parts of the body. Also, we have to keep in mind that texts are texts and emotions are lived and experienced," says Svärd.

The researchers caution that while it's fascinating to compare, we should keep this distinction in mind when comparing the modern body maps, which were based on self-reported bodily experience, with body maps of Mesopotamians based on linguistic descriptions alone.

## **Towards a deeper understanding of emotions**

Since literacy was rare in Mesopotamia (3000–300 BCE), cuneiform writing was mainly produced by scribes and therefore available only to the wealthy. However, cuneiform [clay tablets](#) contained a wide variety of texts, such as tax lists, sales documents, prayers, literature and early historical and mathematical texts.

# Happiness



Modern



Mesopotamian

Happiness 'lights up' similar areas on both modern and ancient body maps, with the exception of the liver, which was more significant for the ancient Mesopotamians. Credit: Modern/PNAS: Lauri Nummenmaa et al., Mesopotamian: Juha Lahnakoski.

Ancient Near Eastern texts have never been studied in this way, by

quantitatively linking emotions to body parts. This can be applied to other language materials in the future. "It could be a useful way to explore intercultural differences in the way we experience emotions," says Svärd, who hopes the research will provide an interesting contribution to discussion around the universality of emotions.

The corpus linguistic method, which makes use of large [text](#) sets, has been developed over many years at the Center of Excellence in Ancient Near Eastern Empires (ANEE), led by Svärd. Next, the research team will look at an English corpus, or textual material from the 20th century, which contains 100 million words. Similarly, they also plan to examine Finnish data.

In addition to Svärd and Lahnakoski, the team includes Professor Mikko Sams from Aalto University, Ellie Bennett from the University of Helsinki, Professor Lauri Nummenmaa from the University of Turku and Ulrike Steinert from Johannes Gutenberg-Universität Mainz.

**More information:** Embodied Emotions in Ancient Neo-Assyrian Texts Revealed by Bodily Mapping of Emotional Semantics, *iScience* (2024). [DOI: 10.1016/j.isci.2024.111365](https://doi.org/10.1016/j.isci.2024.111365).  
[www.cell.com/iscience/fulltext ... 2589-0042\(24\)02590-2](https://www.cell.com/iscience/fulltext/S2589-0042(24)02590-2)

Provided by Aalto University

Citation: Ancient texts reveal how Mesopotamian humans experienced emotions in their bodies (2024, December 4) retrieved 4 December 2024 from <https://phys.org/news/2024-12-ancient-texts-reveal-mesopotamian-humans.html>

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.