

# Initial Post

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by [Fahad Abdallah](#) - Sunday, 22 June 2025, 8:50 AM

The fast development of large language models (LLM) such as GPT-3 has provoked euphoria and fear in the scientific and technological world. As Hutson (2021) describes, GPT-3 produced by OpenAI can generate strikingly fluent text by analysing 200 billion-word patterns. As striking as its generative capacity might be, the article points out that GPT-3 does not understand anything: it can predict words but not their meaning, resulting in biased, illogical, or harmful results.

Such dangers are not imaginary. Humans tend to overestimate the amount of trust and coherence in AI-generated text because of wrong heuristics, and thus, it is challenging to tell the difference between the production by a machine and that directed by human cognition itself (Jakesch et al., 2023). This is life-threatening when this information is blindly accepted in high-leverage areas, such as healthcare or law.

The menace extends to academic integrity. The problem of LMMS abuse in scientific publications should be mentioned (Kendall and Teixeira da Silva, 2024) because of ghostwriting, counterfeit authorship, and the increasing number of paper mills. These problems question the reliability of studies and raise a pressing question of responsibility in writing supported by AI.

Another layer is provided by Gibney (2022), whose article points out that Big Tech dominates the technological industry behind LLMs and, thus, cannot be transparent to users. However, the open-source alternatives can democratise the sphere and enable researchers to audit better, control, and comprehend the tools.

Moreover, Lissack and Meagher (2024) state that ethical systems should be modified and must keep pace with technical advances. Without clear guidelines, using LLM in research threatens to destroy trust, originality, and scientific methods.

Although language models have high potential, their usage should be accompanied by effective ethical control, openness, and social awareness. Otherwise, their excellent output can entail safety, truthfulness, and equity.

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