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The Twilight of Human Genius: AI and the Redefinition of Creativity

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Abstract

The advent of generative artificial intelligence (AI) has precipitated a paradigm shift in the conception, production, and valuation of creative works, challenging centuries-old notions of human genius, originality, and authorship. This article explores how generative AI—exemplified by systems like DALL·E, Midjourney, and ChatGPT—disrupts the Romantic ideal of the solitary creator by producing artifacts that audiences perceive as aesthetically and conceptually original. Drawing on Margaret Boden's (Boden 2004) typology of creativity (combinatorial, exploratory, transformational) and philosophical critiques from Hubert Dreyfus (1992) and Ted Chiang (2025), we argue that AI does not signal the obsolescence of human creativity but rather its reconfiguration into a hybrid, distributed process. Empirical studies (Ashkinaze et al., 2024; Sarkar, 2023) reveal that while AI outputs are often judged as "creative," they lack the intentionality and embodied experience central to human expression. Yet, artists like Refik Anadol demonstrate how AI can serve as a collaborative tool, expanding creative possibilities through projects like Machine Hallucinations (Anadol, R. 2022-2023), which transform vast datasets into immersive installations. This shift raises pressing questions about authorship, ethical frameworks, and the democratization vs. homogenization of culture, as seen in legal disputes over copyright (Heaven W.D. 2025) and the EU's 2024 AI Act. The article concludes that the "twilight of human genius" is not an extinction but a transformation, where creativity becomes a plural, interactive, and ethically grounded practice. The future lies in reflective innovation—balancing technological advancement with critical engagement to ensure that AI augments rather than diminishes the depth and diversity of human expression.

Keywords: Generative AI; Co-Invention; Innovation; Human-Machine Collaboration; AI Governance

Introduction

The Myth of the Solitary Genius

Since the Renaissance, Western culture has enshrined the figure of the solitary creator as the archetype of artistic and intellectual achievement. This ideal, which reached its apogee during the Romantic era, posits creativity as the exclusive domain of the individual genius—a figure whose originality is seen as both innate and transcendent. Philosophers like Immanuel Kant, in his *Critique of Judgment*

(1790), argued that artistic genius is characterized by an "aesthetic idea" that cannot be taught or replicated, but emerges from the depths of the artist's subjective experience. This vision has profoundly shaped cultural institutions, from the valorization of individual authorship in copyright law to the curatorial practices of museums, which often privilege the "hand of the artist" as a marker of authenticity and value. The historical roots of this conception can be traced back to antiquity, where creativity was frequently attributed to divine intervention. In Plato's Ion (c. 380 BCE), the poet is described as a mere conduit for the muses, "not in his right mind" but possessed by a force beyond his control. The Renaissance marked a shift from divine to human agency, as artists like Leonardo da Vinci and Michelangelo were celebrated not only for their technical skill but for their ability to imbue their works with a seemingly inexplicable spark of originality. By the 19th century, Romanticism had fully secularized this idea, elevating the artist to the status of a quasi-divine creator. As Arthur Schopenhauer wrote in The World as Will and Representation (1818), the genius transcends the mundane through an intuitive grasp of the "Platonic Ideas," accessing truths inaccessible to ordinary perception. This reverence for the solitary genius has persisted into modern times, shaping how we evaluate and commodify art. For instance, the auction market places immense value on works attributed to singular figures like Picasso or Basquiat, often ignoring collaborative contributions from assistants or workshops. Similarly, literary culture has long fetishized the author as a lone visionary, as seen in the mythologizing of writers like Emily Dickinson or Franz Kafka. However, this narrative has been critiqued for overlooking the social and cultural networks that enable creativity, such as patronage systems or artistic collectives. The rise of digital platforms, from open-source software to collaborative wikis, further challenges the notion of isolated genius by highlighting the collective nature of knowledge production. Feminist scholars like Linda Nochlin (1971) have also questioned the gendered biases embedded in this ideal, noting that women artists were historically excluded from the canon of "genius" due to systemic barriers. These critiques lay the groundwork for rethinking creativity in light of AI, which further destabilizes the myth by distributing creative agency across human and machine actors. The question now is not whether genius exists, but how it is redefined in an era where technology blurs the boundaries between individual and collective creation.

The Challenge of Generative AI

The advent of generative AI—exemplified by systems like DALL·E, Midjourney, and ChatGPT—radically disrupts this centuries-old narrative. These tools do not merely assist human creators; they generate artifacts that are often indistinguishable from human-made works in terms of coherence, aesthetic appeal, and even emotional resonance. For instance, in 2022, an Al-generated artwork, Theatre *D'opera Spatial*, won first place in the digital art category at the Colorado State Fair, sparking debates about the nature of authorship and originality (Cascone, S. 2022). These developments pose a paradox: if machines create works perceived as creative, what remains of the traditional boundary between human and algorithmic art? The issue is not only technical but existential. In his 2025 Princeton lecture (Chiang 2025), the philosopher Ted Chiang highlighted the gap between machine-generated outputs and the intentional, embodied processes central to human creativity. He likened AI to the electric guitar—an instrument that expanded expression without displacing musicians—yet warned that AI risks reducing art to "prompt engineering," replacing depth with algorithmic novelty. This tension underscores the need to rethink creativity not as a fixed, human-exclusive faculty, but as a dynamic and distributed process. Moreover, generative AI challenges the economic structures that underpin creative industries. Platforms like OpenAI and Stability AI have democratized access to advanced creative tools, enabling non-experts to produce high-quality works. However, this accessibility raises concerns about market saturation, where an influx of Al-generated content could devalue human labor. For example, freelance illustrators have reported declining commissions due to clients opting for cheaper AI-generated alternatives. Additionally, the global reach of these tools introduces cultural challenges, as Western-dominated datasets may marginalize non-Western artistic traditions. The question of whether AI can truly "create" also intersects with spiritual and philosophical traditions that view creativity as a uniquely human gift, tied to consciousness and free will. These diverse perspectives—economic, cultural, and metaphysical—highlight the multifaceted impact of AI on the creative landscape.

Philosophical and Cultural Stakes

The rise of generative AI raises fundamental questions about the future of cultural production. If machines can generate poetry, music, and visual art, how do we redefine originality in an age of algorithmic abundance? Should we continue to privilege human intention as the sole criterion for artistic value, or can we expand our understanding of creativity to include hybrid human-machine collaborations? These questions are not abstract. Institutions like the Museum of Modern Art (MoMA) have already begun to exhibit AI-generated works, such as Refik Anadol's *Unsupervised*—a project that used machine learning to reinterpret the museum's collection, blurring the lines between curation and creation (Anadol, R. 2022-2023).. As the art critic James Wood noted in in line Medium (Wood J. 2022)., the real disruption of AI art lies not in its novelty but in its ability to "expose the myths we've built around creativity." The challenge, then, is not to resist this transformation but to navigate it thoughtfully, ensuring that the integration of AI into creative practice enriches rather than diminishes the diversity and depth of human expression. This shift also prompts a reevaluation of cultural gatekeepers—museums, galleries, and publishers—who have traditionally defined artistic value. AI-generated works challenge their authority by bypassing traditional pathways to recognition, as seen in online platforms like DeviantArt or ArtStation, where AI art thrives without institutional validation. Furthermore, the philosophical implications extend to questions of agency: if an AI can produce a sonnet or a painting, does it possess a form of agency, or is it merely an extension of human intent? Drawing on Hannah Arendt's concept of *natality* (1958), we might argue that creativity is tied to the human capacity for new beginnings, a quality that machines, bound by their programming, cannot replicate. Yet, the cultural impact of AI art is undeniable, as it forces societies to confront their assumptions about value, authenticity, and the role of technology in shaping collective identity. These debates are further complicated by the global adoption of AI tools, which may either amplify diverse voices or reinforce dominant cultural narratives, depending on how they are designed and deployed.

Creativity Reconsidered: From Human Exceptionalism to Distributed Processes Margaret Boden's Framework: Creativity as Process

Margaret Boden's *The Creative Mind: Myths and Mechanisms* (Boden 2004) offers a foundational framework for understanding creativity as a cognitive process rather than a mystical gift. Boden distinguishes three types of creativity:

- Combinatorial creativity, which involves novel combinations of familiar ideas (e.g., a poet merging disparate metaphors).
- *Exploratory creativity*, where new possibilities are discovered within a defined conceptual space (e.g., a composer experimenting with variations on a theme).
- *Transformational creativity*, which redefines the boundaries of a domain, creating entirely new frameworks for thought and expression (Boden 2004).

Generative AI performs well in combinatorial and exploratory modes—blending styles or generating countless variations. Yet transformational creativity, exemplified by Picasso's Cubism or Einstein's theory of relativity, still requires human intentionality and embodied understanding. Boden's framework also allows us to analyze AI's role in creative ecosystems beyond individual output. For instance, AI can facilitate *collaborative creativity* by acting as a catalyst for human teams, generating diverse possibilities that inspire group brainstorming. In scientific research, AI tools like AlphaFold have solved complex protein-folding problems, suggesting that creativity extends beyond art to problem-solving domains. Moreover, Boden's emphasis on process over product challenges the Romantic obsession with the "genius" label, encouraging a view of creativity as a learnable skill. This perspective aligns with educational initiatives that teach creativity as a structured process, such as design thinking methodologies. However, AI's reliance on pre-existing data raises questions about whether it can truly innovate or merely extrapolate from human inputs. The distinction between human and machine creativity may also hinge on cultural context, as non-Western traditions often prioritize collective creativity over individual authorship, potentially aligning more closely with AI's distributed nature.

The Skeptics: Dreyfus and the Limits of Disembodied Intelligence

Hubert Dreyfus, in What Computers Still Can't Do (1992) (Dreyfus 1992), argued that true creativity requires embodied experience, intentionality, and a tacit understanding of context—qualities that machines lack. Dreyfus critiqued the assumption that intelligence could be reduced to symbolic manipulation, pointing out that human expertise relies on "fringe consciousness" and "ambiguity tolerance," which are beyond the reach of algorithmic systems (Dreyfus 1992). His critique remains relevant today. While generative AI can produce outputs that mimic creativity, it lacks the lived experience that grounds human expression in meaning and purpose. Ted Chiang echoes this skepticism, arguing that generative AI's outputs are fundamentally derivative, resembling "sophisticated plagiarism" rather than true invention. In his 2025 lecture at Princeton (Chiang 2025), Chiang emphasized that AI systems, no matter how advanced, operate within the constraints of their training data. They cannot intend, desire, or transcend their programming in the way that human creators can (Chiang 2025). Dreyfus's framework also highlights the importance of situated knowledge—the idea that creativity emerges from an individual's interaction with their environment. For example, a painter's brushstroke is informed by years of physical practice, cultural immersion, and emotional experience, which AI cannot replicate. Similarly, the sociologist Pierre Bourdieu's concept of habitus (1977) suggests that creativity is shaped by social and cultural structures, which machines, lacking social embeddedness, cannot fully engage with. Additionally, the unpredictability of human creativity often stems from serendipitous encounters chance conversations or unexpected inspirations—that AI cannot authentically experience. Critics stress the temporal dimension: human artists evolve with personal growth and social change, while AI outputs remain static, fixed to their training moment. These arguments underscore the unique role of human embodiment in creative processes, even as AI augments them.

Empirical Evidence: Can AI Be Creative?

Despite these critiques, empirical studies suggest that audiences often perceive AI-generated works as creative. A 2023 study by Ashkinaze et al. (Ashkinaze J. 2024) found that exposure to AI-generated ideas enhanced human creativity by diversifying the collective ideational space. Participants who interacted with AI tools produced more original and varied solutions to creative tasks than those who did not (Ashkinaze J. 2024). Similarly, Sarkar's research demonstrated that human evaluators frequently judged AI outputs as creative, even when unaware of their algorithmic origin (Sarkar A. 2023).

This raises a critical question: If creativity is defined by its products and their reception, rather than the process by which they are produced, does AI qualify as creative? Boden herself has suggested that creativity is not a metaphysical gift but a set of processes that can be modeled and extended. In this view, AI could be seen as a new form of creative augmentation, expanding the possibilities of human expression rather than replacing it (Boden 2004). Further evidence comes from cross-disciplinary applications of AI. In music, tools like AIVA have composed symphonies performed by professional orchestras, blurring the line between human and machine creativity. In architecture, AI-driven design software generates innovative building layouts, optimizing for sustainability and aesthetics. These examples show that AI's creative potential extends beyond art into practical domains. Yet studies reveal limits: AI poetry, for instance, was consistently judged less emotionally resonant than human poetry. Additionally, the reliance on human evaluators introduces subjectivity, as cultural biases shape perceptions of creativity. For instance, non-Western audiences may prioritize different aesthetic criteria, complicating universal claims about AI's creative output. These findings suggest that while AI can simulate creativity, its value depends on human interpretation and contextualization.

Redefining Creativity in the Age of AI

The debate over AI creativity ultimately hinges on how we define the term. If creativity is understood as the ability to produce novel and valuable outputs, then AI already participates in creative processes. However, if creativity is tied to intentionality, embodiment, and the capacity for transformational change, then human creators remain irreplaceable. The challenge lies in developing a nuanced framework that acknowledges the contributions of both humans and machines, recognizing that creativity is increasingly a hybrid and distributed phenomenon. This redefinition requires moving beyond binary distinctions between human and machine creativity. For instance, AI can serve as a *creative provocateur*, inspiring humans to explore uncharted territories, as seen in collaborations between

choreographers and AI-driven motion analysis tools. Additionally, the concept of *distributed cognition*—where cognitive processes are shared across individuals and tools—offers a useful lens for understanding AI's role. In indigenous knowledge systems, creativity is often seen as a communal act, a perspective that aligns with AI's collaborative potential. However, this shift also demands new pedagogical approaches, teaching creators to critically engage with AI tools rather than passively consume their outputs. The risk of over-reliance on AI also raises concerns about deskilling, where artists may lose traditional craft skills. Ultimately, redefining creativity involves balancing technological innovation with the preservation of human agency and cultural diversity.

Human Roles: From Creators to Curators and Collaborators The Shift from Production to Curation

As machines take on more of the labor of production, the role of the human creator is evolving from that of a solitary genius to that of a curator, orchestrator, and interpreter. This shift is not without precedent. The history of photography offers a useful parallel: initially dismissed as a mechanical reproduction tool, photography eventually gained recognition as an art form in its own right, with the photographer's vision expressed through framing, timing, and post-processing (Sontag S. 1977). Similarly, generative art positions the human as the architect of algorithmic possibility, crafting prompts, refining outputs, and imbuing them with cultural and aesthetic significance. Refik Anadol's Machine Hallucinations illustrates this paradigm. In works such as Nature Dreams (Anadol, R. 2022–2023), AI processes vast image datasets into immersive data sculptures, while Anadol and his team shape the algorithms, curate the inputs, and situate the results in an artistic and philosophical framework. The outcome is a hybrid creation impossible to achieve independently by human or machine (Anadol, R. 2022-2023). This curatorial role also extends to the selection of AI tools themselves, as artists must navigate a growing ecosystem of platforms with varying capabilities and biases. For example, choosing between DALL·E and Stable Diffusion involves understanding their training data and output tendencies. Moreover, curation involves ethical decision-making, such as ensuring datasets respect cultural sensitivities. The rise of AI also reshapes the role of audiences, who increasingly participate in co-creating meaning through interactive installations. These participatory dynamic echoes relational aesthetics, defining art through social interaction rather than static objects. Yet this shift risks privileging technical expertise over artistic intuition, excluding those without access to advanced tools. These dynamics highlight the need for inclusive frameworks that empower diverse voices in the curatorial process.

AI as a Collaborative Tool in Literature and Education

In literature, writers are increasingly using AI as a collaborative tool. Language models like ChatGPT and Claude serve as brainstorming partners, helping authors generate ideas, refine metaphors, and explore alternative narrative voices. Some writers treat AI as a "sparring partner," using it to challenge their own assumptions and push their work in unexpected directions. For example, the novelist Robin Sloan has experimented with using AI to co-write short stories, describing the process as a dialogue between human intention and algorithmic serendipity (Roffarello et al. 2025). In educational settings, institutions like ETH Zürich and the Rhode Island School of Design are integrating generative tools into their curricula. Students are encouraged to use AI for prototyping and idea generation, while also engaging in critical discussions about authorship, ethics, and the societal impact of algorithmic creativity. The goal is not to replace human creativity but to cultivate a new generation of creators who can navigate the opportunities and challenges of human-machine collaboration (Freischmann 2025). AI's role in literature also extends to translation, where tools like DeepL enhance cross-cultural exchange by generating nuanced translations of literary works. In education, AI-driven tutoring systems provide personalized feedback, fostering creative writing skills among diverse learners. However, these applications raise concerns about over-standardization, as AI may favor conventional narrative structures over experimental ones. Additionally, collaborative AI tools can democratize access to creative education, particularly in under-resourced communities, but their effectiveness depends on equitable access to technology. The integration of AI into creative writing workshops also prompts discussions about authenticity, as students grapple with the balance between leveraging AI and preserving their unique voice. These developments underscore the need for pedagogical frameworks that emphasize critical engagement with AI as a tool for empowerment rather than replacement.

The Ethical and Philosophical Dimensions of Hybrid Creativity

The rise of hybrid creativity raises important ethical and philosophical questions. Who owns the rights to works co-created by humans and machines? How do we ensure that AI systems are trained on diverse and representative datasets, rather than perpetuating biases and stereotypes? And how can we preserve the intentionality and emotional depth that have long been central to artistic expression? These questions are particularly urgent in the context of commercial AI platforms, which often scrape data from the internet without the consent of the original creators. In 2023, a group of artists filed a class-action lawsuit against Stability AI, the company behind Stable Diffusion, alleging that the company had used their copyrighted works to train its models without permission or compensation (Heaven W.D. 2025). Such cases highlight the need for new legal and ethical frameworks that recognize the collaborative nature of AI-generated creativity while protecting the rights and interests of human creators. Beyond copyright, ethical concerns include the environmental impact of AI, given the energy-intensive nature of training large models. Philosophically, hybrid creativity unsettles notions of free will, as artists negotiate the deterministic outputs of algorithms. The concept of co-agency—shared responsibility between human and machine—provides one framework for recognizing mutual contributions. Additionally, the use of AI in politically sensitive contexts, such as protest art, raises questions about accountability, as algorithms may inadvertently amplify controversial messages. To address these challenges, interdisciplinary collaborations between ethicists, artists, and technologists are essential, as are public dialogues that include marginalized voices. Initiatives like the AI Ethics Lab (2024) are pioneering such efforts, fostering ethical guidelines that prioritize fairness and inclusivity in creative AI applications.

The Future of Human Agency in Creative Practice

As AI becomes more deeply integrated into creative processes, the challenge will be to preserve the agency and intentionality of human creators. This requires a shift in how we evaluate and value artistic works. Rather than focusing solely on the final product, we may need to place greater emphasis on the process of creation—the choices, intentions, and ethical considerations that shape the work. In this new paradigm, the role of the artist is not to produce artifacts in isolation but to curate, interpret, and imbue meaning into the outputs of human-machine collaboration. This shift also demands new metrics for assessing artistic value, such as the degree of critical engagement with AI tools or the social impact of the work. For example, projects that use AI to address social issues, like climate change visualizations, highlight the potential for purpose-driven creativity. Additionally, the rise of open-source AI platforms empowers artists to customize tools, fostering greater agency. However, this requires technical literacy, which may exclude creators from less privileged backgrounds. The future of human agency also involves redefining authorship to include collaborative networks, acknowledging the contributions of datasets, algorithms, and human teams. Philosophically, this aligns with posthumanist theories that view agency as distributed across human and non-human actors. By embracing these perspectives, artists can maintain control over their creative vision while leveraging AI's capabilities to push boundaries.

Philosophical and Cultural Implications: Redefining Originality, Authenticity, and Value *The End of the Solitary Genius*

The cult of the solitary genius, which has dominated Western art and culture for centuries, is being dismantled by the rise of generative AI. As Boden argues (Boden 2004), this does not diminish the value of human creativity but forces us to reconceive genius as the ability to orchestrate complex, distributed processes—both human and non-human. In this new model, creativity is not the product of a single, inspired mind but the result of collaboration between humans, machines, and the cultural contexts in which they operate. This shift has profound implications for how we understand and celebrate artistic achievement. If creativity is no longer the exclusive domain of the individual, then our cultural institutions—from museums to copyright law—will need to adapt. For example, the concept of authorship may need to expand to include not only the human creator but also the algorithms and datasets that contribute to the final work. Similarly, the criteria for evaluating art may shift from originality to contextual significance, emphasizing the ways in which works engage with and transform their cultural environments. This redefinition also challenges the elitism embedded in the genius narrative. By decentralizing creativity, AI enables broader participation, as seen in community-driven art projects that use opensource tools. However, it also raises questions about cultural gatekeeping, as institutions may resist recognizing AI-assisted works as

"authentic." Philosophically, this aligns with Deleuze and Guattari's concept of *rhizomatic* creativity (1980), where ideas emerge from interconnected networks rather than singular sources. Additionally, the global spread of AI tools highlights diverse cultural models of creativity, such as African communal art practices, which may resonate more with AI's collaborative nature. These shifts demand a rethinking of how we archive and historicize art, ensuring that hybrid works are preserved and valued for their cultural significance.

Redefining Originality in an Age of Algorithmic Abundance

In a world where machines can generate infinite variations on a theme, the traditional notion of originality—as the product of a unique, individual vision—becomes increasingly untenable. Instead, originality may come to be understood as the ability to contextualize, interpret, and assign meaning to the outputs of generative systems. As Ashkinaze et al. (2024) (Ashkinaze J. 2024) have shown, the most valuable contributions of AI to human creativity may lie not in the production of novel artifacts but in the stimulation of new ideas and perspectives. This redefinition of originality also challenges the commodification of art. If machines can produce works that are indistinguishable from human-made artifacts, the value of art may shift from its uniqueness to its intentionality and ethical dimensions. As Chiang has argued (Chiang 2025), in a world of algorithmic abundance, the scarcity of human intention—the deliberate choice to express, to labor, and to communicate—may become a defining feature of artistic value. Originality may also be redefined through the lens of *remix culture*, where artists build on existing works to create something new. AI amplifies this practice by offering vast combinatorial possibilities, as seen in fan fiction communities that use AI to generate alternative storylines. Additionally, the concept of *serendipitous originality*—where unexpected AI outputs inspire human innovation—offers a new model for creative value. However, this shift risks prioritizing novelty over substance, as market-driven platforms may favor viral, AI-generated content. To counter this, artists must emphasize narrative and cultural context, ensuring that originality reflects meaningful engagement with societal issues. This perspective aligns with global south philosophies that view creativity as a collective, iterative process rather than a singular act.

The Paradox of Abundance: Homogenization vs. Democratization

The democratizing potential of generative AI is one of its most promising aspects. By lowering the barriers to creative expression, these tools enable a wider range of voices to participate in artistic and cultural production. Amateur artists, writers, and musicians can now explore forms of expression that were previously accessible only to those with formal training or professional resources. This democratization could lead to a richer, more diverse cultural landscape, as new perspectives and narratives emerge from communities that have historically been marginalized. However, this potential is counterbalanced by the risk of homogenization. If creators rely on the same datasets and algorithms, there is a danger that the resulting works may begin to resemble one another, reflecting the biases and limitations of the training data rather than the diversity of human experience. Anadol has warned that AI art risks falling into repetition unless guided by a strong human vision (Anadol, R. 2022–2023). The challenge, then, is to harness AI in ways that amplify diversity rather than conformity, ensuring that these tools serve as enablers of creativity rather than constraints. This paradox also has economic implications, as AI-generated content floods platforms like YouTube and Spotify, potentially overshadowing niche creators. Conversely, AI can empower grassroots movements, such as indigenous artists using AI to preserve cultural heritage through digital storytelling. Homogenization risks can be reduced by developing localized AI models that reflect regional aesthetics and languages. Open-source initiatives also foster diversity by enabling communities to adapt tools to their needs. Yet the digital divide persists, since access to AI depends on unevenly distributed infrastructure. Addressing this requires investment in equitable technology access and training, ensuring that democratization does not reinforce existing inequalities.

Ethical and Existential Questions

The integration of AI into creative practice also raises profound ethical and existential questions. How do we ensure that the datasets used to train generative models are inclusive and representative? How can we prevent the exploitation of artists whose works are used without consent to train these systems? And how do we address the environmental impact of AI, given the massive computational resources required to train and run these models? These questions demand urgent attention from policymakers, ethicists, and the creative community. In 2024, the European Union's AI Act introduced regulations aimed at ensuring transparency and accountability in the development and deployment of AI systems, including those used for creative purposes (Regulation (EU) 2024). Similarly, initiatives like the AI Ethics Guidelines for the Arts, developed by a coalition of artists, technologists, and legal scholars, seek to establish best practices for the ethical use of AI in creative fields (Regulation (EU) 2024). Existentially, AI challenges our understanding of creativity as a human endeavor, prompting questions about the nature of consciousness and agency. For example, can an AI-generated artwork evoke the same existential resonance as a human-made one? The environmental cost of AI also raises ethical dilemmas, as the carbon footprint of training large models conflicts with sustainability goals. Additionally, the use of AI in sensitive cultural contexts, such as religious art, requires careful consideration to avoid misrepresentation. Community-driven AI projects, like those preserving endangered languages, demonstrate how ethical AI can amplify marginalized voices. To address these challenges, global cooperation is needed to establish standards that balance innovation with accountability, ensuring that AI serves as a tool for cultural enrichment rather than exploitation.

Conclusion: Embracing a Hybrid Future of Creativity The Transformation of Creativity

The rise of generative AI marks not the end of human creativity but its transformation. Far from rendering human creators obsolete, AI invites us to reimagine creativity as a hybrid, distributed, and collaborative process. In this new paradigm, the role of the artist shifts from that of a solitary genius to that of a curator, interpreter, and ethical steward of algorithmic outputs. The challenge is not resistance but thoughtful navigation, ensuring that AI in creative practice expands rather than erodes the depth, diversity, and ethical integrity of expression. This transformation is already underway. Artists like Refik Anadol are pioneering new forms of hybrid creativity, using AI to explore the intersections of data, memory, and collective consciousness. Writers are experimenting with AI as a collaborative tool, expanding the boundaries of narrative and poetic expression. Educators are integrating generative tools into their curricula, preparing the next generation of creators to engage critically with the opportunities and challenges of human-machine collaboration (Roffarello A.M 2024, Fleischmann K. 2025). These developments suggest that the future of creativity lies not in a choice between human and machine but in the synergy of both. This shift also opens new avenues for interdisciplinary exploration, as AI bridges art with fields like neuroscience and environmental science. For instance, AI-driven visualizations of brain activity can inspire new artistic forms, while climate-focused AI projects raise awareness through aesthetic impact. The transformation also challenges traditional hierarchies, empowering creators from diverse backgrounds to contribute to global cultural narratives. However, it requires vigilance to ensure that AI does not overshadow human voices, particularly in contexts where technology access is limited. By fostering inclusive collaboration, the creative community can harness AI to create works that reflect the complexity of human experience while pushing the boundaries of imagination.

Redefining Value in the Age of AI

As AI reshapes the landscape of creative production, our criteria for evaluating art must also evolve. The traditional emphasis on originality, authorship, and the "hand of the artist" may need to be supplemented by new metrics that account for the hybrid nature of contemporary creativity. These metrics could include the intentionality and ethical considerations that guide the use of AI, the diversity and representativeness of the datasets employed, and the ways in which works engage with and transform their cultural contexts. In this new framework, the value of art may lie less in its uniqueness than in its ability to foster connection, provoke reflection, and challenge established norms. As Chiang has argued (Chiang 2025), the scarcity of human intention—the deliberate choice to express, to labor, and to communicate—may become a defining feature of artistic value in an age of algorithmic abundance. The works that endure will likely be those that not only dazzle with their novelty but also resonate with the depth of human experience and the complexity of our shared cultural narratives. This redefinition also emphasizes *impact* over artifact, as seen in AI-driven public art that engages communities in dialogue about social issues. For example, installations that visualize data on inequality can provoke meaningful discourse. Additionally, the value of art may increasingly depend on its *process transparency*, where artists disclose how AI was used, fostering trust with audiences. The rise of blockchain-based art authentication further supports this shift, ensuring provenance

in hybrid works. However, these metrics must account for cultural diversity, as different societies prioritize different values in art. By embracing these new criteria, the creative community can redefine value in ways that celebrate collaboration and ethical engagement.

Ethical and Cultural Responsibilities

The integration of AI into creative practice also carries significant ethical and cultural responsibilities. As these tools become more powerful and pervasive, it is essential to ensure that they are developed and deployed in ways that are transparent, inclusive, and respectful of human rights. This requires collaboration among artists, technologists, policymakers, and ethicists to establish guidelines and regulations that protect the interests of creators and the integrity of cultural production. Initiatives like the AI Ethics Guidelines for the Arts and the EU's AI Act (Regulation (EU) 2024) are important steps in this direction, but more work remains to be done. The creative community must advocate for policies that recognize the collaborative nature of AI-generated works, ensure fair compensation for artists whose works are used to train algorithms, and promote the development of datasets that reflect the full diversity of human experience. By doing so, we can harness the potential of AI to democratize creativity while mitigating the risks of exploitation and homogenization. This responsibility also extends to addressing the digital divide, ensuring that AI tools are accessible to creators in low-resource settings. Community-driven initiatives, such as open-source AI platforms, can empower local artists to tell their stories. Additionally, cultural institutions must preserve the intangible heritage of human creativity, such as oral traditions, which AI may struggle to capture. Ethical AI use also involves educating audiences about its role in art, fostering informed appreciation. By prioritizing these responsibilities, the creative community can ensure that AI serves as a tool for cultural empowerment rather than domination.

The Future of Human-Machine Collaboration

Looking ahead, the most exciting possibilities of generative AI lie in its potential to expand the horizons of human creativity. By automating routine aspects of the creative process, AI can free artists to focus on the conceptual, emotional, and ethical dimensions of their work. It can also serve as a bridge between disciplines, enabling collaborations between artists, scientists, engineers, and humanists that were previously unimaginable.

For example, projects like Anadol's *Machine Hallucinations* demonstrate how AI can be used to explore the intersections of art, science, and technology, creating works that challenge our perceptions of reality and invite us to reconsider the boundaries between the human and the machine (Anadol, R. 2022–2023). Similarly, in literature, AI tools are enabling writers to experiment with new forms of narrative and poetic expression, from interactive fiction to algorithmically generated poetry. These developments suggest that the future of creativity is not a zero-sum game in which humans and machines compete, but a collaborative endeavor in which each brings unique strengths to the table.

This future also includes AI as a tool for *speculative creativity*, where artists imagine alternative futures through AI-generated scenarios, as seen in sci-fi collaborations. Additionally, AI can enhance accessibility, creating art for visually or hearing-impaired audiences through adaptive technologies. The rise of virtual reality (VR) and augmented reality (AR) further amplifies these possibilities, blending AI-generated content with immersive experiences. However, these collaborations must prioritize human well-being, avoiding the alienation that can arise from over-automation. By fostering interdisciplinary and inclusive partnerships, the creative community can ensure that AI expands the possibilities of human expression in meaningful ways.

A Call for Reflective and Inclusive Innovation

As we stand on the threshold of this new era, it is crucial to approach the integration of AI into creative practice with both enthusiasm and caution. The potential of these tools to democratize creativity, foster innovation, and challenge established norms is immense. However, realizing this potential requires a commitment to reflective and inclusive innovation—one that prioritizes ethical considerations, centers human values, and ensures that the benefits of AI are accessible to all.

The twilight of human genius signals transformation, not decline. Embracing hybrid creativity allows us to redefine creation in the 21st century, cultivating a cultural landscape that is richer, more diverse, and more connected to collective human experience. In this future, creativity is not the sole province of the individual genius but a shared and evolving practice, shaped by the collaboration of humans and machines in the pursuit of meaning, beauty, and truth. This call to action also involves fostering global dialogues that include voices from underrepresented regions, ensuring that AI reflects diverse cultural values. Educational initiatives must teach critical AI literacy, empowering creators to question algorithmic biases. Additionally, funding for ethical AI research can support the development of tools that prioritize human welfare. The concept of slow creativity—emphasizing reflection over rapid production—can counter the pressures of algorithmic efficiency. By championing these principles, we can ensure that AI serves as a catalyst for a vibrant, inclusive, and ethically grounded creative future.

References

- 1. Anadol R. "Machine Hallucinations: Nature Dreams". Refik Anadol Studio (2022-2023).
- 2. Ashkinaze J., et al. "How AI Ideas Affect the Creativity, Diversity, and Evolution of Human Ideas". arXiv:2401.13481 (2024).
- 3. Boden MA. "The Creative Mind: Myths and Mechanisms (2nd ed.)". Routledge (2004).
- 4. Cascone S. "AI-Generated Art Wins State Fair, Sparking Debate". Artnet News (2022).
- 5. Chiang T. "The Incompatibilities Between Generative AI and Art". Lecture at Princeton University (2025).
- 6. Dreyfus HL. "What Computers Still Can't Do: A Critique of Artificial Reason". MIT Press (1992).
- 7. Fleischmann K. "Preparing Creative Arts and Design Students for the New World of Generative Artificial Intelligence in the Workplace". 11th International Conference on Higher Education Advances (HEAd'25) Universitat Politecnica de Valencia, Valencia (2025).
- 8. Heaven W.D. What comes next for AI copyright lawsuits? (2025).
- 9. Kant I. "Critique of Judgment". Hackett Publishing Company Indianapolis/Cambridge (1790).
- 10. Plato. (c. 380 BCE). Ion. Amsterdam Studies in Classical Philology Editorial Board Albert Rijksbaron Irene J.F. de Jong Caroline KroonVOLUME 14
- 11. Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA relevance) PE/24/2024/REV/1
- 12. Roffarello AM, Calo Tommaso and Scibetta Lucan De Russis Luigi. "Investigating How Computer Science Researchers Design Their Co-Writing Experiences With AI". CHI (2025).
- 13. Sarkar A. "Exploring Perspectives on the Impact of Artificial Intelligence on the Creativity of Knowledge Work". arXiv:2307.10751 (2023).
- 14. Schopenhauer A. The World as Will and Representation (1818).
- 15. Sontag S. "On Photography". Farrar, Straus and Giroux (1977).
- 16. Woof James the AI Art Revolution: What is the future of artist?.