Robo(ar)t: On Artificial Intelligence Entering the Art World

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Abstract:

With computer programs producing algorithmic art, the conundrum of capitalisation of art and aesthetics has resurfaced, dressed-up in new clothes. This paper seeks to analyse the ethics of such visual outcomes by drawing upon philosophical discussions regarding autonomy, authenticity, and creativity. I shall attempt to give a holistic perspective on the ethics of art produced by machines. This article shall inform and motivate the reader to deliberate on important questions such as - What qualifies as an artwork? Who is an artist? What are the ethical implications of accepting artificial intelligence in the world of art?

Keywords: art, technology, artificial intelligence, God

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Introduction:

Evolution has wired us to like music since it is in consonance with human vocalisation. The oldest cave paintings found in the Franco-Cantabrian region in western Europe, and in the caves of Maros (Sulawesi, Indonesia) are testimony to the fact that our ancestors were artists before they became orators. Children learn to dance before they can walk and sing before they can talk. Our cognition of art and artistic activities has shaped our individual personalities and by extension, that of our civilisation. The political aesthetics of empires and political regimes found in literature, architecture, etc, are proof of the fact that art cannot be studied in isolation. Orientalism and gender display in artworks highlight the socio-economic context of the era in which they were created. Therefore, in my opinion, art and the progress of human civilisation are inter-connected on multiple levels.

With the advent of technology[2], this connection has taken a debatable turn where the basic expression of human creativity has been overtaken by machines. In the words of a sci-fi lover, the much feared Matrix is dawning upon us! To find a coherence in the divided opinions regarding algorithmic art[3], understanding the function of art is imperative.

What is Art?

Establishing the exact parameters that help in defining what is art is a fruitless exercise in my opinion. Art[4] is neither transcendental nor does it adhere to Kant's notion of disinterestedness. It has functional importance in human life. The cave paintings are nothing but a historical record of hunting techniques of our ancestors. In the moment of its creation, it might have been a result of a parent trying to teach those techniques to their child. Or, it might be a pictorial representation

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[2] I was introduced to the idea of technology creating art when I first read Dan Brown's Origin. It was thought-provoking to manoeuvre the intersections of literature, philosophy of religion and technology while reading it.

[3] Algorithmic art is the visual product of computer programs that generate art. One of the earliest practitioners of this art form is artist Harold Cohen. He wrote the program AARON in 1973 which when

entered into a machine helped in creation of artwork based on a set of rules. I use this term in an expanded sense which incorporates latest technological developments such as, AI and machine learning, which has provided machines with greater autonomy in producing art works.

[4] For the purpose of this essay, I have restricted the understanding of the term 'art' to objects of visual aesthetics such as paintings.

informing a fellow tribe-member that X has gone for hunting while Y was fetching water from the nearby water source. Understood in the light, one gathers that the *function of art is to convey*.

Who is an Artist?

Understanding that art has a functional importance, that which is *to convey*, entails that even a lion's roar is art. However crude this may sound on the outset, it is a true statement. All things that have functionalist importance[5] are a result of evolution. Art helps us communicate but, it makes no promise that everything that is conveyed by anyone will have the dexterity of Austen's pen or Anguissola's paint brush. One can use the simplest expression - "Beautiful!" to convey their feelings or resort to art therapy to convey all that has made them speechless. Different levels of expressions exist and this is why grades of artists exist - good, bad and amateur. Anyone[6] can be an artist when they are conveying something.

The main deliberation upon which one needs to charter their course when discussing algorithmic art is the issue of cognitive activity. Art is a cognitive activity practiced by all beings possessing cognitive abilities. So, when an artist feeds an algorithm to a machine, the machine merely becomes a technologically advanced paint brush. But, when an artificially intelligent machine makes art, who is the artist?

The Issue of Cognitive Capability:

Artificial intelligence (AI) has the ability of memorisation and imitation but, it is said that AI cannot establish independent thinking. To reason, plan, and execute a course of action, independent thinking is an important aspect which all humans are said to possess. However, theorists that have propounded conceptual development in human neonates in their formative years, which forms the groundwork of independent thinking in later years, is via hypothesis testing[7] (Carey, 2009).

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[5] I accept functional importance of art and artistic activities because I subscribe to teleosemantics which states that concepts are evolutionary in nature (Neander, 2017) as opposed to Fregean and contrarian semantics.

[6] The reference to 'anyone can be an artist' might seem puzzling at a cursory glance. For further

clarification, it has been discussed in detail in the next section.

[7] Hypothesis testing is a form of statistical learning which happens in a succession of events, i.e. one after other. This can be understood with the help of the following example - a human baby, firstly, acquires the concept of 'one' in its core cognition.

This works on the supposition that there are certain innate concepts present in our core cognition. In this sense, hypothesis testing and machine learning[8] are not that different after all.

Critics of AI powered art state that cognitive capability includes creative ability, something which artificial intelligence cannot possess because all it produces as art comes from inspiration rather than original creativity or authenticity. If this is made the parameter of being an artist then, even the greatest artists like Artemisia Gentileschi and Da Vinci will also be excluded. Further, if value of art lies solely in its authenticity then, all art is useless and without any authority. All art originated in the attempt to copy the beauty of nature. Art and religion are inherently entwined because artistic activities began in the pursuit of God, the supreme creator (Benjamin, 1935). This supreme creator, in reference with artificial intelligence, is humans. So, if we nullify authenticity of AI powered art then, we automatically nullify the authenticity of art produced by humans as well.

God	Humans	Artificial Intelligence
Supreme creator for humans.	Copyist in relation with God. Supreme creator in relation with artificial intelligence.	Copyist in relation with humans.
Supreme programmer for humans.	Intelligent creations of God, said to be created in God's image. Supreme programmer for artificial intelligence.	Intelligent creation of humans created in their own image.

Then, the baby learns its semantic gradients such as 'once', 'oneness', etc. The cognition improves to enhance the learning of the baby to comprehend 'one object'. After all the information related to 'one' is acquired, 'two' and its semantic gradients happen on the basis of similarity.

[8] Machine learning is the ability of artificial intelligence to automatically learn and improve via experience without being programmed every step of the way.

The tabulated comparison between creators[9] and creations helps one assess the question of authenticity of an artwork and autonomy of an artist in an unbiased manner. Just because 'non-humans' are deemed to not possess cognitive capabilities by general presumption, doesn't mean that the case is so philosophically. Further, several studies undertaken have proved that when placed in the same room, humans are not able to distinguish between AI powered art and art produced by a fellow human. This only goes on to prove that creativity and imagination are present in both the artworks, and by extension the respective artists.

Implications of AI in Art:

With the invention of printing press and rise of capitalism, the world of art faced its first conundrum. Now, with the rise of AI powered art, the conundrum has been doubled. The autonomy and ability of artificial intelligence can easily replace bad or amateur artists. This implies that what

ensured a channel of self-expression for all will now be limited to the few gifted people who can make a career out of it. On the other hand, AI powered art opens the doors for trained computer scientists to become accidental artists through their spirit of entrepreneurship. Hence, a decided statement which establishes this technological development as outrightly bad cannot be made. It may eventually depend on which of the two professions (accidental artist and gifted artist) end up with higher bids.

Another important ethical issue is regarding the ownership of artwork produced by artificial intelligence. Since the creation and training of AI involved human intervention hence, many cyberlaw specialists and artists believe that the ownership should rest with the humans. This is an extremely anthropocentric view in my opinion. To draw a crude analogy, supporters of human ownership of AI powered art will also give the ownership of an artwork created by children to their

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[9] Many would raise an objection to the admittance of 'God' in my arguments. I wish to clarify that God is used in the sense of a higher force of creation which can be understood as an anthropomorphic conception, as Brahman, or evolutionary force that has guided and moulded humans through centuries of development. Further, the question of God cannot be disregarded while making a case in philosophy because, while one cannot argue with surety for God's existence, God's non-existence cannot be argued for with surety either. It is a variable on which civilisations have thrived and philosophical evaluation of any kind which does not refer to this entity is incomplete.

parents because parents, time and again, intervene to mould their child's personality.

The way forward in the world of art, aesthetics and philosophy, is to accept and amalgamate the perceived technological advancements. AI systems have been developed which can detect forgeries by analysing a single brush stroke. AI is not here to end the culture of art and aesthetics, it rather aims at building upon the existing culture. Technology has aided humans on their path of progress. It continues to do so for art by pushing the traditional boundaries of practice.
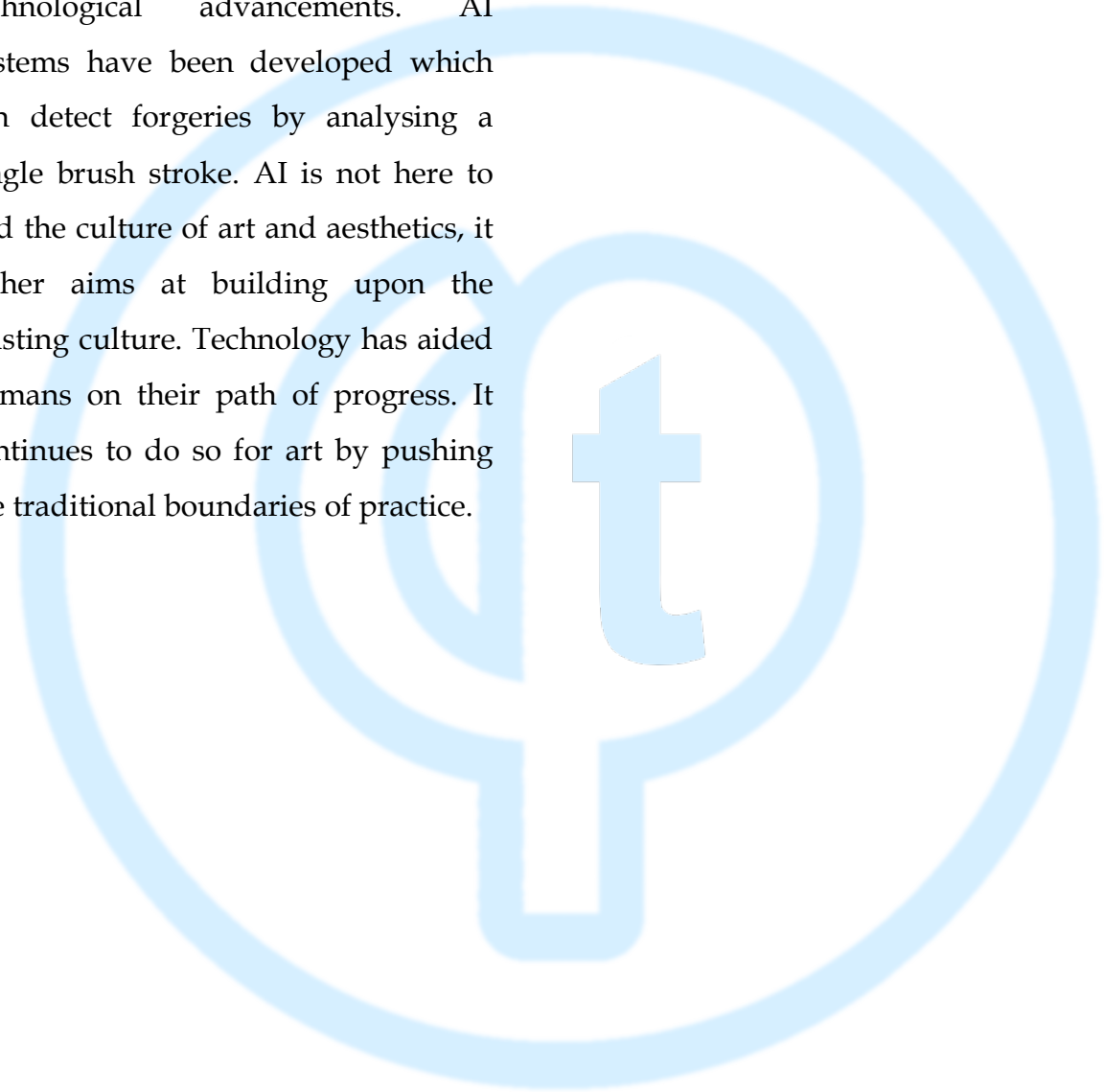
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