



ChatGPT and the Educational AI Chatter: Full of Bullshit or Trying to Tell Us Something?

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What one perceives one thinks about. What one thinks about one complicates.
(Bhikku 2018)

Something is making you read each one of these words, but once you get to the end of this sentence you will get a momentary relief. A mild stress or desire pulls you along word by word as you read, until you stop, ever so briefly at a comma or a full stop. Once we reach these waymarks of punctuation, there is a tiny cessation of desire. We experience it as a collapse of the subject-object distinction. In this way, we, the reader as subject, are completely absorbed by each word in a string of successive objects. We follow the line of words as a dog does a hare. The hare may be a living creature, or it may be a machine on a track. All that matters is that the lure is convincing, as once it is, we will run (Fig. 1).

It does not matter who or what wrote these words. When we read, we cannot precisely remember what happened a few lines ago, and we have no idea what will happen in the lines ahead, but we continue nonetheless, as long as we feel progress is being made. If the words keep stringing together in a plausible fashion, we will follow. Nothing really needs to be said. In fact, nothing is. I am not telling you anything right now that you do not already know, nor giving you anything that you do not already possess. The argument of this paragraph, by implication, is that language has some quality of proliferation. We become caught up in a subject-object chase, punctuated now and then by almost imperceptible intermittent cessations. But further to this, there is sometimes a strange sense we can get, of object-subject instead of subject-object. That is, sometimes it would seem that we are not reading the words, but they are reading us.

This is not the part where I say that these words have been written by an AI. The further good news is that there is hopeful and practical advice to come, so please keep reading. But, before then, this short piece must unfold around a

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Fig. 1 Hare (Liam Costello) (CC BY 4.0)

couple of other topics that say something about the nature of AI in education as a discourse that is not just effusive but pervaded by both froth and murk. To this end, the title of this piece invoked Frankfurt's (1985/2005) oft-cited philosophical concept of bullshit.

We can see plentiful examples of bullshit in the non-truths that pervade contemporary social media-fuelled discourse (MacKenzie and Bhatt 2020). But we will here also draw on the Buddhist concept of *Papañca*, which holds with aspects of Frankfurt's (1985/2005) bullshit but can take us further, for it points to a fundamental conceptual diffusion and differentiation of language itself. Whether an AI chatbot such as ChatGPT is telling the truth or not, whether it is bullshitting us, may not be the question we need to answer. It may be telling us something, via its uncanny human mimicry, about ourselves. It may be that we are intrigued by its capacity to ramble, because that is the thing that we do so well.

Papañca—the beguiling mental proliferation and formation of language alluded to in the opening paragraph—is a Pali word said to have been expounded by Gautama Buddha in the Honeyball Sutta:

[*Papañca* is] the tendency of the mind to 1) spread out from and elaborate upon any sense object that arises in experience, smothering it with wave after wave of mental elaboration, 2) most of which is illusory, repetitive, and even

obsessive, 3) which effectively blocks any sort of mental calm or clarity of mind. (Olendzki 2006)

Papañca can provide a conceptual lens for viewing human communication at a fundamental level. Epistemologically it can allow us to conceive of relative and absolute truths in a way that the concept of bullshit is afraid to, in a way that says language is simply an entangled dream of itself. Those working against bullshit may live in the fear of such relativism, of emptiness, but as we will see we must ultimately embrace such a way of seeing if we are to behold and be held by ultimate truth.

But before we test claims of ultimate truth, we should start with some untruths and non-truths that play upon a relative reality that we know well. Hence, we start in the bazaars of EdTech (Knox 2020; Teräs et al. 2020), where vendors haggle with us over ever greater bundles of every great capability, plugged into ever vaster clouds powered by ever growing arrays of every smaller chip fabrication. AI, it seems, is everywhere now. We can say that AI is, very simply, particular algorithms created by humans over time, enacted in software and running on machines.

For a comprehensive analysis, Holmes and Tuomi's (2022) article on AI in education summarizes the state of the art well. They first situate educational AI in its histories, which are strung between poles such as behaviourism and cognitivism on one hand—well detailed in Watters' (2023) book *Thinking Machines*; and socialization and individualization on the other (Biesta 2015b). These latter functions of education, Holmes and Tuomi (2022) point out, have received much less attention by educational AI researchers than the acquisition of predefined knowledge content. Moreover, a larger problem of the nature of research into AI in education exists. Who is doing the research, in what way, and why?

The vast majority of impact studies have been conducted by the developers of the particular technology being studied (increasingly from commercial organisations), and most often with relatively small numbers of learners. (Holmes and Tuomi 2022: 560)

AI chatbots are the current fascination of EdTech, a discourse Selwyn (2016) found to be full of bullshit. In his reading, the language of transformation and progress pervading EdTech springs from marketing, hype, or simply naive hope rather than 100 years of the research into what has been found to actually transform education—which is in itself very little (Selwyn 2016). There is nothing new here I am pointing to, as we have already been warned about the 'learnification' of education (Biesta 2009, 2015a, 2015b; Bayne 2015a), when it is written in languages where teachers are replaced by robots (Selwyn 2019). This is evident in the AI in education research literature where teachers have been found to be conspicuous by their absence (Zawacki-Richter et al. 2019). Although an alternative prediction is that we will have more human teachers in the classroom of the future, not less, and they will be needed to orchestrate sophisticated AI ensembles (Dillenbourg 2016).

So will robots replace or generate teachers? Will we escape the human machine distinction altogether and reinvent ourselves as cyborgs and teacherbots, enacting

entangled pedagogies of the postdigital? (Haraway 1985/1991; Bayne 2015b; Fawns 2022).

The conversation will go on and on and in many directions. We could choose to focus on AI assessment and surveillance versus trust in students and pedagogies of restoration and reparation (Bozkurt et al 2023). We could choose to speak about the export of AI's pollution from north to south, of workers in EdTech supply chains, viewing toxic and damaging content so we do not have to. Headlines such as 'OpenAI Paid People in the Developing World \$2/Hour to Look at the Most Disturbing Content Imaginable' (Harrison 2022) have not had much impact on the uptake of OpenAI's flagship product ChatGPT which is reported to have become the fastest growing consumer product of all time (Carr 2023).

These are just a few of the stories we could tell and retell. We are 'story machines' and AI is simply trying to catch up (Sharples and Pérez y Pérez 2022). The problem is not the 'generalizability' that many researchers or scholars call for; we do not need to work harder to develop new theories. The problem is that we are theory machines (Taleb 2007). We fabulate, take shortcuts, and spin stories upon the slightest whim or germ of evidence. Most stories we tell ourselves and each other are unprovable. The social world is too complex to make anything but the most banal predictions about but, because we crave certainty, we always fall for the future and its purveyors, AI or otherwise.

What is my position here? For surely, as the adage has it, if I do not stand for something, I will fall for anything. Is this piece saying in the manner of King Lear that all is nothing? It may be that ChatGPT tells us only sweet nothings. Its beguiling and simple iteration over traditional Google search may be just that it talks to us. It performs its role of elocutionist with due flair, right down to the faux animation of the words quaintly typing themselves out in its answers. Its output is reassuring, or uncanny, because it feels somewhat like us. It seems to be able to generate content based on anything; so much anything that it feels like nothing. This is *Papañca*: 'We will discover that everything we are carrying around in our minds is nothing but extraneous matter. It has been put there by our desires, rejections, reactions, thoughts, plans, hopes, ideas, and viewpoints.' (Khema 1997: 101).

The problem with seeking ground truth, such as we might use to verify the output of ChatGPT, or the claims of educational research, is the sea of potential evidence. 'The literature' is a sprawling collective artefact of humankind that we nonetheless somehow aim to understand, review, and cut up. To do so is to try and escape an underlying feeling that it was created in the image of our own mental generative proliferation, vast and churning and only every designed to allow us to be cast about in its waves.

What is real then? According to Buddhism, suffering is a core reality. And only bodies can suffer (Costello et al. 2022). Another of the so-called noble truths that Buddhism promises is liberation. A tracing of the path from suffering to liberation is beyond not just the scope of this short piece, but sadly also my expertise or experience. It is, as they say, a story for another day. The point of this piece is to say as little as possible, to try not to proffer pills for happiness, rubrics for realization, or even tools for change. People can readily look within and without, for such things, in the buildings of their communities, in the eyes of their allies, in a park, a field, the

bark of a tree, in the noise of the traffic, steam from a cup, or anywhere else where language and its machines might drop away for a while.

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References

- Bayne, S. (2015a). What's the matter with 'technology-enhanced learning'? *Learning, media and technology*, 40(1), 5–20. <https://doi.org/10.1080/17439884.2014.915851>.
- Bayne, S. (2015b). Teacherbot: interventions in automated teaching. *Teaching in Higher Education*, 20(4), 455–467. <https://doi.org/10.1080/13562517.2015.1020783>.
- Bhikku, T. (2018). The Ball of Honey Madhupīṇḍika Sutta (MN 18). Talks Writings and Translations of Thanissaro Bhikku, 9 January. <https://www.dhammadtalks.org/suttas/MN/MN18.html>. Accessed 6 March 2023.
- Biesta, G. J. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21(1), 33–46. <https://doi.org/10.1007/s11092-008-9064-9>.
- Biesta, G. J. (2015a). *Good education in an age of measurement: Ethics, politics, democracy*. New York: Routledge. <https://doi.org/10.4324/9781315634319>.
- Biesta, G. J. (2015b). Freeing teaching from learning: Opening up existential possibilities in educational relationships. *Studies in Philosophy and Education*, 34, 229–243. <https://doi.org/10.1007/s11217-014-9454-z>.
- Bozkurt, A., Xiao, J., Lambert, S., Pazurek, A., Crompton, H., Koseoglu, S., Farrow, R., Bond, M., Nerantzi, C., Honeychurch, S., Bali, M., Dron, J., Mir, K., Stewart, B., Costello, E., Mason, J., Stracke, C. M., Romero-Hall, E., Koutropoulos, A., Toquero, C. M., Singh, L Tlili, A., Lee, K., Nichols, M., Ossiannilsson, E., Brown, M., Irvine, V., Raffaghelli, J. E., Santos-Hermosa, G Farrell, O., Adam, T., Thong, Y. L., Sani-Bozkurt, S., Sharma, R. C., Hrastinski, S., & Jandrić, P. (2023). Speculative futures on ChatGPT and generative artificial intelligence (AI): A collective reflection from the educational landscape. *Asian Journal of Distance Education*, 18(1), 53–130. <https://doi.org/10.5281/zenodo.7636568>.
- Carr, F. (2023). ChatGPT Tops 25 Million Daily Visits. SimilarWeb, 17 February. <https://www.similarweb.com/blog/insights/chatgpt-25-million/>. Accessed 6 March 2023.
- Costello, E., Welsh, S., Girme, P., Concannon, F., Farrelly, T., & Thompson, C. (2022). Who cares about learning design? Near future superheroes and villains of an educational ethics of care. *Learning, Media and Technology*. <https://doi.org/10.1080/17439884.2022.2074452>.
- Dillenbourg, P. (2016). The evolution of research on digital education. *International Journal of Artificial Intelligence in Education*, 26, 544–560. <https://doi.org/10.1007/s40593-016-0106-z>.
- Fawns, T. (2022). An entangled pedagogy: Looking beyond the pedagogy—technology dichotomy. *Post-digital Science and Education*, 4(3), 711–728. <https://doi.org/10.1007/s42438-022-00302-7>.
- Frankfurt, H.G. (1985/2005). *On Bullshit*. Princeton, NJ: Princeton University Press.
- Haraway, D. (1985/1991). A cyborg manifesto. In D. Haraway, *Simians, Cyborgs and Women* (pp. 149–181). London: Routledge.

- Harrison, M. (2022). *OpenAI Paid People in the Developing World \$2/Hour to Look at the Most Disturbing Content Imaginable*. Futurism, 20 January. <https://futurism.com/openai-paid-people-developing-world-bestiality>. Accessed 6 March 2023.
- Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, 57(4), 542-570. <https://doi.org/10.1111/ejed.12533>.
- Khema A (1997). *Who is My Self?: A Guide to Buddhist Meditation: the Poṭṭhapāda Sutta: the Buddha's Words on Self and Consciousness*. Boston, MA: Wisdom Publications.
- Knox, J. (2020). Artificial intelligence and education in China. *Learning, Media and Technology*, 45(3), 298-311. <https://doi.org/10.1080/17439884.2020.1754236>.
- MacKenzie, A., & Bhatt, I. (2020). Lies, bullshit and fake news: Some epistemological concerns. *Post-digital Science and Education*, 2(1), 9-13. <https://doi.org/10.1007/s40593-016-0106-z>.
- Oleńdzki, A. (2006). *What is Papañca?* Lions Roar, 1 September. <https://www.lionsroar.com/what-is-papanca/>. Accessed 6 March 2023.
- Selwyn, N. (2016). Minding our language: why education and technology is full of bullshit... and what might be done about it. *Learning, Media and Technology*, 41(3), 437-443. <https://doi.org/10.1080/17439884.2015.1012523>.
- Selwyn, N. (2019). *Should robots replace teachers?: AI and the future of education*. Cambridge, UK: Polity.
- Sharples, M., & Pérez y Pérez, R. (2022). *Story Machines: How Computers Have Become Creative Writers*. London: Routledge. <https://doi.org/10.4324/9781003161431>.
- Taleb, N. N. (2007). *The black swan: The impact of the highly improbable*. New York: Random house.
- Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (2020). Post-Covid-19 education and education technology 'solutionism': A seller's market. *Postdigital Science and Education*, 2(3), 863-878. <https://doi.org/10.1007/s42438-020-00164-x>.
- Watters, A. (2023). *Teaching machines: The history of personalized learning*. Cambridge, MA: MIT Press.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators?. *International Journal of Educational Technology in Higher Education*, 16(1), 1-27. <https://doi.org/10.1186/s41239-019-0171-0>.

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