Artificial Intelligence and Anthropocene

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Abstract

"Being acrobats of time" – imagining how the world we live in, the natural environment, art, culture or our scientific knowledge will change, by the actions we are currently carrying out - is a very complex process to describe. In this work we choose a subset of possible actions and we will try to analyze the impact of Artificial Intelligence (AI) on this transformation process. AI is a discipline that perhaps more than any other provides a simultaneous and abundant contribution on two axes: the functional one, due to the number of innovative and original systems it produces at the service of society, and the theoretical and methodological one that has an impact on many disciplinary areas. In other words, we believe that AI is tangibly transforming our daily life, and society in general, but at the same time it is changing the face of many scientific and humanistic disciplines in their theories.

In the chapter we will talk about how AI has improved the methodological apparatus of the human, social and natural sciences, such as linguistics, cultural heritage, medicine and jurisprudence. We will also provide some examples of systems developed with AI methodologies on some application domains. We will cover some specific themes that highlight the critical issues of AI in the anthropocene era. In particular, we examine the problem of technological unpredictability and that of the unexpected results of AI systems. For the latter, we also discuss the problem of regulation, opacity and prediction of the future, which is based on data from the past.

At the end of the chapter we report some regulatory proposals concerning the commercialization of AI systems and, some methodological aspects for the impact analysis of these systems.

Keywords: Artificial Intelligence, Anthropocene, Artificial Intelligence Criticalities, Artificial Intelligence Opacity, Artificial Intelligence Regulation

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