## Exploring Prompts and Identities for Reasoning About the Existence of God on GPT-4

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With the development of transformer models and self-supervised learning techniques, large language models (LLMs) like Generative Pretrained Transformer (GPT) have been established. As new LLMs, such as GPT-4, were designed, these models began to perform better in many tasks due to increased data and model parameters. Researchers have tested LLMs' capabilities on various complex tasks, such as cognitive tests or comprehension of philosophical paradoxes. In this study, we focus on how it would be possible to make GPT-4 reason about the existence of God using two different methods.

Our first method is the dialectics of multiple identities. Especially when using GPT-4 (via ChatGPT), the model is conditioned to be a chatbot, so it does not respond informatively when asked about personal beliefs. To overcome this limitation, we can assign specific identities like "theist philosopher" or "atheist philosopher" to obtain opinions on different matters like God and religion. By establishing a debate between different identities on philosophical matters, we can help the model reason over different ideas. Our second method involves using a well-known LLM reasoning technique called the chain-of-thought (CoT). In mathematical problems, it has been demonstrated that GPT models perform better when given an example of reasoning for a question, rather than expecting the answer directly. We can apply CoT to construct arguments on the existence of God by introducing new premises constrained by different concepts. We demonstrate early results using various examples. Although our demonstrations do not prove that an LLM model like GPT-4 can function as an independent philosopher, these results indicate that GPT-4 excels in dialectics and creating connections with different concepts to construct arguments.

Bibliography

OpenAI, “[G](http://booksandjournals.brillonline.com/content/journals/10.1163/003188610x12589452898804)PT-4 Technical Report”, *ArXiv*, abs/2303.08774 (2023)

J.Wei et al., “[Chain-of-thought prompting elicits reasoning in large language models](https://www.jstor.org/stable/44403704?seq=1" \l "page_scan_tab_contents)”, *Advances in Neural Information Processing Systems*, 35 (2022), pp.24824-24837.