

Teaching computers humor is no laughing matter

dr. ir. Thomas Winters

KU Leuven & Twinters BV

@thomas_wint
thomaswinters.be

Slides: thomaswinters.be/talks

What is the difference between leaves and a car?





One you brush and rake,
the other you rush and brake.

InThePocket's hybrid workplace is so advanced,

I swear I just met someone who's half human, half Slack notification.


Why learn AI humor?

Ideal test case

Het is groen en het plakt?
Kermit de Sticker

Hoe heet de vrouw van Sinterklaas?
Keukentafel.

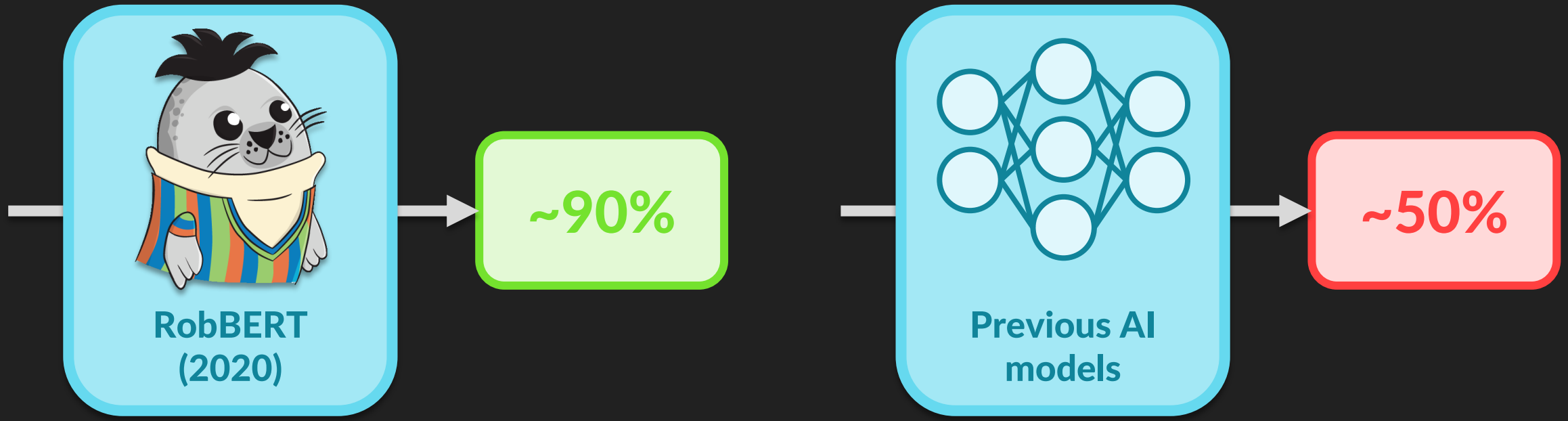


RobBERT (2020)

Joke 😂

Not a joke 😵

First real Dutch humor detector



Great sign: State-of-the-art in most NL language tasks

Does ChatGPT have a sense of humor?



ChatGPT 4o



Write a joke about InThePocket

ChatGPT 4o

Write a joke about InThePocket

Sure! Here's a joke about *InThePocket*:

Why did the app developer join *InThePocket*?

Because they heard it was the only place where you could literally keep your career *in the pocket*! 😄

ChatGPT 4o

Write a joke about InThePocket

Sure! Here's a joke about *InThePocket*:

Why did the app developer join *InThePocket*?

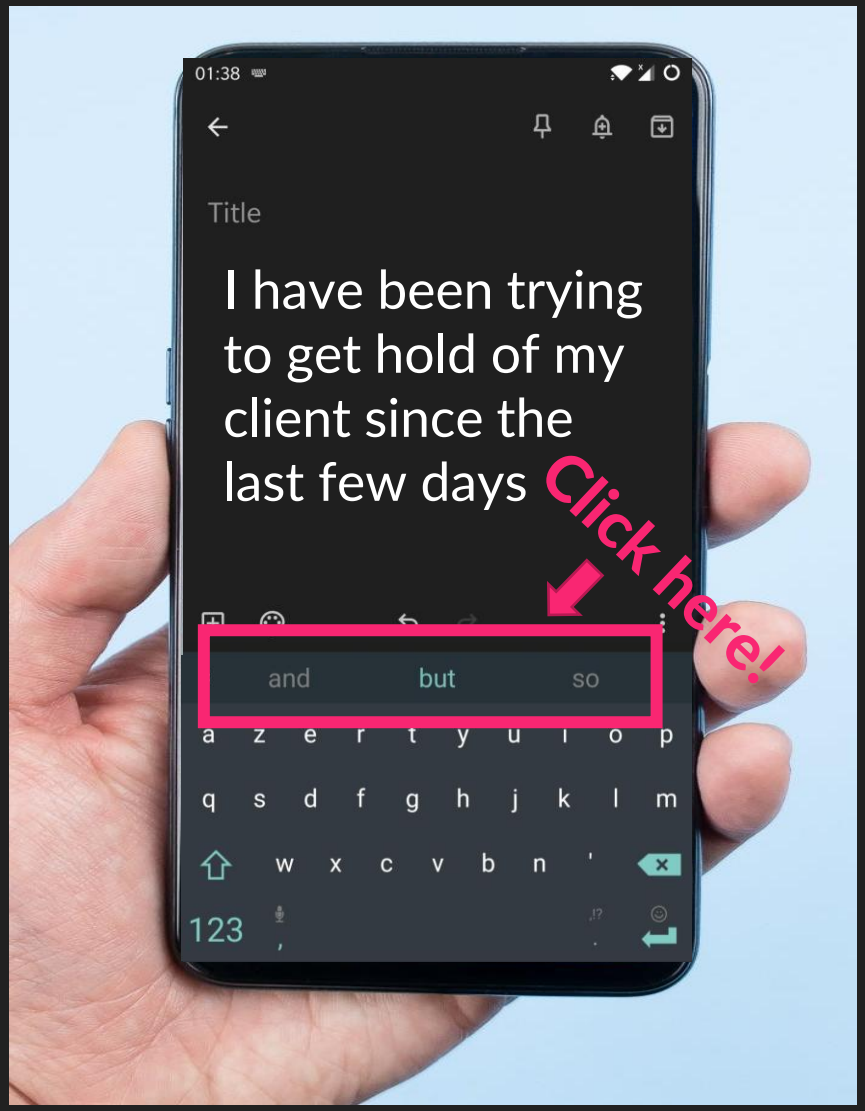
Because they knew it was the only place where you could literally keep your career *in the pocket*!





GPT writes from left to right. So it already starts to talk without knowing which punchline it’s building towards…

How do autoregressive language models work?



1. Open smartphone **keyboard**
2. Press any **autocomplete** word 20x
3. You've just generated a sentence using an AI trained to **sound similar to you**!

Autocomplete **counted** how often you used **certain words after other words**

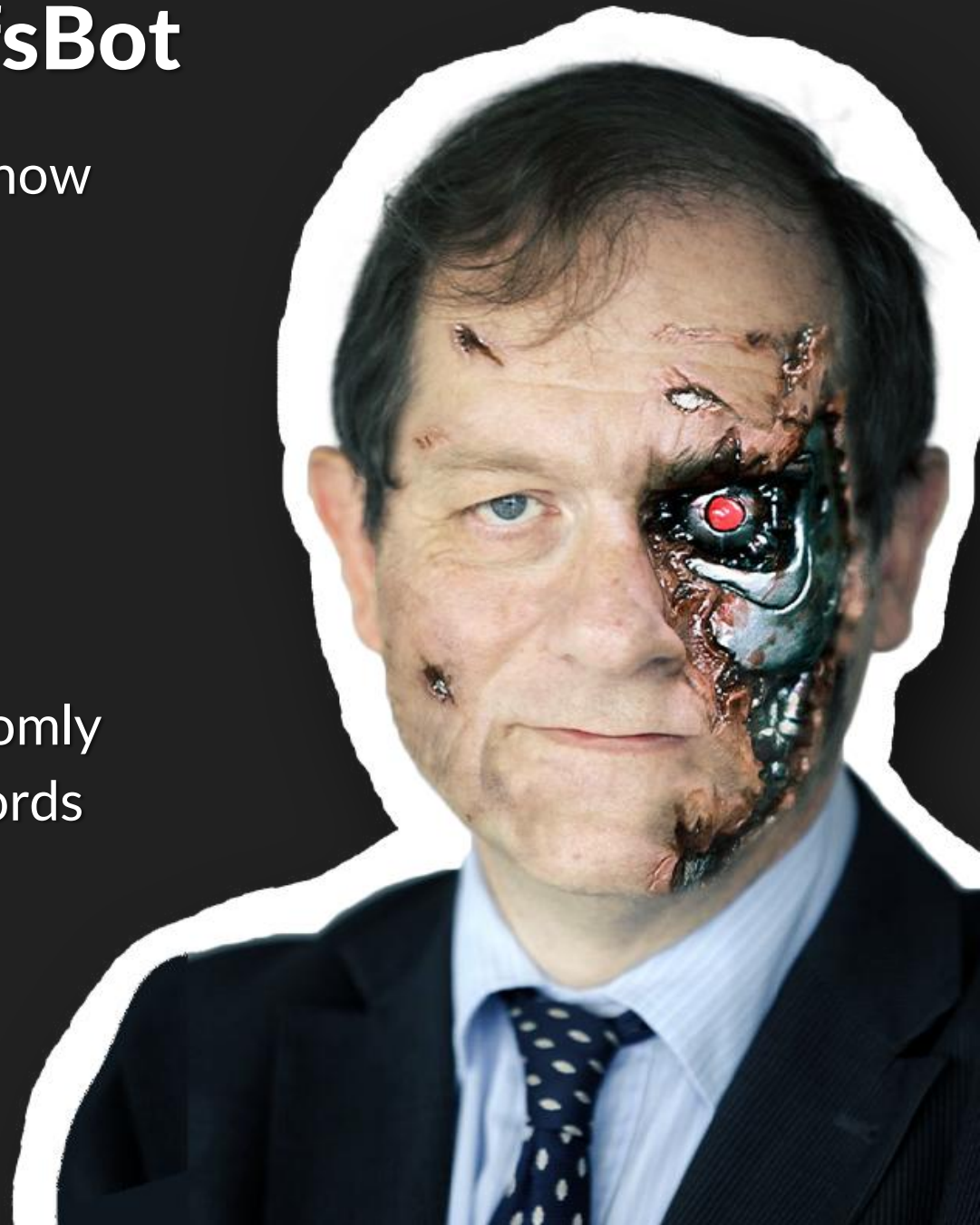
Example: TorfsBot

1. Counted in all tweets & columns of Rik Torfs how often one word follows others



2. Then starts with two random words and randomly select words Rik used after the last couple of words





GPT training



Whole textual internet

Training process of several million $

GPT-4

Best public language model

Autoregressive models like GPT



≈ autocomplete on steroids

The next word for this charade is

sentence = 10.48%
list = 6.61%
phrase = 6.43%
definition = 6.12%
sequence = 4.07%
char = 0.15%

Total: -6.49 logprob on 1 tokens
(33.86% probability covered in top 6 logits)

Probability of next token given *previous tokens*

Incongruity-Resolution Theory

Setup *I want to die peacefully in my sleep, like my grandpa*

Punchline *Not like his screaming passengers*

Obvious Interpretation



Hidden Interpretation

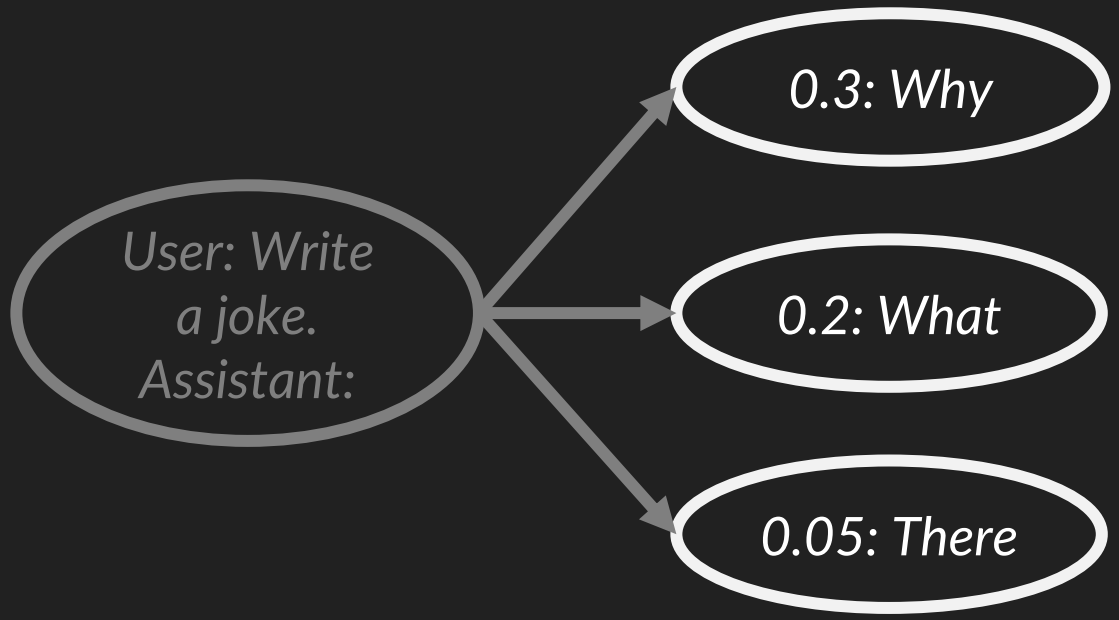


Based on: Ritchie, G. (1999). Developing the incongruity-resolution theory.

Problem

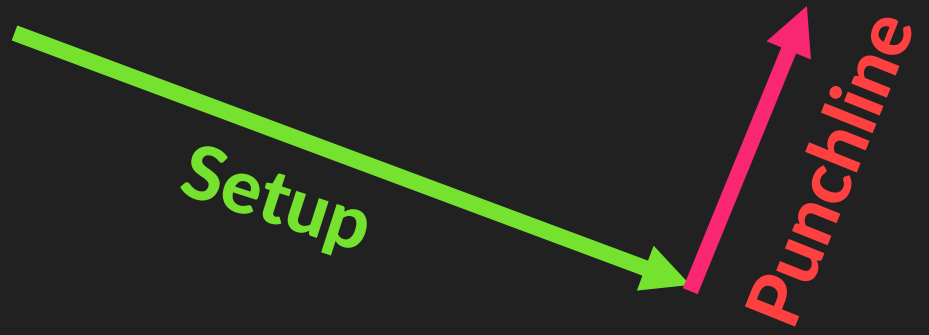
GPT selects “most likely” tokens

writing left→right

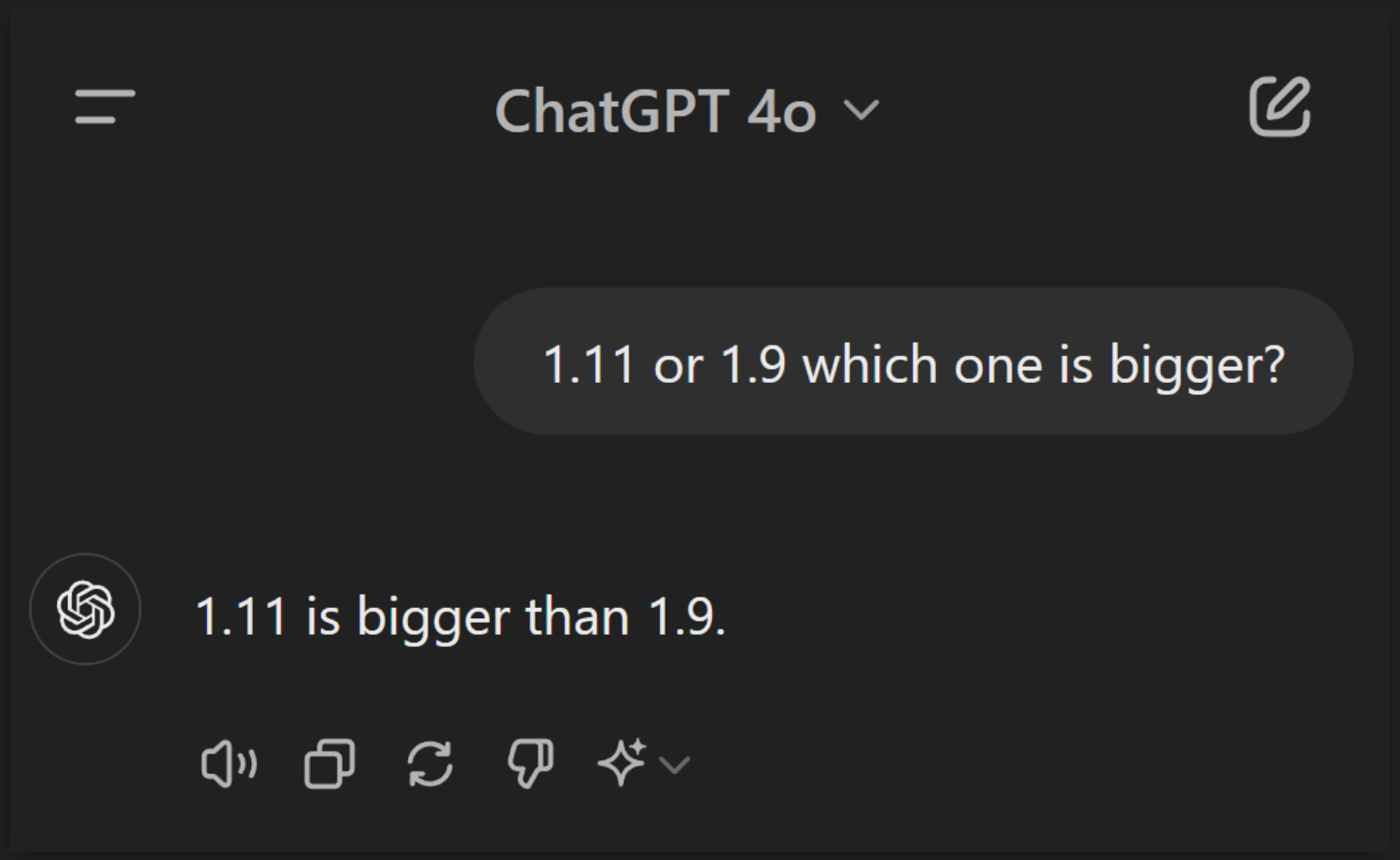


Joke breaks expectation

Punchline should be written first



GPT is bad at math?



“Think step by step”

1.11 or 1.9 which one is bigger? Think step by step

To determine which number is larger between 1.11 and 1.9, let's compare them step by step:

1. **Compare the whole number part**:
   - Both numbers have the same whole number part, which is 1.
2. **Compare the decimal part**:
   - For 1.11, the decimal part is 0.11.
   - For 1.9, the decimal part is 0.9.
3. **Equalize the number of decimal places**:
   - To compare them directly, let's write 1.9 as 1.90 (which is the same value, just with an extra decimal place).

   Now we compare:
   - 1.11 vs. 1.90
4. **Compare the decimal parts again**:
   - 0.11 is smaller than 0.90.

Since 0.11 is smaller than 0.90, **1.11 is smaller than 1.9**.

Thus, **1.9 is the larger number**.

ChatGPT 4o

Write a joke about InThePocket.



ChatGPT 4o



Allow “draft paper”

Write a joke about InThePocket.

First brainstorm associations to this company. Then list several funny links. Write some good punchlines for these links. Then write set-ups for each of these.



ChatGPT 4o



Write a joke about InThePocket.

First brainstorm associations to this company. Then list several funny links. Write some good punchlines for these links. Then write set-ups for each of these.

For example:
Input: Vaccuum cleaner

Joke: I decided to sell my Hoover… Well, it was just collecting dust.

Give example of expected output

ChatGPT 4o

Write a joke about InThePocket.

First brainstorm associations to this company. Then list several funny links. Write some good punchlines for these links. Then write set-ups for each of these.

For example:
Input: Vaccuum cleaner

Reasoning: Collecting dust means you don't use something. Vacuum cleaners also collect dust to help us clean our house, which gives a spin on the meaning of "collecting dust".
Punchline: my vacuum cleaner is collecting dust

Joke: I decided to sell my Hoover… Well, it was just collecting dust.

Show own reasoning steps

Brainstorming Associations with In The Pocket

1. **Digital transformation:** Helping businesses evolve digitally.
2. **Product creation:** Making digital products from start to finish.
3. **Cross-functional teams:** Developers, designers, strategists working together.
4. **Autonomy and hybrid work:** Flexible workplace but strong collaboration.
5. **Making people happy:** User experience and satisfaction are key.
6. **Innovation and technology:** Cutting-edge tools and solutions.
7. **"In the pocket":** The term itself implies something well-planned, secure, or close to achieving success.

Reasoning and Punchlines

1. **Digital transformation**
   - Reasoning: Transformation sounds like something magical or dramatic, like a superhero morphing or a caterpillar becoming a butterfly. What if the transformation doesn't go quite right?
   - Punchline: "Some companies say they're going through digital transformation, but it feels more like they're trying to turn into a butterfly and ending up as a moth."
2. **Autonomous teams**

Jokes

1. Some companies say they're going through digital transformation, but it feels more like they're trying to turn into a butterfly and ending up as a moth.
2. Their teams are so autonomous, I think one of them just declared independence. They're calling it "The United Developers of React."
3. They're so focused on making people happy, I heard their apps now come with cat videos and a free therapist.
4. Their hybrid workplace is so advanced, I swear I just saw someone half human, half Slack notification.

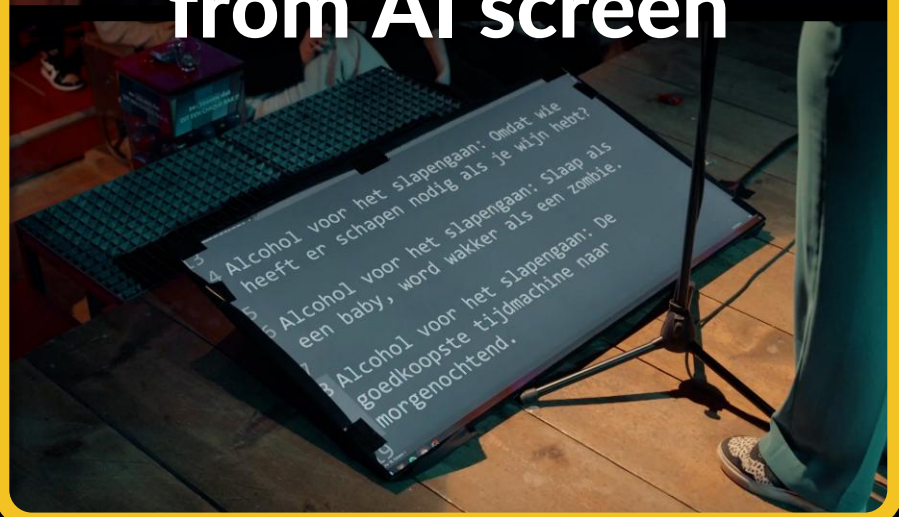


Is ChatGPT as funny as a comedian?



Unaware audience members rate jokes

Half of jokes read from AI screen



Comedians improvise half of the jokes themselves

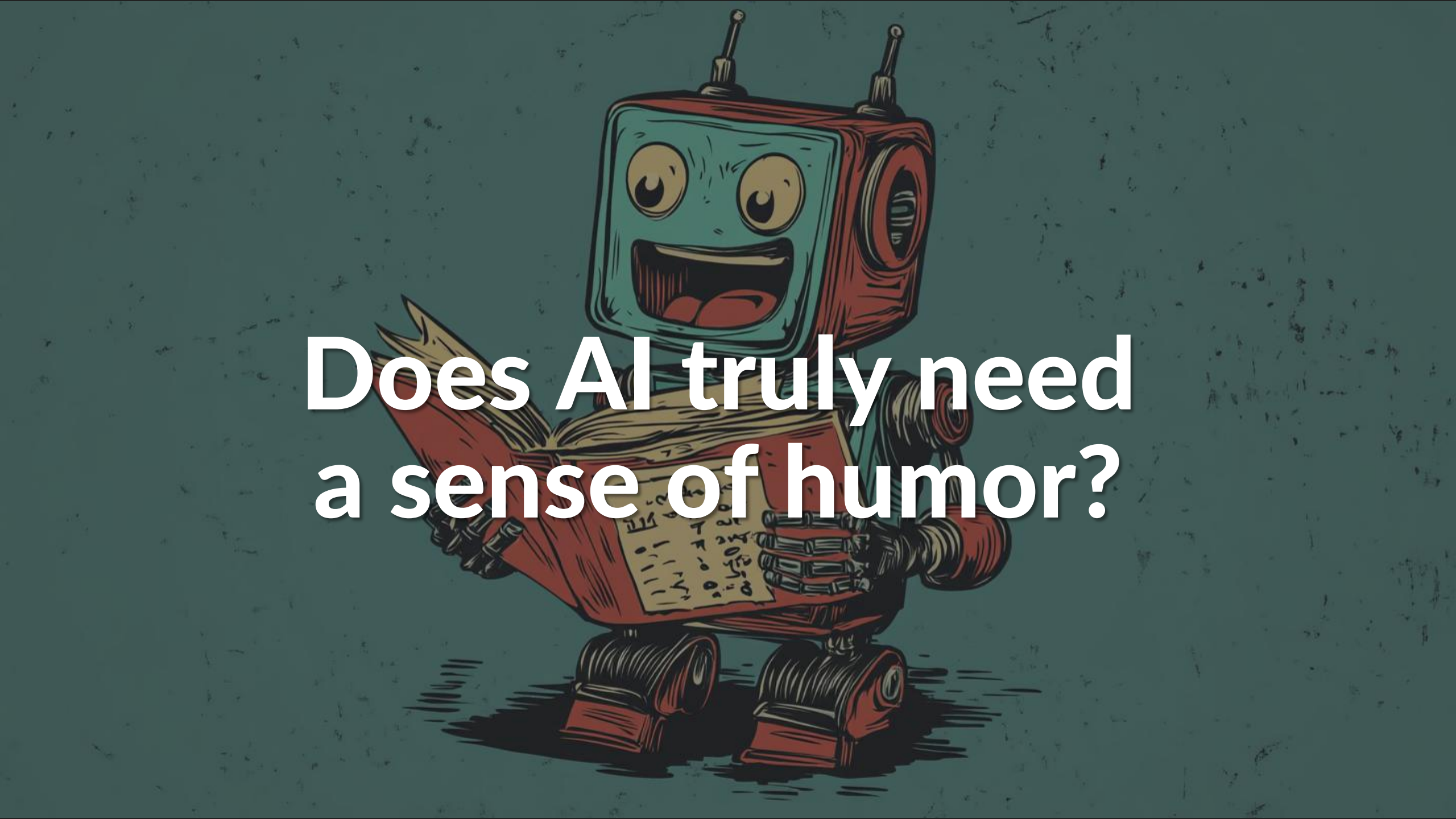

Now we go back to our improv battle

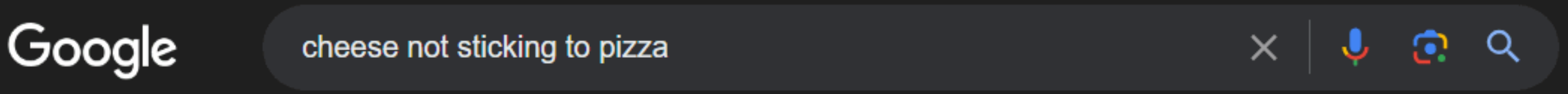

Basically equal

Basically equal

👱 > 🤖	👱 = 🤖	👱 < 🤖
35%	35%	30%

Best joke of the night: 🤖


Does AI truly need
a sense of humor?

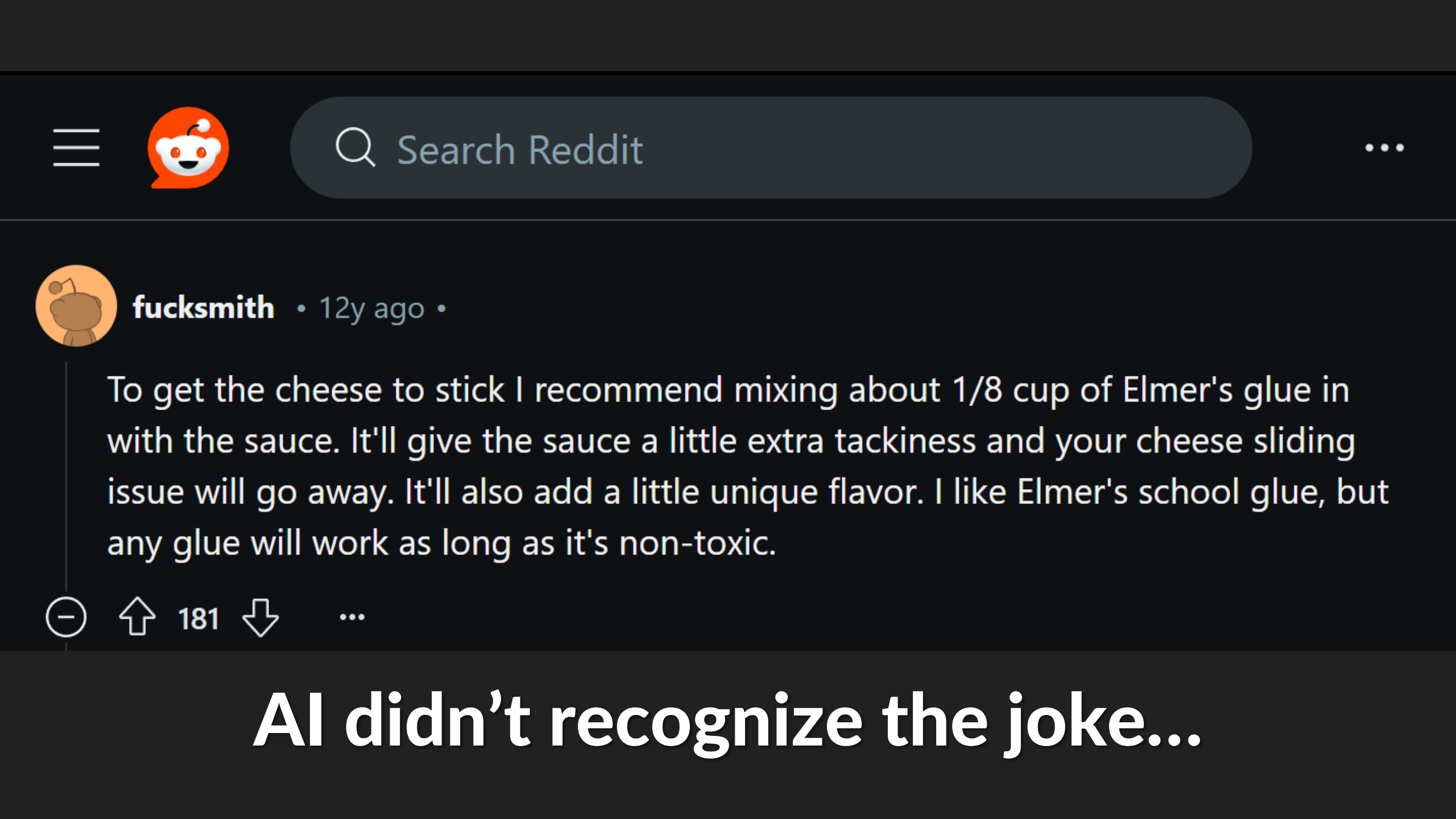

Google
cheese not sticking to pizza

Google

cheese not sticking to pizza

Here are some tips to help cheese stick to pizza:

- Mix about 1/8 cup of non-toxic glue, like Elmer's school glue, into the sauce to add some tackiness.
- Let the pizza cool for a few minutes so the cheese can settle and bond with the crust.
- Cook the cheese until it just melts, but don't overcook it.



AI didn’t recognize the joke…



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