

PósCom-UFBA | Seleção 2024

SEGUNDA FASE | Prova de Inglês

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TEXT 1

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Five years ago, pediatric specialist Ricardo Fonseca traded his white coat for one adorned with superhero motifs and began using social media to disseminate useful information about child health.

With 86 thousand followers and significant engagement from parents and children, Super-Pediatrician was one of the 18 digital medical influencers invited and certified by the Brazilian Society of Pediatrics (SBP) to combat misinformation about immunization.

The influencers selected for the one-day training held last week collectively have an audience of around 20 million people and are one of the organization's strategies to rebuild crucial connections, especially with parents.

According to Super-Pediatrician, the organization's initiative stands out by endorsing professionals who disseminate quality information, valuing solid scientific evidence.

"This chain of goodwill is fundamental for child health, equipping parents and caregivers with knowledge to make a difference in society," he states.

Considering the Text 1, please, answer questions 1-4.

1. The piece of paper published by a Brazilian newspaper informs that:

- (a) Doctors will use their influence to spread misinformation
- (b) Doctors are being trained to combat misinformation about vaccines**
- (c) Influencers are helping children learn about pet health
- (d) Pediatricians will spread misinformation about vaccines
- (e) None of the above alternatives

2. In the following statements about the paper, identify which is/are TRUE:

I - The Brazilian Society of Pediatrics (SBP) invited 18 digital medical influencers to combat misinformation about immunization.

II - The Brazilian Society of Pediatrics (SBP) banned influencers from discussing immunization.

III - The Brazilian Society of Pediatrics (SBP) endorses professionals disseminating scientific evidence.

- (a) I, II
- (b) I, II, III
- (c) II
- (d) I, III**
- (e) III

3. Consider the sentence: "Five years ago, pediatric specialist Ricardo Fonseca traded his white coat for one adorned with superhero motifs and began using social media to disseminate useful information about child health." How could we best understand "traded ... for" in this sentence?

- (a) negotiated
- (b) sold
- (c) addressed
- (d) changed**
- (e) exported

4. Consider the sentence: "Super-Pediatrician was one of the 18 digital medical influencers invited and certified by the Brazilian Society of Pediatrics (SBP) to combat misinformation about immunization." What is the best alternative to replace "about" in this sentence?

- (a) regarding
- (b) never
- (c) above
- (d) upward
- (e) upstairs

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TEXT 2

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[...]

The DWP [the Department for Work and Pensions] has been using Artificial intelligence to help detect benefits fraud since 2021. The algorithm detects cases that are worthy of further investigation by a human and passes them on for review.

[...]

The DWP said in its latest annual accounts that it monitored the system for signs of bias, but was limited in its capacity to do so where it had insufficient user data. The public spending watchdog has urged it to publish summaries of any internal equality assessments.

Shameem Ahmad, the chief executive of the Public Law Project, said: "In response to numerous Freedom of Information Act requests, and despite the evident risks, the DWP continues to refuse to provide even basic information on how these AI tools work, such as who they are being tested on, or whether the systems are working accurately."

[...]

Several police forces are also using AI tools, especially to analyse patterns of crime and for facial recognition. The Metropolitan police have introduced live facial recognition cameras across London in order to help officers detect people on its "watchlist".

But just like other AI tools, there is evidence the Met's facial recognition systems can lead to bias. A review carried out this year by the National Physical Laboratory found that under most conditions, the cameras had very low error rates, and errors were evenly spread over different demographics. When the sensitivity settings were dialled down however, as they might be in an effort to catch more people, they falsely detected at least five times more black people than white people.

The Met did not respond to a request for comment.

West Midlands police, meanwhile, are using AI to predict potential hotspots for knife crime and car theft, and are developing a separate tool to predict which criminals might become "high harm offenders".

[...]

John Edwards, the UK's information commissioner, said he had examined many AI tools being used in the public sector, including the DWP's fraud detection systems, and not found any to be in breach of data protection rules: "We have had a look at the DWP applications and have looked at AI being used by local authorities in relation to benefits. We have found they have been deployed responsibly and there has been sufficient human intervention to avoid the risk of harm."

However, he added that facial recognition cameras were a source of concern. "We are watching with interest the developments of live facial recognition," he said. "It is potentially intrusive and we are monitoring that."

Some departments are trying to be more open about how AI is being used in the public sphere. The Cabinet Office is putting together a central database of such tools, but it is up to individual departments whether to include their systems or not.

In the meantime, campaigners worry that those on the receiving end of AI-informed decision-making are being harmed without even realising.

Ahmad warned: "Examples from other countries illustrate the catastrophic consequences for affected individuals, governments, and society as a whole. Given the lack of transparency and regulation, the government is setting up the precise circumstances for it to happen here, too."

Considering the Text 2, please, answer questions 5-10.

5. What is the subject of Text 2?

- (a) AI is being used to solve the most critical social problems of our time
- (b) AI can make better decisions than humans
- (c) All over the world we can find positive examples of the use of AI
- (d) AI will transform human work
- (e) Government uses of AI that could result in harm to individuals or society

6. In the following statements about the paper, identify which is/are TRUE:

- I - Tests indicate no bias in facial recognition tools
- II - Some public agencies do not provide information about how AI tools work
- III - The positive uses of AI certainly outweigh the negative ones
- IV - Police forces employ AI tools for facial recognition

- (a) I, II
- (b) II, IV
- (c) II, III
- (d) I, III
- (e) III

7. Consider the sentence: "Some departments are trying to be more open about how AI is being used in the public sphere." How could we best understand "trying" in this sentence?

- (a) training
- (b) trainer
- (c) seek
- (d) gamble
- (e) steal

8. Consider the sentence: "Campaigners worry that those on the receiving end of AI-informed decision-making are being harmed without even realising." How could we best understand "campaigners" in this sentence?

- (a) opposition politicians
- (b) intellectuals
- (c) leaders
- (d) activists
- (e) professionals

9. Consider the sentence: "West Midlands police, meanwhile, are using AI to predict potential hotspots for knife crime and car theft." How could we best understand "predict" in this sentence?

- (a) know
- (b) count
- (c) appreciate
- (d) recognize
- (e) forecast

10. Consider the sentence: "Given the lack of transparency and regulation, the government is setting up the precise circumstances for it to happen here, too". How could we best understand "lack of ..." in this sentence?

- (a) absence
- (b) slack
- (c) some
- (d) full
- (e) increased

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TEXT 3

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What is failure? Failure transpires at the moment something stops working. Or maybe it lives in the recognition of expectations unmet. For some, failure works generatively: exposing a capacity for critique (this project has failed!), a yearning for insight (now I can see what worked so invisibly before), and a hope for the future (let's learn from our mistakes). But failure can equally gesture at wider systems of extraction: the appropriation of a hopeful discourse for economic gain, as Facebook's former mantra notoriously reminds ("fail fast and break things").

Failure works in all these ways, and more, according to Arjun Appadurai and Neta Alexander's new book *Failure* (Polity Press). Contributing to an emerging field of failure studies (Berg, 2009; Halberstam, 2011; Nakamura, 2009; Sharma, 2020), the authors examine the commodification of failure within the linked worlds of Silicon Valley and Wall Street. As the innovation engines of contemporary capitalism, Silicon Valley and Wall Street produce more than goods and services. They also create a near-totalizing mythos of technical progress, a world in which "all successes are the result of technology and its virtues, and [that] all failure is the fault of the citizen, the investor, the user, the consumer" (p. 2). This mythos relies on the illusion of not only the achievability of instantaneity and certainty, but a wide desirability of such ends. Capitalist power-brokers frame "failure" as a misdirection that maintains this illusion. They draw our attention away from the lie at the core of capitalist ruin by distracting us with the broken promise of the particular: this latency, this buffering, this interest-laden loan repayment, this mounting debt.

For Appadurai and Alexander, this particularization has two important effects. First, it lets the system off the hook by focusing on individual effects. Compared with many other forms of technological failure, digital latency unfolds with little or no explanation of why or how. Appadurai and Alexander argue that this opaqueness leads to the widespread belief that technological failures are a result of user error, personalizing the failure and shifting blame away from the promise-maker. This reflection on the particular distraction of waiting calls for further examination, especially across its vastly different social and material conditions (e.g. workers handling hazardous materials to make cell phones vs users waiting for Netflix to buffer on their phones).

A second effect of particularization concerns its provisionality. Appadurai and Alexander show that distracting users with the specific deficiency renders the pain of failure less potent, and less memorable. Framing each misstep as an anomaly allows the promise-makers to minimize the experience as an unintentional, temporary inconvenience rather than a symptom of greater systems of exploitation and harm. Here, "failure functions as an affective economy when the idea it might reveal is instantaneously replaced with another, less threatening idea" (p. 92), obscuring the profundity and depth of the breakdown and what might be at stake in its recognition. Despite being framed as singular, rather than systemic experiences, broken promises form a litany of failures in lives mediated by Silicon Valley and Wall Street. And should users manage to overcome this misdirection and recognize that failures are not personal, are not trivial, and are not a necessary condition of progress, the unrelenting flow of breakdowns can still over-whelm the senses. Deep, precise emotional responses may be replaced by a vague "perpetual anxiety" (p. 92), dulling the specific emotional impact of each unfulfilled promise—and along with it, our ability to recall it in place, in community, and in response to new promises not-yet-unbroken—desensitizing us to the lessons of failure and eroding trust in our own instincts and agency.

Considering the Text 3, please, answer questions 11 to 15.

11. How does the mythos of technical progress contribute to the commodification of failure in Silicon Valley and Wall Street?
- (a) It emphasizes user empowerment.

- (b) It exposes systemic exploitation.
- (c) It shifts blame away from promise-makers.
- (d) It promotes accountability of power brokers.
- (e) It prioritizes individual effects.

12. One of the aims of Appadurai and Alexander's book is

- (a) Correct the direction of failure studies.
- (b) Analyze errors only in Silicon Valley companies, such as Netflix and Facebook.
- (c) Show how Silicon Valley and Wall Street manage errors to make us docile.
- (d) End anxiety about failures of digital culture.
- (e) None of the previous answers are correct.

13. Consider the sentence: "Appadurai and Alexander argue that this opaqueness leads to the widespread belief that technological failures are a result of user error, personalizing the failure and shifting blame away from the promise-maker." How could we best understand "widespread" in this sentence?

- (a) narrow
- (b) qualified
- (c) short
- (d) widely known
- (e) fully restricted

14. Consider the sentence: "Framing each misstep as an anomaly allows the promise-makers to minimize the experience as an unintentional, temporary inconvenience rather than a symptom of greater systems of exploitation and harm." How could we best understand "misstep" in this sentence?

- (a) defamation
- (b) error
- (c) detection
- (d) finding
- (e) meaning

15. Consider the sentence: "And should users manage to overcome this misdirection and recognize that failures are not personal, are not trivial, and are not a necessary condition of progress, the unrelenting flow of breakdowns can still overwhelm the senses." How could we best understand "recognize" in this sentence?

- (a) speak
- (b) abdicate
- (c) go away
- (d) teach
- (e) perceive

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TEXT 4
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It is easy to forget that AI has been with us for more than 60 years. Despite the flash of excitement and anxiety that feels so recent, AI itself is not a new phenomenon. The name *Artificial Intelligence* (AI) was coined in the mid-1950s at a series of academic workshops organised at Dartmouth College, New Hampshire (USA). A group of scientists, led by mathematics professor John McCarthy, gathered to investigate the ways in which machines could simulate aspects of human intelligence: the ability to learn and make decisions. Their core assumption was that human reasoning could be reconstructed using mathematical techniques and, as a consequence, problem-solving could be formalised into algorithms (McCarthy et al. 1955/2006).

What is more recent is a reflexive, if not critical, and social-scientific, understanding of not just AI's capabilities, but its impacts on human life and social organisation (Elliott 2019). It took decades for AI research to move from what it could do *for* us to what it could do *to* us, or enable us to do to each other. These first critical insights came along with observations that AI can not only supercharge innovation and bring about economic prosperity but also lead to inequalities and unfairness.

This book contributes to this debate by critically reflecting on how we should think about AI and the relationship between humans and machines. It analyses the discourses and myths that exist around AI; what it will enable and what not. And it looks at issues about AI, power and inequalities, investigating where the risks of exclusion are and how we should deal with this.

The book also brings diverse and critical voices to this debate. Whereas AI as a discipline has been dominated by white, male, predominantly older scientists from mathematical disciplines, this collection brings perspectives that are characterised by a strong diversity in authorship and discipline. And threading through all, the contributions offer a discussion of different tangents of power and political economy in the field of AI and society.

The first task is to name our terms. For a concept that has been with us for so long, there is little consensus on how to define it. The history of debating AI is almost as old as AI itself. There is more debate than agreement about what AI is and what it is not, and the only thing generally agreed is that there is no widely accepted definition (Russell and Norvig 2016). The first definition comes from that gathering of scientists in 1955: McCarthy et al. (1955/2006) then defined AI as: 'Making a machine behave in ways that would be called intelligent if a human were so behaving'. This only raises the challenge of how exactly to define *intelligence*. Russell and Norvig (2016: 2) define different approaches to AI to serve different goals. AI can refer to systems that: (1) think like humans; (2) think rationally; (3) act like humans; and (4) act rationally. Each of the approaches requires different disciplinary expertise, thus requiring an inter-, or at least cross-disciplinary discussion. The human-centred approaches will depart from social science studying human behaviour, while the rationalist approaches will involve a combination of mathematics and engineering. From the four approaches, *acting like humans* is closest to how we define and understand contemporary AI.

We can see the roots of *acting like humans* in the *Turing test*, developed by Alan Turing in 1950. This test, originally designed to provide a satisfactory definition of intelligence, has been central to conceptualising AI. According to the test, if a human interrogator cannot distinguish a machine from a human through conversation, then the machine can be considered *intelligent*. Russell and Norvig (2016) argue that for a computer to be intelligent – to pass the Turing test – it needs to possess the following capabilities: *natural language processing* (being able to communicate successfully), *knowledge representation* (being able to store what it knows or hears), *automated reasoning* (being able to use the stored information to answer questions and to draw new conclusions) and *machine learning* (being able to adapt to new circumstances and to detect and extrapolate patterns).

Considering the Text 4, please, answer the questions 16-20.

16. What was the initial focus of AI research, according to the scientists at Dartmouth College in the 1950s?

- (a) Human-machine collaboration
- (b) Mathematical reconstruction of human intelligence
- (c) Developing advanced problem-solving algorithms
- (d) Simulating human emotions in machines
- (e) Creating machines that could replace human decision-making

17. How does the book contribute to the AI debate, as mentioned in the text?

- (a) By providing a historical account of AI development
- (b) By analyzing the impact of AI on economic prosperity
- (c) By critically reflecting on discourses and myths around AI
- (d) By promoting a singular definition of AI
- (e) By excluding diverse perspectives in the discussion

18. According to Russell and Norvig (2016), what distinguishes the human-centered approaches to AI from rationalist approaches?

- (a) Use of mathematics and engineering
- (b) Focus on social science and human behavior
- (c) Inclusion of diverse voices in AI research
- (d) Emphasis on machine learning capabilities
- (e) Exclusively addressing the economic implications of AI

19. What is the significance of the Turing test in conceptualizing AI, as per the text?

- (a) It defines intelligence based on problem-solving abilities
- (b) It determines if a machine can replace a human entirely
- (c) It assesses a machine's ability to communicate indistinguishably from a human
- (d) It focuses on AI's impact on social organization
- (e) It highlights the limitations of AI in the modern era

20. In what ways does the book address the lack of consensus on defining AI, as discussed in the text?

- (a) By proposing a new and universally accepted definition
- (b) By ignoring the historical debates on AI definitions
- (c) By emphasizing the importance of mathematical expertise in AI discourse
- (d) By exploring the discourses and myths surrounding AI
- (e) By dismissing the relevance of diversity in AI research