Philosophy and AI

5-12-2024
dr. Carlo Ierna

c.ierna@vu.nl
http://ierna.name

What is AI?

"The central problem of AI is the question: *What is the letter 'a'*?
Donald Knuth, on hearing me make this claim once, appended,
'*And what is the letter "i"*?'
–an amendment that I gladly accept."

Hofstadter (1985, p. 633)

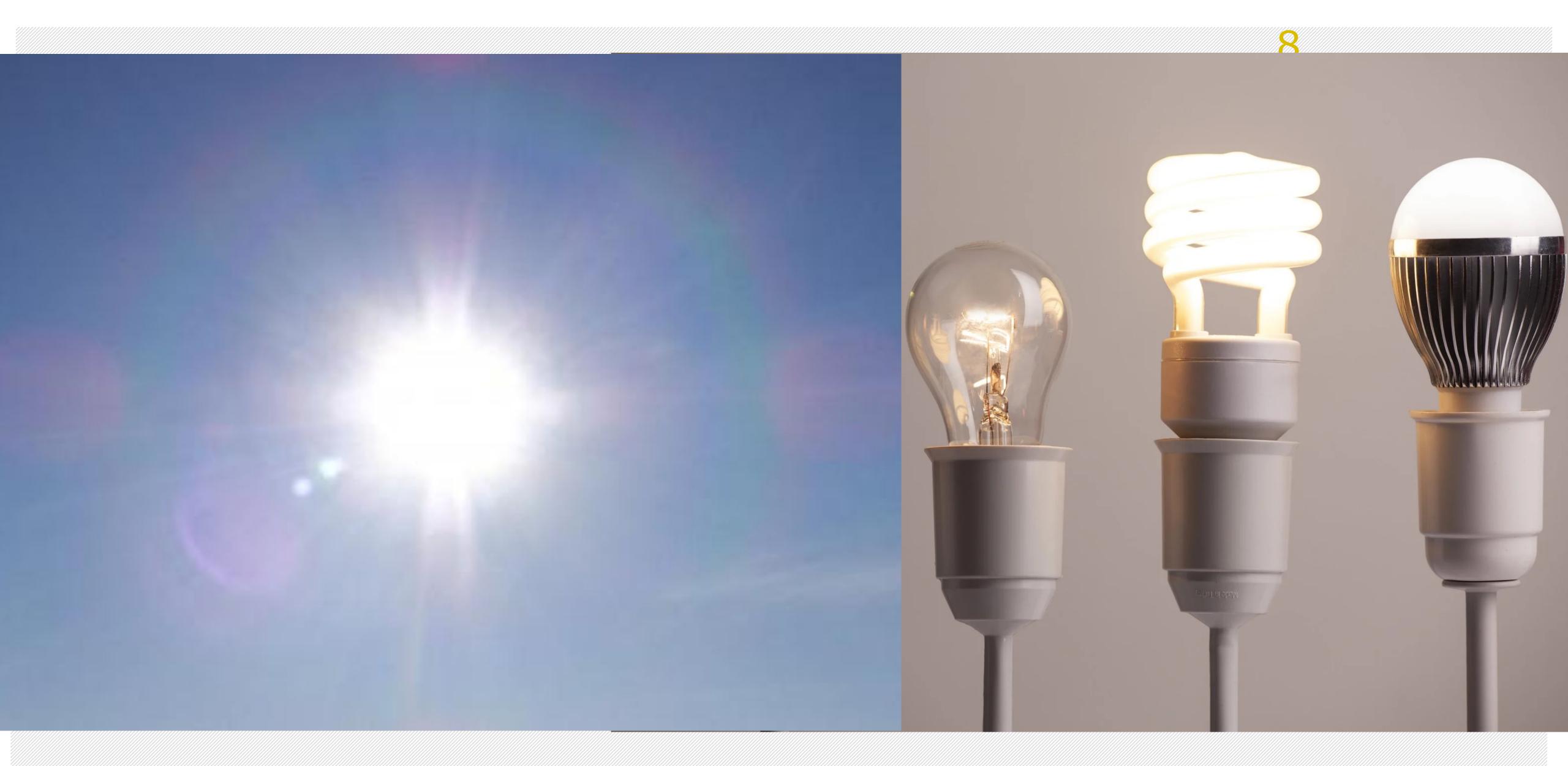# "Artificial Intelligence"

"Artificial"

Bananas

Kids and grown-ups love it so ...

... the happy world of Haribo!

Schuim met bananensmaak

"Artificial"

Bananas are not used in the production of isoamylacetate

"Artificial"

1) Fake

2) Made by humans

"Intelligence"

"*Artificial Intelligence*"
Takes natural intelligence
as baseline:
humans are the standard

"making a machine behave in ways that would be called intelligent if a human were so behaving"

(John McCarthy 1955)

"the science of making machines do things that would require intelligence if done by men"

(Marvin Minsky 1968)

"Intelligence"

"*Machine Intelligence*"
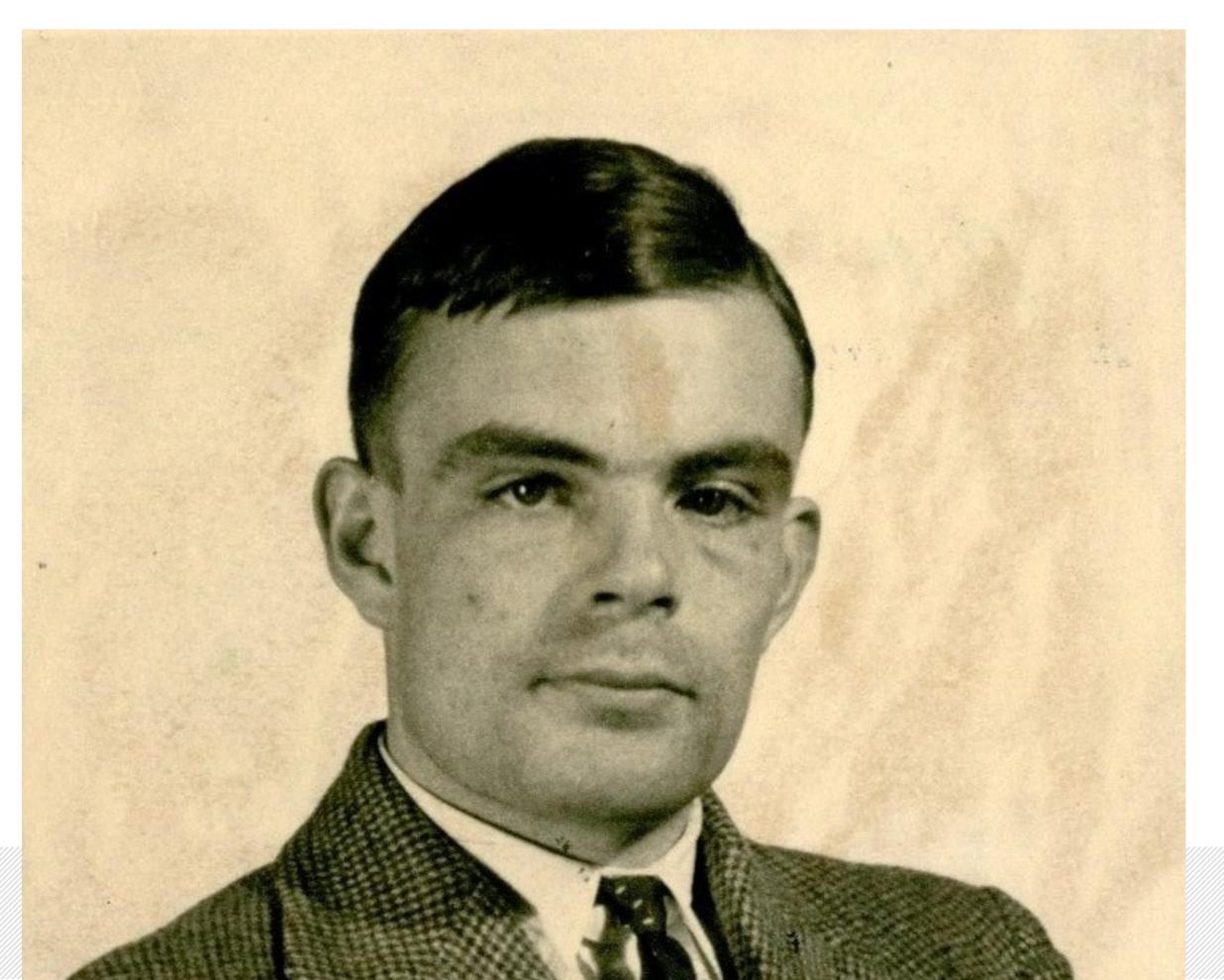Not a question of real or fake:
a different kind of intelligence

"Intelligence"

- Problem solving?
- Pattern recognition?
- Information processing?

"Intelligence"

- Knowledge?
- Intentionality?
- Consciousness?

Alan Turing (1912-1954)

Turing

"Can Machines Think?"
Computing Machinery and Intelligence (1950)

Turing

"I propose to consider the question, 'Can machines think?' This should begin with definitions of the meaning of the terms 'machine' and 'think'."

Turing

"Instead of attempting such a definition I shall replace the question by another, which is closely related to it and is expressed in relatively unambiguous words."

Turing

"The original question
'Can machines think?' I believe
to be too meaningless to
deserve discussion."

Turing

Imitation game
"Turing Test"

Turing

Imitation game

If the machine fools us:
is it intelligent?

Machines actually do perform cognitive tasks

Machines actually do
perform cognitive tasks
some of which we couldn't do
without their assistance

Computers and AI
as cognitive tools
replace human cognitive labor

Computers and AI
as cognitive tools
enhance human cognitive labor

Clark & Chalmers

The Extended Mind

Clark & Chalmers

Cognitive tools
Symbolic technologies
"the mind extends
into the world"

Clark & Chalmers

Does AI have a mind of its own, or does ours extend through it?

Ethics

If AI extends or replaces us, who's responsible?

Dissociation
of technology and ethics

(Krämer 1992)

Tools relieve us from:
1) bodily labour
2) mental labour
3) responsibility

Technology changes human action into a process

Moral distance to the results of the process (alienation)

In practice:
We can solve problems,
without understanding them

Finding solutions independently from justifying solutions

Division of labor with a machine: spreading responsibility and accountability

Manufacturer, programmer, infrastructure, distributor, regulator, etc.

Are we in competition with AI?

Workers against AI?

Workers with AI against workers without AI?

How should we deal with this?

William Fielding Ogburn (1922)
"cultural lag"

products & innovations in
"material culture"
cause changes in
"immaterial culture"

Disruptive innovation

"maladjustment"

"It is thinkable that the piling up of these cultural lags may reach such a point that they may be changed in a somewhat wholesale fashion. In such a case, the word revolution probably describes what happens."

(Marshall 1999, p. 296)

Technological breakthrough:
a new worldview

Stone age,
Bronze age,
Iron age,
etc.

age of the printing press,
age of the steam engine,
the atomic age,
the computer age
etc.

Are our existing ethical theories, principles, values, policies, laws, etc. valid, and just need to be adjusted to the innovation?

Or will our old immaterial culture likewise have to change radically due to the new material culture?

"A very large number of ethical principles, codes, guidelines, or frameworks have been proposed over the past few years. There are currently more than 70 recommendations, published in the last 2 years, just about the ethics of AI"

(Floridi 2019, p. 186)

"Paniekvoetbal"

Ethics as brakes

Alternative:
Ethics as steering wheel

"Instead of seeing ethics as some form of 'assessment', then, it should also be seen as the normative 'guidance' of technology in society. And at the same time, ethics can also guide society in dealing with technology."

"The central question in guidance ethics is not 'yes or no?', but 'how?' It does not focus on rejecting or accepting, but on the valuable design, implementation and use of new technology."

(Peter Paul Verbeek)

Can we ethically justify the use of AI?

Division of labor and use of
increasingly powerful tools
have greatly increased
our ability to act

The knife cuts both ways: how we use it, is up to us