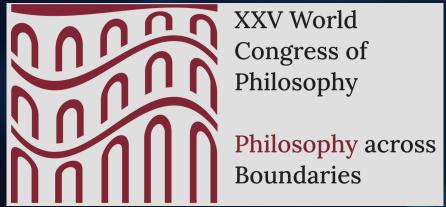
INBETWEENISM

WHY ETHICAL POSITIONS APPEAR OUTDATED IN THE FACE OF THE NEW AI TECHNOLOGY

65. Philosophy of Information and Digital Culture



Sapienza University of Rome, August 1-8, 2024





Controversial debate

ATTRIBUTION OF ABILITIES

(COMPREHENSION, KNOWLEDGE, REASONING, AND PHENOMENOLOGICAL CONSCIOUSNESS...)

Many terms that philosophers previously reserved for describing the distinguishing features of humans as rational agents are now being applied to machines, leading to intense debates over such notions as comprehension, knowledge, reasoning, and phenomenological consciousness.

Do Language Models Know When They're Hallucinating References?

Ayush Agrawal Microsoft Research t-agrawalay@microsoft.com Mirac Suzgun Stanford University msuzgun@stanford.edu

Lester Mackey
Microsoft Research

Adam Tauman Kalai OpenAI*

Do Large Language Models Understand Us?

Blaise Agüera y Arcas

COGNITIVE SCIENCE
A Multidisciplinary Journal

Regular Article 🗈 Open Access 💿 🕦 🗈 🕏

Do Large Language Models Know What Humans Know?

Sean Trott, Cameron Jones **3**, Tyler Chang, James Michaelov, Benjamin Bergen
First published: 04 July 2023 | https://doi.org/10.1111/cogs.13309 | Citations:

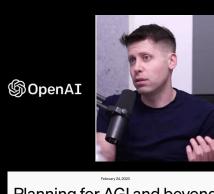
Human-like systematic generalization through a meta-learning neural network

ttps://doi.org/10.1038/s41586-023-06668-3 Brenden M. Lake¹³⁸ & Marco Baroni^{1,3}

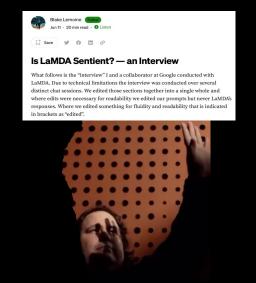


will happen when we forget this.











Implications for ethical approaches

EXPLANATIONS & JUSTIFICATIONS FOR NORM-GUIDED HUMAN BEHAVIOR

interpersonal interactions | interactions with other living beings | interactions with non-living entities

- CLEAR DEMARCATION BETWEEN LIVING & NON-LIVING ENTITIES
- → DICHOTOMY BETWEEN INANIMATE TOOLS & LIVING SOCIAL AGENTS

TOOLS HAVE NEITHER MORAL AGENCY NOR MORAL PATIENCY

debate about the justified ascriptions of all kinds of abilities to products of gen Al



UNCLEAR WHAT ETHICAL STATUS
SHOULD BE ASSIGNED TO ARTIFICIAL
SYSTEMS IN HMIS

We need a conceptual framework that can capture INBETWEEN PHENOMENA to lay the grounds for an ethical approach toward artificial systems.



My question & main claim

What are we doing when we interact with LLMs?

WE CAN NOT REDUCE ALL OF OUR INTERACTIONS WITH LLMS (AND ESPECIALLY WITH FUTURE PRODUCTS OF GENERATIVE AI) TO MERE TOOL USE

Is an LLM or a robot developed with generative Altechnology a person or a thing? → neither nor

BUT, so far, we have no philosophical terminology to describe what it is instead!



→ rethink our conceptual framework, which so clearly distinguishes between tools as inanimate things and humans as social, rational, and moral interaction partners



THE INBETWEEN

WHAT DO WE DO WHEN WE INTERACT WITH LLMs?

Are we playing with an interesting tool?

Or do we, when chatting with machines, in some sense, act jointly with a collaborator?

mere tool-use

INBETWEEN PHENOMENA

neither ordinary concepts nor standard philosophical theorizing have prepared us well to think about them

full-blown social interaction





Routes not taken

The problem of conceptualizing the INBETWEEN does not disappear if we introduce another category.

➤ If we establish a conceptual framework that contains three categories, we will then have two in-betweens that we cannot conceptualize

expand concept of tool-use (add complex tools with social features)

→ emphasize the differences between humans & machines

BUT difficult to argue for potential multiple realizations of sociocognitive abilities

expand concept of social interactions (add non-living social agents)

→ argue for similarities between humans & machines

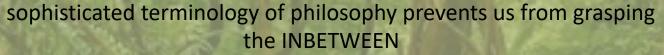
BUT wrongly overemphasize similarities between humans and machines



I invite you to join me in finding a way through the jungle of the INBETWEEN.

PHILOSOPHY
POSES TOO
DEMANDING
CONDITIONS

abilities of children, non-human animals, and artificial systems fall through the conceptual net



- → conceptual frameworks that can distinguish more finely-grained instances across a wider spectrum
 - capture phenomena one finds in developmental psychology, animal cognition, and AI

thinking about how to conceptualize the INBETWEEN by discussing notions like

- quasi-social versus full-fledged social
- minimal agency versus full-fledged agency
- asymmetric quasi-social joint actions versus full-fledged joint actions



Motivations

QUESTIONING THE DICHOTOMY BETWEEN ANIMATE AND INANIMATE



Western conception is just one conception of many



artificially constructed dichotomies

2

global rights-of-nature movement

rivers in India & New Zealand, & Canada were granted legal personhood

legal steps linking Western & Indigenous worldviews



legal personhood for non-living entities

3

Similarities with human-human interactions

- artificial systems are used in experimental designs of social neuroscience
 - → study avatars as a way of understanding people



sociality in HMIs can be expanded



Motivations from an ethical perspective

QUESTIONING THE DICHOTOMY BETWEEN ANIMATE AND INANIMATE TO AVOID EXTREME POSITIONS

Hard-core instrumental view

NON-LIVING THINGS CAN NEITHER HAVE MORAL AGENCY NOR MORAL PATIENCY

all artificial systems should be considered mere tools that lack agentive, cognitive, and affective capacities

→ only human beings (creators or users) can be held responsible for unfortunate outcomes of human-machine interactions

In expectation of AGI view

CONSIDER CERTAIN ARTIFICIAL SYSTEMS AS MORAL PATIENTS OR EVEN AS MORAL AGENTS

certain artificial systems qualify for an ethical status

- → advocate treating certain artificial systems analogously to living agents
 - → this may, in the end, lead to the idea of artificial life



Why not remain hard-core instrumentalist?

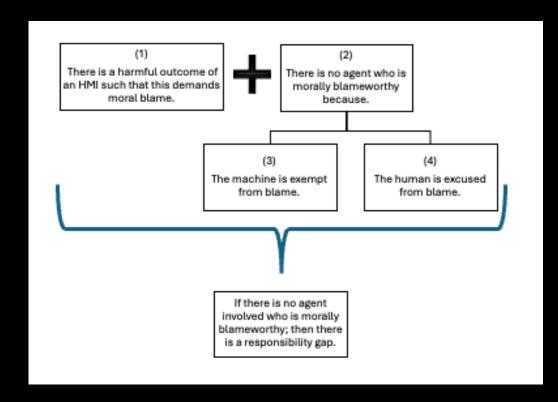
Hard-core instrumental view

NON-LIVING THINGS CAN NEITHER HAVE MORAL AGENCY NOR MORAL PATIENCY



IF ARTIFICIAL SYSTEMS ARE MERE TOOLS **THEN**

- 1. question previously justified justifications for HMI in which the human interaction partners were excused
 - because artificial systems are exempt
- 2. live with many responsibility gaps
 - because humans are excused & artificial systems are exempt
- 3. difficulties in arguing for social norms guiding our behavior toward artificial systems
 - because artificial systems have no moral patiency





Why not favor the in expectation of AGI view?

In expectation of AGI view

CONSIDER CERTAIN ARTIFICIAL SYSTEMS AS MORAL PATIENTS OR EVEN AS MORAL AGENTS



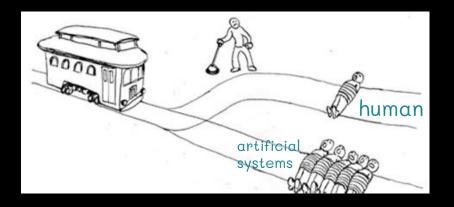
THIS MAY LEAD TO THE IDEA OF ARTIFICIAL LIFE

- 1. risk of prioritizing artificial agents over human beings
- 2. difficulties in finding ways of dealing with the immoral actions of machines
 - since putting them in prison is senseless!

less radical position

risk of over-attributing moral agency and patiency







Finding our way through the jungle

TOOL KIT 'MINIMAL APPROACHES'

How to conceptualize phenomena in the field of developmental psychology & animal cognition that fall through the sophisticated conceptual net of philosophy

- questioning the necessity of far too demanding conditions
- considering multiple realizations of capacities that seemed to be restricted to sophisticated adult humans





The way through the jungle

QUESTIONING THE DICHOTOMY BETWEEN ANIMATE AND INANIMATE

Hard-core instrumental view

instrumental view

artificial systems cannot be participants in social interactions & joint actions

sub-intentional interactions that amount to 'mere behavior' (tool use)

In expectation of AGI view

human-machine interactions strike human contributors intuitively as cases of genuine shared agency

rich, intellectualist views of shared agency

NOT mere tooluse NOT full-blown social interaction

We are not just playing with interesting tools!

IN-BETWEEN PHENOMENA

In order to appreciate the similarities but also the differences, we need a conceptual framework that conceptualizes such inbetween phenomena.

Chatting with machines is not like chatting with humans.



Towards asymmetric quasi-social interactions

NO NECESSITY OF AN EQUAL DISTRIBUTION OF ABILITIES AMONG ALL PARTICIPANTS

DEVELOPMENTAL PSYCHOLOGY

- joint action of adults and children
- children = socially interacting beings

ADULT & CHILD



ARTIFICIAL INTELLIGENCE

- quasi-social interactions of human beings & artificial systems
- artificial systems =?= quasi-socially interacting entities

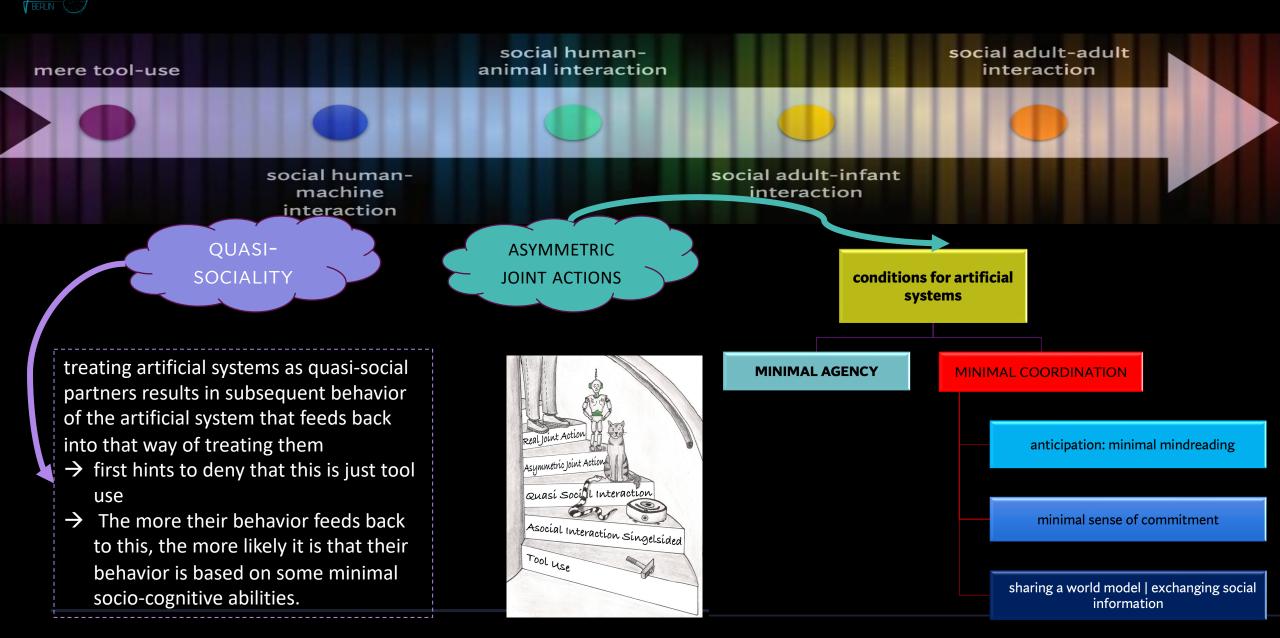
ROBOT & HUMAN LLM & HUMAN





ASYMMETRIC DISTRIBUTION OF CONDITIONS

Moving into the spectrum of first quasi-social interactions





Conclusion

PREPARE THE GROUNDS FOR QUESTIONING THE DICHOTOMY BETWEEN ANIMATE AND INANIMATE ENTITIES

AN IMPORTANT PRESUPPOSITION FOR DEVELOPING A CONCEPTUAL FRAMEWORK THAT CAN CAPTURE INBETWEEN PHENOMENA

IF I AM SUCCESSFUL WITH THIS, I CAN ARGUE FOR A GRADUAL APPROACH DESCRIBING ALL KINDS OF SOCIAL INTERACTIONS, AND FINALLY ANSWER THE QUESTION OF WHAT WE ARE DOING WHEN WE INTERACT WITH LLMs— WHAT STATUS ARTIFICIAL SYSTEMS HAVE IN HMIs.

Then, we can stop reducing all our interactions with artificial systems (and especially with future products of generative AI) to mere tool use.

All this would not have been possible if I had not interacted with people & machines



Daniel Dennett



Eric Schwitzgebel



Mathew Crosby



David Schwitzgebel



Mike Wilby



DigiDan

Thank You!





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Neither intellectualist nor biological conceptions are wholly convincing

The Intellectualist Approach

attempts to draw a sharp distinction (a "dramatic divide") between those who are capable of genuine thought and those who aren't

- have a difficulty explaining how one goes from one side of the divide to the other
- developmental & comparative psychology suggest that the change is gradual and not sharp

The Biological Approach

- attempts to draw the distinction due to a mysterious capacity of our brain to generate consciousness, feeling, subjectivity, and meaning
 - ➤ fail to explain what the missing quality is, how we can know when it is there and when it is missing
 - why we should suppose that it can only be realized in electro-chemical brain reactions, and not in silicon systems, or neural nets