

*Though wise men at their end know dark is right,  
Because their words had forked no lightning, they  
Do not go gentle into that good night.* Dylan Thomas

**Artificial:** contrived (opp. to spontaneous): made by man: synthetic (opp. Fictitious), made in imitation (opp. to real). (Chambers's Twentieth Century Dictionary)

**Intelligence** a(1) : the ability to learn or understand or to deal with new or trying situations : reason also : the skilled use of reason (2) : the ability to apply knowledge to manipulate one's environment or to think abstractly as measured by objective criteria (such as tests). (Merriam-Webster Dictionary)

Artificial Intelligence (AI) is a man-made tool. It is neither worthy of adulation nor fear. Its output is reflective of the human input entered and processed by the algorithms designed and programmed in by humans. Actual intelligence is a complex phenomenon while AI is designed to mimic only certain aspects of natural intelligence. It is but another wave of progress as postulated in Kondratiev's (Tyulin, 2023) critique of capitalism.

Arthur Samuels (1962) writes "Artificial intelligence is an apparently self-evident phrase which has come into common usage without having a well-defined and generally accepted meaning. Unfortunately, this term also carries with it certain anthropomorphical implications which tend to arouse emotional responses on the part of the reader that have little or no bearing on the actual state of affairs. To some people, the concept of artificial intelligence is a scientific aberration defined as the Myth of Thinking Machines; to others, it relates to man's first stumbling attempts to develop machine methods for dealing with some of the perplexing problems that should, in all justice, be delegated to machines but which now seem to require the exercise of human intelligence; and, finally, to some easily frightened individuals, artificial intelligence refers to the impending danger of man's domination by the Machine.

As always, with any revolution, there is a lunatic fringe-people who believe in magic, or those who are carried away with their enthusiasm for a new cause and

who make wild claims which tend to discredit the entire undertaking. The field of artificial intelligence has, perhaps, had more than its share of these people.”

Samuel Butler wrote in 1863: “We refer to the question: What sort of creature man’s next successor in the supremacy of the earth is likely to be. We have often heard this debated; but it appears to us that we are ourselves creating our own successors; we are daily adding to the beauty and delicacy of their physical organisation; we are daily giving them greater power and supplying by all sorts of ingenious contrivances that self-regulating, self-acting power which will be to them what intellect has been to the human race. In the course of ages we shall find ourselves the inferior race.

Day by day, however, the machines are gaining ground upon us; day by day we are becoming more subservient to them; more men are daily bound down as slaves to tend them, more men are daily devoting the energies of their whole lives to the development of mechanical life. The upshot is simply a question of time, but that the time will come when the machines will hold the real supremacy over the world and its inhabitants is what no person of a truly philosophic mind can for a moment question.”

*The Maschinenmensch (literally 'machine-human' in German) is a robot featured in Thea von Harbou's novel Metropolis and Fritz Lang's 1927 film adaption.*



Boden (1973) states “The artificiality of artificial intelligence is of controversial logical status. Some claim that the contrived and unrealistic character of current machine intelligence is contingent rather than essential, that despite the formidable problems involved there is no reason in principle why a manmade system (of inorganic, and even perhaps even digital, construction) should not match all

important aspects of spontaneous human thought. Others argue that there are unavoidable and significant limitations on the extent to which intelligence of the synthetic variety could simulate its natural precursor, and that achieved 'successes' are fictitious rather than real since they rely directly on the ingenuity and skill of the human artificer and not on any creative potential attributable to the artifice. Claim and abstract counterclaim are scattered throughout the cybernetic, psychological, and philosophical sources.”

Hammons (1973) reported that in “1972 Sir James Lighthill of Cambridge University undertook to survey the field of artificial intelligence. The report questions whether artificial intelligence is a coherent field of research or whether it is really two diverging kinds of investigations linked in a makeshift way by a fascination with robots. The report is cautiously optimistic about the future of research on particular aspects of AI (automation and computer studies of neurobiological functions), but downgrades work on robots as having, at best, discouraging prospects. The ABCs of artificial intelligence, as Lighthill styled them, amount to Advanced automation, including pattern recognition, speech recognition, and automation of industrial processes; the emphasis, according to Lighthill, is on practical problems and on efforts oriented toward new hardware. Building robots including coordination of eye and hand functions, use of natural languages for communicating with computers, automated analysis of visual scenes or environments, and problem-solving techniques.”

*Robby the Robot in the science fiction movie Forbidden Planet (1956) exhibited artificial intelligence with a distinct personality and dry wit.*



### **AI as brute computer power**

AI involves the application of computer algorithms for determining sequencing and decision making. The concepts were formulated in the 1940s and 1950s and have continually been refined. Why now does it seem to be causing such a transformation of society?

Forbes (2018) posits that “the answer is simple: computers have finally become powerful enough to enable the promise of AI. AI is, essentially, a massive series of math problems that learn to correct their own mistakes. In the case of speech recognition, a computer must perform millions of math problems (or calculations) per second for a system to “learn” and “recognize” the patterns that are fed through it. This requires pure brute-force computational power that, until quite recently, simply wasn’t available.”

Today AI is little more than a brute, unintelligent system decisions crunching superhuman amounts of data in accordance with a human designed program.

According to Foreign Policy (2022) “Today’s artificial intelligence is as self-aware as a paper clip. Despite the hype—such as a Google engineer’s bizarre claim that his company’s AI system had “come to life” and Tesla CEO Elon Musk’s tweet predicting that computers will have human intelligence by 2029—the technology still fails at simple everyday tasks. That includes driving vehicles, especially when confronted by unexpected circumstances that require even the tiniest shred of human intuition or thinking.”

AI simply addresses the **infinite monkey theorem** “if an army of monkeys were strumming on typewriters, they might write all the books in the British Museum” (Eddington, 1928).



“ANOTHER Shakespeare play?!! Look, all we wanted was the user manual for a sandwich maker.”

## Fear of AI

*HAL 9000 (Heuristically programmed Algorithmic computer) : “I'm sorry, Dave. I'm afraid I can't do that,” locking Dr. Bowman out of the spacecraft. (2001 A Space Odyssey )*



Fear of AI is an old, old story. Rebellng robots and evil mystery boxes have worried us for millennia. Stories such as Pandora, Frankenstein and the golem of Prague highlight the fear of artificial intelligence.



*According to Greek mythology, Zeus described Pandora as evil disguised as beauty. Her mission was to insinuate herself into human society and then open her jar and release misery onto mankind.*

According to Neuroscience News (2023), the fear of AI is rooted in our response to uncertainty and potential threats. AI fears “commonly revolve around the loss of

control, privacy, and human value, as AI develops capacities that might outperform human abilities. Addressing these fears responsibly involves understanding that AI mimics but doesn't possess consciousness, ensuring ethical data handling, and promoting a 'human-in-the-loop' concept where AI collaborates with, rather than replaces, humans." The perception of AI as a sentient being out of human control is terrifying, a fear perpetuated by popular media and science fiction. A sample list follows:

***Fail-Safe (1964)***

*computer error causes one U.S. bomber group to erroneously receive apparently valid orders for a nuclear attack on Moscow.*

***Colossus: The Forbin Project (1970)***

*an advanced American defense system becoming sentient; assume total control of the world despite its creators' orders to stop.*

***Wargames (1983)***

*Defense computer system runs amok intending to initiate a nuclear war.*

***The Terminator (1984, 1991, 2003, 2009, 2015)***

*Skynet defense network*

***Nirvana (1995)***

*Virtual reality game becomes sentient and runs amok.*

***The Matrix (1999, 2003, 2021)***

MIT Technology Review (2015) reported that "extrapolating from the state of AI today to suggest that superintelligence is looming is comparable to seeing more efficient internal combustion engines appearing and jumping to the conclusion that warp drives are just around the corner."

Walker (2018) notes that nothing today approaches "general AI, a hypothetical intelligence that could compete with humans across all sectors." And that "Andrew Moore, dean of computer science at Carnegie Mellon, has said that AI's applications have not been explored: 'We have pretty much stopped trying to mirror human thinking out of the box. We are focusing on engineering [what] has

already been invented.’ As it is constrained by human ingenuity, AI seems unlikely to take humanity by surprise.”

AI itself is not evil, out of control, or necessarily dangerous. What is dangerous is how we decide to use it. As Samuel (1962) man “...must bear the ultimate responsibility and attempts to assign blame to an in-animate collection of mechanical and electrical parts which man assembles, or causes to be assembled, constitute a shabby form of buck-passing.”

Lastly, turning again to the world of science fiction there sits a solution to the AI threat in the Frank Herbert’s 1965 classic *Dune*. Herbert wrote of mankind gaining control over the thinking machines by wiping them out; waging war against robots, computers, sentient thinking machines during what a called became ‘The Butlerian Jihad’. After humanity defeats the machines one absolute commandment became law: “*Thou shalt not make a machine in the likeness of a human mind.*” (Herbert, 1965), Verdict (2024).

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