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Analytic Summary

Gómez Pin, Víctor (Department of Philosophy. Autonomous University of Barcelona. Campus de Bellaterra. E-08193 – Bellaterra-Barcelona): **Mankind questions its status** (Orig. en)

In: *Rev. int. estud. vascos*. 67, 2

Abstract: This paper addresses the issue of the extent to which the contemporary questioning of the singularity and irreducibility of the human being is based on reason, focusing on the case of artificial entities and asking whether the capacity attributed to them covers the spectrum of cognitive, ethical and aesthetic judgements that are not to be confused with one another. Furthermore, it addresses the *aporia* that the very being that explains the universe minimises its weight therein.

Keywords: Judgement. Understanding. Ethics. Aesthetics. Syntax. Semantics. Foresight. Explanation.

Pinillos. Iñaki (NASERTIC. Navarra de Servicios y Tecnologías, S.A. C/ Orkoien, s/n. E-31012 Pamplona/Iruña): **Artificial Intelligence is created by humans** (Orig. en)

In: *Rev. int. estud. vascos*. 67, 2

Abstract: Artificial Intelligence comprises a series of powerful tools developed by humans. Advances in this field require the contribution of a considerable number of experts. As algorithms become more autonomous, there is a risk of a decrease in the skills of professionals and a deficient implementation of AI, failing to provide the expected benefits to society.

Keywords: Artificial Intelligence. AI skills. AI ethics. Synthetic data.

Alkorta, Itziar (University of Basque Country. Faculty of Law. Manuel de Lardizabal, 2 – E-20018 Donostia-San Sebastián): **Five crucial challenges for regulation of Medical Artificial Intelligence** (Orig. en)

In: *Rev. int. estud. vascos.* 67, 2

Abstract: Building on the reviewed literature, this paper intends to offer a synthesis of the main orientations that have been proposed for the future regulation of the Medical AI in Europe as well as its clinical, industrial and societal potential impacts.

Keywords: Artificial Intelligence in Medicine. Health Data. Big Data. Automated Decision Making. Ethics. Law. European Regulation of Artificial Intelligence. Liability.

Tejada, Javier (Jakiunde. Zientzia, Arte eta letren Akademia. Prim, 7. 20005 - E-Donostia): **From Theodicy to Technodice: Artificial Intelligence** (Orig. en)

In: *Rev. int. estud. vascos.* 67, 2

Abstract: We, humans, are moving very fast to a new world in which the exponential growth of Technology is dominated by the belief: If anything can go well, it will. Moreover, at the present moment we are walking along a narrow path that has Theodicy on one side and Technodice on the other. What role will play Artificial Intelligence, AI, Intelligent Robots and Cyborgs in the future?

Keywords: Nature and human evolution. Artificial Intelligence. Theodicy. Technodice. Intelligent Robots. Cyborgs.

Martínez, Naroa); Agudo, Ujué; Matute, Helena (Deusto University. Department of Psychology. Avda. de las Universidades, 24- E-48007 Bilbao): **Human cognitive biases present in Artificial Intelligence** (Orig. en)

In: *Rev. int. estud. vascos.* 67, 2

Abstract: In this article, we review evidence of human cognitive biases present in artificial intelligence (AI), and discuss examples of how these biases influence AI and human-AI interactions. We argue that using the knowledge that psychology has already accumulated about biases during many years can advance our understanding of how these biases affect AI, as well as how we could minimize their impact.

Keywords: Cognitive bias. Psychology. Artificial intelligence. AI. Bias. Confirmation bias. Causality bias. Causal illusion.

Errea, Ion (University of the Basque Country (UPV/EHU). Faculty of Engineering. Plaza Europa, 1. E-20018 Donostia/San Sebastián); **García Lekue, Aran** (Donostia International Physics Center. Manuel de Lardizabal, 4. 20018 Donostia/San Sebastián): **Materials Science Powered by Machine Learning** (Orig. en)

In: *Rev. int. estud. vascos.* 67, 2

Abstract: Considering the large impact that artificial intelligence has had in several disciplines, materials scientists have started incorporating machine learning techniques into their everyday research. Currently, machine learning techniques are used to predict the properties of materials employing regression models based on datasets, to create accurate interatomic potentials, and also to solve the most basic equations of materials. In this manuscript we discuss the main techniques used in machine learning models in materials science, the most important applications, and the future prospects.

Keywords: Materials science. Neural networks. Deep learning. Machine learning potentials. Descriptors. Superconductivity. Quantum computing.

Bustince, Humberto (Univ. Pública de Navarra. Departamento de Estadística, Informática y Matemáticas. Campus Arrosadía s/n 31006 Pamplona): **From Artificial Intelligence to Digital Humanities** (Orig. en)

In: *Rev. int. estud. vascos.* 67, 2

Abstract: In this work, we discuss the notion of artificial intelligence, some of its recent achievements, its limitations and how it may and should be considered together with humanities, through the new notion of digital humanities.

Keywords: Artificial Intelligence. Neural Networks. Deep Learning. Digital Humanities.