



ARTIFICIAL INTELLIGENCE AND THE FUTURE OF CREATIVITY: TRANSFORMING PRACTICE AND PRINCIPLES IN ART AND DESIGN

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Abstract. *Our research explores the future of digital art in the age of artificial intelligence, viewing the field as an important lens for examining broader trends in the worlds of art and technology.*

The integration of AI moves the human role in innovation and design increasingly towards sensemaking, or understanding which problems are meaningful to address, as AI takes over problem-solving functions. By examining the emergence of AI in creative contexts – from its role in generating digital artworks to its application in transforming design we can gain a deeper understanding of the shifting landscape of creativity. This shift highlights new possibilities for enhanced user-centricity and iterative development, while also raising concerns about potential constraints on creative freedom through private ordering and contractual restrictions. This investigation aims to illuminate how AI is not just augmenting creative endeavors but fundamentally transforming their practice and challenging their core principles, shaping the future of creativity in art and design.

The primary impact of AI on the digital art community lies in the potential control over creativity. This control is asserted not so much through intellectual property principles, but rather through contractual restrictions that can be embedded in the very design of generative AI.

According to Lawrence Lessig's warning about the emergence of a *permission culture* and a *pay per use* society [1], which requires licenses to create. In his view, the advent of generative AI as a catalyst for the development of the digital creative marketplace is leading to the realization of these predictions. Generative AI acts as a catalyst for the growth of the digital creative marketplace. The unsettled law surrounding digital art serves as an important indicator of the future of art and technology in the age of artificial intelligence. The main danger posed by generative AI lies in its ability to control creativity through contractual restrictions. Digital art forces a contemplation of how paradigms such as contract, creativity, and intellectual property operate with both limits and possibilities within an emerging world of *private ordering*. Handing digital creativity over to art licensors risks contracting not only the pool of available *raw materials* from which artists draw. It also risks limiting the capabilities of generative AI itself, which empower artists to transform these materials into transformative artworks. This tendency risks shrinking innovation and creativity in the public domain, making culture accessible only by *digital key*.

Private ordering, facilitated by restrictive licenses, risks creating a world where creativity is conformed and thus transformed not by intellectual property principles,



but by contractual control. Therefore, the sources emphasize that the main challenge and impact of AI on the digital art community lies in the potential constraint of creative freedom and innovation due to legal and technical limitations embedded in AI tools and governed by private contracts, rather than general principles of intellectual property [2].

The advent and widespread adoption of artificial intelligence are profoundly reshaping numerous aspects of society and the economy, moving beyond traditional industrial settings to influence fields previously considered exclusively human domains, including the creative arts and design. This transformative period, sometimes referred to as the *Age of AI*, introduces new opportunities and challenges for how creativity is conceived, practiced, and understood. At the heart of any innovation process lies *design*, understood as the way people create ideas and solve problems. Traditionally a human-intensive process involving complex decision-making, design practice is undergoing significant change as AI integrates data and algorithms into its core. Simultaneously, the realm of art, particularly digital art, is grappling with AI's capabilities, which challenge established notions of authenticity, ownership, and artistic value.

AI is not merely serving as another digital tool; it is fundamentally altering the way creative decisions are made and executed. It influences the practice of creativity by automating tasks, enabling real-time adaptation, and changing the very object of design from finished solutions to dynamic problem-solving systems. Concurrently, AI compels a re-examination of the foundational principles that underpin creativity and design, such as user-centeredness, abductive reasoning, and iterative processes, as well as philosophical questions about authenticity, control, and the essence of artistic expression.

References

1. Lessig, L. (2004). *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. Penguin.
2. Boden, M.A., & Ernest, A.E. (2019). *From fingers to digits: an artificial aesthetic*. MIT Press.