

How does AI rewrite concepts such as ‘creativity’ and ‘authorship’?

This study investigates the scope and content of the concept of ‘AI creativity’, which attracts growing popularity with the recent advances of deep learning and other cutting-edge forms of machine learning algorithms. The term has initially been coined in the discourses of computer science, psychology and AI research to designate ‘the capacity of machines to both generate and evaluate novel outputs that would, if produced by a human, be considered creative’ (Veale and Cardoso, 2019). The focus of computer scientists is to *systematise*, *formalise*, and thus *automatise* what is considered as the highest form of human intelligence – the capacity for creating valuable novelty. The underlying assumptions about the concept of *creativity*, implied in the above formulations has evoked the critical responses of various researchers, who have pointed out the reductiveness and intrinsic contradictions in these definitions from aesthetic, philosophical and historical perspectives (Still and d’Inverno 2016, Du Sautoy 2019, Fazi 2019, Zylinska 2020). This study attempts to unravel the complex texture of these discussions with the aim to reach a deeper understanding of the ontological and epistemological potential of *AI creativity*.

Contrary to the conventional understanding of computer science which sees AI creativity as automated mimicry of human-level creativity, this paper will switch the focus to question whether the concept of computational creativity points to the emergence of a new form of techno-*logos*, seen as a shifting *epistēmē* (in the sense advanced by Yuk Hui following Foucault), which sets the conditions of our existence in relation to the cosmos and which, consequently, demands new syntheses of thought to be produced. In this sense, the question of AI creativity needs to be re-evaluated in light of computation creating systemic conditions for structural transformation of the world, reconfiguring the bonds between space-time, objects and actions in a new form of ‘worldification’ (Garelli quoted in Hui 2017, p.68). It is a new algorithmic intelligence operating beneath the surface, which Benjamin Bratton termed ‘the stack’ – a megastructure of cybernetic governance at a planetary scale, which follows the contingencies of its own internal logic.

There are two prominent features, which distinguish the 21st century computation from previous technology: 1) big data information overloads and their autonomous processing by machine learning algorithms; and 2) *tertiary protention* (Hui 2018) – the capacity of computation to preemptively predict uncertainty or determine the unknown. The ubiquitous transfer of human discourses, human and nonhuman bodies, affectivities, emotions and behaviour as well as information on chemical, physical, social and molecular scales into the infosphere is bringing forth new forms of computation, whose logic is inaccessible to the human intelligence. Its form of creativity – that is, its capacity to preempt the unknown – so far appears as reductive. It reduces the contingent to the most probable. However, the contingent, which is the brought forth by true creativity ‘is the least probable, or even the improbable’ (Hui 2018, p.211)

Therefore, I would like to reformulate the question ‘Can AI be creative?’ as ‘How does computation participate in the shifting paradigm of creativity as non-anthropocentric ecosystemic imagination of the unknown?’. This question looks at computers as inherently recursive, indeterminate machines, which might have the potential to unwrite and rewrite their own code, thus overcoming their own pre-programmed determination. What is the capacity of computational logic to exceed its own mechanism and defy the verdict of Ada Lovelace? Because as Keats wrote in 1818, ‘That which is creative must create itself’.

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Short Bio

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