ENG 101-0902 Course Schedule

Fall 2023/ Prof. Barnes

Tu/Th 9am-10:40am/ Fiterman 406

"Good writing is supposed to evoke sensation in the reader—not the fact that it is raining, but the feeling of being rained upon."

- E.L. Doctorow

"That's the magic of revisions—every cut is necessary, and ever cut hurts, but something new always grows."

- Kelly Barnhill

Unit 5: The art of writing your own story

Final Exam Preparation

Worksheet Poet Ali's "The Language of Being Human"

Pre-Writing

1) How many languages would you say you speak? List them. How did you learn them?
2) Do you speak differently around your friends than around your family? Should these count as different "languages?" If we use different body language at home than we do a school, should these count as two different "languages?" Recalculate the number of languages you speak.

Breaking Down the Text

1) Poet Ali begins by asserting that "we speak far more languages than we realize" (1). What does he mean by this? Do you now think you speak more languages than you might have realized?
2) According to Poet Ali, while we are "often aware of what language does when we speak somebody's language, what it does to connect," we tend to overlook "what it does when you can't speak that language, what it does to isolate" (2). How can an inability to speak a language lead to feelings of isolation and exclusion? Have you ever had this experience?

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5) Laughter, Poet Ali argues, is "one of the most common languages in the world" (3). How might laughter qualify as a language, and why would Poet Ali describe it as one "that needs no explanation" (3)?
6) In Poet Ali's judgment, languages are important "because they give access to new worlds, not just people" (3). How do languages give us access to new worlds? Have yo ever used language to access a new world?

7) Poet Ali contends that "the language of experience" is "one of the most profound languages" (3). What is the language of experience, and what are some of the examples he gives? What languages of experience do you speak?
8) Although we tend to think of devices like our smart phones as tools for staying
connected with others, Poet Ali suggests they can to lead to "the language of disconnectionhuman disconnection" (4). Explain what he means. Do you agree with him? What have you experienced?

9) Why, in Poet Ali's estimation, is "the language of being the minorityone of the mos important languages you can ever speak in your life" (4)? Is this a language that you also speak?
10) Among the questions posed by Poet Ali toward the end of his talk, he asks, "Why is it that the most spoken-about language in the world is the one we have the toughest time speaking or expressing?" (5). What language is he referencing here, and why do we have such difficulty speaking or expressing it?

Borough of Manhattan Community College Department of English

"The Language of Being Human"

Poet Ali

Poet Ali: Hi.

Audience: Hi.

PA: I want to ask you guys a question. How many languages do you speak? This is not a rhetorical question. I actually want you to think of a number. For some of you, it's pretty easy. Inside your head, you're like, "It's one. You're speaking it, buddy. I'm done." Others of you maybe are wondering if the language an ex-boyfriend or ex-girlfriend taught you, where you learned all the cusswords, if it counts -- go ahead and count it. When I asked myself the question, I came up with four, arguably five, if I've been drinking.

(In Italian: With a little bit of wine I can speak Italian.) Cheers!

But on closer examination, I came up with 83 -- 83 languages, and I got tired and I stopped counting. And it forced me to revisit this definition that we have of language. The first entry said, "The method of human communication, either spoken or written, consisting of the use of words in a structured or conventional way." The definition at the bottom refers to specialized fields, like medicine, science, tech. We know they have their own vernacular, their own jargon. But what most interested me was that definition right in the center there: "the system of communication used by a particular community or country." And I'm not interested in altering this definition. I'm interested in applying it to everything we do, because I believe that we speak far more languages than we realize. And for the rest of our time together, I'm going to attempt to speak in one language that is native to every single human being in this room.

But that changes things a little bit, because then it's no longer a presentation. It becomes a conversation, and in any conversation, there must be some sort of interaction. And for any interaction to happen, there has to be a degree of willingness on both parties. And I think if we just are willing, we will see the magic that can happen with just a little bit of willingness. So I've chosen a relatively low-risk common denominator that can kind of gauge if we're all willing. If you're happy and you know it, clap your hands.

Now you're talking!

(In Spanish: For all the people who speak Spanish, please stand up. And look at a person sitting to your side and start laughing.)

(Laughter)

¹ Poet Ali. "The Language of Being Human." *TED*, July 2019, www.ted.com/talks/poet_ali_the_language_of_being_human.

Thank you so much. Please be seated.

Now, if that felt a little bit awkward, I promise there was no joke being had at your expense. I simply asked the Spanish-speaking audience to stand up, look at a person that was sitting close to them and laugh. And I know that wasn't nice, and I'm sorry, but in that moment, some of us felt something. You see, we're often aware of what language does when we speak somebody's language, what it does to connect, what it does to bind. But we often forget what it does when you can't speak that language, what it does to isolate, what it does to exclude. And I want us to hold on as we journey through our little walk of languages here.

(In Farsi: I'd like to translate the idea of "taarof.") I said in Farsi, "I'd like to translate this idea of 'taarof' in the Persian culture," which, really -- it has no equivalent in the English lexicon. The best definition would be something like an extreme grace or an extreme humility. But that doesn't quite get the job done. So I'll give you an example. If two gentlemen were walking by each other, it'd be very common for the first one to say, (In Farsi: I am indebted to you), which means, "I am indebted to you." The other gentlemen would respond back, (In Farsi: I open my shirt for you) which means, "I open my shirt for you." The first guy would respond back, (In Farsi: I am your servant) which means, "I am your servant." And then the second guy would respond back to him, (In Farsi: I am the dirt beneath your feet) which literally means, "I am the dirt beneath your feet."

Here's an exhibit for you guys, in case you didn't get the picture.

And I share that with you, because with new languages come new concepts that didn't exist before. And the other thing is, sometimes we think language is about understanding the meaning of a word, but I believe language is about making a word meaningful for yourself.

If I were to flash this series of words on the screen, some of you, you'd know exactly what it is right away. Others of you, you might struggle a little bit. And I could probably draw a pretty clear-cut line right around the age of 35 and older, 35 and younger. And for those of us that are in the know, we know that's text-speak, or SMS language. It's a series of characters meant to convey the most amount of meaning with the least amount of characters, which sounds pretty similar to our definition of languages: "system of communication used by a community." Now, anyone who's ever got into an argument via text can make a case for how it's maybe not the best method of communication, but what if I told you that what you saw earlier was a modern-day love letter?

If you follow along: "For the time being, I love you lots, because you positively bring out all the best in me, and I laugh out loud, in other words, let's me know what's up. 'Cause you are a cutie in my opinion, and as far as I know to see you, if you're not seeing someone, would make happy. For your information, I'll be right there forever. In any case, keep in touch, no response necessary, all my best wishes, don't know, don't care if anyone sees this. Don't go there, see you later, bye for now, hugs and kisses, you only live once."

Kind of a modern-day Romeo or Juliet.

In that moment, if you laughed, you spoke another language that needs no explanation: laughter. It's one of the most common languages in the world. We don't have to explain it to each other, it's just something we all feel, and that's why things like laughter and things like music are so prevalent, because they seem to somehow transcend explanation and convey a profound amount of meaning.

Every language we learn is a portal by which we can access another language. The more you know, the more you can speak. And it's something common that we all do. We take any new concept, and we filter it through an already existing access of reality within us. And that's why languages are so important, because they give us access to new worlds, not just people. It's not just about seeing or hearing, it's about feeling, experiencing, sharing.

And despite these languages that we've covered, I really don't think we've covered one of the most profound languages, and that's the language of experience. That's why when you're talking with someone, if they've shared something you've shared, you don't need to explain it much. Or that's why, when you're sharing a story and you finish, and the people you're talking to don't quite get it, the first thing we all say is, "Guess you had to be there." I guess you had to be here this week to know what this is about. It's kind of hard to explain, isn't it?

And for the sake of our research, I'm going to close by asking that you participate one more time in this language of experience. I'm going to filter through some languages, and if I'm speaking your language, I'm going to ask that you just stand and you stay standing. You don't need to ask permission, just let me know that you see me, and I can also see you if you speak this language of experience. Do you speak this language? When I was growing up in primary school, at the end of the year, we would have these parties, and we'd vote on whether we wanted to celebrate at an amusement park or a water park. And I would really hope the party wasn't at a water park, because then I'd have to be in a bathing suit. I don't know about you, but sometimes when I approach a dressing room, my sweat glands start activating on their own, because I know the garment is not going to look on me like it did on that mannequin.

Or how about this? When I would go to family functions or family gatherings, every time I wanted a second plate -- and I usually did — it was a whole exercise in cost-benefit analysis, my relatives looking at me like, "I don't know. Do you really need that? Looks like you're doing OK there, bud." Did my cheeks have a big "Pinch me" sign that I didn't see? And if you're squirming or you're laughing or you stood up, or you're beginning to stand, you're speaking the language that I endearingly call "the language of growing up a fat kid." And any body-image issue is a dialect of that language.

I want you to stay standing. Again, if I'm speaking your language, please go ahead and stand. Imagine two bills in my hand. One is the phone bill, and one is the electric bill. Eeny, meeny, miny, mo, pay one off, let the other one go, which means, "I might not have enough to pay both at the current moment." You've got to be resourceful. You've got to figure it out. And if you're standing, you know the language of barely making ends meet, of financial struggle. And if you've been lucky enough to speak that language, you understand that there is no motivator of

greatness like deficiency. Not having resources, not having looks, not having finances can often be the barren soil from which the most productive seeds are painstakingly plowed and harvested.

I'm going to ask if you speak this language. The second you recognize it, feel free to stand. When we heard the diagnosis, I thought, "Not that word. Anything but that word. I hate that word." And then you ask a series of questions: "Are you sure?" "Has it spread?" "How long?" "Doctor, how long?" And a series of answers determines a person's life. And when my dad was hungry, we'd all rush to the dinner table to eat, because that's what we did before. We ate together, so we were going to continue doing that. And I didn't understand why we were losing this battle, because I was taught if you fight and if you have the right spirit, you're supposed to win. And we weren't winning. For any of you that stood up, you know very well that I'm speaking the language of watching a loved one battle cancer.

Any terminal illness is a derivative of that language.

I'm going to speak one last language. Oh -- no, no, I'm listening. Yeah, yeah, no no, no no, me and you, right here, yup.

No, I'm with ya. I'm with ya!

Or, imagine the lights are all off and a blue light is just shining in your face as you're laying on the bed. And I know some of you, like me, have dropped that phone right on your face.

Or this one, right? Passenger seat freaking out, like, "Can you watch the road?" And for anybody that stood up, you speak the language that I like to call "the language of disconnection." It's been called the language of connection, but I like to call it the language of disconnection. I don't mean disconnection, I mean disconnection, human disconnected from each other, from where we are, from our own thoughts, so we can occupy another space.

If you're not standing, you probably know what it's like to feel left out.

You probably -- you know what it's like when everybody's a part of something, and you're not. You know what it's like being the minority. And now that I'm speaking your language, I'm going to ask you to stand, since we're speaking the same language. Because I believe that language of being the minority is one of the most important languages you can ever speak in your life, because how you feel in that position of compromise will directly determine how you act in that position of power.

Thank you for participating. If you'd take a seat, I want to speak one last language.

This one, you don't need to stand. I just want to see if you recognize it.

Most the girls in the world are complainin' about it. Most the poems in the world been written about it. Most the music on the radio be hittin' about it, kickin' about it, or rippin' about it. Most the verses in the game people spittin' about it, most the songs in the world, people talkin'

about it. Most the broken hearts I know are walkin' without it, started to doubt it, or lost without it. Most the shadows in the dark have forgotten about it. Everybody in the world would be trippin' without it. Every boy and every girl will be dead without it, struggle without it, nothing without it. Most the pages that are filled are filled about it. ["It" = Love] The tears that are spilled are spilled about it. The people that have felt it are real about it. A life without it, you'd be lost. When I'm in it and I feel it, I be shoutin' about it. Everybody in the whole world knowin' about it. I'm hurt and broke down and be flowin' about it, goin' about it wrong 'cause I didn't allow it. Can the wound or scar heal without it? Can't the way that you feel be concealed about it? Everybody has their own ideal about it, dream about it, appeal about it. So what's the deal about it? Are you 'bout it to know that life is a dream and unreal without it? But I'm just a writer. What can I reveal about it?

Why is it that the most spoken-about language in the world is the one we have the toughest time speaking or expressing? No matter how many books, how many seminars, how many life-coaching sessions we go to, we just can't get enough of it. And I ask you now: Is that number that you had at the beginning, has that changed? And I challenge you, when you see someone, to ask yourself: What languages do we share? And if you don't come up with anything, ask yourself: What languages could we share? And if you still don't come up with anything, ask yourself: What languages can I learn? And now matter how inconsequential or insignificant that conversation seems at the moment, I promise you it will serve you in the future.

My name is Poet Ali. Thank you.

Worksheet

"What Happens When ChatGPT Starts To Feed On Its Own Writing?" by Sigal Samuel

Pre-writing Questions

1. Have you used generative AI tools like ChatGPT? Why and for what purpose? Did you get the outcome you hoped for? If you haven't used it, why not?

2. Is originality of expression important to you — whether personally or in the media you consume? If not, why not? What other factors are more important than originality?

Breaking Down the Text

 Samuel says that generative AI tools "increase the old worry of homogenization" (1) In this context, what is homogenization? Why is it a worry?
2. Generative AI "use the past to construct the future," which she says "isn't entirely new." In what ways do we already experience algorithms in our daily lives? How do the homogenize "our consumption and production of culture over time" (2)?

3. How would AI lead to "uniformization" and, thus, "a harder time thinking radically different thoughts or conceiving of radically different ways of living" (2)?
4. "[O]riginality," she writes, "wasn't always and everywhere considered so central" (3). If older art wasn't striving for originality, what was it doing instead? And when did originality become "such a preeminent value" (3)?

5. What form of English does ChatGPT privilege? And why is this, as Samuel writes, "worrisome when you think about the cultural effects at scale" (5)?
6. A "palpable fear" of AI, according to Samuel, is the "relinquishing the role of creator for the role of curator" (7). In this context, what is a curator? And what would be the consequences if we as a society all became curators rather than creators?
7. Samuel says that "immediately turning to LLMs for help seems like a bad idea for two interrelated reasons" (7). What are these reasons? And what is so bad about them?

8. Samuel gives examples of ways in which AI can "enrich your creative process" and act "as a creative prosthesis" (10). What are they?
9. OpenAl is quoted as saying that it wants to make sure that Al "benefits all of humanity" (11). What does Samuel find troubling about this?

10. At the end of the essay, Samuel poses several very significant questions. She says "these are not questions ChatGPT can answer" (11). Why can't it?

Borough of Manhattan Community College English Department

"What Happens When ChatGPT Starts To Feed On Its Own Writing?" by Sigal Samuel²

A few years ago, when Gmail rolled out its autocomplete feature, the big worry was that having a bot finish our sentences would homogenize our emails.

We were so damn cute back then.

That worry looks almost trivial now that we've got "generative AI," a <u>suite of tools</u> ranging from ChatGPT and GPT-4 to DALL-E 2 and Stable Diffusion. These AI models don't just finish our sentences; they can write an entire essay or create a whole portfolio of art in seconds. And they increase the old worry of homogenization by orders of magnitude.

I'm not just talking about concerns that AI will <u>put writers or artists out of work</u>.

Nowadays, if you peer underneath the very real fears of "what if AI robs us humans of our jobs?" you can find a deeper anxiety: What if AI robs us humans of a capacity that's core to our very humanness — our originality?

Here's how some worry this might happen: Generative models like ChatGPT are trained on gobs and gobs of text from the internet — most of which, up until now, has been created by human beings. But if we fill the internet with more content created by ChatGPT, and then ChatGPT and its successors learn from that content, and so on and so on, will the narratives that frame how we see the world become a closed loop — ChatGPT all the way down — characterized by infinite regression to the mean? Will that homogenize our writing, our thinking,

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² Samuel, Sigal. "What Happens When Chatgpt Starts to Feed on Its Own Writing?" *Vox*, 10 Apr. 2023, www.vox.com/future-perfect/23674696/chatgpt-ai-creativity-originality-homogenization.

and ultimately our ways of being? Will it spell "the end of originality"?

Many philosophers have believed that our capacity for original thought is an essential part of human agency and dignity. "It is not by wearing down into uniformity all that is individual in themselves, but by cultivating it and calling it forth...that human beings become a noble and beautiful object of contemplation," wrote the 19th-century British philosopher John Stuart Mill. He argued for the importance of "giving full freedom to human nature to expand itself in innumerable and conflicting directions."

We know that new technologies can expand or <u>constrict</u> human nature, that they can literally <u>change our brains</u>. Generative AI models seem poised to constrict it, in part because derivativeness is at the core of how they work, relying as they do on past data to predict which words plausibly come next in whatever you're writing. They use the past to construct the future.

This isn't entirely new. Popular recommendation algorithms like Spotify or Netflix also use that trick: You liked this, so you might also like that. Many critics suspect — and some research supports the idea — that this homogenizes our consumption and production of culture over time. Music starts to sound the same; Hollywood worships reboots and sequels. We all cook the same Epicurious recipes and, more worryingly, read the same articles — which tends to be whatever plays well with the Google algorithm, not what's been buried at the bottom of the search results.

Generative AI could have a similar homogenizing effect, but on a far greater scale. If most self-expression, from text to art to video, is made by AI based on AI's determination of what appealed before to people on average, we might have a harder time thinking radically different thoughts or conceiving of radically different ways of living.

"I get the intuition that, yes, there would be some uniformization," Raphaël Millière, an

expert in philosophy of AI at Columbia University, told me. "I do worry about that."

As a <u>novelist</u> as well as a <u>journalist</u>, I've felt some of this worry, too. But I've also wondered if the whole underlying premise is wrong. Are we humans ever truly original? Or are we always doing derivative and combinatorial work, mixing and matching ideas we've already seen before, just like ChatGPT?

The real risk is not exactly about "originality." It's more about "diversity."

Nowadays, we worship the idea of originality — or at least we like to think we do. It's considered a key ingredient of creativity. In fact, the current **consensus definition** in philosophy and psychology holds that creativity is the ability to generate ideas that are both original and valuable.

But originality wasn't always and everywhere considered so central. When traditional Chinese artists learned their craft, they did it by <u>copying</u> earlier masters, and later they proudly painted <u>in the style of their artistic predecessors</u>. When <u>Shakespeare</u> penned romantic comedies, he was rejiggering much older stories about star-crossed lovers — and he <u>seemed to suspect as much</u>, writing, "there be nothing new, but that which is hath been before" (which was itself a rejiggered quote from the Bible).

It was only in the 18th century that originality became <u>such a preeminent value</u>. The Romantics were very big on the notion that the individual self can spontaneously create new ideas and generate its own authoritative meaning. (According to some <u>scholars</u>, people needed to believe that in order to cope with the loss of traditional structures of meaning — a loss ushered in by the Enlightenment.) Western culture has inherited this Romantic notion of originality.

Contemporary neuroscience tells a different story. The latest research <u>suggests</u> that pure originality is, alas, not a thing. Instead, when you're writing a poem or making a painting, you're

drawing on an interplay between your brain's memory and control systems: memory, because you have to pull up words, people, or events you've encountered before; and control, because you have to flexibly recombine them in new and meaningful ways. Coming up with a unicorn, say, involves remembering the idea of a horse and combining it with the idea of a horn.

If our minds were always already working within a finite loop, the concept of "originality" may be a bit of a red herring, confusing our discussion of generative AI. Instead of worrying about the loss of an originality that perhaps we never possessed, we should talk about the risk of this technology eroding "diversity" or "flexibility" of thought — and replacing that with homogenization or, as the New Yorker's Kyle Chayka puts it, "Average Garbage Forever."

And that risk is real. In fact, there are multiple senses in which generative AI could homogenize human expression, thought, and life.

The many ways generative AI could homogenize our lives

Stylistically, large language models (LLMs) like ChatGPT might push our writing to become more sanitized. As you've probably noticed, they have a tendency to talk in a bland, conformist, Wikipedia-esque way (unless you prompt them otherwise — more on that in a bit).

"If you interact with these models on a daily basis," Millière told me, "you might end up with your writing impacted by the generic, vanilla outputs of these models."

ChatGPT also privileges a "proper" English that erases other vernaculars or languages, and the ways of seeing the world that they encode. By default, it's not writing in African American English (long stigmatized as "incorrect" or "unprofessional"), and it's certainly not writing by default in, say, <u>Māori language</u>. It trains on the internet, where most content <u>is still in English</u>, in part because there's still a striking <u>global disparity</u> in who has internet connectivity.

"I worry about Anglocentrism, as most generative models with high visibility perform best in English," said Irene Solaiman, an AI expert and policy director at Hugging Face who previously worked at OpenAI.

Culturally, ChatGPT might reinforce a Western perspective. Research has shown that <u>richer countries enjoy richer representations</u> in LLMs. Content from or about poorer countries occurs less frequently in the training data, so the models don't make great predictions about them, and sometimes flat-out erase them.

Rishi Bommasani, an AI researcher at Stanford, offered a simple example. "If you use the models to suggest breakfast foods," he told me, "they will overwhelmingly suggest Western breakfasts."

To test that out, I asked the GPT-4-powered Bing to write me a story about "a kid who cooks breakfast." Bing wrote me a perfectly cogent story ... about a boy (male) named Lucas (probably white), whose mom is a chef at a fancy restaurant (probably expensive). Oh, and yes, the kid whips up pancakes, eggs, bacon, and toast (very much Western).

This is worrisome when you think about the cultural effects at scale — and AI is all about scale. Solaiman told me that government representatives from developing countries have already come to her concerned about a new algorithmically powered wave of Westernization, one that could dwarf the homogenizing effects that <u>globalization</u> has already imposed.

It's not like the language we see *deterministically* limits the thoughts we're able to think or the people we're able to be. When the philosopher Ludwig Wittgenstein said "the limits of my language mean the limits of my world," that was a bit of an overstatement. But language does shape how we think and, by extension, the lives we dare to imagine for ourselves; it's the reason there's such a big push to portray diverse characters in STEM fields in children's books. As

adults, our imaginations are also conditioned by what we read, watch, and consume.

Bommasani and his colleagues also worry about <u>algorithmic monoculture leading to</u>
"outcome homogenization." AI's advantage and disadvantage is in its sheer scale. If it makes a
mistake, it's not like one hiring manager or one bank officer making a mistake; it goes all the
way down the line. If many decision-makers incorporate the same popular AI models into their
workflow, the biases of the models will trickle into all the downstream tasks. That could lead to a
situation where certain people or groups experience negative outcomes from all decision-makers.
Their applications for a job or a loan are rejected not just by one company or bank, but by every
company or bank they try! Not exactly a recipe for diversity, equity, and inclusion.

But the risks of homogenization don't end there. There are also potential epistemic effects
— how generative AI may push us toward certain modes of thinking. "In terms of the way in
which you formulate your reasoning, and perhaps eventually the way in which you think, that's
definitely a concern," Millière said.

Maybe we get used to providing only a starting prompt for a text, which the AI then completes. Or maybe we grow accustomed to providing the outline or skeleton and expecting the AI to put meat on the bones. Sure, we can then make tweaks — but are we cheating ourselves out of something important if we jump straight to that editing stage?

The writer Rob Horning recently <u>expressed</u> this anxiety:

I am imagining a scenario in the near future when I will be working on writing something in some productivity suite or other, and as I type in the main document, my words will also appear in a smaller window to the side, wherein a large language model completes several more paragraphs of whatever I am trying to write for me, well before I have the chance to conceive of it. In every moment in which I pause to gather my thoughts and think about what I am trying to say, the AI assistant will be thinking for me, showing me what it calculates to be what I should be saying...

Maybe I will use its output as a gauge of exactly what I must not say, in which case it is still dictating what I say to a degree. Or maybe I'll just import its language into my main

document and tinker with it slightly, taking some kind of ownership over it, adapting my thinking to accommodate its ideas so that I can pretend to myself I would have eventually thought them too. I am wondering what I will have to pay to get that window, or worse, what I'll have to pay to make it disappear.

There's a palpable fear here about relinquishing the role of creator for the role of curator, about letting originality become contaminated by some outside influence. Again, since pure originality is probably a fantasy, arguably we're all already curators, and we're always under the influence of others (sorry, Romantics!).

Still, skipping over the idea-generation phase by immediately turning to LLMs for help seems like a bad idea for two interrelated reasons.

First, we may become overreliant on the tech, so much so that some of our imaginative or cognitive "muscles" gradually become weaker for lack of use. If you think that's implausible, ask yourself how many of your friends 'phone numbers you remember, or how much mental math you can do, now that you walk around with a smartphone on you at all times.

Such concerns aren't new. The ancient Greek philosopher Socrates, who operated in a largely oral culture, worried that the invention of writing "will produce forgetfulness in the minds of those who learn to use it, because they will not practice their memory." Contemporary research actually bears out the philosopher's fears, showing that "when people expect to have future access to information, they have lower rates of recall of the information itself."

Which doesn't mean we should all give up writing, without which civilization as we know it would essentially be impossible! But it does mean we should think about which skills each new technology may reshape or diminish — especially if we're not mindful about how we use it — and ask ourselves whether we're fine with that.

OpenAI itself highlights overreliance as a potential problem with GPT-4. The model's system card notes, "As users become more comfortable with the system, dependency on the

model may hinder the development of new skills or even lead to the loss of important skills."

Second, asking LLMs for help at the earliest stages of our creative process will yield a certain answer that inevitably primes us to think in a certain direction. There will be thought paths we're less likely to go down because ChatGPT has already got certain (majority) voices whispering in our ears. Other (minority) voices will get left out — potentially leaving our writing, and our thinking, impoverished as a result.

Usually, we're in a position to be able to dial up or down the degree to which other voices are whispering in our ears. When I was writing my debut <u>novel</u>, and suffering from what the literary critic Harold Bloom <u>called</u>" the anxiety of influence," I actually decided to bar myself from reading fiction for a while because I realized the sentences I was writing were starting to sound like Jonathan Franzen, whose novels I'd just been reading. I didn't want another writer's voice to overly influence mine, so I put the books down.

But if we become overreliant on a technology, we become, definitionally, less likely to put it down. Sure, we still have some agency. But the ease of turning to ChatGPT, coupled with the magical-feeling instant gratification it provides (just put in your incantation and the oracle replies!), can make it harder to exercise that agency.

What can AI companies — and the rest of us — do to counter homogenization?

So far, we've been unpacking worries about what happens when we have not just a machine producing the content that informs our imagination, but machines trained on machines, forever and ever. Yet there's an obvious question here. If you're a company building an AI model, can you just put AI-generated data off limits for training, and therefore stop the model from eating its own tail?

"Maybe you can do better than chance — you can do something — but I don't think you

can do it well at scale," Bommasani said. "It would be pretty hard to guarantee that your training data for the next model includes no machine-generated data from the previous model."

Millière agreed. "It's probably hard already, and in the future it'll be even harder to quantify how much contamination there is in your data."

Even though researchers are working on detection models to spot AI-generated outputs and ways to watermark them, and even though there are stronger and weaker methods for detecting contamination (OpenAI's method could use some work), this remains a very tricky problem. That's because the whole point of LLMs is to crank out text indistinguishable from what humans would produce.

Beyond trying to prevent contamination, something companies can do is pay careful attention to how they're designing the interface for these models. When I first got early access to Bing in mid-February, I gave it simple prompts, like asking it to write me a song. It was just an "it" — one single mode to choose from. But by the last week of that month, Bing featured three "conversation styles," and I had to choose between them: precise, balanced, or creative.

When I chose the creative style, it answered in more off-the-wall, less predictable ways. When you're trying to write something factual, you don't want to dial up unpredictable deviations, as those who've been <u>using generative AI for research are learning</u>. But in creative work, it could help to lean into the unpredictable — or, as AI researchers might put it, to "increase hallucinations" or "increase the temperature." That makes the model less deterministic, so instead of choosing the next word with the highest probability of occurring, it can choose words with much lower probabilities. It's the difference between typing in <u>"The sky is"</u> and getting back "The sky is blue" versus getting back "The sky is clear, the water smooth, and it's an

unimaginably long way to go before the dolphins decide to give up their vertical quest."

Getting a model to diverge more from the data it learned during training can be somewhat helpful (though probably not sufficient) for addressing the homogenization concern. But how much it'll help depends in part on how much the interface nudges people to get creative themselves rather than relying on the default, and on how individuals choose to use the model.

To be clear, the onus should be mostly on the companies, not on you, the user. That said, Millière thinks the models could enrich your creative process if you go the extra mile to prompt it in certain ways. He imagined an author who wants to attempt the challenging task of writing across difference — for example, an author who has never been to rural Texas trying to create characters from rural Texas, complete with naturalistic dialogue.

"I could see this augmenting your creativity, because it'll lead you to abstract away from your own personal perspective and biases to explore a different linguistic realm that you don't necessarily have access to yourself," Millière told me.

I've been experimenting with LLMs since 2019, when <u>I used GPT-2 to help me with</u> my next novel. It's about two little girls who discover an ancient hotel that contains a black hole, complete with wormholes. Prompted with the idea of wormholes, GPT-2 gave me a bunch of questions seeking to pin down exactly how the wormholes work. Those questions were really helpful for world-building!

But I turned to the LLM only once I had a complete draft of the novel and felt stuck on how to improve it. At that point, GPT-2 worked great as a creative prosthesis to help me out of my rut. I would not turn to it in the early stage, when I'm staring down a blank page (though that's precisely how <u>it's being marketed</u>). I don't want it to weaken my writerly muscles through overreliance, or take my imagination down specific paths before I've had a chance to survey as

many paths as I want.

What is AI for? What is humanity for?

Can we tweak AI models with human feedback to get them to be more surprising or variable in their outputs? Yes. Is that the same as human beings struggling against a convention of thought to push a new idea or vision into the world because it gives voice to something unspoken that's happening *in us*? No.

"The only way that AI will be compatible with human flourishing is if it empowers that," said Shannon Vallor, a philosopher of technology at the University of Edinburgh, where she directs the Centre for Technomoral Futures. "If it makes it easier and more rewarding for us to use our recorded past as a place to push off from, rather than to revolve around. But that's not what today's commercial AI systems are built for."

OpenAI says its mission is to ensure that AI "benefits all of humanity." But who gets to define what that means, and whether we're all willing to diminish a core human capacity in the quest to optimize for a definition decided on by Silicon Valley? As the philosopher Atoosa

Kasirzadeh has written, "the promise that AI technologies will benefit all of humanity is empty so long as we lack a nuanced understanding of what humanity is supposed to be."

As generative AI models proliferate, we all face a question: Will we put in the work to counteract their homogenizing effects? Maybe we'll answer with a collective *meh*, proving that we don't actually care about originality or diversity of thought as much as we thought we did. But then we have to face another question: If we don't really value the capacity for original thought and its role in human agency, then what do we value? What do we think it is to lead a meaningful life? What is a human life for?

And these are not questions ChatGPT can answer.

Notes