

This is what happens in your brain when you can't recall a word

SOURCE: <https://www.youtube.com/watch?v=wtovy-1-QUM>

https://www.ted.com/talks/cella_wright_this_is_what_happens_in_your_brain_when_you_cant_recall_a_word
November 2025, A TED-Ed lesson by Cella Wright with the visuals directed by Avi Ofer.

Dig into what causes **the tip of the tongue phenomenon**, where your brain struggles to recall a word or term from memory.

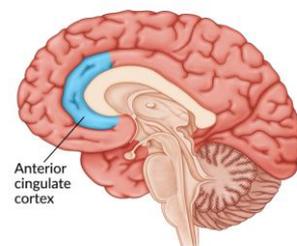
You're sure you know your 3rd grade teacher's name—it's like you're **hovering over it** in your mind, but it just **won't materialize**. Researchers call this **tantalizing torment** a "tip-of-the-tongue state," and it's something everyone experiences. But what's actually happening when **a word's caught** here, and how can you best **get it unstuck**?



Cella Wright explores why your brain can **struggle with recall**.

1. Some things melt before they become memories. [Patti Smith, *Devotion*]
2. You're sure you know your third grade teacher's name—
3. it's like you're **hovering over** it in your mind, but **it just won't materialize**.
4. Researchers call this **tantalizing torment** a "**tip-of-the-tongue state**,"
5. and it's something everyone experiences.
6. But what's actually happening when **a word gets caught** here?
7. And how can you best **get it unstuck**?
8. Most of the time, our brains **seamlessly summon words**
9. from **vast** stores of knowledge,
10. **paring-pairing** their meaning and sounds, and **stringing** them into sentences.
11. But in a **tip-of-the-tongue moment**, this **retrieval process derails**,
12. and there's the **sensation of remembering** the word but the **struggle to recall it**.
13. In these moments, on top of the usual brain activity **associated with word retrieval**,
14. we also see other brain regions light up,
15. like the conflict-detecting **anterior cingulate**,

AI: The [Anterior Cingulate Cortex](#) (ACC) is a frontal part of the **brain's limbic system**, shaped like a collar around the *corpus callosum*. It acts as a **critical hub** for emotion regulation, decision-making, error detection, **reward anticipation**, and attention **allocation**.



16. which generates that **urgently frustrating feeling**.
17. It's unclear whether **the target word** is directly detected

18. and just not successfully recalled,
19. or associations are simply helping the brain **infer** that it has the word.
20. The reality could also be some combination of these hypotheses.
21. But the experience is pretty **consistent with** how psycholinguistic theorists think
22. we mentally organize language-related information,
23. going from the word's
 - **meaning**
 - and **associations**
 - to **how it sounds**.
24. Some researchers think that the last **layer** of information— sound—
25. might be the most **vulnerable to glitches**.
26. Lots of things seem to influence **how likely you are**
27. to enter a tip-of-the-tongue state,
28. **all the way**
 - **from** what kinds of words are involved,
 - **to** your experiences and environment.
29. For example, tip-of-the-tongue states **occur** most frequently with
 - **proper nouns**,
 - **infrequently** used words,
 - and ones that are **more abstract** and **less visual**, like “**idiosyncrasy**” or “**revelation**.”
30. **Cognitively**, recognizing a face and associating it with general information,
31. like someone’s profession, is often easy,
32. **while** names tend to **trip us up**.
33. And **retrieval** of **unintended words** is also a common problem.
34. Like if you’re trying to **summon** the star of “The Wizard of Oz’s” name
35. and **keep getting stuck on** Dorothy instead of Judy Garland.
36. In these situations, the words seem to work as distracting, **red herring-like** blockers **in the retrieval pathway**.
37. And one study found that stressful test conditions
38. made participants **report** more tip-of-the-tongue experiences,
39. **suggesting** that environmental conditions, including stress, can **exacerbate** them.
40. But some people tend to have more tip-of-the-tongue moments than others.
41. This seems to be true for people who speak multiple languages—

42. perhaps because they know more than one word to describe the same thing.
43. So a word in one language might become
44. an **interfering** blocker for the target word in another.
45. This seems to be especially true when someone's switching between languages—
46. but it might also depend on their fluency:
47. one study suggested that people who learned their second language
48. before age five had fewer tip-of-the-tongue **stumbles**.
49. And sometimes even just hearing a **language participants didn't know**
50. has proven to be enough to increase their tip-of-the-tongue incidents.
51. They also seem to rise with age, perhaps from
 - a **cognitive decline** in speech-related brain areas,
 - greater **accumulation of knowledge** to search through,
 - or a combination of both.
52. But while tip-of-the-tongue states may feel like **the brain is failing**,
53. they seem to have a positive function.
54. Words don't usually **go past the point of no return** and get permanently forgotten
 - 55. so much as they tend to **get tougher to access**.
 - 56. That **tough-to-shake**, tip-of-the-tongue feeling
 - 57. of **impending success** just around the corner
 - 58. may help motivate us and **make us more likely to remember**.
 - 59. And researchers have observed that **participants** in tip-of-the-tongue states
 - 60. **are more likely** to spend more time and effort searching for answers.
 - 61. One method for getting something off the tip of your tongue is **cueing**.
 - 62. This means **leaning into the clues** your brain surfaces,
 - 63. like associated memories and letters.
 - 64. For example, if you're trying to remember the name of the ancient city
 - 65. with the legendary **Hanging Gardens**,
 - 66. you might recall they're one of **the Seven Wonders of the Ancient World**
 - 67. and run through the alphabet to **see if any letters stand out**.
 - 68. Because tip-of-the-tongue moments don't seem to be just **your brain babbling**,
 - 69. but perhaps trying to **jog** its own **extensive memory**,
 - 70. where your third grade teacher's name is surely stored... somewhere.

