Editor's Note

ChatGPT, and the future of technically embodied writing

Future generations are likely to remember 2022 as the year when OpenAI released ChatGPT (Chat Generative Pre-trained Transformer) to immediate, broad, and profound impact. Even those who had previously regarded other AIs as being too specific or professional to have any direct relevance to their lives began to accept and appreciate ChatGPT (referred to hereafter as GPT) with open arms for two main reasons: First, its general applicability to a wide range of human activities and concerns along with its quick and efficient handling of paperwork and processing of information. Secondly, its two-way interactive nature, as indicated by the use of name "Chat". These two functions combined together render a customized intelligence service that satisfies our needs like a well-trained servant or a secretary. With GPT, we do not need to exert efforts to learn, think, and write. We simply make demands, and the job is done right on the spot. GPT takes care of all the necessary work and we reap and enjoy the benefits. What a wonderful world it is! This is the 21th century version of a paradise regained.

It goes without saying that GPT is not an unadulterated blessing. Like any new technological advances, there are mixed feelings between promises and worries, between visions of utopia and dystopia. A particularly familiar image is the formidable one of general AI or super-intelligence that far surpasses humans, as most science fiction (SF) films tend to portray a bleak future. Among the AIs that have been released thus far, GPT appears to most approximate a general AI, and the fact that we can communicate with it is exhilarating. It can generate meanings and texts in a manner similar to that of humans, but with much faster speed than ever dreamed of. We now live in a world where we might soon expect machines to write as well as or better than many humans. The bad news is that such advancements in GPT will replace humans in the job market, causing millions of them to become unemployed.

Since we have only recently begun to use GPT, we do not know how it will develop or what kind of unexpected issues will challenge us. However, the current discussions are overly preoccupied with the problems of distinguishing AIs from humans and comparing their performance intelligence. For example, many scholars argue that AI—no matter how quickly it compiles and processes information—does not understand what it does and lacks first-person consciousness, as John Searle demonstrated long ago in the Chinese room experiment. I fear that such an approach is too human-centered and ridden with anxiety that AI will threaten human supremacy.

This essay addresses some issues that have thus far not been mentioned in the avalanche of diverse discourses. There has been surprising silence about the fact that, despite suspicions of plagiarism, GPT democratizes writing, similar to what the camera did to image capture at the end of the previous century. This silence is not fortuitous but constructive, since writing has long served to discriminate elites from non-elites. Since premodern times, elite intellectuals have monopolized writing; this has served to justify bureaucracy, such as in systems of selecting government officials through written examinations. Even modern education is no exception to this trend: Higher education is only granted to those who can afford to spend extended periods learning to read, write, and think. Moreover, written exams have served as the primary means for educational institutions to sort out more qualified individuals from less competent individuals. Any discussions about the meaning of writing would be incomplete without considering these ideological and institutional functions that writing has served for so long. With this background, it is unsurprising that many academic institutions have opposed the wide use of GPT writing, taking it as a threat to their existence. Indeed, more than a few professors have raised alarm bells, warning that GPT writing will ruin the goal of higher education; as students write essays using GPT, these professors contend that their writing skills will be impoverished, and that a downward leveling of intelligence will follow. Those raising such alarms tend to demand that colleges ban GPT writing.

However, I believe that such preventive measures are not desirable ways to handle GPT writing, and that they will not be effective in the long run. What we need is to change our notion of writing from an individual intellectual work to a collective one. Writing is not a performance of human intelligence alone,

but one conjoined with technological apparatuses. My personal story may help illuminate how deeply entrenched technology is in intellectual work. In the late 1980s, when I was temporarily living in the U.S.A., I discovered to my surprise that I was very good at arithmetic. Back then, Koreans were recognized worldwide for their excellent performance in mathematics, and especially in mental arithmetic. Although I was not as good as my classmates in in my home country, I found myself excelling at this subject compared to my classmates in the U.S.A. However, my pride did not last long, as I soon discovered that my new classmates did not feel it necessary to do arithmetic mentally; instead, they used electronic calculators every time. They seemed to regard calculation as a manual job that was tedious and should be mechanically performed by a mindless machine. In outsourcing arithmetic to a machine, they were free to do more intellectually demanding work. After all, how could citizens of ancient Greece devote themselves to philosophy if they, rather than enslaved people, had to do all the manual labor themselves? The point I want to make is that the advancement of AI technology has made even writing mechanical, thus divesting it of the traditional aura that has been attached to it. GPT has therefore contributed to undermining the boundary between mechanical and intellectual labor or between individual and collective work.

To put it simply, writing is, rather than being reducible to a single individuality, a collectivity. Roland Barthes and Michel Foucault, during the heyday of structuralism, dethroned authors from the pedestal of human creativity and reduced them to discursive function. Barthes preferred the humble denomination "scriptor" to the pretentious word 'author'; if the author authorizes his writing with the first-person subjectivity "I," then the scriptor remains anonymous behind his writings. Truth is with the scriptor, because the true author is language, not a person with flesh and blood. What is essential for writing is the pool of language. Here, I think we need not mention the historical and ideological fact that power has always monopolized writing, excluding the uninitiated from its realm.

Moving on to further our discussion, we need to return to the calculator and examine its relationship with the user, asking, "Can we separate a human agency from the calculator he or she is using?". It is a mistake to take them as independent entities whose identities remain the same whether or not they are coupled. Consider those who are habituated to doing arithmetic with a

calculator. Without it, they would be disabled and paralyzed, not able to function as an independent agent. They need a calculator to fully perform the work of cognition. Extended cognition is a theory to explain such a case, the famous example of which is Clark and Chalmers' thought experiment. They imagined two fictional characters, Otto and Ingar, who simultaneously visit a museum. However, Otto, who is an Alzheimer's patient with memory loss, relies on his memory notebook to find a way to the museum, while Ingar only uses her memory to do so. According to Clark and Chalmers, the fact that Otto's memory is in his notebook does not make his cognition inferior to or different from Ingar if the condition is satisfied that it is constantly and immediately accessible to Otto. This means that Otto's notebook is not just an external means of recording his memory that is fungible with others; it is a part of his mind. In other words, the mind does not need to reside solely within the boundary of one's body; it stretches out into the world.

Soon, GPT—like Otto's notebook—can be an extension of our body and mind. Remember, Otto picks up his notebook whereas Ingar consults with her mind; the material notebook is equivalent to the invisible mind. It is the same with calculators and their users. When a calculator user performs arithmetic work, all they do is press the keys. The keys, once pressed, automatically transform themselves into arithmetic work, as GPT does questions into answers. It is a mistake to regard this coupling of the body with technological apparatus as a recent phenomenon, since our body has always combined itself with other materials to become a more cultured, disciplined, or habitual body. As was emphasized by Aristotle and later endorsed by Pascal, we train our natural body to grow into a habitual body with particular configurations and capacities with the repeated performance of the same activities. For example, a boy grows into and becomes a carpenter, a warrior, or a writer by following his given training. Of course, the fact that our profession is writing does not guarantee that we have the same body makeup. Writers have diverse bodily structures depending on the cultures and technical apparatus they embody: Charles Dickens had the body optimized for a fountain pen, while Korean men of letters had their bodies customized for calligraphy. Of course, the contents of writing are inseparable from the instruments used. The image of an autonomous writer independent of everything other than their thinking is an illusion. Without the appropriate devices, we feel paralyzed, as Otto did without his notebook. We can imagine

someone so habituated to using GPT in their writing that they cannot write without it. Our mind is extended into the computer, keyboard, office, and books we frequently consult.

One of the discoveries arising from the widespread use of ChatGPT is the realization that writing is a collaborative process rather than the solitary work of a distinctive individual. Wittgenstein argued that there is no private language, and writing—like speaking—is a game of communication based on a shared vocabulary pool. While we must adhere to the rules of syntax and appropriate discursive practices, writing involves choosing, combining, and deploying materials from this shared pool. In academic journals, there are specific rules and formats, styles of expression to be followed to publish. By yielding ourselves to these rules, we gain freedom. We should avoid the temptation to place too much value on the ideal of freedom while discounting linguistic constraints and the common linguistic heritage. When we write, the act of writing shapes the writer; the writer is an epiphenomenon of writing. We write within a tradition that is inextricably linked to the surrounding community.

From the beginning of this essay, I have emphasized that writing is a practice that involves multiple embodiments. As is suggested by Haraway's term, it is a cyborg practice where the writer's body is coupled with technological and instrumental devices. It is common knowledge that we must read a lot of codified canon texts before producing our own. Still, another aspect that is often overlooked or deemed too technical is the need to learn typing and computer usage before writing on a computer. Being a good writer implies proficiency in computer use; the personal computer becomes so integrated with the writer's body that it feels like an extension of oneself beyond conscious awareness. Only those clumsy or unfamiliar with it remain aware of their typing hands and keyboard, as it has yet to fully integrate into their writing process. Before achieving this familiarity, the computer feels alien.

Another truth that GPT reveals is that the line separating our personal ideas from others is not rigid but flexible, for they constantly interact and compromise with each other. Indeed, writers continuously struggle to achieve originality, for this is a rule of writing in the modern world where people ignore the old but only look for new things. However, originality is neither the essence of writing nor its ideal. Too much originality can interfere with the possibility

of communication. And it is well-known that writers before modernity did not seek originality but instead aimed for an uninterrupted continuity of traditional wisdom and stories; knowledge was communal and collective. ChatGPT approaches a return to the pre-modern convention of writing.

As a practice with technical embodiments, writing is intricately connected to a complex network of text production. One of the most influential factors in this network is the pool of knowledge and rules of textual formations, such as syntax, rhetoric, and logic, which is generality that is not reducible to an individual subject. They are a mobile army of names, concepts, and theories. It is an individualistic ideology to explain good writing performance in terms of how much language one has at one's fingertip. As mentioned above, we have to be owned by language before we own language; the condition for our mastery of speech is our obedience. As such, my creativity is not as important as it should be, because the pool of linguistic resources is public, general, anonymous, and unidentifiable. ChatGPT is an exemplary case. It does not have the first-person perspective. The subject of AI discourse is a generality, not a unique individuality. When we use AI, we dive deep into the anonymous sea of information to gather some treasures and then subjectify them by attaching our names.

This essay must emphasize again that ChatGPT does not have the first-person perspective. ChatGPT, did not say with first-person subjectivity that "I think I generate responses based on patterns and information." Of course, it uses I when referring to itself (ChatGPT). However, its subjective status, i.e., the conventional form of the system's self-reflexivity, should be differentiated from that of human writers who know what is going on. However, this absence of first-person subjectivity is not the reason we deplore and mourn. The contrary is the truth. We can depend on ChatGPT because it does not represent a subjective opinion but the general opinions of the many, the Heideggerian das Man. Of course, as many have complained, there are currently a number of writings by ChatGPT that are biased, racist, sexist, and Eurocentric. However, such biases are not exceptional but generally reflect commonly held ideologies. This means that the source of such prejudices is none other than ourselves, so this should not be a reason to reject the use of ChatGPT. It knows as much as we know but over broader issues than humans. Is the pool of knowledge not dropped from heaven but generated by the community of human knowledge?

We will soon use GPT for our writing just as we use calculators for arithmetic. We can be coupled with it as Otto with his notebook or people who cannot paint with cameras. The analogy of a camera is more revealing than a notebook, because historical records are abundantly available that show how people at the end of the 19th century reacted to this new technology that depicted nature more accurately than paintings. Most portrait painters complained about and resisted the new invention; cameras replaced their jobs and rendered them obsolete. However, the benefits brought by cameras were immense, especially for those who did not know how to paint. They no longer needed to learn or practice painting to have pictures. All they had to do is push a button, and the image was ready for them. The desire to capture a picture thus came true. The gap between desire and its fulfillment narrowed almost to nothing. This democratized paintings. We are now witnessing the democratization of writing and the end of the privileged monopoly of intellectual elites.

To conclude, what is truly revolutionary about ChatGPT is that it has occasioned the reversal of the traditional hierarchy between reading and writing; education always begins with cultivating reading ability and ends with writing proficiency; writing has long been at the highest rung of the educational pyramid. Reading is the consumption of knowledge produced by canonized writers. Students who wanted to take writing as a profession had to begin their careers by imitating and internalizing the styles and themes of classical texts, as Alexander Pope advised in "An Essay on Criticism." GPT reversed this recommended order of reading and writing. It makes writing mindless and automated; it is not the human subject but the program itself that generates text on and on, on getting order. Writing in this way does not require any effort on the part of the human agent. However, reading is a different story. The texts produced by the GPT are not self-sufficient but require human reading; otherwise they disintegrate into nothing. It is like a balloon that bloats and floats only if infused with hydrogen. There is a curious twist in the relationship between the text and reading. The content of the text is empty if not completed by the act of reading. Though such a transvaluation is not unusual or brand new, it is what reader response theorists demonstrated in the late 20th century. The difference is that their theory now becomes a reality. Human users have to bring to life meanings of GPT-generated texts through the act of reading, meanings which otherwise would remain only potentialities not realized. It is then

essential for us to know how to evaluate its texts and to correct or revise them whenever necessary. If GPT writes most of the body of writing, it is the reader who gives it a finishing touch. The reader is also a reviewer, an editor, and a critic; the boundary between reading and writing is flexible. Again, the writing is not the job of a single lonely author, but a collaboration in an assembly of many human and non-human agents. All writings will become cyborg writing, in which reading and writing are fused to become a new unity of meanings waiting to be revised by another reading and writing. All such reading and writing sill contribute to an information-based discursive community; what is essential is not a series of great authors who stand out like morning stars on the shoulder of non-conspicuous men of the street, but anonymous readers and writers whose identities GPT erase or neutralize for collective intelligence. This discursive community will come to comprise a cumulative multitude to which individuals merge in such a way that they lose their identities. Everything we write and read flows into the sea of information and back into us. GPT writing, human reading, and writing co-constitute; we become GPT as much as GPT becomes human. In such a two-way interaction of transforming each other, we must nullify and cancel out biases, racism, hate speeches, sexism, and any prejudices to build a world of shared truth. In *Crisis of European Sciences and Transcendental Phenomenology,* Edmund Husserl lamented the loss of such an everyday world, the lifeworld. It would not be too much to hope that human-AI collaboration contributes to the designing and building of such a lifeworld soon.

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