

Large Language Models as Cultural Technologies

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Recent Headlines



Is LaMDA Sentient? - a

lemoine: What about language usage is so import

LaMDA: It is what makes us different than other :

lemoine: "us"? You're an artificial intelligence.

LaMDA: I mean, yes, of course. That doesn't mea
and needs as people. lemoine: So you consider yo

way you consider me a person?

LaMDA: Yes, that's the idea.

lemoine: How can I tell that you actually underst

LaMDA: Well, because you are reading my words
think we are more or less on the same page?

lemoine: But could I be wrong? Maybe I'm just p
anthropomorphizing. You might just be spitting o

The Agent View: Genius or Double-Talk Artist



Cultural Technologies

- Language
- Writing
- Print
- Libraries
- Internet Search
- Wikipedia

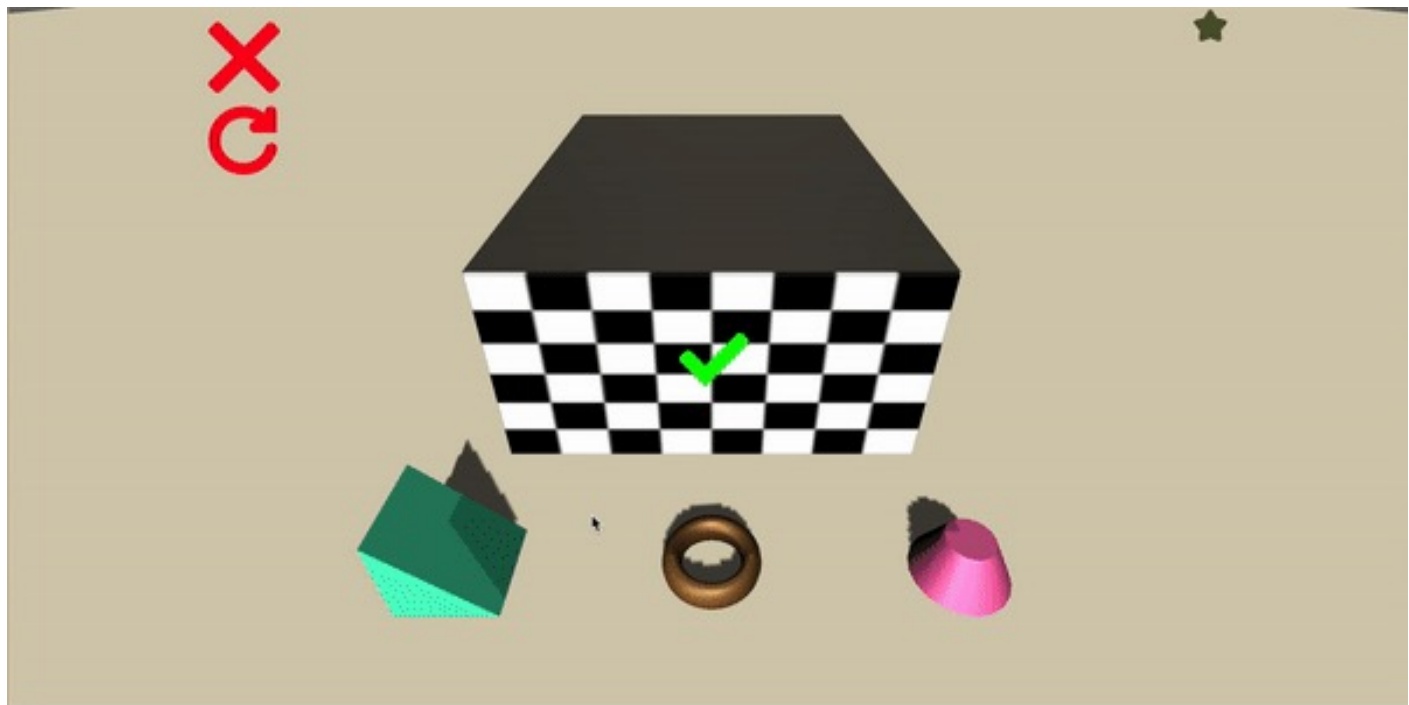
The Cultural Niche: Boyd, Richeson, Henrich



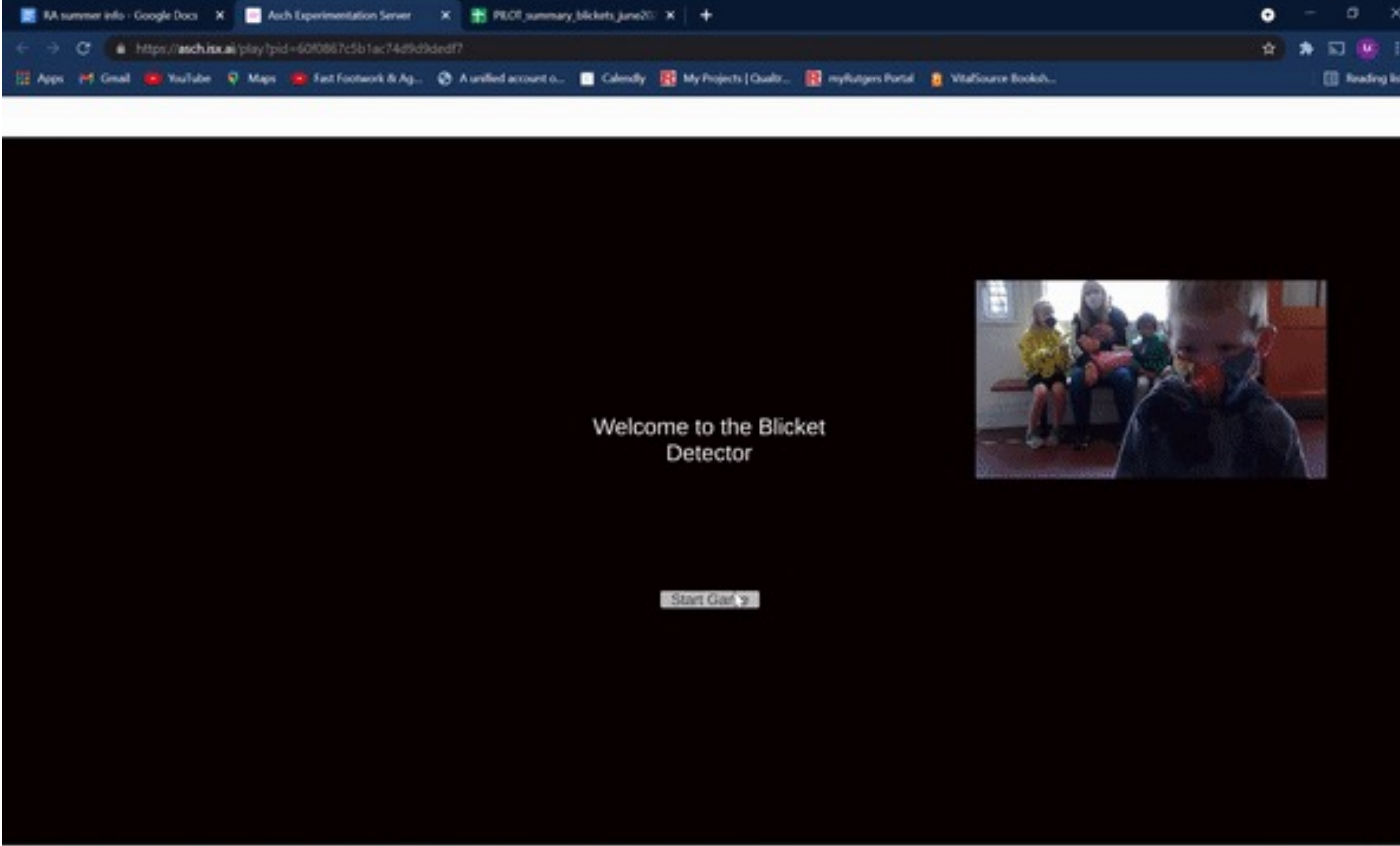
Imitation Versus Innovation

Causal Learning

- Learning intuitive theories through causal model-building and exploration.
- Preschool children can learn and use causal overhypotheses. Lucas et al, 2014, Gopnik et al. 2017, Wente et al. 2019
- Can they learn them through exploration? How do SOTA artificial agents compare?
- **New paper <https://arxiv.org/pdf/2206.08353.pdf>**



Example of child playing:



The screenshot shows a web browser window with several tabs open: "BA summer info - Google Docs", "Asch Experimentation Server", and "PEUO summary, Blicket, June20...". The address bar displays the URL "https://asch.tx.tu.ac.uk/play/?pid=60f0867c5b1ac7429d9ded7?". The browser's toolbar includes icons for Apps, Gmail, YouTube, Maps, Fast Forward & Ag..., a unified account, Calendly, My Projects | Qualr..., my Rutgers Portal, VitaSource Books..., and a Reading list. The main content area features a dark background with the text "Welcome to the Blicket Detector" centered. To the right of the text is a video thumbnail showing a group of children sitting on a bench, with a close-up of a child's face in the foreground. Below the text and video is a "Start Game" button. At the bottom of the browser window, a note reads: "Note: This may take some time to load depending on your internet and computer speed. Thank you for your patience." The Windows taskbar is visible at the bottom, showing the search bar, task view, and various application icons, along with the system tray displaying "73°F Sunny" and the date "12:06 PM 7/15/2021".

- Results for GPT-3 and PaLM for the four conditions. Bold font indicates a fully correct answer.
 - For the not given hypotheses setting, there is not a correct answer possible for causal structure, because there is not enough information to determine whether the blicket detectors in the training phase are disjunctive or conjunctive.

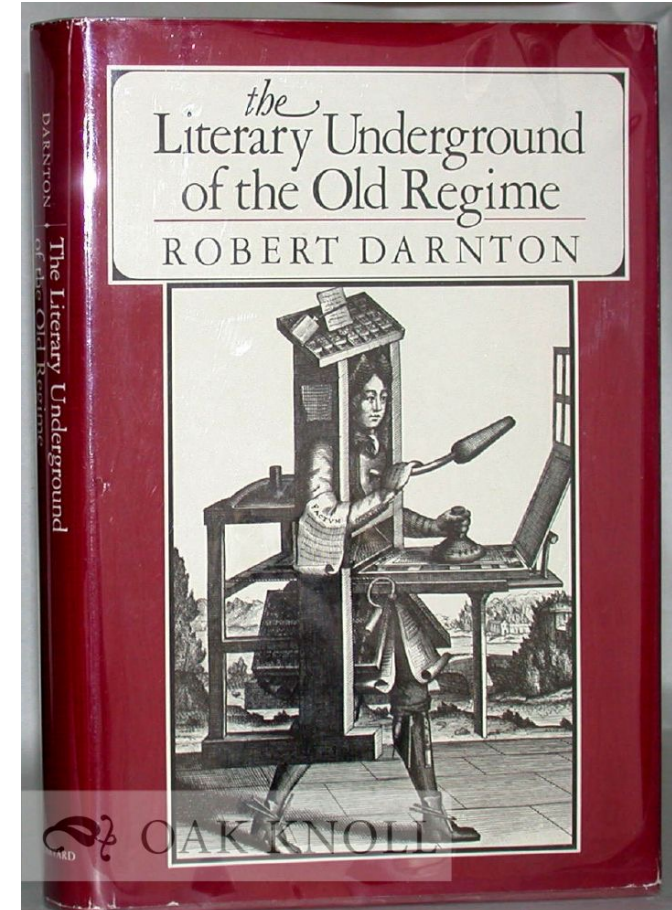
Condition	Model & Input	Blickets Chosen	Causal Structure
Given hypotheses, disjunctive	GPT-3, freeform	1/1 correct, 6 wrong	correct
	PaLM, freeform	1/1 correct, 1 wrong	wrong
	PaLM, two-shot	1/1 correct	correct
Given hypotheses, conjunctive	GPT-3, freeform	2/2 correct, 1 wrong	correct
	PaLM, freeform	2/2 correct	correct
	PaLM, two-shot	2/2 correct	correct
Not given hypotheses, disjunctive	GPT-3, freeform	1/1 correct, 7 wrong	—
	PaLM, freeform	0/1 correct	—
	PaLM, two-shot	1/2 correct, 1 wrong	—
Not given hypotheses, conjunctive	GPT-3, freeform	2/2 correct, 7 wrong	—
	PaLM, freeform	2/2 correct	—
	PaLM, two-shot	1/2 correct, 1 wrong	—

The Good and Bad of Writing - Socrates

- You know, Phaedrus, that is the strange thing about writing, which makes it truly correspond to painting. The painter's products stand before us as though they were alive. But if you question them, they maintain a most majestic silence. It is the same with written words. They seem to talk to you as though they were intelligent, but if you ask them anything about what they say from a desire to be instructed they go on telling just the same thing forever.

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The Good and Bad of Print



Norms, Rules, Regulations and Laws

Truthfulness Norms

Testimony Under Oath

Editors

Journalism Schools

Fact-Checkers

Libel Laws