

Viewpoint

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Why Artificial Intelligence is not An Author

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Abstract

Generative AI/chatbots provide a valuable new writing tool, but they are just software products, and software does not have a legal persona. You cannot sue, arraign, fine, imprison or otherwise punish a chatbot. This is one reason why many journals, as well as COPE, ICMJE and WAME, among other practitioners' organisations, advise against identifying AI as an author. Furthermore, chatbots produce a statistically generated language, or botfo, by applying probability to the materials they have scanned. It is a strangely dehumanised language, lacking intentionality and containing conscious and unconscious bias. Ultimately, this paper argues that we should not call chatbots authors since they are unaccountable, and can't think, judge or be jailed.

Keywords:

Authorship, botfo, chatbots, generative AI, large-language models

Can code be sentient?

When we were kids and our dolls or teddy bears made noises that sounded human or animal, we may have been thrilled by this apparent sign of sentience and believed they were alive. Glove puppets, Punch and Judy and, later, cars telling us to fasten our seat-belts or turn left at the next junction, continued this process. At some point, however, we surely conceded that the doll and teddy were just cloth, wood or plastic wrapped around a piezo speaker, that humans were animating the puppets, that computer chips were doing the talking in cars – and that none of the apparent speakers was actually alive.

This evolution continues with artificial intelligence (AI). It seems necessary to stress that AI is simply good software, and nothing more. It is not “almost conscious” – it is just code, completely unconscious and non-sentient code. Concepts such as “fairness”, “equality”, “democracy” and “rights” only apply to sentient beings, and not to software. Even though UK law has been expanding the notion of sentience in the animal kingdom down to the levels of molluscs and crustaceans,³ AI algorithms are way below that. They belong to the doll and teddy family, and not to those of the newly sentient squid or crab – and they are likely to stay there.

It is coming for our jobs

The idea that there is a “fearful response by some humans, who may perceive AI/large language models (LLMs) as a threat to human endeavour”² could be applied to almost any new technology. Remember pocket calculators? They were certainly “able to generate, in a tiny fraction of time, what takes some humans a lifetime to achieve”.² Despite the doom-saying about jobs when they arrived, calculators proved to be not really frightening. Indeed, they ended up being the new tools of the trade among the very people in

finance, engineering and education who were supposed to be the most threatened by them.

Taking this line of technological thought to an extreme, consider the lowly shovel. A shovel can help you to dig holes that would take a lifetime to excavate by hand. But, just as a shovel needs a pair of hands connected to a human brain to perform its magic, so does a calculator – and so does software. In a way, that’s the point of technology: to amplify what humans can do.

We already use all kinds of software to help us write – we use software for word processing, spell-checking, grammar-checking, style-checking, word prediction, calculation and tabulation, drawing and design...the list goes on. And generative AI/LLMs are the new tricks in the box.

Many of us will remember a sense of happy astonishment when we first saw PowerPoint (very boring now). I had the similar sensation of discovering great new fields of opportunity when encountering ChatGPT.

All in all, the menu of assistive software is getting longer and better. However, I do not consider Word to be my co-author – nor is ChatGPT or the other LLMs. This is not fear speaking or some kind of anti-AI bias.

Why shouldn't generative artificial intelligence/chatbots be authors?

With the above in mind, here are some of the reasons why generative AI/chatbots should not be shown as co-authors:

- *Shovels 1.* Chatbots have no legal personas: you cannot sue, arraign, fine, imprison, or otherwise punish a chatbot. In every sense of the word, they are unaccountable. They own nothing and are not subject to shame or pain. But those who use them do and are. This is a kind of shovel argument – if your shovel goes through your neighbour’s telephone line, there may be trouble ahead, but

nobody is going to sue the shovel. When AI does something naughty, it is the owners of the rights to the AI who are liable, not the AI itself.

It is often forgotten that software has authors and that it is usually covered by copyright, just like a poem, paper or song. However, only very rarely in discussions of generative AI are the names of those who created it mentioned. Apart from the legal implications of this silence, it is almost as if we are trying to forget that AI is software written by humans, as if it were some kind of genetically contrived life-form. Calls for the “equality” of AI/LLMs with humans seem to be a symptom of this amnesia.

- *Botfo*. Chatbots produce a statistically generated language, or botfo, which is based on text collected (with questionable legality) from the internet and other databases. What they emit depends on the application of probability to the materials they have scanned. This is not new. Over 20 years ago, you could find a ‘Dylan Thomas Poetry Generator’ online. This produced lines of text that were shaped by Dylan’s characteristic phrasing. Chatbots do the same thing. But applying rules to imitate is not the same thing as thinking. Chatbot information remains botfo, a peculiar form of language lacking anything intentional. There is no intrinsic judgement, evaluation, originality, or creativity involved. Any gaps in the ontology available to the chatbot are papered over by statistically generated inventions (“hallucinations”). Botfo is thus quite distinct from human utterance, and should not be confused with it.

Restrictions recommended by journals and by COPE,⁴ ICMJE⁵ and WAME¹ arise because chatbots produce botfo that can easily be mistaken for human utterance. To avoid misleading anyone into thinking that what they are reading is human opinion, botfo should be

identified as botfo. The means to do this automatically exist, but they are currently being withheld for commercial reasons.⁶ This is why WAME and others recommend that authors using chatbots should indicate which part of their text is botfo and which is human output.

Apart from such ethical concerns, there can be commercial considerations regarding the extent of botfo used in articles and other documents. If you are paying someone to write something for you and they submit a text that took them 10 minutes to produce with a chatbot, you may be inclined to pay them less than someone who delivered the piece after 2 weeks of research, writing and editorial polishing. This is not necessarily an ethical question, unless the chatbot use is concealed. A similar argument goes for the use of chatbots in education.

All of this would go away if botfo were always clearly indicated. Interested parties should apply pressure to AI producers to ensure that the identification technology is made available as soon as possible. In the meantime, those for whom it matters who or what is the source of a text need to establish protective regimes in their domains. This is precisely what the COPE, ICMJE and WAME guidelines, as well as the myriad rules of learnt publishers, seek to do.

- *Shovels 2*. As mentioned earlier, chatbots are tools used to assist writers. I suspect their role will follow an application arc similar to that of translation software. To date, machine translation continues to produce, at best, “a basic, if not, high, level of translation”⁷ – an amateurish approximation of accurate translation. Despite some 70 years of effort and billions of dollars in investment, machine translation is still simply not good enough to operate autonomously in a professional environment, especially in mission-critical fields such as healthcare⁸ or literature.⁷ The fears expressed in the 1970s

that human translators and interpreters would soon be replaced by machines were proved false. In fact, what has happened is quite the reverse, as the large, growing and highly profitable industry of translation and localisation shows. Human translators use machine translation as a shortcut. Thus, in my opinion, this is exactly the technological arc that can be foreseen for generative AI. Chatbots are simply a new weapon in the writer's armoury – along with all the other shortcuts and shovels.

- *Bias.* As we all know, chatbots/LLMs have built-in biases of all kinds. These biases stem from 1) biases inherent in languages and societies, 2) the biases present in the literature they have scanned and 3) the biases of the programmers who created the AI software. While most of the immanent, encoded biases are not deliberate, some of them have been explicitly programmed into the software as a kind of anti-bias. These include carefully crafted anti-biases to prevent insults to race, sex, religion, hate speech, and so on. We can feel a certain ambivalence about this. Even though we may agree with the largely liberal, Western criteria applied by the programmers, we have to acknowledge that this kind of cleaning up further distances the software from human utterance. Unfortunately, the closer the software hews to human nature, the more likely it is to show ugly human biases.

Some conclusions

Despite all the literature telling us that AI has been “trained”, that it has “learned” or “suggested”, or “proposed”, AI should not be personified. Nor should it be considered sentient, when it is not even on the road to sentience; it is just code. At this point, it's the piezo beeper in a doll, the shovel in a strong hand, Word

on steroids. Great stuff, but we don't need to consider AI/LLMs as a threat to human endeavour. Instead, we should expect to use chatbots to the maximum extent possible to help us produce publishable prose, poetry and everything else.

Because of the insidious creep of botfo, there are specific situations in which we need to know that a chatbot has been operating. This is an urgent requirement, particularly in education and research. Consequently, existing software that can pinpoint the use of chatbots should be released for general use immediately. As a tool promoting the safe and ethical use of chatbots, it should be available for free.

And no, we should not call chatbots authors: they are unaccountable, and cannot think, judge or be jailed.

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