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Creativity in the Age of AI: A Post-Phenomenological Comparison between AI-Generated Content and Exquisite Worker' AI Surrealism

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ABSTRACT. AI technologies such as neural networks and deep learning have revolutionized the arts, generating debate around creativity, originality, and the nature of authorship. The Exquisite Workers' 'AI Surrealism' exhibition exemplifies AI's potential to democratize art and expand digital aesthetics. This paper explores AI's impact on art's cultural role, starting from a theoretical and anthropological framework influenced by Benjamin, Noë, and Russo's ontology of machines, challenging traditional concepts of authenticity and authorship.

1. Introduction

Since the turn of the millennium, groundbreaking technologies like neural networks, deep learning, and artificial intelligence (AI) have progressively permeated the realm of the arts. This era has witnessed the advent of systems designed for assessing, critiquing, and valuing artistic creations against aesthetic norms or popular preferences. Furthermore, AI's capability for image generation

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has been harnessed to produce innovative, synthetic art forms, leveraging its seemingly boundless image-generating potential. These machine learning technologies, when intensively trained on vast datasets, possess an extraordinary capacity for generating artistic content.

Instances where AI generates works evocative of Dalí, produces manga-style images, composes music reminiscent of the style of famous rock bands, or completes a Beethoven symphony, sparks debate. Critics claim, with good reason, that such creations lack originality or authenticity, branding them as intricate simulacra of human cultural achievements. This discourse revives the age-old inquiry into the nature of creativity: what permutations of ideas, unique analogies, and conceptual interconnections constitute authentic and original human creativity? Is it conceivable for AI to be genuinely creative and autonomous? What is the relationship between art and technology? Furthermore, how soon until AI's creative works render the artist's role obsolete?

The burgeoning of AI-generated art has brought the notion of authorship into question: Who is the rightful owner of an AI-created artifact? While some view an AI system as merely a tool in the hands of artists and programmers, the prospect of AI embodying a surrogate of independent artistic creativity, indicative of a certain agency, cannot be overlooked. Additionally, "deepfake" technologies, which allow for the alteration or creation of events, pose new challenges to the political landscape by disseminating misinformation.

Yet, AI also offers formidable artistic applications. A digital-native collective, Exquisite Workers,[2] launched an exhibition titled "AI Surrealism" from June 3-24, 2023, in New York, featuring a varied array of genres including: AI Photography, AI animation, and AI-infused jewelry and fashion design. The exhibition is also available online.[3] Since 2020, Exquisite Workers has pioneered the fusion of Surrealism with emergent technologies. The collective posits that AI and blockchain technologies can transcend the limitations of human experience, unleashing unprecedented forms of creativity. In this vein, digital technologies evolve from mere imitative instruments that replace human creators to potent facilitators of novel and immersive visual experiences. Surrealism, with its tradition of innovation and adaptability during significant societal

[2] https://exquisiteworkers.com/

[3] The works can be viewed on X: https://x.com/ew_corpse

shifts, serves as an exemplary foundation for exploring the confluence of AI and blockchain technology.

The "AI Surrealism" exhibition extended beyond physical confines, accessible online, thus revolutionizing traditional notions of presence. The works of art have also been sold online for a few cents or cryptocurrency, democratizing the art market. If in the previous century thinkers like Günther Anders (1944), Martin Heidegger (1980, pp. 1-70), and Walter Benjamin (2008) identified, from different and somehow irreconcilable perspectives, a crisis of presence within the museum and the reproductive dimensions of art, this paper will examine whether such frameworks remain applicable to art born digital and, in some instances, detached from its material base. The categories outlined by Benjamin and Anders pertaining to the "neutralization" of art seem to apply within online and Metaverse environments, where the work of art is digital since the beginning of its creation.

Benjamin noted that with the advent of technologies, enabling the mass reproduction of artworks, the "aura"—the unique space-time, cultural and historical context of an artwork—fades. He posited that mechanical reproduction, as opposed to manual reproduction like painting, modifies the essence of art.

This is not necessarily a negative trait; for example, since the Renaissance paintings, works of arts, and artists have circulated extensively through Europe, giving birth to new styles and artistic currents. The speed of information transmission, in this case, of artworks, resulting from the media through which such information is conveyed, is always a factor in accelerating and diffusion of processes. This shift led to various outcomes, including the democratization of art and its distribution. The recent mechanical reproduction of art dismantles elitist barriers, making art more widely accessible. However, it also introduces a change in perception; the audience engages differently with reproduced art compared to the original, prompting a reevaluation of how art is conceived and interacted with in the digital age. Furthermore, the loss of aura in art, as per Benjamin, could erode its traditional ritualistic and cultic significance, potentially fostering more politically charged and critical art forms. The pervasive and instantaneous spread of digital art, facilitated by the internet, has also transformed the political dimension of art, and its spatial and

temporal determinations. Lastly, the function of art transitions from being unique and ritualistic to a mass-culturally reproduced entity, affecting how art is produced, disseminated, and perceived.

Informed by post-phenomenology, which recognizes that technologies—especially media—exert a reciprocal feedback effect on their users (Idhe and Malafouris, 2019), this paper will explore the dichotomy between disruptive and proper uses of AI in visual arts based on the relationship between humans, technology, and art. First, it will consider the so-called entanglement (Noë, 2023) between art and technology from an anthropological and phenomenological perspective. Then, it will examine AI systems through a theory of machines (Russo, 2021). Next, it will analyze the case study of Exquisite Workers' aesthetics within the ontological and methodological framework established in the previous sections. Finally, within the post-phenomenological theoretical context, the discussion will turn to how AI might reshape our engagement with art, the role and status of the creator, and the modalities of artistic fruition and function.

2. The anthropological entanglement

Since the very beginning of our natural history, art has been a fundamental aspect of our being in the world. The extraordinary monuments of Paleolithic art are an immensely important discovery and a significant challenge to every theory of humanity, testing their validity.

Art and technology are two universal features of humankind, detectable at least in Homo sapiens and Homo neanderthalensis (Hoffmann et al., 2018). The ancient Greeks used the same word to define both phenomena: the term *techne*. Aristotle (Phys. II, 194 a21-22; 198 a15-20) argued that *physis* (nature) and *techne* (art/skill) were bound by analogy. According to the Greek philosopher, *techne* is *mimesis* (imitation) of *physis*, and both operate through final cause or purpose. *Technei onta* (artificial beings) are in Greek *Weltanschauung* artifacts, both technological beings and works of art. What distinguishes the artifacts from the natural being is the *causa efficiens* (efficient cause) and the *causa finalis*. In the artifacts the *causa efficiens* (*archè*) and the *causa finalis* (*telos*) are always external to the being itself; they reside in the *architecton* (the maker) that invent and realize the being, shaping matter according to a form or a project.

In his *De Argumentis Scientiarum*, a latinized expanded version of *Advancement of Learning*, Francis Bacon, following Aristotle, stated that artificial things do not differ from natural ones in their essence or form but rather according to their *causa efficiens* (Bacon, 2013). In a technological artifact, the *causa efficiens* is human, and likewise, human purposes are their final cause. Therefore, the finality in a technological artifact always has a social or individual origin. On the other hand, it is philosophically debatable if the finality in art is explicit or implicit, present or, according to Kant and romantic speculation, not immediately given. It is a common aesthetic cliché that Art is per sé or quoting Wilde "for its own sake". In this context, we cannot further explore this highly complex issue; it would exceed the purpose and scope of the present essay. However, what immediately stands out is that the indifference of the Greek term *techne* is not fully adequate to describe the phenomena of art and technology; their mutual origin resides in our poietic faculty, but they pursue different purposes.

Writing, speech, and pictoriality are specific expressive and poietic "technologies" that, according to Alva Noë, we can define as habits (Noë, 2023). Habits are part of our cultural behavior, the natural way of our being in the world. Human is the only animal cultural by nature; therefore the dichotomy between nature and culture, from this ontological perspective, is only apparent (Descola, 2014). We are beings that are naturally technological and symbolical; therefore, in human nature and culture, art and technology are always entangled. According to this theorical framework, if we consider technology as a product of both nature and culture, then the being-in-the-world of human being is bio-cultural. We are cultural, and therefore artistic and technological by nature. Art and technology are both part of our material culture, but they do not have the same role. Whereas technology has to do with the way we organize our both social and natural world, transforming the nature and ourselves, establishing new habits and even institutions, art is the disturbance of a habit as a reflective activity (Noë, 2023). Art has a reconfigurative and revolutionary power that exceeds habits. Rather than with the "unconcealment" (*aletheia*) revealing of the origin or of the root, as Heidegger stated in his masterpiece *Ursprung des Kunstwerkes* (Heidegger, 1980), art has to do with changing and becoming; it has a dialectical nature whose essence is wandering. Walter Benjamin underlined this feature of artistic production, criticizing Heidegger: the artist is similar to the Flaneur, to the wanderer of the modern cities. Art has in the errancy its inspiration, and the

losing of the aura of the work of art in the age of its mechanical reproduction, with the consequent fluidification of its space and time, testify the very revolutionary nature of the artistic artifact. This is true especially in the digital era of information, where images are detached even from their material consistency. Technology and art then interact together like Nietzsche's Apollonian and Dyonisian; the first is will of form, the second is a force breaking down the boundaries, expressing the untamed aspects of existence.

They need each other: art needs technologies and techniques as expressive means, technology needs art to rework the raw materials of our organization and to open new horizons.

3. AI as a Machine

The use of algorithms and computing technologies in art is neither radically "new" nor exclusively enabled by AI and machine learning. An early example is generative art, which originated in the 1950s as a process of algorithmically generating new ideas, forms, shapes, colors, or patterns. Generative art is an artistic process mediated by a non-human autonomous system, where the artist sets boundaries for the creative process that a computer follows to produce new works on their behalf. This approach was pioneered by Ben Laposky in his work with oscilloscopes and later by Manfred Mohr.

Generative art embodies the concept of "art that generates art," where the work is produced by an autonomous system capable of determining its characteristics (shapes, sounds, colors, etc.), which would otherwise require direct artistic decisions. In some cases, the human artist may view the final work as a representation of their artistic vision, while in others, the autonomous system assumes the role of creator entirely. Generative artworks can be produced through mechanical, robotic, computational, chemical, or randomization systems, among others.

Generative art can be regarded as a precursor to AI-generated art platforms such as Midjourney and OpenAI's image generation tools. Yet, as Soddu (2019) observes in the context of new AI-generated art: "The software of creative experimentation based on the subjective identity of the artist has given way, in most cases, to commercial software that has progressively

overshadowed the possibilities explored by early experimenters, making them, at least apparently, objective and detaching them from the creative identity of their original designers."

This development may lead to what Roland Barthes described as the "death of the author", as we later clarify. The use of a non-human autonomous system introduces a new kind of intentionality and agency in the artistic process, reconfiguring it. Contemporary AI systems seem to introduce a mixed intentionality (Di Martino, 2024), leading to unpremeditated outcomes in the artistic process. In this context, the intentionality and creativity of the artist are either enhanced or replaced by the intentionality of the machine and the engineer who designed it.

At first glance, this hybridization of human and machine creativity, in line with art's reconfigurative function, leads to new forms of expression. However, this perspective also poses risks, as these new systems are capable of generating art independently of human intervention. It is therefore necessary to understand what it means to create or produce something.

Margaret Boden, in her essay *Creativity in a Nutshell* (2004), identifies three types of creativity:

1. **Combinational Creativity**: This involves novel combinations of existing ideas or concepts, akin to creating new recipes by blending familiar ingredients in unique ways. This combinatorial activity reflects relationships among ideas, as described by philosophers such as Descartes, Hume, and Kant. Here, imagination combines experiential materials to create new artifacts, ideas, and relationships.
2. **Exploratory Creativity**: This type explores the structured space of possible ideas within a particular conceptual framework or style, pushing existing boundaries to uncover new possibilities.
3. **Transformational Creativity**: The most radical form, in which the conceptual space itself is transformed. This involves altering the rules or foundational principles of a domain, leading to genuinely novel and original concepts. Examples include Einstein's theory of relativity, Caravaggio's exploration of light and shadow, and Duchamp's conceptual art.

While AI can imitate and reproduce the first two types of creativity, transformational creativity remains an exclusively human prerogative. AI, by itself, cannot create entirely new domains, concepts, or forms of art that are fundamentally novel, either aesthetically or conceptually. This limitation stems from the nature of machine learning, which relies on human-generated knowledge or data, as well as the ontological nature of machines.

Therefore, a phenomenology of art and creativity alone cannot fully illuminate the phenomenon of AI-generated art. AI is ultimately a machine—a technological artifact. While it may appear to have a higher degree of autonomy than other technologies and may seem to mimic human agency and artistic behavior, its intelligence is, at best, only analogous to human intelligence and operates in a fundamentally different way (Cristianini, 2023). As a machine it cannot be fully autonomous, since it needs, as said, an external *telos*.

To understand the extent to which an AI system might be considered autonomous, it is essential to develop a theory of machines that provides a genealogical and methodological framework for analysis. According to Russo (2022), a machine is a particular kind of technological artifact, whose nature can be deduced from the etymology of the term. A machine is primarily an instrument—a medium between humans and nature. This mediating role aligns with the concept of *homo faber:* if the machine is the proper instrument of humanity, then humans are beings that build, project, and design instruments to mediate their relationship with nature, their habitat, and even themselves. This implies that the purposefulness of the machine is inherent in its design, making it an artifact created with one or more specific goals.

However, as a human-specific instrument, a machine is not merely a form of mediation also used by animals, particularly our closest relatives (Boesch, 2014). The Greek term *mechane*, derived from *mechos*, indicates both a medium and an expedient, trick, or remedy, and has its root in the Indo-European √*magh*, akin to the German terms *mögen* and *Macht*, indicating will and power. *Mechane*, and hence the machine, refers to a tool or trick that enables control or power. *Homo faber* is therefore also *homo habilis*—a creature with "many skills" or "tricks" (Russo, 2008). A machine is different from a mere mechanism; it has a specific function tied to achieving a goal or completing a task. Machines are artifacts that indirectly operate on nature.

These distinctions are not merely theoretical but are necessary to illuminate the general character of AI as a machine, especially when used in artistic creation.

It is therefore necessary to differentiate among instruments, tools, and machines:

- **Instrument**: This is the basic level of mediation, a first-order technology that directly mediates the animal-instrument-nature relationship. Instruments are used by animals as well (e.g., by monkeys, octopuses, crows) as natural entities used to enhance a specific organic function.
- **Tool**: A tool is a raw or nearly raw natural entity used to perform a specific task, directly aimed at achieving a goal (e.g., a hammer or brush). This is typically human and involves explicit purpose and rules for execution. Tools signal the emergence of technical skills unique to humans.
- **Machine**: A machine is a means to an end, but it follows an indirect path; it is not just an artifact but an artful procedure. It is an artifice to achieve desired outcomes from nature indirectly, somehow "tricking" nature. Compared to tools and instruments, machines possess a certain degree of autonomy. Therefore, every machine implicitly carries human power to organize and manipulate nature. However, a machine is not identical to a mechanism; it is more than the sum of its parts.

Following Russo's ontology of machines (2021), we can distinguish two types of machines: **apotelestic** and **sympleromatic**.

- **Apotelestic**: Derived from apo (starting from) and *telos* (end). This term describes machines that perform a defined, final function, no longer requiring the artist's intervention once completed. Apotelestic machines typically operate on nature as executive instruments, fulfilling a pre-defined human goal, like a wind turbine or pneumatic drill.
- **Sympleromatic**: A sympleromatic machine is a technological artifact directed inward, impacting the user and enhancing their inner self through mediation. Examples include

writing, musical notation, musical instruments, and AI. Sympleromatic machines have a reflexive function, creating a feedback loop that alters or fulfills the user.

In summary, apotelestic machines operate on nature, while sympleromatic ones operate on humans. Both types have an organizing function. According to some scholars, the oldest known sympleromatic machine is a Neanderthal-era flute found at Divje Babe in Slovenia, dating to around 43,000 years ago (D'Errico et al., 2015). Sympleromatic machines enable a feedback effect, modifying the user in an indirect way. While apotelestic machines externalize a function and provide a degree of autonomy from that function, sympleromatic machines act dialectically, impacting the user in a transformative process.

According to this theoretical framework, AI can be seen as the paradigmatic sympleromatic machine, externalizing and objectifying many human functions (Kapp, 2015), such as calculation, reasoning, and artistic creation. It possesses a specific intentionality that impacts both the user and the consumer. However, as a machine, it always depends on its creators (engineers) as its *causa efficiens*; its *causa finalis* is still ultimately shaped by its creators, users, and society. For this reason, we can only metaphorically speak of agency, reasoning, or intentionality in machines, recognizing that these functions fundamentally differ in humans and artificial systems.

AI thus embodies what Mumford describes as "paradigmatic machines"—instruments that define an era. According to Noë, AI incorporates both organizational and reconfigurative functions, reflecting its role as a technology with organizational power and as an autonomous system capable of generating or facilitating art creation.

4. Case Study: Exquisite Workers and *AI Surrealism*

As introduced earlier, the philosophy of Exquisite Workers and their exhibition, *AI Surrealism*, provides a concrete context through which we can examine and test theoretical assumptions regarding AI and art. In a 2023 interview for *Medium*, DEHISSENCE — a Toronto-based artist and prominent member of the Exquisite Workers collective — provides insights into his use of AI to create art:

> I have no formal art training; my background is in forensic anthropology and, more recently, in healthcare. I describe my art as visual anthropological explorations of the human experience—a somewhat cumbersome term, but one that reflects my art's grounding in interactions with the human body, shaped by both of my previous careers. […] Regarding the integration of artificial intelligence in my artistic process, I experimented with Art Breeder in 2018/2019 but found it unsuited to my creative goals. I liked the concept of being able to 'modify genes' but ultimately felt limited by the lack of control over the output. This experience shifted my focus away from collage and digital painting toward AI as an artistic tool. As I studied gene editing technology for a residency, alongside my broader interest in medical technology, I became increasingly motivated to use technology to modify the human body artistically, edit my works, and develop models tailored to my needs. […] My workflow is relatively standard. I start with a rough sketch or collage and then input it into Stable Diffusion, which I may run once or multiple times depending on the outputs and the adjustments required. I might manually edit the image between Stable Diffusion iterations, but this varies. Once I obtain images suitable for further refinement, I complete them in Photoshop or Procreate, using basic adjustments like color correction or more complex techniques like overpainting. For animations, I use Deforum Diffusion; recently, I have also begun experimenting with Runway Gen 2's text-to-video capabilities. Since the release of Midjourney V5, I have used Midjourney's blending option to merge older works into new base images for use with Stable Diffusion.

This interview reveals several noteworthy themes. First, AI provides a means for individuals without a formal artistic background to engage in artistic production. Historically, becoming an artist required acquiring the necessary technical skills to convey one's creative ideas. With AI, however, individuals possessing artistic vision, but coming from disparate fields, can now produce credible art. In this sense, AI functions as an authentic *mechane* — a trick or "side street" toward a defined goal. Here, AI serves as an expression enhancer, a democratizing force that broadens access to artistic expression. According to Noë, AI art is revolutionary in that it reconfigures standardized cultural frameworks, which typically constrain artistic production—and, by extension, the artist figure—within fixed canons or stereotypes.

A second significant insight is that even without specific training in art, learning to use AI software can serve as a powerful outlet for creativity. AI operates with a purpose or telos established by the artist and, secondarily, in accordance with the program's underlying architecture and ontology, as projected by its engineer. Despite the technological mediation, the artist retains control

over the creative process and the final output, functioning as both the *causa efficiens* (or at least one of them) and the *causa finalis*. Simultaneously, however, AI — functioning as a symptomatic technology with a degree of autonomy — exerts a retroactive influence on the artist, who must refine and adapt their approach to achieve desired outcomes.

Moreover, DEHISSENCE's work exemplifies the standardization of artistic procedures, indicating that once an approach is established, it often becomes habit, acquiring structure and form. In this regard, Generative art is no exception. Within DEHISSENCE's practice, artist and machine intentionality converge and interact in the creation of the artwork, aligning with Di Martino's concept of "mixed intentionality." The artist initiates the process with an original creation (e.g., a collage), which is subsequently modified by AI tools such as Stable Diffusion or Midjourney. In this dynamic, AI acts beyond the passivity of a mere tool like a paintbrush, instead engaging "actively" in the co-creation of the final artifact. The artist then intervenes with additional software, such as Photoshop, to finalize and refine the artwork.

5. Conclusions

This process serves as an exemplary case of a symbiotic collaboration between artist and generative AI to produce original art. Conversely, the widespread use of AI and autonomous software raises concerns about the future role of the artist. Soddu's apprehension regarding the decline of authorial subjectivity appears both apt and prescient. Proprietary software has progressively subsumed many of the creative possibilities originally explored by the pioneers of Generative art, rendering artistic production seemingly objective and distancing the artist from the programmer's creative identity. As Soddu (2019) observed, this development echoes Barthes' notion of the "Death of the Author" and signals the fragmentation of the artist's role into a network of social and artificial agents (e.g., software, programmers, engineers). The artist is no longer the creator of experimental software or codex uniquely tailored to their artistic needs; instead, they encounter these tools pre-packaged and commercially available.

Furthermore, the democratization of the artistic process introduces the paradoxical risk that if everyone can be an artist, then no one truly is. This is the central tension introduced by generative

AI in art. This shift suggests two possible trajectories: one aimed at establishing objective categories to optimize processes and classify creations, and the other emphasizing the distinctiveness and uniqueness of each artist, given the procedural complexity of design and the authorial signature it confers.

The Exquisite Workers collective appears to align with the latter trajectory. In their *AI Surrealism* exhibition, they seem to prioritize the poetic and philosophical underpinnings of art over the optimization and mass production of images. Each artist's individuality emerges from a foundation of shared values, lending authenticity to the collective's work. AI thus operates as a *mechane*, propelling creativity into new domains, and therefore as symptomatic technology — a powerful instrument reshaping the role and identity of the artist and of the socio-cultural ambient. In this context, as Benjamin noted, the artist's individuality surfaces as an ongoing project, a learning process that must account for other singularities: the technological singularity of the machine and the embedded social singularity within the scientific knowledge that underpins AI's development. Consequently, art reemerges as a protean, anthropogonic force, actively shaping our world, our imagination, and, ultimately, our conception of ourselves.

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