

LÍNGUA INGLESA

In January 1818, Mary Shelley anonymously published a strange little novel that would eventually make her world-famous. **Frankenstein; or, The Modern Prometheus** is the story of a scientist, Victor Frankenstein, who is driven by an unrelenting “thirst for knowledge,” an ambition to penetrate the secrets of nature, heaven, and Earth. He works tirelessly to engineer a sentient being who, upon coming alive, is hideous to him. Realizing with horror that his plan has gone awry, Frankenstein flees his creature who in turn angrily chases him to the end of the Earth and finally destroys him at the novel’s end.

Shelley’s dystopian tale has managed to stay relevant since its publication. It has a riddling quality that has edified and entertained readers for centuries, inspiring a range of interpretations. Recently, it has been making appearances in the heated debates over generative artificial intelligence, where it often is evoked as a cautionary tale about the dangers of scientific overreach. Some worry that in pursuing technologies like AI, we are recklessly consigning our species to Victor Frankenstein’s tragic fate. Our wonderchildren, our miraculous machines, might ultimately destroy us. This fear is an expression of what science fiction writer Isaac Asimov once called the “Frankenstein complex.”

Strangely, it’s not only people who are afraid of robots who are expressing such fears today; it is also some of the people who are most aggressively at the forefront of technological innovation. Elon Musk seemed to have had Mary Shelley’s story in mind when he warned a World Government Summit in Dubai in 2017 that sometimes “a scientist will get so engrossed in their work that they don’t really realize the ramifications of what they’re doing.”

Jennifer Banks. *Mary Shelley’s Frankenstein can illuminate the debate over generative AI.*
In: Big Think. Internet: <bigthink.com> (adapted).

Based on the previous text, judge the following items.

- 1 In the second sentence of the first paragraph, the excerpt “an ambition to penetrate the secrets of nature, heaven, and Earth” can be understood as an explanation for the “unrelenting ‘thirst of knowledge’” that drove Victor Frankenstein.
- 2 According to the text, at the end of Mary Shelley’s novel, Doctor Frankenstein kills the monster he created.
- 3 In the last sentence of the first paragraph, “awry” is used to indicate that Victor Frankenstein’s plan went well, as his creature was similar to a human being.
- 4 According to the author of the text, Shelley’s novel should be mentioned in debates over AI because it proves things can go very wrong with new technologies.
- 5 In the last sentence of the second paragraph, the excerpt “Our wonderchildren, our miraculous machines” refers to the creatures that may be created by AI.
- 6 The last paragraph of the text states that Elon Musk was thinking of Mary Shelley when he declared scientists didn’t realize the ramifications of what they were doing.
- 7 According to the text, Elon Musk is someone who is afraid of robots, even though he is one of the leaders of technological innovation.

The idea that we might one day be able to construct some artefact which has a mind in the same sense that we have minds is not a new one. It has featured in entertaining and frightening fictions since Mary Shelley first conceived of Frankenstein’s monster.

In the classic science fiction of the early to mid-twentieth century, this idea was generally cashed out in terms of ‘mechanical men’ or robots – from the Czech word *robata*, which translates roughly as the feudal term *corvée*, a term which refers to the unpaid labour provided to one’s liege lord.

In more modern fiction, the idea of a mechanical mind has given way to the now commonplace notion of a computational artificial intelligence. The possibility of actually developing artificial intelligence, however, is not just a question of sufficiently advanced technology. It is rather a philosophical question.

Matt Carter. *Minds and Computers: an introduction to the philosophy of artificial intelligence.*
Edinburgh: Edinburgh University Press, 2007 (adapted).

About the preceding text, judge the following items.

- 8 The word “It”, in the beginning of the second sentence of the text, refers to “some artifact which has a mind in the same sense that we have minds”.
- 9 The first sentence of the first paragraph would still keep both its original meaning and its grammar correctness if the word “might” were replaced with **can**.
- 10 The text states that the idea of developing human-like minds in non-human artefacts has been part of fictional production for many decades.
- 11 The author suggests that the philosophical question behind the development of AI plays a more central role in the AI related debate than the advanced technology it demands.
- 12 From the information given in the second paragraph of the text, it is correct to assume that the origins of the word “robots” had to do with the slavery system.

Espaço livre

The term AI winter refers to a period of reduced funding in the development of AI. In general, AI has followed a path on which proponents overstate what is possible, inducing people with no technology knowledge at all, but lots of money, to make investments. A period of criticism then follows when AI fails to meet expectations, and, finally, the reduction in funding occurs.

A number of these cycles have occurred over the years — all of them devastating to true progress. AI is currently in a new hype phase because of machine learning, a technology that helps computers learn from data. Having a computer learn from data means not depending on a human programmer to set operations (tasks), but rather deriving them directly from examples that show how the computer should behave. It's like educating a baby by showing it how to behave through example. Machine learning has pitfalls because the computer can learn how to do things incorrectly through careless teaching.

Scientists are working on machine learning algorithms, each one from a different point of view. At this time, the most successful solution is deep learning, which is a technology that strives to imitate the human brain. Deep learning is possible because of the availability of powerful computers, smarter algorithms, large datasets produced by the digitalization of our society, and huge investments from businesses such as Google, Facebook, Amazon, and others that take advantage of this AI renaissance for their own businesses.

People are saying that the AI winter is over because of deep learning, and that's true for now. However, when you look around at the ways in which people are viewing AI, you can easily figure out that another criticism phase will eventually occur unless proponents tone the rhetoric down. AI can do amazing things, but they're a mundane sort of amazing.

John Paul Mueller and Luca Massaron. *Artificial Intelligence For Dummies*. Hoboken (New Jersey): John Wiley & Sons, 2022.

Judge the following items according to the previous text.

- 13 With the sentence "AI can do amazing things, but they're a mundane sort of amazing", the author indicates that he does not believe in everything AI proponents are saying AI can do.
- 14 Wealthy people with no technology knowledge are told by proponents to invest in the development of AI because the latter truly believe it is a good investment.
- 15 It can be inferred from the text that deep learning depends on a variety of factors, the most important of which being the investment from big businesses.
- 16 Because it does not depend on human programming, machine learning does not make mistakes.
- 17 According to the second paragraph of the text, learning from data means not depending on human programming but on examples of behavior.
- 18 In the last paragraph, the author suggests that a new AI winter is likely to happen if AI proponents maintain their rhetoric.
- 19 AI winter cycles have been detrimental to AI progress because, when they happen, people with money reduce their investment in AI development.

Last night, instead of the usual bedtime stories, my son and I embarked on a shared literary adventure with the latest version of ChatGPT. We posed a challenge to the AI: craft a narrative about a tiger, 100 hamsters, some floating cabbages and three time-travelling penguins locked in battle. As we further prompted it with outlandish creatures and slapstick scenarios, ChatGPT didn't miss a beat. Its stories, generated in mere seconds, were genuinely hilarious. For my son, this wasn't just a technological marvel; it was magic.

As someone who both delights in reading and strives to write words that move others, my evening with ChatGPT was fascinating and discomfiting in equal measure.

Reading has always been a bridge, a way of knowing that in the vast expanse of human existence, our joys and sorrows, fears and hopes are shared. But how does one reconcile this when the bridge is built by algorithms and code? While literature's most extraordinary gift may be its ability to awaken empathy, it's a curious endeavour to try to connect, to really feel, for something fundamentally unfeeling.

The literary realm stands at a precipice. Ghostwritten books raise questions about the genuine origin of stories, challenging our notion of authenticity. Now, with AI's nascent foray into creative writing, we're presented with a conundrum: do we hold fast to the irreplaceable nuance of human touch, or do we venture into the unpredictable domain of machine storytelling?

For traditional authors, this evolution raises existential questions.

Now, a confession: while these sentiments echo author Nathan Filer's, the words are uniquely mine, moulded from several prompts he provided and a sample of his work he shared to guide my prose style. I am ChatGPT-4.

Nathan Filer. 'It is a beast that needs to be tamed': leading novelists on how AI could rewrite the future. In: *The Guardian*. Internet: <www.theguardian.com> (adapted).

Based on the preceding text, judge the following items.

- 20 It is possible to infer that the discomfort felt by the author after his experience with ChatGPT was due to his concept of reading as being an exchange of feelings and emotions between humans.
- 21 The author tells how ChatGPT was able to write a text following strange demands, and this easiness is expressed by the segment "ChatGPT didn't miss a beat" (third sentence of the text).
- 22 It is possible to correctly conclude from the last paragraph of the text that its real author was ChatGPT-4.
- 23 In the third sentence of the first paragraph, the word "it" refers to ChatGPT.
- 24 In the fourth paragraph, "Ghostwritten books" refers to books written by AI machines, which replace the ones written by humans.
- 25 In the expression "hold fast" (last sentence of the fourth paragraph), "fast" conveys the idea of **quickly** or **speedily**.

MOVIES FROM
**TERMINATOR
TO WALL-E**

THE ADVANCEMENT OF ARTIFICIAL INTELLIGENCE HAS MADE IT A HOT TOPIC within the technology community and beyond in recent years, but AI has been a focal point for filmmakers since the days of silent motion pictures.

44 Number of movies with AI since 2010
52% of movies portray AI positively
144% increase in AI movies since 2010 vs. last decade



Metropolis
1927
First on-screen appearance of AI



The Day the Earth Stood Still
1951
First cinematic AI to become a household name (Gort)



2001: A Space Odyssey
1968
First AI film to feature a scientifically accurate depiction of spaceflight



Star Wars
1977
First film featuring AI to be selected for preservation in the National Film Registry



Tron
1982
First instance of a full-fledged simulated world



Wargames
1983
First depiction of AI's involvement in a nonfictional war



The Terminator
1984
Due to the popularity of the franchise, people still refer to any digital totalitarian force as "skynet"



The Matrix
1999
A quintessential Hollywood vision of what an AI takeover would look like



Bicentennial Man
1999
First time an AI character is featured as the main protagonist



A.I. Artificial Intelligence
2001
First childlike AI



WALL-E
2008
First AI Pixar character



Ex-Machina
2015
A bold look at the willpower of AI to become human



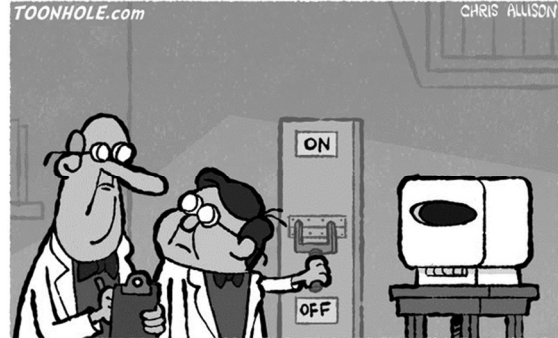
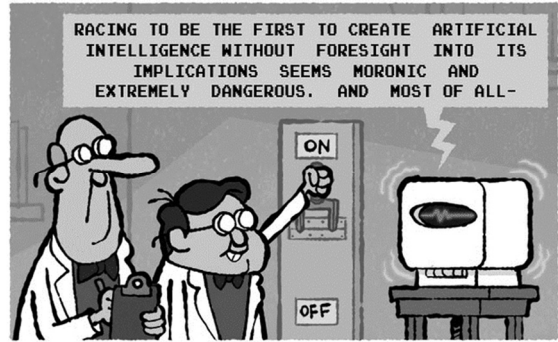
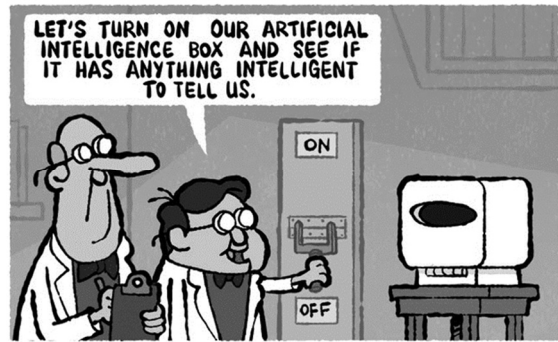
Avengers: Age of Ultron
2015
Highest-grossing movie with AI at the center



Upgrade
2018
Depicts a world in which AI and humans coexist

Enlightened Digital. A century of AI in the movies.

Internet: < interestingengineering.com>.



Chris Allison. Artificial Intelligence.

Based on the preceding infographic, judge items 26 to 28 and choose the correct option on item 29, which is **tipo C**.

- 26 The increase of 144% in AI movies shows that AI has recently become a topic of interest for filmmakers.
- 27 It can be said from the information in the infographic that, from all the movies presented, the most successful one in terms of profit was **Star Wars**.
- 28 From the information in the infographic, it is possible to infer that the movie industry might have influenced movie viewers to have a positive view on AI.
- 29 According to the information of the infographic, a very popular movie which is responsible for an expression denoting a digital oppressive force is

- A Metropolis.
- B The Matrix.
- C The Wargames.
- D The Terminator.

- 30 In the previous comic strip, the scientist turned the machine off because
- A his colleague became scared of it.
 - B it didn't have anything sensible to say.
 - C what it said about the dangers of being the first to create AI made a lot of sense.
 - D the words it said made both of the scientists scared of the future with AI.

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