

Expert Input on Artificial Intelligence and Creativity

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I. INTRODUCTION

This document intends to provide an expert opinion on artificial intelligence (AI), specifically generative AI (GenAI), and its impact on creativity from a perspective of a practitioner in computer engineering and researcher of social impacts of AI on creative workers. The scope of “creativity” addressed includes that of base creative expression by humans, creative arts as a means and ends for education, creative arts as a means to earn income, and creative arts as a collective expression for lucrative and cultural purposes. The text will largely follow the format of questions posed by the OHCHR in the call for contributions¹, though will deviate in areas necessitating further elaboration.

A. Subject Matter Expertise of Author

Harry H. Jiang is a Canadian PhD Candidate in Electrical and Computer Engineering at Carnegie Mellon University (USA)². Though his main research area within his PhD studies is focused on distributed machine learning systems, he has engaged in independent research on the impact of generative AI on artists throughout his professional career prior to and including his current role at CMU. His methodology involves directly collaborating with working artists from various media and engaging directly with academia in order to foster further collaboration and directing research topics towards the benefit of working artists as a stakeholder in AI systems. Such work has produced [1], one of the first papers directly addressing the labour impact of generative AI on the arts; furthermore, he has organized multiple interactive sessions at computing conferences (FAccT '23 [2], FAccT '24 [3], CHI '25 [4]). This documents is largely informed by the aforementioned paper and three panels, as well as other insights from ongoing research.

II. RESPONSE TO GENERAL QUESTIONS

A. What are the main challenges posed by AI to human creativity?

From a market and labour perspective, a current threat posed by generative AI products is the overall devaluation of artistic expression in the perception of the general public. In pure production terms, generative AI provides a shorter time-to-product for a single novel image or arbitrary unit of

text (e.g. paragraph, page). In workplaces, this has lead to devaluation of the unit of work provided by creative workers and an increased expectation from management. In the general public, the wide deployment of genAI products a) contributes to the flattening of perception of creative arts to a few media categories convenient for digital consumptions (e.g., digital image, video, audio), and b) erodes the value of individual works in those media, with the large volume of media artifacts produced as outputs of generative AI flooding areas such as social media or advertising. This is especially true as the lay consumer is understood to be unable to reliably distinguish between human-made and machine-generated imagery [5].

From a cultural and pedagogical perspective, AI, and genAI in particular risks damaging or destroying the transmission of craft to newer generations. Teachers of arts have reported the use of genAI by students in academies, risking the acquiescence of fundamental skills such as composition and colour theory [2]. The market devaluing of creative crafts will also reduce the student pool of many crafts as the arts are seen, moreso than previously, as non-lucrative career paths and thus not worthwhile of full-time study.

Also from a cultural persepective, much research on machine learning and AI bias has shown overwhelming evidence that machine learning systems (and thus all current generative AI technology) encode harmful social biases found in the training datasets for the models [1], [4], [6]. Continued use and deployment of genAI risks imposing and entrenching hegemonic views on many segments of society and flattening nuance understanding of society by users and consumers of genAI products and their outputs.

B. How do we understand the notion of creativity?

While creativity is conceived of as an idealized process from which ideas spring forth from an abstract mental space and implemented in the physical realm, artists often describe their creativity as a process as a dialogue with the physical world, not only in terms of personal experience, but also as part of as “struggle” with their medium of choice. Exemplary occurrences of creativity as a dialogue with medium include the use of empty space in East Asian ink painting, rhyme and metre in poetry, or the concept of *terroir* explicitly tying the choice of certain ingredients to the land and region they are collected from.

¹<https://www.ohchr.org/en/calls-for-input/2025/call-contributions-artificial-intelligence-and-creativity>

²This document represents the opinion of the author alone, and does not reflect the position of the institution at large.

C. Can AI generated products be considered “originals”, and if so, what are the consequences? What is artistic integrity in relation to AI use?

Generative AI can be thought of as producers of artifacts, akin to an industrial process, which may be perceived of as artistic or carrying artistic qualities after the fact. Should it be presented as art as-is, it may be accepted as an artistic artifact, though the artistic element would be constrained to its presentation as an art piece (insofar as the art is the performance of introducing the piece into an artistic space); this is reminiscent of the works of *ready-mades* by René Magritte and other Dada artists in the early 20th century. It is important to note that *ready-mades* exist in a specific artistic and social context for which the pieces are accepted and interpreted as art; in the context of general entertainment as a use case for genAI, the mass production capacities of genAI is itself a desired property of the product, thus it can be argued that genAI outputs in practice often fails to clear the threshold of art, and is instead an entertainment product to be consumed as a simulacrum for the enjoyment effect in humans that would typically be achieved using art.

Insofar as artistic expression can also be determined through intent, the use of genAI as generalized means of entertainment will also cause its outputs to fail to be counted as artistic expression or original creation in certain cases. If a genAI product is used as a singular, one-time tool to generate an image for direct consumption by a user or an audience of the user, genAI in this case can be seen as a substitute element for art in the perception of entertainment in the same way that artificial sweeteners is a substitution for the perception of sweetness without being a sugar which assumes its full functions in the body.

Should genAI outputs be incorporated into a larger piece, the production of this specific component can be thought of as lacking originality, though any addition and further processing may rightfully be attributed to the originality of an artist. This is also the stance of certain institutions as the United States Copyright Office, which has ruled that a comic using generated imagery may not hold copyright for said images, but may hold rights for the framing and textual dialogue added to the work³.

III. RESPONSES REGARDING POLICIES AND PRACTICES

A. Which measures have been taken to protect human creativity from threats posed by AI? What measure(s) would best achieve this aim?

For the most part, responses have been piecemeal across media and across markets. Actions can be roughly separated into three types: legislative, restitutive, and collective. Legislative actions occur in local forms in various jurisdictions depending on the political system, and are difficult to coordinate, though they are generally within the realm of intellectual property, and thus may be relevant to certain international agreements such as the Bern Convention. Restitutive actions are also generally confined to jurisdictions as they typically take the form of civil suits; examples include *Andersen v. Stability* (USA), *Kadrey*

v. Meta (USA), *Robert Kneschke v LAION eV* (Germany), the last of which has now been dismissed. Within this typology, as small but growing subsection of restitutive actions are those of technical defensive actions, which would include tools such as Glaze [7] and Nightshade [8], which help prevent specific abuses by technical malfeasants towards certain artistic rights.

B. Please provide examples of good practices to promote human creativity through AI.

On occasion, there exist conceptual works which invoke machine learning algorithms in a fully creative manner. These are almost always divorced from the current generative AI ecosystem and fit in more closely towards the existing lineage of procedural art. An example would be Anna Ridler’s *Mosaic Virus* (2019)⁴, which uses the artist’s own training data by taking photos of 10,000 tulips, which itself is a work of art she titled *Myriad* (Tulips). She then trained a GAN based image generator with this data, creating a video where the appearance of a tulip is controlled by the price of bitcoin, “becoming more striped as the price of bitcoin goes up—it was these same coveted stripes that once triggered tulip mania...a 17th-century phenomenon which saw the price of tulip bulbs rise and crash...It is often held up as one of the first recorded instances of a speculative bubble” [9].

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³<https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>

⁴<http://annaridler.com/mosaic-virus>