Chinese room

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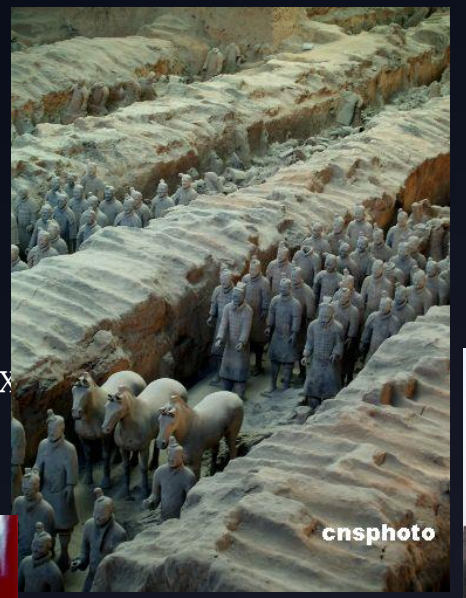
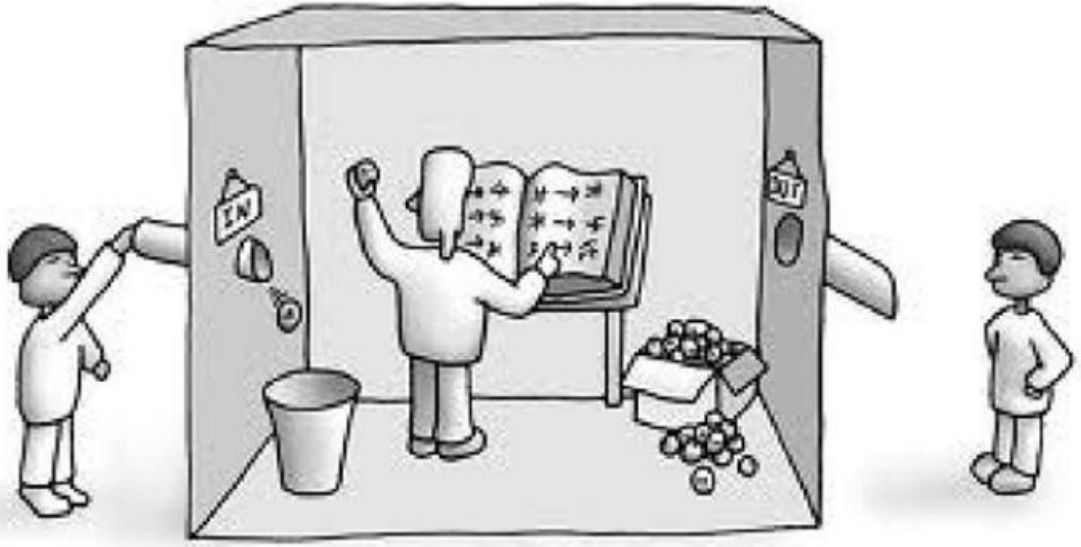


Outline

1. The author and background
2. Description of the experiment
3. Questions and arguments
4. Our thoughts and views

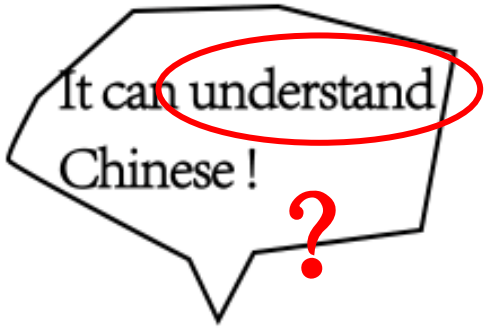
John Searle

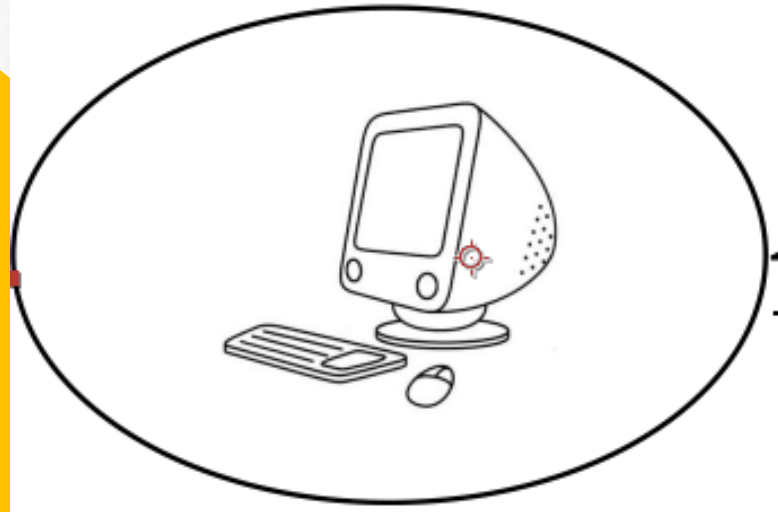


Chinese Room

The Chinese room argument holds that a digital executing a program cannot be shown to have a "mind", which was first presented by philosopher *John Searle*

A Hypothettcd Premise





嘿，你读过我写的文章吗？

当然，写的不赖嘛！

a machine

a Chinese writer

they communicate in Chinese

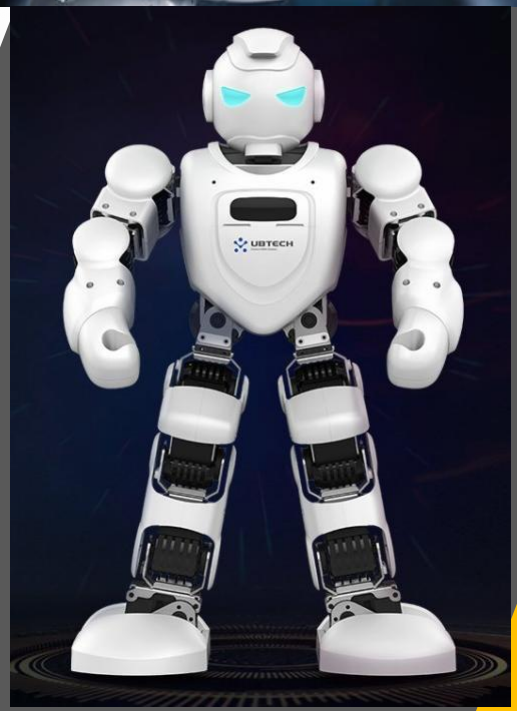
Questions

Does the Machine Literally "Understand" Chinese?

——————— "Strong AI"

Is It Merely Simulating the Ability to Understand Chinese?

——————— "Weak AI"



Chinese room thought experiment

恭喜发财

谢谢

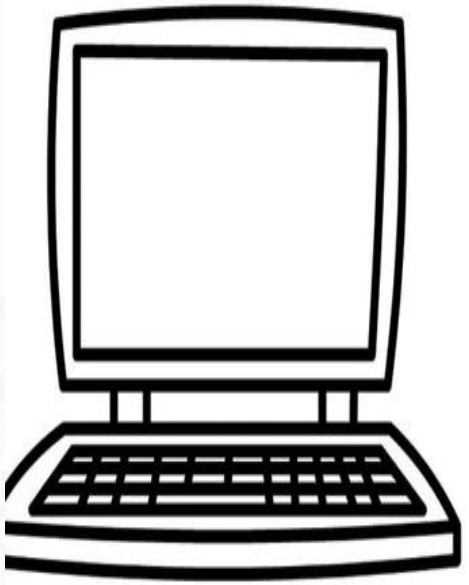
sential difference between
himself in the experiment.
step-by-step, producing a
erpreted by the user as
versation. However, Searle
derstand the conversation.
(I don't speak a word of Chinese," he points out.)
Therefore he argues, it follows that the computer would
not be able to understand the conversation either.

There is no essential difference between the roles of the computer and himself in the experiment

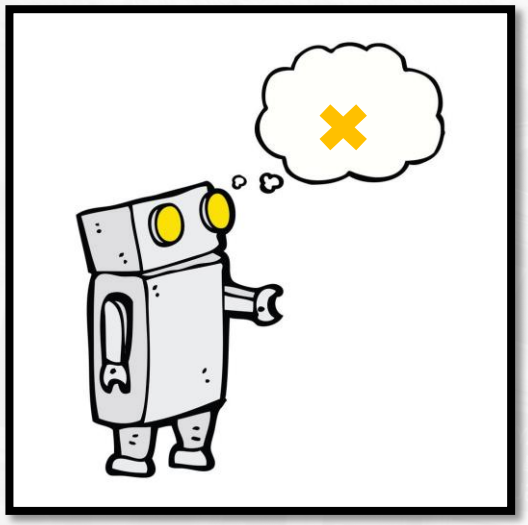
inference

I don't understand Chinese character

...I don't have strong AI



Content



without understanding

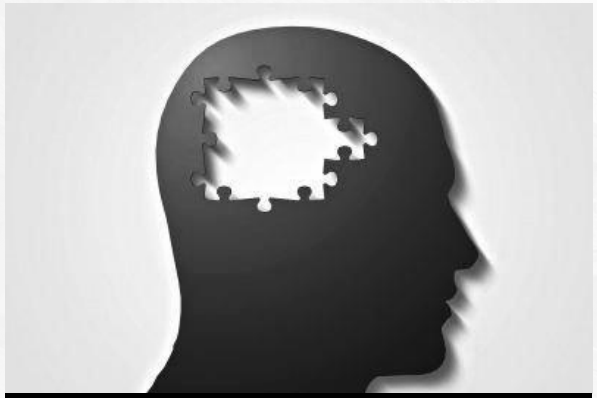
↓

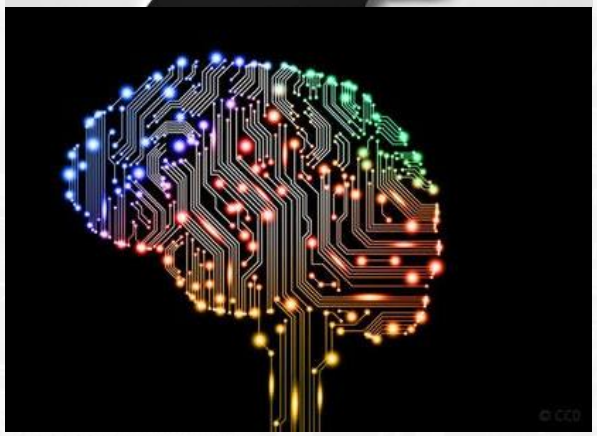
cannot think

↓

the "strong AI" hypothesis is false

The Affirmative



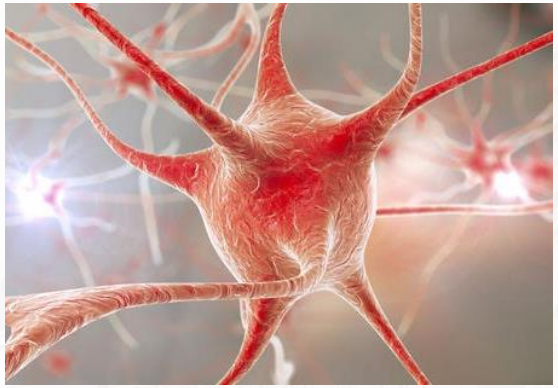


Me either

I don't even know the definition of information I am trying to find

The Negative

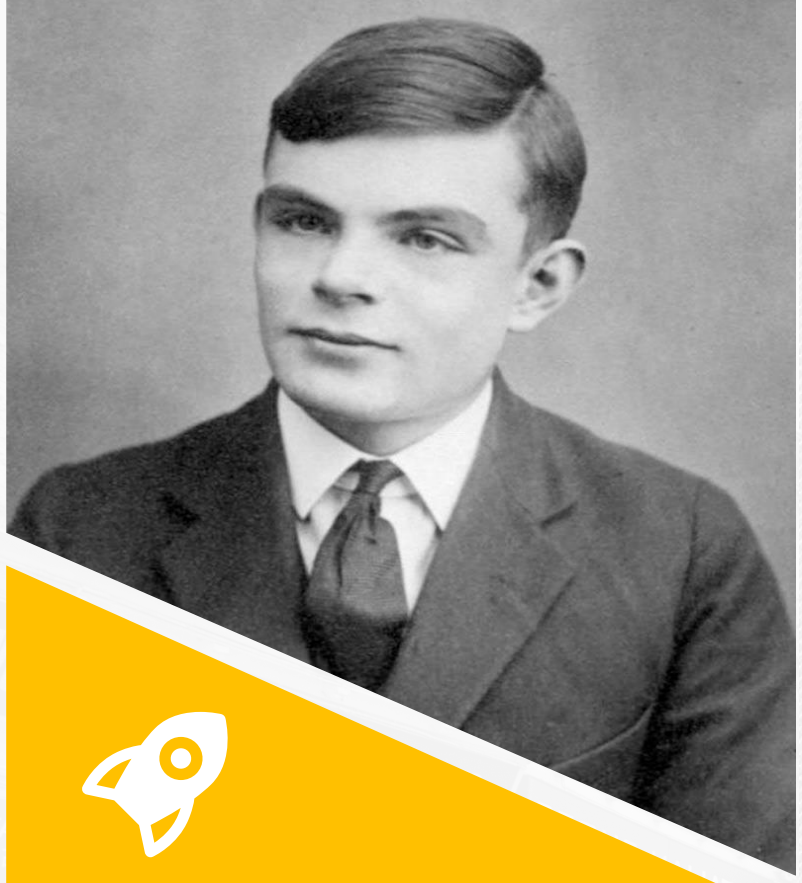
$\neq$



$* n$

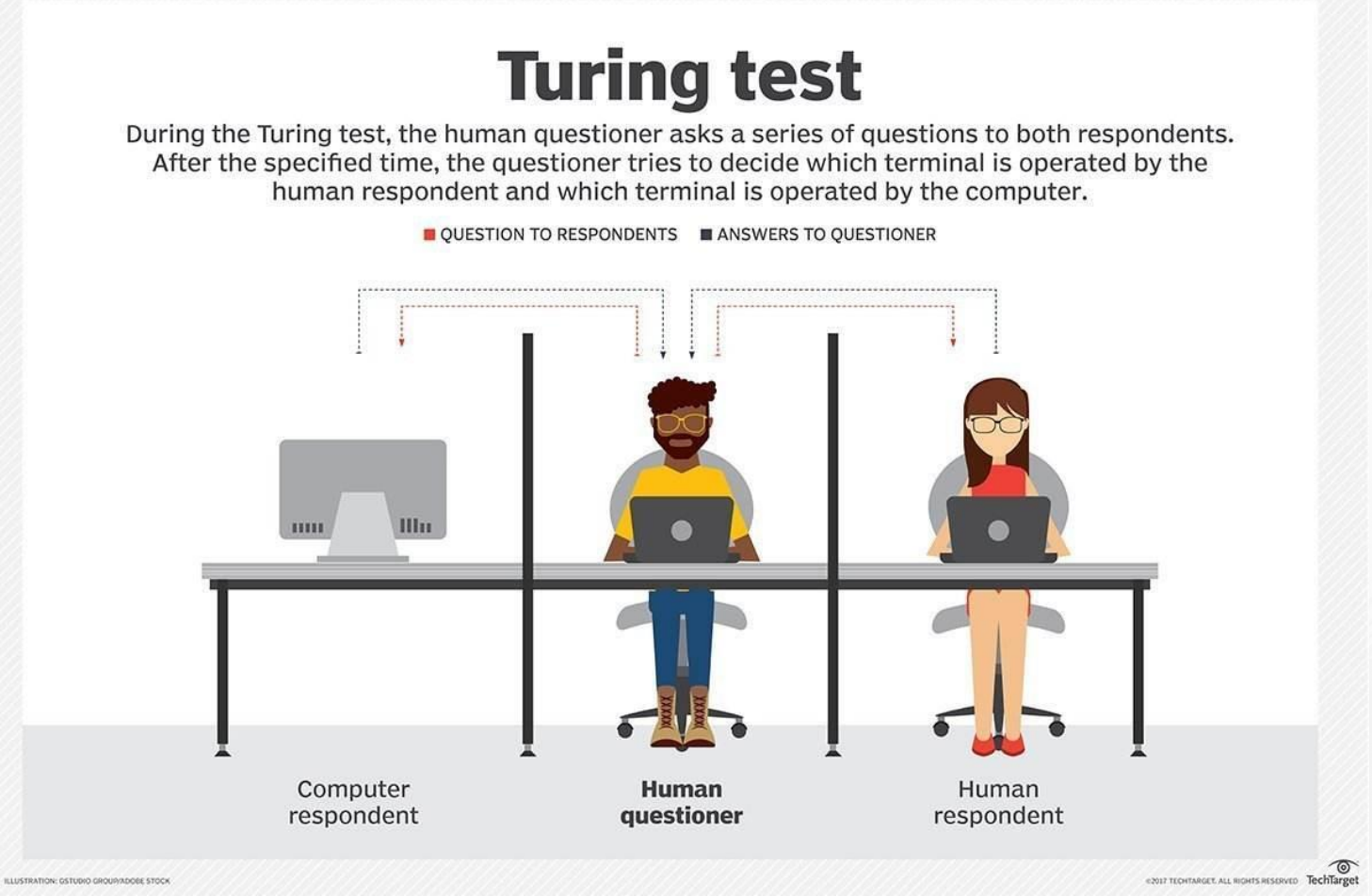
Some critics hold that running the program may create something that understands Chinese.

Searle's claim that he doesn't understand Chinese while running the room is conceded, but his claim that there is no understanding, and that computationalism is false, is denied.



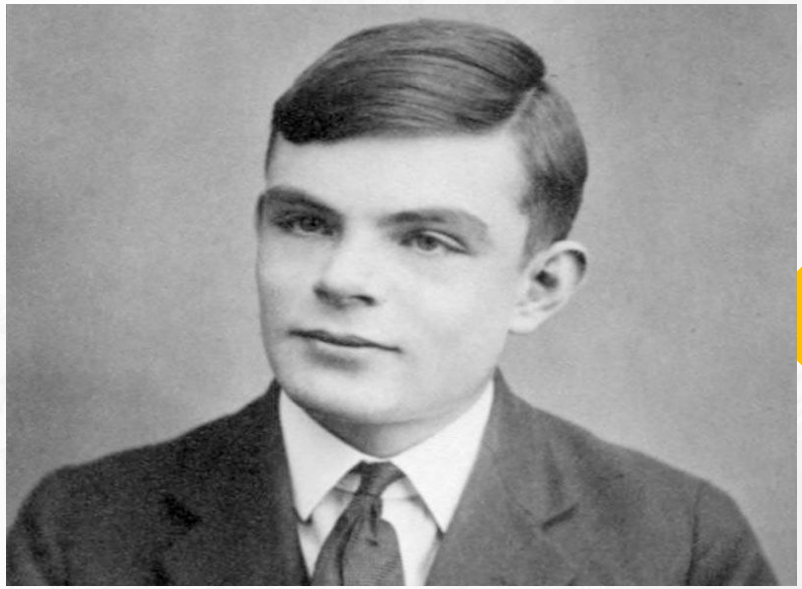
Alan Turing

(1912-1954)



Chinese Room

Turing Test

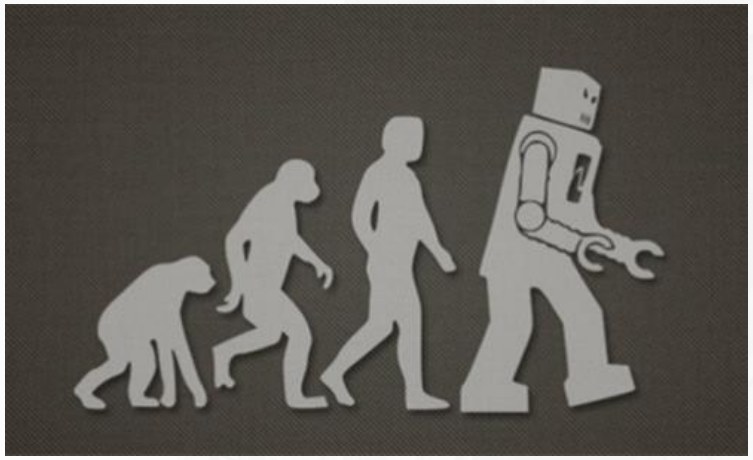


Can computer understand?

proper programs can make machine understand

understanding is related to biological structure

Behavioristic hypotheses	Functionalistic hypotheses	Dualistic hypotheses	Identity theoretic hypotheses
Anything besides *acting* intelligent is required.	Intelligent-seeming behavior must be produced by the right procedures or computations.	Besides (or instead of) intelligent-seeming behavior	It to be essential that the intelligent-seeming performances proceed from the right underlying neurophysiological states.



If the machine creates its own rules through existing rules in the process of interacting with the outside world, can we say that this is artificial intelligence?

AlphaGo

Thanks & Questions

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