

# AI is the printing press reborn

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**Online Desk:** There is a lot of hand-wringing going on nowadays about literacy. People are worried about how we can teach students productively, given that artificial intelligence can pass most tests or assignments. How are we to interpret students' abilities, or even know that what we are reading was composed by a thinking human being who possesses morality and accountability? While the reason behind these anxieties is novel, the tradition of moral panic when it comes to writing is not. As long as people have been writing, people have also been complaining about how it undercuts our humanity. It is in this context that we need to understand generative AI and what it represents as a technology.

When we see writing as a vehicle for something (such as thinking), AI becomes akin to a calculator. But when we think of writing as an end in itself (such as a perfect essay), we become completely unprepared for what is to come. All through history, transformations around technologies of literacy have usually led to revolutionary changes across societies—because we are so deeply organised by the written word.

## *Being suspicious of writing technologies*

Writing was invented in ancient Mesopotamia to keep records. People soon also understood its power as discourse—a way of speech—that went beyond bean-counting; and so we began writing down stories, poems, and prayers. People started to believe that it was a gift from the gods, an act of compassion from the divine that was also a curse. An ancient Egyptian myth goes that the god Thoth gave writing to men as an aid for memory. King Thamus, learning what writing could do, concluded that it would rob people of understanding, given that mankind is lazy and would stop learning things because they could not always fall back on what was written.

Plato, in *Phaedrus*, compared writing to painting and said that, like images, the written word cannot respond to questions. “It is the same with the written words,” Plato ventriloquised through Socrates, “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 you just the same thing forever. It provides an image of truth with truth.” The theme is the same as when a tool to make things better actually makes things worse because of how people use it.

But we know that these warnings against writing were false. In fact, we have progressed in ways the ancients cannot even fathom. We have gone to the moon, and we have cured a disease such as smallpox, hopefully forever. Our moral senses have also improved. For example, slavery, common for so long, is now beyond the pale. This is not to say that we are innately better; our darker natures continue to stalk us, and we still explode with unbelievable cruelty, apathy, and greed, through acts small and universal. And through it all, writing has been there: scientists relied on writing to work together on vaccines and Nazis kept famously detailed ledgers of the people they sent to death camps.

## *Changes in writing technologies*

While its impact is subtle, it is irrefutable that the printing press was the bedrock of the modern world. Nation states, the scientific method, Western imperialism, and modernity itself would not exist without moveable print. The printing press allowed for the mass production of written materials, which then led to wide-scale literacy and the spread of knowledge. Mass media, such as newspapers, radio, and television, further accelerated the flow of information and helped create a more informed public and organised modernity. At the same time, if Europe had normalised mass literacy through the printing press, the Enlightenment and European imperialism it engendered would likely have never happened.

The technology of the printed word did this. Empires such as the Ottoman or the Qing dynasty were not able to make use of moveable print in the same way—the quirk of the modular Latin alphabet made it a perfect fit for moveable type—and their mighty societies were superseded and then colonised.

So, what does this history mean as we countenance generative AI, stupefied and confused about what it means for our societies that are organised around writing? Our schools won't work if we can't use writing in them. Specifically, we believe we won't know what is being learned if we can't use writing to test it. "Students will cheat," we throw up our hands, "because students are lazy."

AI is an impossible problem if you think of writing as the end. If you think our goal is getting students to produce a text that is correct and marks educatedness, I'm sorry to say that this is now impossible to guarantee in the school setting.

Teachers might ask students to write out answers by hand in exact booklets, but that would mean robbing them of learning how writing functions in the world. The educated need to write in print or digitally, and students won't learn how if writing in school means only writing by hand. Some have also suggested that we assign essays as homework and then ask students questions on their composition. This won't work because students could just ask AI to compose the texts and then read those texts to prepare their answers. It would just double our work, without stopping any student wanting to use AI to compose their assignments.

This problem of AI and writing, however, disappears if we think about writing as a means to an end. AI can write generic compositions on ideas well enough; but it cannot compose specific, task-based texts regarding real world situations. Any writing by AI, after all, is not a real thing, but a simulacrum of real speech. Furthermore, the longer I use AI tools, the clearer it becomes to me that while AI can compose sentences and paragraphs cohesively and correctly, its overall compositions are incoherent. AI writing is unthinking writing—because AI *can't* think. Like Plato's picture, it will just keep telling you the same thing again and again, forever. Given the nature of large language models, it cannot be otherwise.

So, writing as a form of thinking and a way to engage with the world is safe, and will remain so. Furthermore, AI's capacity to parse information quickly and act as a tool to help us think is immensely useful to the task of writing. We should teach students to use it and show them that AI can't actually write, but it can help us read and help us think, which in turn will help us write better. We can now jot down our ideas and use AI tools to get suggestions on how we might develop them further. We could use AI to read difficult texts and understand them better. We can provide an AI tool with our own drafts and ask for ways to build on what we have written (considering its suggestions as a thread to start brainstorming with, rather than as correct feedback.)

Artificial intelligence is the printing press reborn. We need to teach its uses to our students the right way and learn how to adapt to the new context it represents. If we don't master this tool, we risk being unprepared for the new technological world that is approaching us apace.