

THE THEORY OF ALGORITHMIC CULTURE IN LIGHT OF THE CONTEMPORARY DEVELOPMENTS IN ARTIFICIAL INTELLIGENCE

SUMMARY

The aim of this research project is to provide a new framework for theorising contemporary culture, which is increasingly influenced by artificial intelligence-based technologies. The project pivots and elaborates on the concept of ‘algorithmic culture.’ Introduced into scholarly discourse by Alexander R. Galloway in 2006, the concept has only been an object of significant analytical exploration for about a decade. The project continues and expands these endeavours by focusing on the fact that the dynamic development of predictive and generative AI makes it urgent to seriously revise our understanding and theorisation of algorithmic culture.

That changes are necessary is particularly evident in the areas of creativity, agency, normativity and power, where AI-based solutions are profoundly remaking our cultural practice. It should be emphasised that without a reconsideration and remodelling of our entrenched theoretical framework of algorithmic culture, we will be unable to capture, empirically study or insightfully interpret its new forms and mutations. A thorough understanding of the cultural dimension of the algorithmisation process is also crucial for the development of public debates on the consequences of artificial intelligence development and the challenges associated with it.

This research project is underpinned by an innovative abductive methodology (based on Charles S. Peirce's concept of abduction), which has recently been developed by Iddo Tavory, Stefan Timmermans, Richard Swedberg and others. Unlike the deductive approach, abductive methodology does not involve deriving hypotheses from existing theories, and unlike the inductive approach, it analytically compares existing theories and empirical data. Following these principles, I will scrutinise the theories of algorithmic culture in juxtaposition with the latest cultural changes propelled by predictive and generative artificial intelligence. In this way, I will identify inconsistencies (referred to by Charles S. Peirce as ‘novelties’ or ‘anomalies’), on the basis of which new theorisations can be crafted through abductive reasoning. As a result of this research process, a new theoretical framework for algorithmic culture in the era of contemporary artificial intelligence development will be developed.

The project will be carried out in collaboration with scholars from three research institutions: the Jean Monnet Centre of Excellence at the University of Adelaide (Australia), the Institut National de la Recherche Scientifique, University of Quebec (Canada) and the Department of Sociology at the University of York (the UK). The PI has been invited to conduct research visits at these institutions by Professor Anthony Elliott, Professor Jonathan Roberge and Professor David Beer, respectively, who are eminent researchers of the cultural dimension of the algorithmisation process. The project findings and insights will be presented in international journals and in a book in English published by an internationally recognised academic press.