[This is an annotated pre-print of my article that was published, September 28, 2023, as an Opinion Piece in the Toronto Star*. The* Star *published it under the title:*

"Does AI Make It Impossible to Write an 'Original' Sentence"]

Is it Fair to Mechanically Test Originality

by

William M. Goodman

As a retired educator, I've seen, first hand, the temptations for students to plagiarize, which the proofreading company Scribbr calls "using someone else's work without giving them proper credit". Academics in Canada have increasingly expressed alarm at this growing problem.

But angst about plagiarism usually focuses on writers' intentions and efforts: Is someone *intending* to get away with something (i.e., cheat), or *carelessly* not citing sources? Here, I'm concerned rather with the difficulty of writing purely original words at all, these days, under the constant, accusatory eyes of "similarity-detection" tools like Turnitin.

Politico.com once reported a plagiarism claim about U.S. presidential nominee, John McCain: He described the country Georgia as "one of the world's first nations to adopt Christianity as an official religion." *Wikipedia*, apparently, described Georgia as "one of the first countries in the world to adopt Christianity as an official religion."

McCain should, absolutely, have given credit if he did *consult Wikipedia*, and didn't just recall historical "common knowledge." But consider the implications if *just his similarities of wording* are blameworthy: Is every paraphrase of "one of the world's first countries to ____[whatever]" off limits, to ever again include in writing or a speech? Along with "adopt Christianity as an official religion"?

This conundrum is not new. Long before *Turnitin*, Mark Twain was informed he'd unintentionally appropriated, in a work of his, words from Oliver Wendall Holmes. Twain, horrified, wrote to Holmes personally, beseeching his forgiveness, and was comforted at Holmes' reply, which Twain paraphrases: "… every man alive on the earth who writes or speaks commits [unconscious plagiarism] every …. time he opens his mouth; that all our phrasings are … shadows cast multitudinously from our readings; that no happy phrase of ours is ever quite

original with us; there is nothing of our own in it except some slight change born of temperament, character, environment, teachings and associations."

Holmes' point is amplified exponentially as more writings become recorded and searchable. This struck me when I heard the now-famous monologue in the recent *Barbie movie*. The speech lists, in a snappy rhythm, challenges perennially faced by women. Yet, its short phrases are hard to say much differently, like "...never show fear, never get out of line." I assume the movie's writer of "not only are you doing everything wrong, but also everything is your fault" never happened across this posting on *Quora* in 2021 (no author displayed): **"**they make everything your fault, they make it seem like you did everything wrong." Would *Turnitin* notice that similarity?

It's like we've entered the "Library of Babel" in Jorge Luis Borges' famous story. It holds countless books of apparently random characters; but if you search, you'd find chance copies of every book ever written. Someone on Facebook, apparently, is helping to create such a library: He says he's "created", with the help of ChatGPT AI, over 12,000 books!   If *Turnitin* discovers them, is that millions more sentences we can no longer write "originally?"

Yes, it's cheating if someone submits a ChatGPT-created text as their own. But it is alarming when a *Turnitin* spokesperson boasts their "AI detection system" has already flagged over a million such alleged transgressions.   Such detection systems make mistakes, and students have been falsely accused.   These systems finger someone, *not* because they've demonstrably copied from an *existing* text created by ChatGPT, but only because they submitted something that ChatGPT, probabilistically, *could have written*, or *might write*. Even in the Library of Babel, you only can plagiarize from a text that *exists*!

My tentative response to these issues when I last graded papers and, admittedly, did use *Turnitin*, was to ignore apparent word matches shorter than 9 consecutive words. At the risk of getting fooled sometimes, I didn't want my relation to students to be focused on finding "Gotcha" text matches. For exams, I had students read and sign an academic integrity statement, to remind them of expectations to have *right intentions* to do their own work.   As Holmes' continued in his reply to Mark Twain, above, we're all immersed in old, recycled stuff, but sometimes we can make it "our own for the time being" with our own style.   That's what I hope for from myself, and what I'd recommend looking for from other writers.

Commented [WG7]: Yvonne Villarreal reproduces the full speech, by the *Barbie* character Gloria, in a July 23 article in *Los Angeles Times*: https://www.latimes.com/entertainment-arts/movies/story/2023-07-23/barbie-america-ferrera-monologue

Commented [WG8]: The full post on Quora appears at: https://www.quora.com/When-they-make-everything-your-fault-they-make-it-seem-like-you-did-everything-wrong-and-that-person-doesn-t-even-own-up-to-their-faults-is-that-manipulation
That page does not display a date for the posting; however, Googling "Quora" followed by the quote displays a link showing its posting date of October 19, 2021.

Commented [WG9]: Jorge Luis Borges. "The Library of Babel" (1941). Full text is online at: https://archive.org/stream/TheLibraryOfBabel/babel_djvu.txt

Commented [WG10]: Joe Johnson posted several entries in the Facebook group "Practical AI for Entrepreneurs - OpenAI ChatGPT Stable Diffusion DALL-E etc" related to this claim. He posts on January 31, 2023: "I created 12,393 books with chat GPT AI. Besides Amazon, how can I sell them?" (https://www.facebook.com/photo/?fbid=197586189596900)

Commented [BG11]: Assuming Mr. Johnson's books average about 80,000 words, grouped into sentences of about 15 words each, his 12,000 books could potentially use up 12,000 x (80,000/15) original sentences, i.e., 64 million.

Commented [BG12]: "In just the first month that our AI detection system was available to educators," boasts the Chief Product Officer of Turnitin, Annie Chechitelli, in a published letter, we flagged more than 1.3 million academic submissions as having more than 80 percent of their content likely written by AI." ("Not True That ChatGPT Can't Be Accurately Detected," *The Chronicle of Higher Education*, June 25, 2023) (https://www.chronicle.com/blogs/letters/not-true-that-chatgpt-cant-be-accurately-detected?

Commented [WG13]: One telling example is discussed in a *USA Today* article by Kayla Jimenez, reprinted in numerous papers including *The Greenville News* (April 15, 2023, pages A1-A2). (https://www.newspapers.com/image/950197204/) Students' self-reports of alleged false accusations are also periodically posted on *Reddit* and *Quora*. One example is found at: https://www.reddit.com/r/GPT3/comments/10gfyly/my_professor_falsely_accused_me_of_using_chatgpt/?rdt=65117

Commented [WG14]: According to a simplified explanation by Jack Caulfield, the AI checker's language model "essentially looks at the input and asks 'Is this the sort of thing that I would have written?' If the answer is 'yes,' it concludes that the text is probably AI-generated." https://www.scribbr.com/ai-tools/how-do-ai-detectors-work/

Commented [WG15]: An illustration of a similar approach used at Chapman University is provided at https://blogs.chapman.edu/academics/2020/05/06/academic-integrity-statement-example/ I cannot recall where I was first introduced to the idea, years earlier.