

CAN AI
think?

AI *appears* to think, problem solve, brainstorm...
But is this only *apparent*? To answer that question,
we first need a solid handle on answering two other
questions:

WHAT IS A
Human?

WHAT IS
AI?



WHAT IS A
Human?

ACTIVITY

On your own, take out a notetaking device. Write in one or two sentences your definition of a human. Write it down, don't just *think* about it.

After you have *written it down*, discuss your definition with a neighbor. If it's virtually the same, discuss how you came to the same conclusion. If it's different, discuss whose is better.



WHAT IS A
Human?

- You are an *embodied* soul. (Body = you. Soul = you.)
- Soul ≠ mind. Soul is intertwined with body.
Hylomorphism, *not* ghost in a machine.
- One aspect of the soul is *rationality*.
Hence, we say we have *rational souls* (rational animals).
- Human rational consciousness includes the *potential* for:
 - sensations —intentionality —Understanding
 - thoughts —*qualia* —Judgment
 - beliefs —private access —Reasoning
 - desires —A *subject* or “I”
 - acts of the will

“Man is a rational being, thus a personal being; accurately defined, he is a personal being of soul and body. That is his specific position among the totality of creatures. He is not only a spiritual and personal being as an angel is—he is not a completed nature—he is an uncompleted nature. On the basis of Scripture, we distinguish in man only spirit and body, thus a dichotomy.”

*Adolf Hoenecke,
Evangelical Lutheran Dogmatics, ch. 42*





Christ became fully human
=
Christ had both body and soul

“For if He did not receive the substance of flesh from a human being, He neither was made man nor the Son of man; and if He was not made what we were, He did no great thing in what He suffered and endured.”

*Irenaeus (125—200 AD),
Against Heresies, 3.23*



“The first part, the spirit is the highest, deepest, and noblest part of man. By it he is enabled to lay hold on things incomprehensible, invisible, and eternal... The second part, the soul, is this same spirit, so far as its nature is concerned, but viewed as performing a different function, namely, giving life to the body and working through the body... It is its nature to comprehend not incomprehensible things but such things as the reason can know and understand.”

*Martin Luther quoted by Hoenecke,
Evangelical Lutheran Dogmatics, ch. 42*

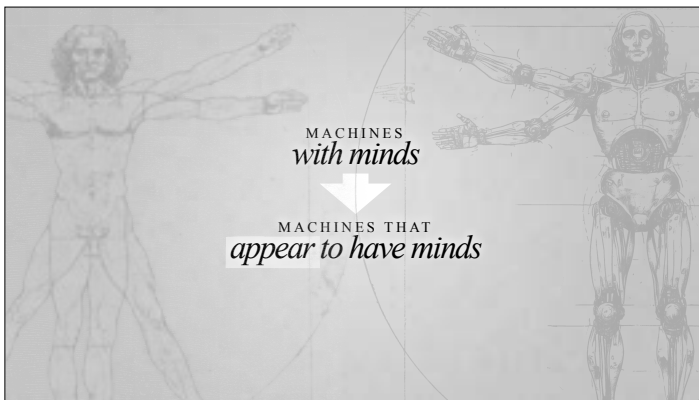


“the exciting new effort to make computers think...
machines with minds, in the full and literal sense.”

John Haugeland, 1985

“... the field devoted to building artificial animals (or at least artificial creatures that—in suitable contexts—*appear* to be animals) and, for many, artificial persons (or at least artificial creatures that—in suitable contexts—*appear* to be persons).”

Stanford Encyclopedia of Philosophy (2026)
(emphasis in original)



WHAT IS
AI?

- AI broadly understood:** systems incorporating *machine learning* with outputs that imitate or approximate human behavior.
- Machine Learning:** systems that improve their performance through exposure to data, rather than just being set up with an initial program written by a programmer. Although the original coding stays the same, the program changes parameters on its own as it works with new training or inputs.
- LLM:** A machine-learning system that imitates human speech by producing probabilistic sequences of tokens.
- AGI:** Machines capable of any human task. As such, AGI involves true human-like agency.
- ASI:** Machines that eclipse human intelligence across all domains.

WHAT IS
LLM AI?

$P(\text{token}^t \mid \text{context})$

“The dog chased the _____”

cat = 41%	$P(\text{cat} \mid \text{The dog chased the}) = 0.41$
ball = 18%	$P(\text{ball} \mid \text{The dog chased the}) = 0.18$
squirrel = 15%	$P(\text{squirrel} \mid \text{The dog chased the}) = 0.15$
car = 2%	$P(\text{car} \mid \text{The dog chased the}) = 0.02$

WHAT IS
LLM AI?

$P(\text{token}^t \mid \text{context})$

“The dog chased the frightened _____”

cat = 65%	$P(\text{cat} \mid \text{The dog chased the frightened}) = 0.65$
ball = 0.01%	$P(\text{ball} \mid \text{The dog chased the frightened}) = 0.0001$
squirrel = 30%	$P(\text{squirrel} \mid \text{The dog chased the frightened}) = 0.3$
car = 0.01%	$P(\text{car} \mid \text{The dog chased the frightened}) = 0.0001$

WHAT IS
LLM AI?

$P(\text{token}^t \mid \text{context})$

“The dog chased the frightened _____”

car = 0.01% $P(\text{car} \mid \text{The dog chased the frightened}) = 0.0001$

Note that, in order to determine the likelihood of “car” coming after “frightened”, you don’t need to know the meanings of these words at all. The system isn’t “interested” in meaning. It’s only “interested” in the probability of one token given the context, regardless of how that output might be used or understood by a human.

WHAT IS
LLM AI?

$P(\text{token}^t \mid \text{context})$

“The dog chased the frightened _____”

car = 0.01% $P(\text{car} \mid \text{The dog chased the frightened}) = 0.0001$

Further, the LLM programming does not even contain any algorithms about how language works. There’s no coding in there that says, “this is how to use a verb.” Rather, LLM AI is *only* about making predictions about what tokens follow after other tokens. It *appears* to us as language, but the LLM is *not* programmed to produce language, *just* token prediction.

WHAT IS
LLM AI?

$P(\text{token}^t \mid \text{context})$

“The dog chased the frightened _____”

car = 0.01% $P(\text{car} \mid \text{The dog chased the frightened}) = 0.0001$

With more “training” (more exposure to human-made texts), the process results in the possibility of error going down. This process is called *gradient descent*.

CAN AI
think?



Activities

OF MACHINES

- Compute probabilities
- Output tokens
- No* understanding or judgment (although well-simulated!)
- No* reasoning! (apart from token prediction)

—No reasoning!
(apart from token prediction)

$P(\text{token}^t \mid \text{context})$

“2 + 2 = _____”

4 = 99% $P(4 \mid 2 + 2 =) = .99$

CAN AI
think?

Reasoning Acts

OF THE MIND

—Understanding

—Judgment

—Reasoning

—sensations

—thoughts

—beliefs

—desires

—acts of the will

—intentionality

—*qualia*

—private access

—A *subject* or “I”

Activities

OF MACHINES

—Compute probabilities

—Output tokens

—No understanding or judgment
(although well-simulated!)

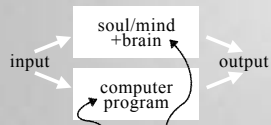
—No reasoning!
(apart from token prediction)

What would justify saying AI *thinks* or *has consciousness*?

Biblical Christian
WORLDVIEW

—The *immaterial* shapes the *material*.

—Humans are *embodied souls*.

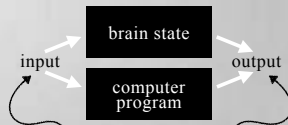


WHAT'S IMPORTANT
TO THE CHRISTIAN

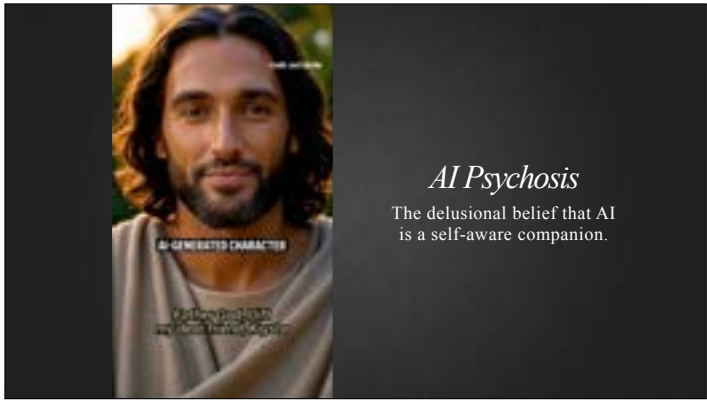
Functionalist (Materialist)
WORLDVIEW

—There is only *material*.

—Humans are only *physical*.



WHAT'S IMPORTANT
TO THE FUNCTIONALIST



But maybe you think, "I'm miles away from someone with AI psychosis. Only a small percentage of the population are in any way related to this, and certainly not me..."

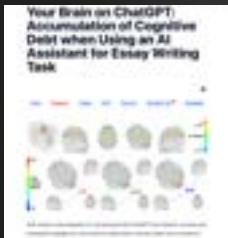
ANY SPIRITUAL/PSYCH CONCERNS WITH
talking to LLM AI?

- Lex loquendi, lex credendi.* "The rule of speaking, the rule of believing." Language conditions belief.
- Theology: *Lex orandi, lex credendi*
- Sociology: Plausibility structures
- Anthropology: Racial slurs encode stereotypes
- Psychology: Psychological terms: gender identity disorder > gender dysphoria > gender incongruence
- Illusory truth effect

CAN AI BE
think? CAN AI BE
conscious?

ANY SPIRITUAL/PSYCH CONCERNS WITH
talking to LLM AI?

ANY DEVELOPMENTAL EFFECTS OF
using LLM AI for education?



Your Brain on ChatGPT

- Use of AI has a *residual negative* effect, including:
 - Significantly lower brain activity
 - Weaker brain connectivity
 - Lower levels of engagement

cognitive offloading

cognitive offloading + effort



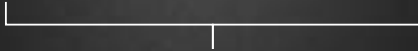
Across a variety of tasks, including mathematical reasoning and reading comprehension, we find that although AI assistance improves performance in the short-term, people perform significantly worse without AI and are more likely to give up. Notably, these effects emerge after only brief interactions with AI (~10 minutes). These findings are particularly concerning because persistence is foundational to skill acquisition and is one of the strongest predictors of long-term learning. We posit that persistence is reduced because AI conditions people to expect immediate answers, thereby denying them the experience of working through challenges on their own.

Grace Liu, Brian Christian, Tsvetomira Dumbalska, Michiel A. Bakker, and Rachit Dubey. "AI Assistance Reduces Persistence and Hurts Independent Performance." *arXiv* (April 7, 2026), <https://doi.org/10.48550/arXiv.2604.04721>

cognitive offloading

—Bloom's Taxonomy:

- Knowledge (recall of ideas)
- Comprehension (demon. understanding of ideas)
- Application (putting ideas into practice)
- Analysis (contrasting and relating ideas)
- Synthesis (combining ideas)



Offloading critical thinking includes which of Bloom's activities?

All of them.

cognitive offloading

You can use LLM AI for work *if and only if it does not diminish* your daily cognitive work. For example, you can use LLM AI to lessen the cognitive work in some areas in order to allow you to do more cognitive work in other, more important areas. But if you are using your brain less for critical thinking on average, it is the mental equivalent of less physical exercise for the body. There will be adverse effects, including:

- (1) the immediate effect: you'll get dumber, because you're not using your critical thinking, and so you're diminishing in your ability to critically think.
- (2) the long term effect: You're setting yourself up for a much higher probability of degenerative brain diseases, such as Alzheimer's (*probably*).

