## TEXTO 1

### POMPEII ROW ERUPTS BETWEEN RIVAL SCIENTIFIC FACTIONS

It is one of the most ambitious archaeological missions ever undertaken. The Great Pompeii Project promises remarkable discoveries about life in the Roman empire, including the genetic profiles of the town's inhabitants, their dining preferences, occupations and health. But as layers of volcanic rock are chipped away to uncover the secrets that lie below, not everyone is celebrating. Volcanologists say the excavation risks destroying clues about the AD79 eruption that could be crucial for protecting the 600,000 people who live in the shadow of Vesuvius today.

After years of simmering tensions, a row has broken out between the two scientific factions, and volcanologists published an open letter in the journal Nature this month criticising the "alarming" destruction of volcanic deposits. "They seem not to realise that the enthusiasm for archaeology is committing an act of vandalism to volcanology," said Roberto Scandone, a professor of volcanology at the Roma Tre University. "Leaving some of the deposits in place is valuable not only for scientists but also for visitors, who will be able to see at first hand how the volcano destroyed the town." Archaeologists say they are collaborating with volcanologists at the University of Naples and point out there is plenty more volcanic rock for earth scientists to work on beyond the zone of archaeological interest.

The Great Pompeii Project, which was launched in 2012, is a €105m effort by the Italian government and the European Union to preserve the site, which had descended into a dangerous state, and make new scientific and historical discoveries. It is expanding excavations across the one-third of the Unesco world heritage site yet to be uncovered. DNA profiles of the Vesuvius's victims are giving new insights into the ethnic diversity of Roman Pompeii. Samples are being taken of 2,000 sample remains of food, and medical scans will provide a picture of the community's health.

However, Christopher Kilburn, an earth scientist at University College London, believes the reason Pompeii has become a town synonymous with catastrophe has been sidelined. "There's a sense of frustration that volcanology is not being taken terribly seriously," he said. "You go to Pompeii and there's virtually no mention of the volcano at all." According to Kilburn, scientists have been barred from accessing certain areas for health and safety reasons. "But when something interesting is found, all the TV crews and media were there," he said. "It seems it wasn't dangerous to them but was dangerous to the professional volcanologists." Kilburn said preserving rock at inhabited sites was important to help reconstruct the violent passage of pyroclastic flows, currents of hot gas and volcanic matter that swept through Pompeii. "Today we hope to use the archaeology to understand the details of how real pyroclastic flows sweep around real buildings, in order to improve methods of protecting future populations not only on Vesuvius but at similar volcanoes around the world," he said.

A spokeswoman for the Archaeological Park of Pompeii said an agreement had long been in place with the University of Naples to jointly study the stratigraphy and damage caused by the eruption, and that this guaranteed volcanologists on-site access. “All the excavation activities, therefore, were supervised by the volcanologists of the University of Naples Federico II, who were able to record the stratigraphy, take samples and construct a damage mapping,” the park said in an email. “These data, in addition to being the subject of internal reports pursuant to the agreement, have already been presented at international conferences.”

Gary Devore, an archaeologist and retired Stanford University lecturer who has worked in Pompeii, said archaeologists constantly had to weigh up the potential for new discoveries with the possible destruction of data by digging things up. “The new excavations have been very limited in scope and location – just one small neighbourhood – and I think they are aiming to responsibly walk that tightrope between slow, meticulous, careful excavation of new rooms that can bring new public interest in the site, and conserving what they expose as they work as best they can,” he said. Devore acknowledged the volcanologists had a point but there ought to be sites of low archaeological interest that could be preserved for their research purposes. “I hope both parties could cooperate and respect the value of both side’s expertise,” he said.

**FONTE:** Adaptado de: H. Devlin. **Pompeii row erupts between rival scientific factions.** Disponível em: https://www.theguardian.com/science/2019/jul/22/pompeii-row-erupts-between-rival-scientific-factions. Acesso em 15 nov 2019.

## TEXTO 2

### BOTS

As artificial-intelligence products steadily improve at pretending to be human—an AI-generated voice that books restaurant reservations by phone, for example, or a chat bot that answers consumers' questions online—people will increasingly be put in the unsettling situation of not knowing whether they are talking to a machine. But the truth may make such products less effective: recent research finds a trade-off between transparency and cooperation in human-computer interactions.

The study used a simple but nuanced game in which paired **players** make a series of simultaneous decisions to cooperate with or betray their partner. In the long run, it pays for both to keep cooperating—but there is always the temptation to defect and earn extra points short term, at the partner's expense. The researchers used an AI algorithm that, when posing as a person, **implemented a strategy** that was better than people are at getting human **partners** to cooperate. But previous work suggested people tend to distrust machines, so the scientists wondered what would happen if the bot revealed itself **as such**. The team hoped people playing with a known bot would recognize **its** ability to cooperate (without being a pushover) and would eventually get past **their** distrust. **“Sadly, we failed**

**at this goal,"** says Talal Rahwan, a computer scientist at New York University in Abu Dhabi and a senior author on the paper, published last November in Nature Machine Intelligence. "No matter what the algorithm did, people just stuck to **their** prejudice." A bot playing openly as a bot was less likely to elicit cooperation than another human, even though **its** strategy was clearly more beneficial to both **players**. (In each mode, the bot played 50 rounds against at least 150 individuals.)

In an additional experiment, players were told, "Data suggest that people are better off if they treat the bot as if it were a human." It had no effect.

Virginia Dignum, who leads the Social and Ethical Artificial Intelligence group at Umeå University in Sweden and was not involved in the study, commends the researchers for exploring the transparency-efficacy trade-off, but she would like to see it tested beyond the paper's particular setup.

The authors say that in the public sphere, people should be asked for consent to be deceived about a bot's identity. It cannot be on an interaction-by-interaction basis, or else the "deception" obviously will not work. But blanket permission for occasional deception, even if it can be obtained, still raises ethical quandaries. Dignum says humans should have the option to know after they have interacted with a bot—but if she is calling customer service with a simple question, she adds, "I just want to get my answer."

**Fonte**: HUTSON, M. **People Don't Learn to Trust Bots.** Scientific American (February 2020). Disponível em: <https://www.scientificamerican.com/article/people-dont-learn-to-trust-bots/>. Acesso em: 21 jan. 2020.

## QUESTÕES

**As questões de 1 a 5 referem-se ao TEXTO 1:**

**1) Por que o projeto "Great Pompeii" tem gerado conflitos entre arqueólogos e vulcanólogos?**

**2) Qual é a contradição apontada por Christopher Kilburn em relação ao tratamento recebido por vulcanólogos em Pompeia?**

**3) Os vulcanólogos que se dedicam a pesquisar Pompeia**

**(A)** desconsideram o potencial arqueológico do sítio.

**(B)** disputam com os arqueólogos o financiamento da União Europeia.

**(C)** objetivam descobrir formas de proteção em áreas vulcânicas.

**(D)** revelaram a inexistência de depósitos vulcânicos no interior da cidade.

**4) A porta-voz do Sítio Arqueológico de Pompeia**

**(A)** reforça a necessidade de sigilo sobre achados arqueológicos.

**(B)** refuta o que afirmou o cientista Christopher Kilburn.

**(C)** subestima conceitos relevantes para a vulcanologia.

**(D)** traz dúvidas sobre descobertas recentes da vulcanologia.

**5) O arqueólogo Gary Devore**

**I.** minimiza o impacto da arqueologia na pesquisa vulcanológica em Pompeia.
**II.** se revela desatualizado em relação aos recentes achados arqueológicos em Pompeia.
**III.** considera ser possível conciliar os interesses de vulcanólogos e arqueólogos em Pompeia.

**É CORRETO o que se afirma em**

**(A)** I e II, apenas.

**(B)** I e III, apenas.

**(C)** II e III, apenas.

**(D)** I, II e III.

**As questões de 6 a 10 referem-se ao TEXTO 2:**

**6) Segundo o artigo, o experimento conduzido envolveu**

**(A)** uma ferramenta simples, porém, diferenciada.

**(B)** informações sem precedentes.

**(C)** grupos fora do estudo do cientista Talal Rahwan.

**(D)** a pesquisadora sueca Virginia Dignum, da Umeå University.

**7) Sobre os termos destacados no 2º parágrafo, é INCORRETO o que se afirma em:**

**(A)** As ocorrências de **"its" e "their"** referem-se a *bot* e *people*, respectivamente.

**(B)** Ambos os termos **"players"** e **"partners"** referem-se aos sujeitos do estudo.

**(C)** A expressão **"as such"** pode ser substituída por **"as a machine"** sem prejuízo de significado à frase.

**(D)** A ação **"implemented a strategy"** foi praticada por *researchers*.

**8) Os desdobramentos do experimento descrito no artigo**

**(A)** indicaram falhas do algoritmo de IA.

**(B)** trouxeram questões éticas à tona.

**(C)** comprovaram a eficácia de produtos de IA.

**(D)** revelaram a confiança humana em IA.

**9) Qual era a objetivo dos pesquisadores e por que a constatação *"Sadly, we failed at this goal"*, em destaque no 2º parágrafo?**

**10) O que os autores do estudo e a pesquisadora Virginia Dignum sugerem sobre a futura interação humanos-robôs?**

## RASCUNHO

**EXAME DE PROFICIÊNCIA EM COMPREENSÃO DE LEITURA EM INGLÊS - EDITAL 03/2023**

## CHAVE DE RESPOSTAS

| QUESTÃO | |
|---|---|
| 1 | **Porque, de acordo com os vulcanólogos, as escavações arqueológicas em Pompeia trazem o risco de destruir sinais da erupção vulcânica ocorrida em 79 d.C. que poderiam ser vitais para proteger as 600.000 pessoas que vivem nos arredores do Vesúvio.** |
| 2 | **Segundo Christopher Kilburn, a contradição se dá porque o acesso de vulcanólogos a certas áreas de Pompeia é restringido por conta de razões de saúde e de segurança. Entretanto, toda vez que uma descoberta relevante acontece, os profissionais de imprensa têm livre acesso, o que parece demonstrar que o local era perigoso somente para os vulcanólogos.** |
| 3 | Ⓐ Ⓑ ● Ⓓ |
| 4 | Ⓐ ● Ⓒ Ⓓ |
| 5 | Ⓐ ● Ⓒ Ⓓ |
| 6 | ● Ⓑ Ⓒ Ⓓ |
| 7 | Ⓐ Ⓑ Ⓒ ● |
| 8 | Ⓐ ● Ⓒ Ⓓ |
| 9 | **O objetivo dos pesquisadores era fazer com que os participantes do estudo deixassem de lado o preconceito e a desconfiança que os humanos têm em relação às máquinas, propondo que interagissem de forma cooperativa com robôs. As várias tentativas, entretanto, não obtiveram sucesso no sentido de conseguir que esses sentimentos negativos fossem superados.** |
| 10 | **Que no âmbito público das interações com robôs, as pessoas deveriam ser consultadas se consentem ou não serem "enganadas". As pessoas deveriam ter a opção posterior de saber que estão interagindo com um robô.** |