I thought that an appropriate way to start this review would be to ask ChatGPT about the topic under discussion. So, I entered the following prompt:

What is the relation between AI language-learning models and creativity?

Here is the machine’s answer:

Artificial intelligence language learning models can be trained to generate text, but their output is limited by the data they have been trained on and the algorithms used. While these models can produce creative output in the sense that they can generate novel combinations of words, they lack the human-like ability to generate truly original and imaginative ideas. They do not have a creative consciousness, consciousness, personal experiences or emotions that inspire human creativity. In this sense, AI language learning models can be seen as tools for generating text, but not as sources of creativity in their own right.

This response, while strictly speaking accurate, is frankly disappointing. It gives the sense that someone has gotten too ChatGPT, domesticated it, and turned it into nothing more than an online encyclopedia. Then again, perhaps it’s my fault for asking such a bland, predictable question—precisely the kind one would open an encyclopedia to answer. Why, given such a prompt, should the AI give any “thought” to the question of what makes an idea “truly original and imaginative”; or what a “creative consciousness” is; or whether, as many avant-gardes have asked, there are sources of human creativity other than “personal experiences or emotions”?

So, I tried something a bit more to the point:

How do AI language-learning models challenge our understanding of “human creativity”?

Again, the response is underwhelming:

All language learning models challenge our understanding of human creativity by demonstrating that some tasks previously thought to require human-level creativity, such as generating novel text or poetry, can be performed by machines with a high degree of fluency and originality. This raises questions...
about the nature of creativity and whether it is unique to humans or a product of the computational abilities of the brain. However, these models are still limited in their capacity for truly autonomous creativity, as they rely on huge amounts of human-generated data and are ultimately only as creative as their training data and programming allow them to be.

This is getting a little more interesting, though—if tasks previously thought to require human-level creativity can be performed by machines, can’t we assume that these machines will continue to encroach upon the “previously thought” amid ever more frantic attempts to hold on to some “genuinely human” slice of territory? Following a long history of apotropaic but ultimately empty phrases like “truly autonomous creativity,” once machines produce works indistinguishable from those thought to exhibit “truly autonomous creativity,” what then? Do we claim that the machines have yet to acquire really, really, actually, truly human creativity? And even given the similitude of human and computer-generated products, if we try to drill down and identify the “inner workings” of mind, consciousness, emotions, experience, or whatever, are we not going to find ourselves analyzing and dissecting those inner workings to see exactly how they “work”? And, in that case, have we not begun to conform our own understanding of the “authentically human” to the terms of the technology we want to distinguish it from? And has it ever been otherwise? To take one fairly obvious example, it’s hard to imagine that the notion of the human mind starting out as a “blank slate” had nothing to do with the emergent print culture within which anyone learning to write was confronted with blank slates to be filled.

We already have quite a few creative artists moving us beyond or maybe through these impasses and paradoxes. Sasha Stiles’s book of poetry Technelegy has become a bit of a sensation; K Allado McDowell has several books written “in collaboration” with GPT-3 (including the forthcoming Air Age Blueprint); and there is the book under review here, My Life as an Artificial Creative Intelligence, by Mark Amerika, a longtime experimenter in fiction, media, and multi-media. Amerika, steeped in traditions of the avant-garde, is far less invested in notions of “intention” and “human creativity” than many, and I would suggest reading his book as organized around the disruption of the author function by what he calls “onto-operational presence.” Such a concept helps us to acknowledge, in the field of writing studies, that we are “always already” technological and have always been constituted by our tools. Do we not, as language users, also rely upon “large amounts of human generated data”? What else would we call the commonplaces, formulas, and statistical relations between words used in various degrees of proximity to each other that any speaker or writer depends upon and “feeds back” into? Indeed, this might be a good time to brush up on post-structuralist literary theory and remind ourselves of the questions it raised regarding textuality and intertextuality, arche-writing and the death of the author.

Amerika is working with GPT-2, an earlier iteration of AI language learning, but in a way that I think is far more interesting than the question-and-answer format ChatGPT seems to encourage. GPT-2 and then GPT-3 are language prediction models—you introduce some language and it produces what would “most likely” follow that text in the continuation of the discourse. In other words, it provides you with a reading of the text fed in in terms of a kind of “average” language user (while allowing you to adjust how predictable you’d like the continuation of your text to be). Therefore, the more unpredictable your writing, the more “interesting” the range of continuations of it you will receive. If you think this way, you are
thinking about your own writing and thinking as always already technological, and the
technological as very much a source of human creativity. Amerika comes back to this
argument throughout the book, interspersed regularly with “samples” of his own discourse
“remixed” through GPT-2. This remixing leads to the transformation of one’s own language,
and we can follow the development of new vocabularies through Amerika’s book as he takes
up the responses of the AI. In one example of Amerika’s linguistic performativity and his
reflections upon it, he observes that

[t]o scent the non-human-in-me opens up a possibility space for my own
customizable language model to feed-forward a psychic trajectory
remixologically inhabiting the compositional moment. The fact that “I can
relate” to the generative language processing modeled by GPT-2 somehow
makes me feel more real. As I continue fine-tuning my relationship with GPT-
2, I further train myself to scent the non-human-in-me becoming a vibrant
thing-in-itself (me-the-other). In some ways, the non-human-in-me feels more
vibrant than the phony self that portrays a professional workaholic who
suffers from imposter syndrome. It—the non-human-in-me—feels like an
embodied animism “passing” as a carbon-based form of human life continually
training itself to become an attuned onto-ontological presence, one that knows
what it likes and senses that it just may need to trigger the next creative act.
How it knows it knows not. Yet when the opportune moment arises, it takes
hold of whatever source material is being transmitted—whether it comes
from inside or outside no longer really matters—and feeds it forward into the
forever shape-shifting networked Metaverse. This feed-forwarding
mechanism of agency operates in perpetual remix mode and drives the
creative advance into novelty. It is an adventurous mode of discovery that
transforms our nonhuman information behaviors into the auto-affective
performance of an otherworldly aesthetic sensibility. This otherworldly
aesthetic sensibility is all that matters as we generate our alien outputs into
new poetic territory. (p. 94)

There’s no attempt to preserve what is “genuinely” human from the “alien” technology here;
rather, there is the becoming alien to oneself by participating in the circulation of discourse
through the world, throughout history, that is now accessible. It was humans, after all, who
wrote all the text comprising the data used in the AI models; but, then again, will our own
language still be human as it is fed into the database and remixed, recycled and recomposed
innumerable times in response to the “searches” of others? Algorithms are designed by
humans and also troublingly remind us that they are possible because humans can be
interpreted and their actions predicted fairly well using probabilistic models. Amerika
argues for taking our participation in this system as a new form of presence, of (retrieving
an old, existentialist, perhaps “Beat” notion that Amerika is often drawn to) “being in the
moment” or “going with the flow.” There is a kind of transcendence to this otherworldly
aesthetic sensibility that has us intuiting and enacting emergent selves that, like any self, is
not quite ours, comprised as it is out of materials of the earth, the past, and the massive
infrastructure of what Benjamin Bratton (2016) called “planetary-scale computation” that
we are only passing through.
I would recommend bringing Amerika’s book (along with the others mentioned above, and others not mentioned) into the classroom, at any level. One question that has been asked regarding the use of AI in the writing classroom is whether students should do some writing on their own, free of AI, or perhaps dive right in and engage AI from the start. Perhaps writing will eventually become a process of revising text produced by our “customizable” AIs. But in that case, as, for example, Anna Mills (2023) has been arguing, how would students acquire the kind of literacy that enables them to see where and why the AI-generated text needs to be revised or transformed? Without some, let’s say, “seed-writing” on the part of students, it is to be feared that modes of literacy crucial to critical thinking will be lost. On the other hand, I recall a little “trick” the composition theorist William E. Coles (1988) played on his students, as reported in his *The Plural I and After*: he took a sentence from each of the drafts submitted by his class and recomposed them into a new paragraph, and then distributed the new text and asked them to identify their own respective sentences. Needless to say, perhaps, they couldn’t. How distinguishable are the student texts you receive? Don’t they often appear somewhat generated by processes and logics outside of the students’ own agency? Is it more productive to think of students as “thinking on their own” or as reworking existing texts, formulas and canons? If so, why? Where is this “thinking” if not in some engagement with texts accessible to the student’s “memory” and “programmed” by their many interactions over many years with educational institutions?

Late in the book, Amerika begins engaging with/remixing the work of Clarice Lispector and acknowledges that leaving behind one’s human organization does entail taking calculated risks—which for the avant-garde creative artist is something they know they must accept if, as Clarice says, they hope “to bring the future to here or . . . bring the future to now. The auto-affective “elasticity” that Clarice keeps referring to in Água Vita as a way to access the future, right now, is an acquired cosmotechnical skill. Clarice, like me, has to first train herself to automate the process of writing as discovery. And the best way to do that is to study how others have achieved this psychic dexterity. (p. 203)

Here, it seems we have come back to more familiar, while undoubtedly valuable, practices of studying and imitating those great writers of the past who are worth emulating. But he goes on:

This [psychic dexterity] requires the ACI [Artificial Creative Intelligence] within every nonhuman creative actor to proto-algorithmically instruct the language artist cum language model to access the intuitive vibe of other clairvoyants, philosophers, poets, performers, and scientists who have trained themselves to discover patterns of being-unmaking. (p. 203)

How would our pedagogies change if we proto-algorithmically instructed ourselves as language models to instruct our students to proto-algorithmically instruct themselves as language models (or language-learning models) to train themselves as “critical thinkers” discovering such patterns? Would they believe us if we told them that this is the way of becoming “clairvoyant” (a term so out of use that today’s students may not have ever heard
it)? It would involve initiating them into the necessarily mysterious and mystical process of finding their own words in the words of others, and finding their own words to be other.

References