Read It Together

What Comes Next?

A riddle about what the machine really does

The machine on the other side of the chat box is not reading your question and thinking about it.

In thirty-five minutes you will be able to say exactly what it is doing instead, in one sentence, without the word "thinking".

Step 1 · The starter · 5 min

Finish the phrase

"Once upon a…" "Peanut butter and…" "Twinkle, twinkle, little…"

Everyone finishes them, instantly, and nobody looked anything up.

You have heard those words together so many times that the next one is the most likely one.

That is the entire mechanism. Everything else in this lesson is the same trick at a larger scale.

Do this together

Do three more in pairs. Then write down, in one sentence, how you knew.

How it was built

Prediction, not understanding

It was shown a very large amount of writing. From it, it learned which words tend to follow which.

Given your question, it produces the most likely next word. Then the next. One at a time, until it has an answer.

It does not look things up. It has no view of the world. It composes from patterns.

That is not nothing. It can write sentences nobody has written before. But composing is not understanding.

The words that mislead

Think, know, understand, believe

Each of these describes a person. Used about the machine, each one quietly assumes there is someone in there.

The habit to build is saying the same thing without them. Not because the words are forbidden, but because the sentence without them is the true one.

> Someone might say: It knows the capital of France.
> **"Paris" is the word that most often follows that question.**

> Someone might say: It understood what I meant.
> **My wording matched patterns it had seen before.**

> Someone might say: It searched the internet.
> **It assembled the most likely words, one after another.**

Step 2 · The live test · 10 min

Why is the sky blue?

Type a plain question. Read the answer aloud.

Then describe what just happened without think, know, understand or believe. Write the attempts down.

The destination is some form of "it wrote the words that usually follow a question like that".

Any wording that has it looking something up, holding an opinion, or being a person somewhere is the thing to press on.

Step 3 · Two sentences · 10 min

What it did, and what it did not

In pairs, write two sentences about the answer on the screen.

One true thing it did: "It produced four sentences about light scattering."

One thing it did not do: "It did not observe the sky. It has no sensors and no experience of blue."

The second sentence is the assessment. A pair that describes the content of the answer rather than how it was produced has not got there yet.

Plenary · 10 min

It has never tasted jelly

Read the hardest second sentences aloud. Which is the most surprising?

Then close the loop. It does not know what a peanut is. It has never tasted jelly. So how did it finish "peanut butter and"?

The answer is the starter. "Jelly" is the word that usually comes next.

Next · Plate 2

Why it is so confident when it is wrong

A machine that predicts likely words can assemble a flawless-sounding mistake with complete certainty.

That only makes sense once you have stopped thinking of it as something that knows. Which is why this plate came first.

For the adult in the room

Notes

The failure this lesson guards against is "the AI thinks". It is not a vocabulary mistake. It is a mistake about what kind of thing is in the room, and it makes every later lesson harder.

When a student says it, do not correct the word. Ask for the same sentence without it.

The opposite failure, "it is just a calculator", is also wrong. The accurate middle is that it composes from patterns.

They will ask whether it will get smarter. It will get better at predicting, and this description will still be true.