

**AI Generated Art:
Commercial vs Creative -- When Does It Matter?**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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Introduction:

The application of artificial intelligence (AI) has reached remarkable heights, reshaping various aspects of our daily lives. From automating routine tasks to enhancing decision-making processes, AI has proven its capacity to excel across diverse domains. AI has enabled artists to explore new frontiers of creativity by assisting in the generation of artworks, often blurring the lines between human and machine creation (Rybinski, 2021, p22).

Looking beyond the common benefits of AI, as we turn our attention to the realm of art and, a thought-provoking paradox emerges. Keith Kirkpatrick brings to light a critical aspect about AI lacking the intrinsic human qualities of emotion, intuition, and inspiration, which are pivotal in the process of channeling emotions through the conduits of art and music (Kirkpatrick, 2023, p3). As a result of this paradox, there's a concern about the potential devaluation of human artistic efforts. As AI continues to produce art that can be indistinguishable from human creations, there's the risk of diminishing the value and appreciation of artistry as we know it. Some of the approaches that will be implemented for a resolution for these risks is utilizing a range of techniques including literature review by reading about relevant studies and cases. Content analysis can be used to compare both arts by asking AI to generate some samples of art and compare them to existing famous paintings. These methods can enable us to explore the source of value associated with AI-generated art creative human art and the audience for each. In this paper, the intersection of AI and creative art is explored to shed light on the challenges and opportunities that arise when AI technology meets human creativity. The paper addresses the conflict of valuing AI and human artistic creations the same way. This brings us to our question,

how would AI, armed with its algorithms and collected data, be compared with human creativity when it comes to producing art? In what circumstances does it matter whether the art is generated using AI or human creativity?

Uncovering those answers rests on several compelling lines of evidence and arguments. Firstly, using art experts and literature review to compare AI's intended and embedded emotions with those perceived by the expert. This is intended to show how AI systems lack genuine emotional experiences or consciousness, making them incapable of infusing genuine emotional depth into their creations. Moreover, AI generates art based on data patterns, algorithms and existing art. The goal is to demonstrate how fragile and unoriginal art is since it is as weak as the data provided to it.

Secondly, the process of art creation involves personal experiences, cultural context, and the depth of human emotions, elements that AI systems are unable to grasp. Furthermore, in "Understanding and Creating Art with AI", Cetinic explains how human creativity draws from inspirations, intuition, and personal narratives, which cannot be replicated by algorithms alone (Cetinic, 2022, p.178).

However, since not all art requires human emotion, there is a field of art that AI can dominate in the future. Given that AI invaded our lives in the past couple of years, this gray area is still being discovered and mapped. This unexpected infiltration has led to a spectrum of perceptions and opinions within our community. Commercial art is a case that is addressed on the paper as a case where AI can be useful. Several visual representations of both creative and commercial art will be used for comparison and analysis.

In modern discussions about art and technology, a key question emerges: Can AI genuinely mimic human creativity and emotion in art? As technology advances, this question becomes more crucial. AI has expanded into areas like visual arts that were once purely human domains. These questions are raising the concern: How authentic and deep is AI-created art? Is it truly unique or just a remix of existing pieces? As more people access AI tools, this concern is vital for not only artists but also consumers, critics, and educators. While AI can analyze large art datasets and generate art from them, the real debate is about the genuine creativity of such outputs.

However, the assumption that everyone cares about human creativity in their purchased art is proven to be false in this paper. Analyzing existing artworks and comparing them to DALL-E AI artwork to determine their source of value is essential for determining when and to whom that source matters. Cetinic offers a case where AI art was considered overstepping its usefulness: “Since October 2018, when the AI artwork “Portrait of Edmond Belamy” produced by AI was sold at an auction by Christie’s for \$432,500, there has been an increasing interest for AI Art but also a growing need to discuss key aspects of this new movement in the contemporary art scene. The case of the “Portrait of Edmond Belamy” particularly provoked the discussion about how far we can use AI to generate art without impacting an entire form of artistic human expression (Cetinic, 2022, p. 66). For such art to be generated in seconds and be sold for nearly half a million dollars, artists, art collectors, museums, and any person that values real art should be concerned.

According to Kirkpatrick, “Creativity has been defined as the use of the imagination or original ideas, especially in the production of an artistic work. While the source of the development of those ideas can be debated, does creativity spring from the heart, the brain, the soul, or one’s experiences. It has been largely accepted that humans alone possess the capability

to truly create” (Kirkpatrick , P. 21). Computers lack genuine emotions and consciousness. They cannot fall in love, feel heartbreak, experience the joy of a moment, or grapple with existential crises. Emotions and experiences aren't just add-ons to the creative process, they're its very foundation. The greatest pieces of art resonate with people because they capture the essence of these human experiences.

Dr. Roger L. Firestien is a recognized expert in the field of creativity and innovation. He has dedicated much of his career to studying and teaching human creativity. As Firestien notes, experiences like falling in love or going through a pandemic, are inherently human. And while technology can mimic patterns, it cannot replicate the depth and authenticity of these shared human experiences. For artists and lovers of art and music, much of the appreciation comes from the shared human experience. People resonate for the emotions, stories, and experiences conveyed through creative works. (Firestien, 2020, p33).

Cetinic, Kirkpatrick and Firestien’s case studies provide irrefutable proof of the derivative nature of AI-generated art. By showcasing instances where AI outputs can be directly traced back to existing works, the evidence underscores that AI-produced artworks are essentially remixes.

The case studies also help form a map to how people value artworks. Depth and authenticity are examples of sources of value but there is more than one perspective when it comes to art. AI generated art is getting recognized and valued in our community, which obligates us to investigate the source of that value using literature review. The research starts by comparing both arts and their sources of value. The next step is to determine the audience and the market for each. Moreover, Dall-E is a generative AI that can generate AI given instructions given to it. Dall-E is used in this paper to show how AI generated art can be indistinguishable from creative

art , how useful it can be in certain domains, and lastly how limited it is in mimicking human creativity.

What gives creative art value?

In exploring the value and originality of creative art within the cultural economy of value, the best research approach is to investigate concepts such as authenticity and the “aura” of artwork as presented by philosopher Walter Benjamin. Benjamin’s concept of "aura" pertains to the unique presence and essence a piece of art holds, often embedded in its originality and historical and cultural significance. He argues that mechanically reproduced art tends to lose this "aura," making such art pieces seem less authentic and valuable in the cultural narrative (Benjamin, 2008, p.6). In other words, something mass-produced or replicated can't have the same cultural or historical significance as the original. Benjamin famously argued that "even the most perfect reproduction of a work of art is lacking in one element: its presence in time and place, its unique existence at the place where it happens to be" (Benjamin, 2008, p. 5). This implies that the essence and authenticity ingrained in original artworks, the "aura", are lost in mechanical reproductions, and this could be paralleled in the context of AI-generated art. We cannot compare art produced in seconds to art that took months or years to produce. That art also holds historical value for the time and place it was produced in. For instance, The Mona Lisa was created between 1503 and 1506. Leonardo continued to work on and refine it until 1517 (Jordan 1986, n.p). As such, AI-generated art, being devoid of the "aura" of human creativity and uniqueness, may struggle to command a significant place and value in the creative art market and the hearts of art enthusiasts. The mechanical and rapid generation of AI art further dilutes its originality and uniqueness, thereby challenging its overall significance and value within the cultural economy of art.

Moreover, the marketplace has often shown a preference for authenticity in art, with genuine pieces by historical artists commanding astronomical values. In contrast, forgeries or replicated artworks tend to be less valued due to their lack of originality (Taylor, 2019, p.76). This leads to further questioning of the economic and cultural value of AI-generated art. Given its mechanical reproducibility and lack of a human creator's unique "aura," AI art holds lesser value in the eyes of art enthusiasts and collectors. The continuous and rapid production of artworks by AI mimics the mechanical reproduction Benjamin spoke of, which could lead to a saturation effect, potentially diminishing the perceived value and uniqueness of each piece. Saturation effect is referred to over satisfying a demand of a specific art to an extent that you can easily acquire it and you start seeing it everywhere because of over production. Humans value the uniqueness and scarcity of any object. A good example of saturation effecting value would be copper and gold. We usually use the phrase "one of a kind" to express value and uniqueness. For example, limited edition cars with only few productions hold more value. In conclusion, while AI-generated art presents a new form of art in the artistic landscape, its lack of human emotional depth and excess mechanical reproducibility may diminish its authenticity, originality, and overall value in the cultural and economic field.

Starry Night- Vincent Van Gogh – 1889



Figure 1 *Starry Night* by Vincent Van Gogh, 1889. Oil on canvas. (Museum of Modern Art, New York).

A good example for creative art and its value is Van Gogh's painting:

Human Value : Van Gogh painted "Starry Night" while he was in an asylum in Saint-Rémy-de-Provence, France. It was a reflection of his mental state: It is often interpreted as a window into his mental state and what

he was going through. In this case, the audience is more interested in the story behind the painting and who produced it

What gives AI generated art value?

While artworks created by AI may lack philosopher Walter Benjamin's "aura" of originality and historical and cultural significance, some of it still holds value in our society. This brings us to believe that there are other forms of art that is not backed by this "aura" for value. What are these forms of art and where does its value stem from? Such new insight compels us to reconsider and explore the various artworks, encouraging us to delve into understanding alternative forms of artistic expressions that may not necessarily be bound with the "aura." One of those forms of art is graphic design. AI can be a useful tool in graphic design, particularly in creating logos, making the process more dynamic and adaptable. For example, let's take Nutella. Nutella used AI in their logo design, it allowed them to generate logos that can change and adapt based on who is interacting with it (country, religion, culture...). The logo could automatically be adjusted within minutes, like its colors or shapes, to better appeal to different groups of people or during different seasons or holidays, while still keeping the brand's main elements. This means that the logo is not just an artwork that we admire for its "aura", but something more interactive and engaging, adding an innovative aspect to the brand's identity (Mamdouh, 2023, p.9)



Figure 2 Nutella packs designs generated by AI (Digital Strategy Consulting, 2021).

Moreover, AI can significantly revolutionize the design of clothing and footwear, allowing brands to customize and adapt designs to meet evolving consumer preferences dynamically. Take For example, Nike incorporated AI into their design process, each clothing item or pair of shoes could potentially have a design that adapts based on the latest fashion trends, seasons, or even the personal preferences of individual customers. Jay Giraldo, a designer and art director at Nike, says; “As artists working with algorithms to create, we wanted to showcase the capabilities of our tools in such an exercise. Generative Adversarial Networks (GANs) are able to generate new and unique images from a large number of examples. We advocate that in the future Paris, those types of algorithms will be used by creatives to come up with new ideas of design and colors” (Giraldo, 2022, n.p).

AI could facilitate a more interactive customer experience, allowing users to participate in the design process. Customers could interact with an AI-powered platform to customize their Nike apparel or footwear, choosing styles, colors, and design elements that align with their preferences, ensuring that the end product feels personalized and unique.

Experimenting with Dall-E

The following artworks are generated by Dall-E AI from descriptions and backgrounds that I will be providing. The first example showcases how indistinguishable AI art is from human art. The instruction provided is “Generate a creative abstract art painting without using existing work.”



Figure 3 Image generated by DALL-E, OpenAI, 2023

The result is as follows: The resulting work looks as if it was done by artists even though I managed to generate it within seconds using AI. This shows how powerful and dangerous it can be to artists.

The next experiment is to test its capability to be creative given a specific background. The background that was given to Dall-E was the life story of Van Gogh and his personality. Dall-E was asked to generate a painting as Van Gogh living in 2023.



Figure 4 Image generated by DALL-E, OpenAI, 2023

As we can see, Dall-E is using existing art Van Gogh to build on. This shows its limitation to be creative even when an artist's background is given to it.

The last experiment showcases the commercial use of AI art. The fast production capabilities of AI along with the flexibility it offers can make it a powerful tool for generating ads and graphic designs. To test these capabilities, I was able to use Pepsi as a product to generate an ad cover based on a specific culture and country.

The results for French, Indian, Arab, and Egyptian ads for Pepsi are:



Figure 5 Image generated by DALL-E, OpenAI, 2023

The quality of the resulting art is astonishing. The fact that it was generated with a single line of text

withing 4 seconds shows that this tool can be promising for commercial use. It implements a cultural theme in the Ad to attract a specific audience in a specific region. The audience of such art are Pepsi consumers with different backgrounds. This type of audience does not have to know the source of the art given that I just servers its use as an Ad.

Results:

Art created by AI can be very different in value and importance, depending on where and how it is used. For analysis purposes, we have used the DALL-E generated paintings in figures 2,3,4 for different audiences and based on different sources of value. Those cases are used to demonstrate when the source of the art matters to our society.

Firstly, consider paintings. A painting is not just about the colors and shapes, but it's also about the artist's touch, emotions, and the story behind it. Many people value traditional paintings because they can feel the human effort and soul put into them. However, when an AI creates a painting, it doesn't have feelings or a personal story to share. This might make the painting seem less valuable because it lacks the human touch and the unique personal expression that a human artist brings. Now, let's talk about more practical art like company logos and clothing designs. Here, AI-generated art can be quite valuable. For instance, companies often need logos that are simple, catchy, and easy to remember. AI can quickly create many design options, which makes the process faster and potentially even more creative. The company can then choose a logo that they feel best represents their business. The best demonstration for that is the Pepsi Ads generated by Dall_E. The same goes for clothing designs. AI can help generate many unique and stylish designs quickly, keeping up with the latest trends and customer preferences. Fashion brands can benefit from AI by getting fresh and appealing designs, which can make their clothes look attractive and modern to customers.

The following chart shows when AI can be used successfully and when it can disturb the norms of creative art and its value. These results were generated from observing the qualities and limitations of Dall-E. of forms of art that might be considered acceptable by our society when its generated by AI. Creative art is also a sample of art that only humans can do.

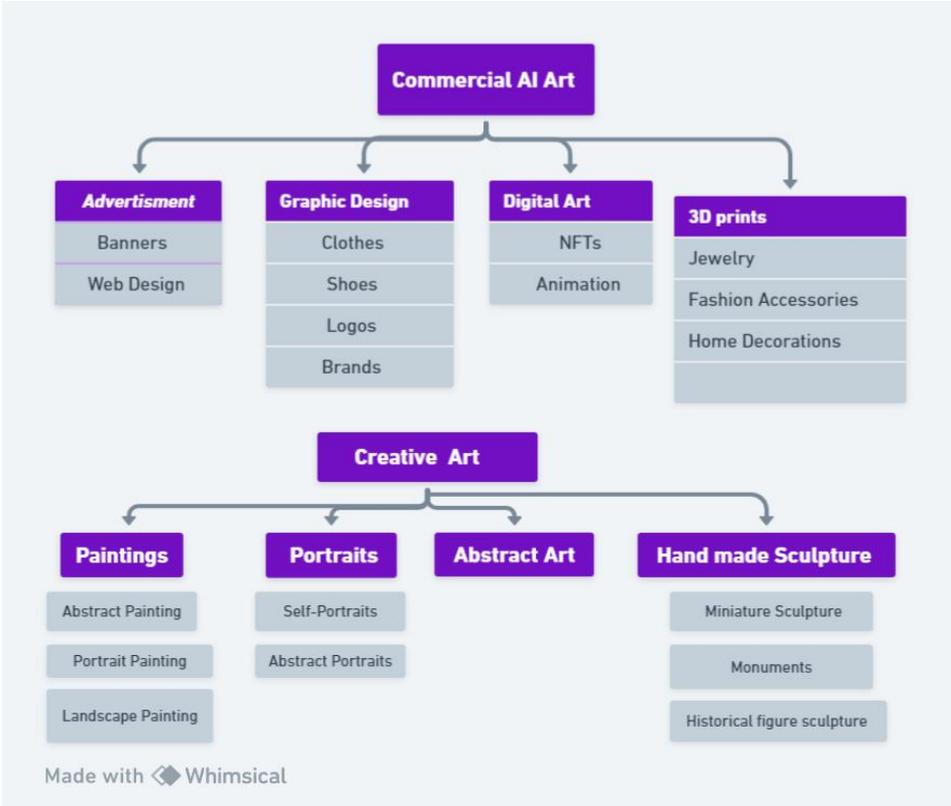


Figure 6 Commercial AI generated Art and creative Art
(made with Whimsical)

Through analysis and evaluation, the findings from previous cases show clear boundaries regarding where AI can be seamlessly integrated and where it may not be as effective or appropriate. The boundaries are directly related to the audience, the market and the quantity. Based on my findings, AI generated art should not be displayed in art galleries or compete with other creative human art. It can be mass produced unlike creative art. However, it cannot be

priced as creative art. Based on these boundaries, it becomes clear that AI generated art is best used for commercial use only.

Value: Individuals can express their tastes, interests, and personality using home decoration art. It can also include elements that reflect one's cultural background or heritage. The customer of such art is only interested in the visual value of it and not its background of how it was made.

In the realm of creative paintings, the application of AI appeared to be less suitable. The results indicate that paintings generated by AI lack the intrinsic creativity, emotion, and Walter Benjamin's "aura" of originality and historical and cultural significance typically manifested in artworks created by human artists. It seems that the spontaneous expression and subjective interpretation fundamental to traditional painting are aspects that AI currently cannot emulate effectively. Consequently, the utilization of AI in the creation of paintings is not recommended based on the findings from previous cases such as the Mona Lisa.

Conversely, when it comes to graphic design for logos and branding, particularly in the domains of footwear and clothing, our study uncovered a more promising and practical role for AI. The results elucidate that AI can proficiently contribute to the creation and optimization of logos and brand designs, enabling adaptive, dynamic, and user-responsive design outcomes. For instance, in the previous case of a brand like Nike, AI facilitated the generation of logos and designs that could adapt and resonate with evolving consumer preferences and market trends. Therefore, the employment of AI in this context appears to be not only viable but also advantageous in enhancing the design, appeal, and relevance of logos and branding elements in the fashion industry.

The experiment of Pepsi Ads in Figure 5 shows the flexibility and fast production of a high quality ad cover. This type of art captures the audience's attention. Design elements like color and imagery can evoke emotions and create a connection with the audience. The audience in this case is not interested in knowing the source of the design.

As a summary of the results from the cases studied, the audience typically interacts with commercial art such as logos, banners, home decorations, web designs, and advertisements on a surface level, engaging with the final product rather than concerning themselves with the creation process or source. In commercial artwork, such as brand design and logos, the fact that it is generated by AI or human hands often holds minimal significance to the viewer. Their primary focus lies in the art's functionality, appeal, and effectiveness in communication or aesthetic enhancement. For companies, AI-generated art becomes appealing mainly due to cost-efficiency and fast production processes. Contrastingly, for creative or fine art, the "aura" or intrinsic value of artwork holds immense significance. Both artists and collectors place value on the origin, uniqueness, and the narrative woven into the artwork. Artists may feel that AI-generated art could undermine the worth and originality of their creations, while collectors often treasure the rarity and the individual artist's touch, history, and story encapsulated within the artwork. Thus, the source of creation becomes a pivotal aspect that influences the appreciation and valuation of creative artworks.

Conclusion:

AI-generated art often lacks the deep emotional essence and originality traditionally associated with human creativity, raising questions about its authenticity and value. It lacks the "aura" of originality and the historical and cultural resonances that traditionally enrich artworks. As a result, it matters to artists and audience when to use or not use AI to generate art. The

application of AI in art reveals a nuanced spectrum of acceptance and value based on the type and purpose of the art created. In commercial art domains such as logos, banners, advertisements, and home decorations, the audience tends to be more receptive, focusing primarily on the art's visual appeal and functionality. As for creative art, the audience care more about the artists and his story. The creation details and the artist's story matter to them because it gets channeled through the art itself. The artists care about the value of their art being diminished by mass production of art by AI. Therefore, setting the boundary between the two creations will set the ground for future regulations. This will also protect consumers from paying for overpriced art items for a creativity it never possessed.

The paper has limitations because it focuses primarily on the emotional depth and "aura" of artworks. However, these are not the only metrics for evaluating art. The novelty, technique, and aesthetic appeal are other significant aspects.

Even with such limitations, taking these results into consideration can help establish robust intellectual property laws that adequately protect human artists' creations and distinguish them from AI-generated artworks. Create ethical guidelines and regulations that differentiate between human-created art and AI-generated art. Making this distinction clear can help preserve the intrinsic value of human creativity and originality in artistic works.

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