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Roman Konik

Copernican Academy, Warsaw, Poland

roman.konik@sgmk.edu.pl

ORCID ID: 0000-0002-3715-3540

Does art have to be created by humans?

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Abstract: This paper explores the question of whether art must be created by humans, examining the intersection of artificial intelligence (AI) and artistic expression from philosophical, historical, and aesthetic perspectives. Drawing on foundational texts by Walter Benjamin, Alan Turing, John Searle, and Władysław Tatarkiewicz, the discussion considers the cognitive limitations of AI, particularly

its lack of intentionality, consciousness, and emotional depth–qualities traditionally associated with human creativity. The paper analyzes notable AI-generated artworks, such as *The New Rembrandt*, *Théâtre D'opéra Spatial*, and *Edmond de Belamy*, as case studies that challenge conventional definitions of authorship and creativity. While AI can generate compelling imitations using combinatorial and exploratory creativity, it falls short of transformative artistic innovation rooted in subjective experience. The paper argues that AI should be viewed not as an autonomous artist but as a powerful creative tool. Ultimately, the capacity for emotional expression, symbolic meaning, and aesthetic intentionality remains exclusive to human creators, rendering AI-generated outputs as imitative and soulless rather than genuinely artistic.

Keywords: art, intentionality, limits of art, aesthetics, philosophy of art, epistemology, artificial intelligence

Introduction

Addressing the question posed in the title requires first clarifying and defining the core concepts, thereby avoiding the common misunderstandings, oversimplifications, and distortions that frequently accompany discussions in this age of pervasive artificial intelligence (AI). It is commonly believed that, with the 20th-century rise of machines capable of processing information analogously to human thought, fundamental questions about intelligence, creativity, consciousness, and the relationship between humanity and machines have become increasingly urgent. These questions have given rise to far-reaching skepticism. On one hand, they have fueled fears of anthropomorphizing artificial intelligence—particularly whether it might become conscious or capable of self-reflection. On the other hand, they have inspired enthusiastic declarations about the digital humanization of modern existence. Among AI's many applications, its role in the creation of art is widely debated. Questions arise regarding the role of the artist, the nature of creative subjectivity, the boundaries of creativity itself, and the emergence of new digital styles. In this context, a key question

must be asked: in the age of digital humanism, do we still need human artists, or will they be replaced by AI?

A Thinking Machine? History of Controversies

Such questions about the relationship between humans and machines preceded AI's use in art. Therefore, when analyzing the relation between art and artificial intelligence, it is worth recalling Walter Benjamin's 1935 essay *The Work of Art in the Age of Mechanical Reproduction*. In this influential work, Benjamin examined the profound consequences of the unrestricted mass reproduction and distribution of artworks. Although his analysis focused on photography, gramophone records, and film, the insights he offered remain strikingly relevant today. He argued that mechanical reproduction erodes the aura of true art—its uniqueness and authenticity—by making it ubiquitous and disconnected from its original context. For Benjamin, mechanically reproduced art—lacking the direct involvement of the artist—marked a turning point in art history. It transformed art into something distant and impersonal, offering only an ersatz of true artistic experience. In other words, mass reproduction leads to the loss of the "soul" of art. Benjamin emphasized not only the mechanical possibilities of reproduction but also the mechanical origin of such art, drawing a sharp distinction between authentic, original creation and its mechanical counterpart. This distinction between real and mechanical art—between the intimate and the mass-produced—still resonates today, particularly in the context of AI-generated works. In many ways, Benjamin's essay proves prophetic, anticipating the philosophical questions we now face about authorship, originality, and the role of the creator in an age of algorithmic generation (Benjamin, 1935).

The philosophical inquiry into the cognitive capacities of machines was continued by Alan Turing. In his 1950 paper *Computing Machinery and Intelligence*, Turing asked whether machines could think—a question that laid the foundation for modern AI debates. Although the answers to this question are somewhat archaic today, Turing was one of the first to analyze the ability to process natural language, thus opening the debate on whether computers can be

considered thinking machines or whether they will remain mere combinatorial generators of previously uploaded data. It is worth noting that the debate initiated by Turing was not limited to the IT community, but also involved cyberneticists, neuroscientists, and philosophers (Turning, 1950).

These debates soon extended beyond computer science and sparked a rather critical philosophical stance. In 1965, Hubert L. Dreyfus compared the pursuit of equating artificial intelligence with human thought to the efforts of alchemists attempting to turn metal into gold or discover a *panacea* for immortality. According to Dreyfus, the main argument for the non-translatability of human thinking into binary code lies in the categories of common sense and intuition—qualities that people use when making decisions. These elements, deeply embedded in embodied human experience, will never be available to any machine, regardless of its sophistication (Dreyfus, 1965).

Among the philosophers who questioned the cognitive ability of machines at the human level was the American philosopher John Rogers Searle. In his research on the mind, he drew attention to the concept of intentionality—the capacity to have mental states directed at or about something—which he considered the exclusive domain of the human mind. His famous Chinese Room thought experiment is particularly noteworthy. In this scenario, Searle describes an isolated room where a person who does not know Chinese receives questions in Chinese and uses a rulebook to produce appropriate responses, all without understanding the language. To external observers, it appears as though the person understands Chinese, but in reality, they are merely following syntactic rules without semantic comprehension. Searle argued that this situation mirrors what computers do: manipulating symbols based on programming without genuine understanding (Searle, 1980).

According to Searle, while advanced programs may allow computers to simulate correct answers, they do so without awareness or comprehension, which disqualifies them from achieving human-like consciousness or intentionality. Extending this analogy, he claimed that even the most advanced AI algorithms, capable of analyzing the literary patterns of Anton Chekhov, the painting style of Piet Mondrian, or the musical forms of Gustav Mahler,

remain confined to the realm of stylistic imitation. They lack the capacity for emotional or aesthetic understanding, as true creativity is grounded in internal experience—a quality machines inherently lack. For Searle, the mere processing, shuffling, and recombination of algorithmic data is neither creative nor comparable to genuine understanding. Artistic meaning, he argues, is rooted in the internal experiences of both the artist and the recipient—something machines inherently lack. As a result, AI-generated outputs remain hybrids at best, capable of imitation but devoid of true insight. Most importantly, Searle underscores that artificial intelligence lacks intentionality in the human sense—it has no rational or conscious reference to reality (Searle, 1980).

Hilary Putnam and Jerry Fodor echoed this view, emphasizing that intentionality is a necessary condition for intelligence. Fodor, in particular, explored the deep relationship between thought, meaning, and mental representation (Putnam, 1975; Fodor, 1994).

Although there is no consensus on whether AI can actually have *true* intentionality or consciousness, some philosophers allow for this possibility or believe that it can be attributed in a specific and narrow sense (see: Dennett, 1971; Minsky, 1986; Chalmers, 1996; Clark, 2008).

Creativity—long considered a hallmark of human cognition—is, in this view, intrinsically human. It is not merely the rearrangement of existing elements but an expression of internal experiences shaped by culture, emotion, and memory. For this reason, doubts about machine creativity are not simply technical—they arise from deeper philosophical concerns. At the heart of the debate lies the question of whether machines can truly be creative—a quality that, despite its complexity and rich philosophical lineage, has historically been attributed solely to human thought. Creativity has served as one of the defining traits of *Homo sapiens*, the only species capable of generating a cumulative culture imbued with values, symbols, and traditions. Philosophers of mind such as Searle, Putnam, and Fodor argue that even the most advanced machines—those employing neural networks or analogous analytical methods—lack intention, emotional control, and therefore consciousness in the full human sense (Putnam, 1975; Fodor, 1994).

The Humanization of Digital Aesthetics

Both the aforementioned critical voices—denying artificial intelligence's capacity for creativity at the level of human consciousness—and the enthusiastic declarations of supporters who advocate for the anthropomorphization of digital machines resurface during various high-profile events that test the boundaries of artistic authorship and authenticity. In 2022, such a moment occurred at the Colorado State Fair, reigniting debates around the role of AI in art. Jason M. Allen submitted a painting titled *Théâtre D'opéra Spatial* and won first prize in the digital art category. The work had been generated using the AI tool Midjourney, which creates images from text prompts. Crucially, the jury—composed of art theorists, curators, and practicing artists—was unaware of the painting's AI origins. Once revealed, the decision sparked controversy. Critics questioned whether the aesthetic value of the piece, a depiction of a mythical landscape, was compromised by its algorithmic genesis. The incident raised fundamental concerns about authorship, originality, and deception in an age where AI-generated work can be indistinguishable from human-made art.

A similar discussion was triggered by the 2016 project *The New Rembrandt*, a collaboration between Delft University of Technology, Microsoft, ING Bank, and several Dutch museums. In this case, data from 346 Rembrandt paintings were analyzed in meticulous detail—tracking brushstroke patterns, chromatic composition, clothing styles, facial features, and lighting effects. The AI system then synthesized this information to create an entirely new portrait in the style of Rembrandt, printed in three dimensions using layered paint and glaze. The final result: a 148 × 129 cm portrait of a fictional man dressed in black with a white collar, evoked the painter's signature use of chiaroscuro and compositional balance. The project received widespread acclaim, with many celebrating the possibility of "a new painting by the master" centuries after his death. Yet critics were quick to respond: while the algorithm could convincingly replicate Rembrandt's style, it merely recombined existing data—akin to a forger "capturing the spirit" of an artist's work without contributing genuine innovation or intent. In this view, the programmer feeding data into the system, no matter how sophisticated the algorithm, is not an artist in the traditional sense.

Definitional Difficulties

The question posed in the title of the article—whether art must be created by humans—ultimately boils down to two philosophical issues: the definition of art and creativity and the relationship between humans and machines. In essence, it hinges on two fundamental concerns: how we define creativity and how we define art itself.

When defining creativity in aesthetic terms, it is worth turning to Władysław Tatarkiewicz (1982), who, in *Dzieje sześciu pojęć* (Eng. *The History of Six Concepts*), offers a precise account of the historical evolution of the notions of reproduction and creativity—effectively tracing the conceptual history of creativity itself. According to Tatarkiewicz (1982), artistic creativity is characterized by innovation, originality, inventiveness, and the capacity to break new ground, while reproduction is aligned with imitation. Contemporary understandings of creativity, however, tend to be more nuanced and scalar, encompassing several dimensions: combinatorial creativity, which involves synthesizing existing elements in novel ways; exploratory creativity, which operates within established systems and patterns; and transformational creativity, which breaks with convention to produce genuinely original work, often tied to emotional expression and individual experience. When we examine these categories more closely, it becomes apparent that artificial intelligence currently meets only the first two: combinatorial and exploratory creativity.

If we wish to ask whether art must be created by a human, we must first confront a more fundamental question: what is art? Without at least a working definition, any further discussion risks descending into vagueness, imprecision, or overgeneralization. Yet it is important to acknowledge that, since the 20th century, efforts to define art have been met with increasing skepticism. Rather than being merely difficult, many philosophers argue that defining art is, in fact, impossible. Ludwig Wittgenstein (1966), in his reflections on language and language games, observed that certain concepts—art among them—lack a set of common, defining features. As such, they remain open-ended and resistant to rigid categorization. Morris Weitz (1956), echoed this view, asserting that the philosophical challenge lies not in the difficulty of defining art, but

in the futility of attempting to do so. Similarly, William Elmer Kennick (1958), argued that the central error of aesthetics as a philosophical discipline is its relentless pursuit of a fixed definition for a subject that may, by nature, defy one.

Authors who embraced this skepticism toward definitions often argued that one of the fundamental pillars of artistic practice is freedom of expression—something that cannot be confined within rigid conceptual frameworks. Such frameworks, they contended, risk limiting artists to pre-established boundaries, stifling innovation and experimentation. From this perspective, artists are not only free to create works that fall outside existing definitions, but also to explore novel materials, previously nonexistent media, and the possibilities opened up by emerging technologies. While some sought to temper this view by asserting that meaningful discourse about art remains possible even in the absence of a strict definition, time has revealed the limitations of this approach. Analyses grounded in vague or overly fluid criteria often reduce philosophical and scholarly discussions to the level of everyday conversation—a tendency especially apparent in current debates surrounding the intersection of artificial intelligence and art.

Among the many philosophical efforts to define art with precision, Władysław Tatarkiewicz's (1982) proposal stands out as particularly noteworthy. His carefully balanced analyses are marked by objectivity and a resistance to bias. In his dialogues with Anglo-Saxon philosophers, Tatarkiewicz considered both the material dimensions of art history and artistic practice, as well as the theoretical challenges posed by the avant-garde movements of the early 20th century. This measured and cautious approach, avoiding extreme claims, lends significant weight to his contribution to the definitional debate. Tatarkiewicz's philosophical stance is distinguished by an earnest search for a common denominator—a thread of typicality within the vast diversity of artistic expression. His aim was to identify a unifying feature that could encompass all works of art. Defying the prevailing skepticism of his time, Tatarkiewicz put forth his own definition: "Art is the recreation of things, the construction of forms, or the expression of experiences—if the product of this recreation, construction, or expression is capable of delighting, moving, or shocking" (Tatarkiewicz, 1982, p. 248).

Although broad in scope, this definition manages to distinguish a category of objects regarded as art from ordinary reality, while also capturing certain intuitive responses we experience when engaging with artworks. If we provisionally accept Władysław Tatarkiewicz's definition, then addressing the question posed in the article's title—"Does art have to be created by humans?"—requires us first to clarify what we mean by artificial intelligence, a term that has grown increasingly ambiguous in recent years.

For the purposes of this article, we can adopt a working definition of artificial intelligence as the capacity of digital machines to process data in a way that mirrors human cognition. In other words, a sufficiently programmed computer can gather and interpret information using algorithms that emulate the human mind. Accordingly, art generated by artificial intelligence refers to any form of artistic creation that relies on programming and cannot be produced without it.

It is essential to recognize that artificial intelligence is not a monolithic entity, but rather a convergence of diverse, specialized technologies, each designed for particular functions. Depending on its programming, AI can gather and interpret visual, auditory, numerical, or linguistic data to perform its designated tasks. Consequently, if we adopt Władysław Tatarkiewicz's (1982) definition of art, then AI-generated art may satisfy the criterion of recreating objects or constructing forms. However, it falls short of fulfilling the dimension of expressing lived experience.

Concluding remarks

In examining the relationship between art and artificial intelligence, several key points merit emphasis.

First, the advanced algorithms used to generate images—such as Google's *Deep Dream* (2015), which employs neural networks to recognize and produce images, or text-to-image models like *Midjourney* and *Stable Diffusion*—as well as those used for music composition (e.g., *AIVA*, the Artificial Intelligence Virtual Artist, which analyzes harmonic structures to create new musical arrangements), and literary creation (e.g., *LaMDA*, Language Model for Dialogue

Applications, *AI Dungeon*, or *Jasper AI*, which synthesize massive datasets of literary texts, online content, and dialogues to generate narratives complete with plot, character development, and dialogue) all belong to a category known as generative algorithms. These systems operate by recombining material that has already been encoded into their memory.

Even if we entertain the possibility that artificial intelligence can generate content autonomously in response to user interaction, it is crucial to remember that such algorithms—despite mimicking neural networks—remain confined to the boundaries of their programming. In essence, an AI application that "creates" art is merely executing tasks within a predefined set of rules. It does not create in the human sense but rather simulates creativity through the emulation of programmed instructions.

Secondly, even when using programs that employ technologies capable of "learning from aesthetics"—by analyzing vast collections of images, music, or literature—we remain confined to a repository of what already exists. In contrast, nearly every act of artistic creation—whether in music, literature, or the visual arts—is inherently subject to revision, reinterpretation, and transformation, shaped by the artist's evolving experience and external influences. Consider Pablo Picasso's iconic *Guernica*. Originally conceived in 1937 as a purely abstract mural for the Paris World Exhibition, the work was not intended to carry any specific political or representational message. However, following the bombing of the Basque town of Guernica by the German Condor Legion on April 26 of that year, Picasso radically altered his vision. The abstract concept gave way to a stark, figurative composition that powerfully conveys the horrors of war. Throughout the painting process, Picasso continually modified the arrangement of figures, adding and removing elements as the emotional and political weight of the subject deepened. This fluid, responsive process—shaped by changing contexts, emotional resonance, and artistic intuition—is emblematic of the kind of intentional creativity that artificial intelligence fundamentally lacks.

It is true that some artificial intelligence programs exhibit a level of generativity that can seem unpredictable. However, this apparent unpredictability—often mistaken for creativity—stems from the processing of vast datasets far beyond human reach, both in terms of scale and speed. It is crucial to remember that such

systems function solely within the bounds of pre-existing data stored on disk. In the realm of art, for example, these models generate output based on previously ingested images, texts, or music. In essence, artificial intelligence simply "feeds us" a recombination of what it has already been fed.

If we accept artistic freedom as a defining criterion for the creation of art, then by that standard, art generated by artificial intelligence must be excluded. AI, after all, lacks the capacity for freedom—computational power and data processing alone do not constitute autonomy—nor can it intentionally express emotion. Rather than viewing AI as an autonomous creator, we should consider it a tool for artistic expression, another medium in the artist's toolkit. Framing AI in this way may simplify the debate to some extent, positioning it alongside instruments like the musical keyboard, the paintbrush, or the camera—tools that extend the artist's vision but do not replace it.

Finally, it is worth addressing a frequently overlooked aspect of discussions surrounding AI and art. If we embrace the post-avant-garde definition of art—which allows anyone, regardless of technical skill or imaginative capacity, to be considered an artist—and combine it with the postmodern notion of cultural exhaustion, where art is reduced to a patchwork of mixed styles, pastiche, and self-referentiality, then within such an expansive framework, artificial intelligence can indeed be regarded as an artist, and computational algorithms as autonomous instruments of artistic creation. A striking example of this perspective is the French art collective Obvious, composed of Hugo Caselles-Dupré, Pierre Fautrel, and Gauthier Vernier. In 2018, the group gained international attention when their AI-generated portrait *Edmond de Belamy* was auctioned at Christie's in New York, fetching an astonishing $432,500. The portrait depicts a male figure in a dark coat and white collar, his face slightly blurred, giving the image an unfinished, ghostly quality. As noted in the auction catalog, the artwork was created using an algorithm defined by an algebraic formula developed by the collective. The process behind the portrait's creation involved feeding over 15,000 historical portraits—from the 14th to the 20th century—into a neural network. A specially trained generator then attempted to produce a new image by distinguishing between human-made portraits and those synthesized by the machine, ultimately crafting an output that could convincingly mimic the former. The goal was to create an illusion: a portrait

that *feels* human-made. Despite the conceptual ambition behind the project, it is difficult to fully accept the claim that these algorithms demonstrate genuine creativity rather than mere generativity. Even the members of Obvious express caution when it comes to assigning authorship to AI. As Caselles-Dupré aptly puts it: "If the artist is the one who creates the image, then that would be the machine. If the artist is the one who holds the vision and wants to share the message, then that would be us" (Caselles-Dupré, 2018).

It is important to note that most of these types of "works" fall within the realm of abstract art. This is largely because the algorithm responsible for generating new forms follows a model that mirrors the historical progression of art—from figuration to abstraction. In this light, the conversation evokes parallels with the long-standing debate over whether animals are capable of creating art.

Some theorists, such as Desmond Morris (2013), Karl von Frisch (1974), Irene Pepperberg (2008) argue that certain animals do exhibit creativity. They may even demonstrate a preference for individual style and engage in artistic behavior purely for pleasure, occasionally producing results that are aesthetically pleasing to human observers. However, such interpretations tend to overlook a crucial distinction: animals lack symbolic consciousness. Their creations—no matter how visually appealing—are not the product of deliberate reflection or the result of rigorous training in technique. What is most often ignored in these discussions is that such examples, whether generated by animals or algorithms, typically operate within the framework of so-called non-figurative art.

When considering whether artificial intelligence can fully meet human aesthetic needs, two perspectives emerge: affirmative and negative. The affirmative view applies primarily to superficial or passive engagement with art—comparable to ambient music, which often lacks a distinct melodic line and departs from traditional song structures. In such cases, the aesthetic experience is fulfilled by the creation of an atmospheric soundscape, offering a pleasing background rather than a focal point of artistic contemplation. Conversely, the negative perspective resonates with those who seek depth, originality, and a sense of artistic presence. Drawing on Walter Benjamin's (1935) concept of the *aura*, this view holds that true aesthetic satisfaction arises from a unique, transcendent connection to the artwork—something that current AI, despite its capabilities, may not yet be able to replicate.

In summarizing and synthesizing critical perspectives, Vladen Joler's (2022) work *New Extractivism* stands out, particularly for its striking metaphor: a modern individual utilizing artificial intelligence is likened to a prisoner in Plato's cave. Shackled by digital technologies, this prisoner's perception is shaped by AI-generated simulations—synthetic images mistaken for reality. The neural networks that structure discourse become impenetrable walls, preventing any awareness of the broader truth. According to Joler, escape is possible only through what he terms "pulling the plug".

While acknowledging the metaphysical nature of this conclusion and its reliance on metaphorical representations of the immeasurable, one may still argue that artificial intelligence, by its very nature, can produce only soulless art.

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