



D R A D E K

Studies in Philosophy of Literature, Aesthetics,  
and New Media Theories

Vol. VIII Num. 1 2022

ISSN 2465-1060

[online]

*Creativity in the Light of AI*

Edited by  
Fabio Fossa, Caterina Moruzzi, Mario Verdicchio

powered by



UNIVERSITÀ DI PISA

Comitato Direttivo/Editorial Board:

Daniilo Manca (Università di Pisa, editor in chief), Francesco Rossi (Università di Pisa), Alberto L. Siani (Università di Pisa).

Comitato Scientifico/Scientific Board

Leonardo Amoroso (Università di Pisa), Christian Benne (University of Copenhagen), Andrew Benjamin (Monash University, Melbourne), Fabio Camilletti (Warwick University), Luca Crescenzi (Università di Trento), Paul Crowther (NUI Galway), William Marx (Université Paris Ouest Nanterre), Alexander Nehamas (Princeton University), Antonio Prete (Università di Siena), David Roochnik (Boston University), Antonietta Sanna (Università di Pisa), Claus Zittel (Stuttgart Universität).

Comitato di redazione/Executive Committee:

Alessandra Aloisi (Oxford University), Daniele De Santis (Charles University of Prague), Agnese Di Riccio (The New School for Social Research, New York), Fabio Fossa (Università di Pisa), Beatrice Occhini (Università di Napoli "L'Orientale"), Elena Romagnoli (Scuola Normale Superiore di Pisa), Marta Vero (Università di Pisa, journal manager).

ODRADEK. Studies in Philosophy of Literature, Aesthetics, and New Media Theories.  
ISSN 2465-1060 [online]

Edited by Università di Pisa



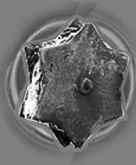
License Creative Commons

Odradek. Studies in Philosophy of Literature, Aesthetics and New Media Theories is licensed under a Creative Commons attribution, non-commercial 4.0 International.

Further authorization out of this license terms may be available at <http://zetesisproject.com> or writing to: [zetesis@unipi.it](mailto:zetesis@unipi.it).

Layout editor: Marta Vero

Volume Editor: Alberto Frigo



D R A D E K

Studies in Philosophy of Literature, Aesthetics,  
and New Media Theories

Vol. VIII Num. 1 2022

ISSN 2465-1060  
[online]

*Creativity in the Light of AI*

Edited by  
Fabio Fossa, Caterina Moruzzi, Mario Verdicchio

powered by



UNIVERSITÀ DI PISA

# Introduction

This issue of *Odradek*, titled *Creativity in the Light of AI*, stemmed from our wish to investigate the intersection between the notion of creativity and Artificial Intelligence (AI).

This analysis can be carried out along different axes, directions, planes, perspectives...finding a proper metaphor for this task is itself a task, since we are dealing with two or, rather, three concepts that have been the object of long-standing debates on their own and present no clearly defined theoretical or practical boundaries. Indeed, we are not able to produce answers to questions like “What is creativity?”, “What is intelligence?” or “What is artificial?” without resuming extremely interesting yet complex discussions that would delay our mission of tackling creativity and AI indefinitely.

To avoid such a pitfall, at the risk of oversimplifying things, we need to roughly sketch a conceptual starting point. We may pick the very traditional, if not trite, human vs machine contraposition to kick-start our analysis from what we may consider an ontological perspective.

An initial focus on human creativity is indeed helpful since, even if we do not have a clear and comprehensive account of how humans are creative, surely we can rely on a vast and varied history and catalog of traditions, methodologies, and products of such endeavors. One way to study creativity and AI is to analyze how the rather recent, at least in

comparison with the temporal scale of art and humankind, introduction of AI-based instruments has affected all aspects of creativity.

This is much easier said than done, since the influence of AI on creative efforts can take many forms that may be, in turn, framed in different ways, ranging from a simple enhancement of a physical tool to a complete substitution of a mental process.

The human vs machine contraposition provides a background to the analysis of this range, which is not exclusive to creativity, but has characterized debates in AI about intelligence since the inception of this discipline. In fact, we might think of our investigation on creativity and AI as a specialization of traditional debates on intelligence and AI, often formulated in the form of questions like “Can machines be \_\_\_\_\_?” or “Are machines \_\_\_\_\_ in the same way humans are?” and so on.

Similarities in questions, however, should not trick us into thinking of creativity as a special form of intelligence. After all, as said before, there is no definition of intelligence that is precise enough to allow for such attempts at conceptual taxonomy. Moreover, if there is at least one form or facet of intelligence, namely computational intelligence, that is amenable to a significant amount of modeling by means of computers (the very effort that led to the birth of AI), things are much foggier when it comes to creativity, where precise and deterministic rules are accompanied by more mysterious factors like inspiration, intuition, and improvisation, among others.

This intriguing mix of ingredients that is creativity and our attempt to cross it with AI keep us circling back to the human vs machine contraposition: what is supposed to work as a starting point becomes a recurring milestone. Every time some endeavor that has been considered exquisitely human is modeled, enhanced, or substituted by an AI-based tool we may obtain some answers about the capabilities of machines, but new questions arise about the very nature of human creativity. Asking what happens to creativity when AI is involved turns out to be an attempt to keep a distinction between whatever happens in our human brains when we create and what happens in the electronic circuitry of computers.

This line of thought brings us beyond the boundaries of an ontological discourse on creativity: it taps into our very view on human nature and the effects on it of the technological revolution that AI seems to be ushering in. We have long given up doing math to machines, and it was not such a problematic delegation, because we do not see computation as essentially defining us as humans. Are we ready to do the same with creativity? Or are we going to approach the human vs machine contrast in a different way this time?

The scholars who contributed to this issue of *Odradek* shed light on extremely interesting directions along which this discussion might develop. In “Creating Art with AI” Anscombe discusses the artistic significance of contemporary computer-generated works, pointing at the opportunities that

human-machine interaction opens up for developing new forms of human creativity. Taking as example musical improvisation as a forum for human-machine co-creation, in “Computation, Creativity, and Improvised Music” Mogensen argues that the dialogue between humans and computational systems is made possible precisely by the categorial differences between human and artificial creativity.

The following two contributions to this issue take a pragmatic approach to defend the involvement of AI in the creative sector. After providing an insightful summary of existing research on the nature and origins of creativity, in their paper “AI’s Role in Creative Processes” Arriagada and Arriagada-Bruneau advocate for the recognition of the creative value of AI as a stimulus and a support for human creativity. The functional role of AI art is at the core of Barale’s argument as well in “Latent Spaces”, but she shifts the attention from the assistance that AI can offer to humans in the production of creative artefacts, to its role as a lens we can use to better understand aesthetic experiences.

The problems raised so far also resonate in the last contribution of this issue. In “Specchi di carne e cesellatura musicale. Limiti della creatività computazionale tra corpo e coscienza”, Merlini and Nicoletti critically argue for a notion of computational creativity that, rather than substituting the human element, acknowledges it as its own context. AI art, then, can only be fully understood if it is not forcefully separated by the human dimension to which it belongs.

We are very grateful for these enrichments to debates on human and artificial creativity provided by the contributors to this issue, and we are happy to share them with our readers.