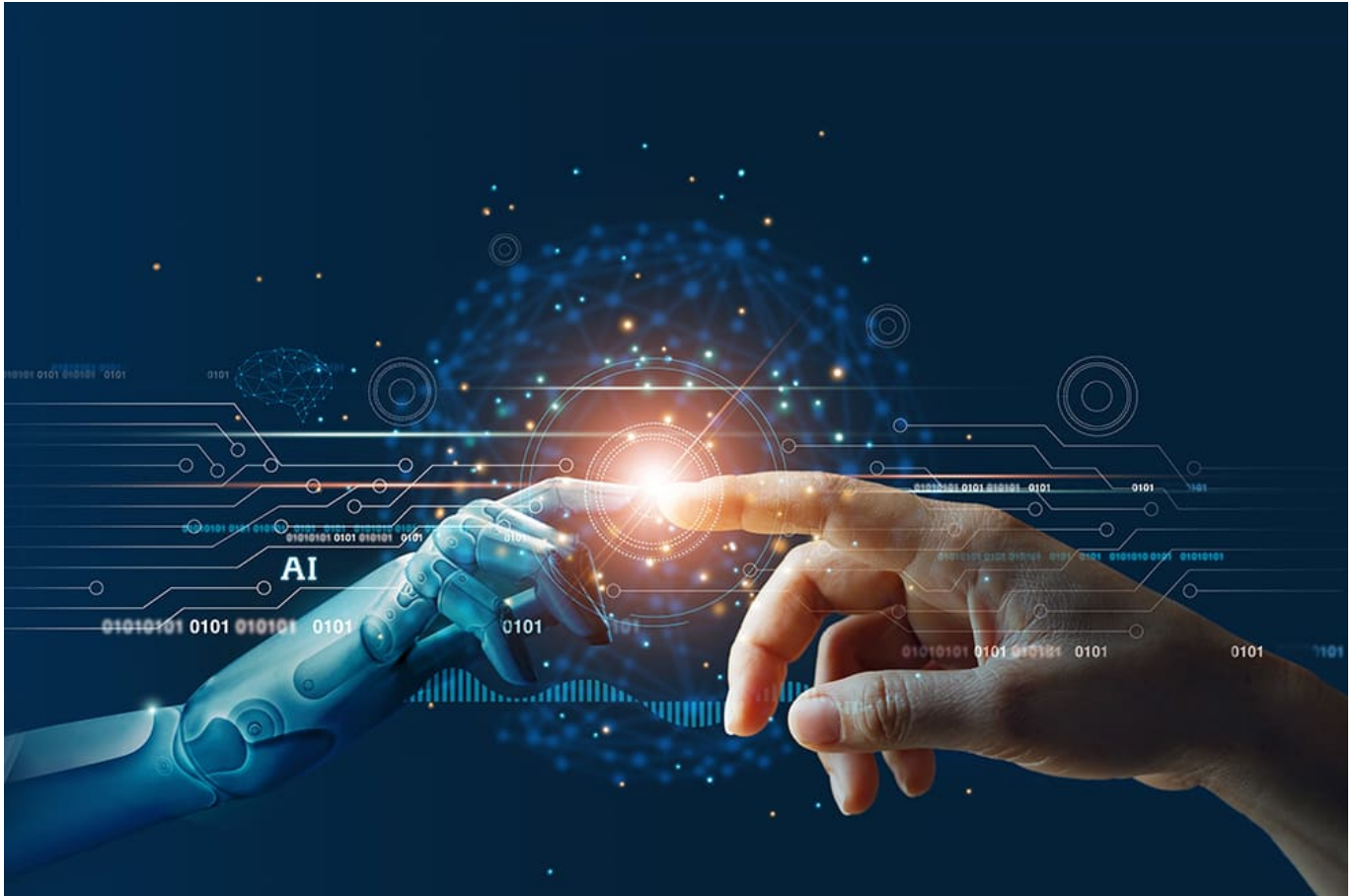# What exactly is "artificial intelligence?" – some futuristic ruminations

by Lev Tsitrin

Theodore Dalrymple's [recent reflection on potential consequences](#) of the startling progress in artificial intelligence reminded me of an amusing story by a Polish science-fiction writer Stanislaw Lem about a cybernetic poet whose works could not be rivaled (nay, approached!) by any living poet, causing such despair in the creative class that it turned into Luddite violence – and so, for the sake of public good (and of physical well-being of the poetic robot's maker) this marvel of artificial intellect was loaded unto a spaceship and sent to the farthest reaches of the Universe – out of sight, out of mind.

I read it when I was a kid in Russia (Lem's work was immensely popular in the former Soviet Union; while much of it is very dark, his entire cycle of short stories titled "*[Cyberiad](#)*" in which this story one belongs and which describes cosmic adventures of two engineers who hold "permanent omnipotence" degrees — *summa cum laude* at that! — is great fun.)

But hilarity aside, Mr. Dalrymple's focus on ennui which humanity would face once all creative venues become foreclosed for humans due to the superior quality of machine-generated writing, is not the only possible one (though the chess-players — if not the poets — already face that very problem — the very best of them are no match for a computer), A different, and equally profound question can be asked: who are we? The distinction that we humans boast of, is that we can reason. But if machines can be made to reason, too, does it mean that we are just machines? If A=B and B=C, should we acknowledge that A=C even when A is humanity, B is ability to reason, and C is machines? This seems to follow inexorably — but does it?

To Mark Twain, for instance, it did. Towards the end of his life he became extremely bitter, and expressed deep disappointment in what he called "the damned human race," penning a book-length philosophical treatise titled "*[What is Man?](#)*" in which he posited his thesis that the man is just an intricately-constructed machine, and nothing else.

Far be it from me to debate Mark Twain; I will limit myself to comparing man to the futuristic machine that, supposedly, would dwarf his creative powers into insignificance, and either make humans give up their efforts, surrendering to desperate boredom (an outcome Mr. Dalrymple discussed), or ban artificial intelligence outright — per Mr. Lem's story.

The question I would pose first is — to what degree the much-touted "artificial intelligence" is actually "artificial" — that is, independent from humans' and different from it?

Suppose, astronauts reach Mars. Does the answer to a question of "is there the intelligent life on Mars?" become "yes" at that moment? Technically, yes — but not in the context in which the question was originally posed: the question was not about the imported life; it was about the "indigenous," "native," "extra-terrestrial" life. The answer to that question would still be a "no."

Taken in that sense, the "artificial intelligence" is not "artificial" at all. If certain functions (like playing chess — or critiquing texts, which was Mr. Dalrymple focus) are by nature algorithmic, and those algorithms can be be articulated and programmed into a computer, the resulting actions, although performed on a computer, are still human actions — because we made the computer perform them, and made the computer that performed them. Computers are mere extensions of human mind, not its replacement. In that they are just like cars: cars help us get to where we want to go much faster than we would do by walking, but being man-made extension of human legs. There is nothing "artificial" about them; they have no independent agency.

What "intelligence" a computer possesses, is that which we deliberately imparted to it, not one bit more. Sure, a computer can execute predefined algorithmic steps much faster than we can — but it is humans who think those steps out, and program them in. In fact, doing this may in itself be quite an exciting pursuit for those with intellectual bent who may otherwise get bored when machines take over too many of our chores (there was not a dull moment in life for Lem's science-fictional engineers!).

Such chores are many indeed — even in intellectual pursuits. Consider our press, which sends journalists out to report on news. Journalists are highly intelligent people — and yet, to think of it, information-gathering they perform is a mechanical function: it merely reflects what others do. In a sense, for all their intelligence, journalists don't have any

real agency (when they try to exercise agency — by withholding facts from the public (remember the Hunter Biden's laptop "non-story" that turned out to be a "story" all right?), or concocting facts instead of reporting them as they are — they create bad journalism: journalists shouldn't report what is not happening, and should report what is happening, that's all; a mechanical chore). Now, a swarm of satellites or drones that are made to see and hear everything that's happening on the face of the earth (minus certain biological activity that we all agree should be kept private), recording and reporting what is done and said in high places and low, will do an infinitely better job than human reporters can ever hope to do. Robotic detectives would, by the same token, be better too. (Ditto, robotic judges!)

So in sum, it seems to me that the much-touted "artificial intelligence" simply does not exist. Yes, machines do quickly that what humans do slowly (as we see in about every industry: little of what was made by hand centuries ago, is done by hand today). But this does not mean that machines can do everything, pushing people out of every meaningful activity. As "artificial intelligence" develops, what people do will change as computers take on further workloads; for instance, people who now sew clothes (or do journalism) may turn to engineering and programming the "intelligent" machines; but people will not be idle, it seems to me. And if a writer manages to self-analyse his creative process, and to program a computer to do it for him — why not? That will consume his energies for a very long time — a lifetime, I suspect. Yet somehow, I doubt that this is at all possible — to have one's thoughts expressed, one at the very least has to have thoughts. And those thoughts are all different for different people — which in itself proves that there is no algorithm to thinking, that "artificial intelligence" is no thinking at all.

Some functions cannot be outsourced to a machine. Those that

can be, should be. Building such machines, and making them work can be a lifetime of intellectual fun — a far cry from boredom. But there is a limit to how much of ourselves we can impart to a machine, and there is a limit to what machines can do better than we. "Artificial intelligence" is but the algorithmic portion of human thinking transferred to a computer. This being the case, poets and "all of us who scribble for publication" (to quote Mr. Dalrymple) don't need to hyperventilate too much; they are not going to be replaced by an intelligent machine — not anytime soon. Not ever, in fact — for there will never be a separate from humanity, "artificial" intelligence in a man-made machine. Unless, of course, Mark Twain was right and we ourselves are machines, so the machines we will eventually make, will completely replicate us, biology of reproduction getting replaced by engineering. Yet, to think of it, even this would not be "artificial intelligence," but human intelligence by other means. No matter how much we turn to machines, we cannot escape from ourselves and make something "artificially" new. The more things (technologically) change, the more they will stay the same.