

From Spell Check to AI Why using tools is not cheating



I have been working in the field of AI since 1983. While I don't claim the title of expert (I'll leave claiming that title to those who write articles about doomsday, and Skynet Terminators coming to steal our jobs), I frequently get asked to speak on the subject of AI. I always start by asking a simple question: "How many of you use AI in your everyday lives?" Almost every hand goes up. But when I follow up by asking who has been using AI for more than a decade, well... crickets.

This may surprise you but the humble spell checker in our email and word processors was introduced in 1979, and was considered the pinnacle of AI. By the mid-1990's spell check and grammar correction were so common, we forgot they were ever cutting edge. It just shows how quickly we adapt to new tools!

As an "old timer" in the field I've seen firsthand how our perceptions shift as "AI"-powered tools enter the weave of our everyday life. Today's conversation about genAI may feel new, but it's really just the next step in a long journey—one that started with the simple spell checker.

Is using a spell checker cheating?

Well, if you are competing in a spelling bee, I would say - YES!

On the other hand, as I am typing impaired, having a spell checker helps me provide you with a clear reading experience. I feel confident that you would not consider these early AI tools which we all use constantly to be cheating. But what about "new AI"? What is it really? How does it work? Is it "Intelligence"?

What about today's AI?

AI has become a very broad label which we hang on a large group of technologies. I like to think of it as breaking down into right brain/left brain groups of tools – yes TOOLS! The left brain is logic, reasoning, language, and analytical skills. The right hemisphere of the human brain is credited with creativity, spatial comprehension, and intuitive thought. Strangely enough, AI tools can now be broken down this way.

AI's Left Brain Tools:

Tools like natural language processing (NLP), machine learning, predictive analytics, and so on can be lumped as left brain. These tools are all about math! Statistics and probabilities to be exact. You can think of these tools as using advanced algorithms to find patterns in large amounts of data – like my shopping and browsing habits. The tools look at my data and your data, and find patterns, then I get advertisements for golf clubs, fishing gear, and vacations on warm sunny beaches. I guess we have all been using (victims of?) this AI for years on end. Is it cheating? Is understanding your clients better, so you can offer a better experience cheating? I would say – No.

Generative AI – the Right Brain tool:

Now let's look at the recent buzz – ChatGPT, Generative AI tools, Large Language Models (LLMs) – the right brain. Are these “Intelligence”? No! This is just another mathematical construct. Again – though it looks smart – it cannot reason, and does not “know” anything. ChatGPT and other generative AI tools seem sophisticated, but they're still powered by math: pattern matching, statistics, and probabilities – at massive scales. They are great at synthesizing plausible text, but they can't reason nor comprehend. So when they produce errors (and they do), it's up to *us* to catch them.

How does it work? Consider –

Me to ChatGPT: “write a poem about my dog”

What happens next?

- First it uses NLP to break down my sentence. It says “write” not a word, but it has a distance of 1 from “write” so it calls that “close enough”
- Then by breaking my sentence into pieces, it tries to match those pieces with everything on the internet, the Library of Congress, and maybe even the Galactic Knowledge Base!
- These matches come back and it finds 43,879 poems about dogs.
- Finally it picks random phrases, and strings them together to make a “new” poem.

Bottom Line:

If my 4th grade teacher asks me to write a poem about my dog, I would certainly call this cheating. But what about the quality? What about originality? If you read articles on the web, you will certainly run across many which have been “written” by AI. They tend to be repetitive, and worse, they WILL have incorrect information in them! Remember, the Gen AI does its Artificial Dumbtelligence job by pattern matching, near miss, and randomness. The outputs sound convincing but HUMAN fact checking is absolutely essential.

So teachers – please fact-check your students’ writing. Professional writers – for heaven’s sake – use RI (Real Intelligence) as your tool, then use AI as an adjunct tool to improve your thought process, help you organize, and perhaps look for gaps in your writing.

In the world of human intelligence, the right brain and the left brain work hand in hand. As we move into a new world of tools, couple your right brain, your left brain, and your tools together. Bring your creativity and original thoughts forward, then seize every available tool to make what you produce better. Use tools as an extension of your own creativity and productivity.

Now I am going back to the shed I am building, and I will use a rock to pound in my nails, because someone might think using a hammer is cheating.

Clap if you like the RI – AI experience! AI (Dall-E) generated the picture – I can’t draw! But I can certainly explain what is in my head.

Cheers!