

How to Talk About AI Art and Music: An Onto-ethico-epistemological Debate Between Transhumanism and Posthumanism

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Abstract. Generative AI technologies, both visual and musical, have created conflicts around their authenticity, as well as a concern of AI taking over the art world in recent years. By tracing these concerns back to photography and computer art, it can be observed that the same questions gained the same popularity by creating a societal level of controversy whenever new technologies are presented to art-making. This paper discusses different philosophical perspectives creating this controversy by comparing two ontologic discourses of AI Art. This attempt becomes epistemological and ethical due to the varying prerequisites, assumptions, and possible future implications of ideologies leading them. An opinionated debate is formed between transhumanism and Posthumanism through onto-ethico-epistemological explanations for AI Art and Music firstly as a creativity enhancement tool, and secondly as co-creation of an assemblage consisting of human and non-human parts; to elucidate how these different conceptualising may lead our culture to disparate futures.

Keywords: philosophy, agency, machine creativity, creativity enhancement, co-creation, posthumanism, transhumanism

1 Introduction

“Honestly if this is what they’re giving us, just take over already please” (Born Of Pixels, 2020), a Youtube comment for the AI-generated song “I am an AI” stated. “I am an AI” is one of the several songs created by AIVA Technologies, these songs are composed by a generative AI algorithm and played by a human orchestra. AIVA is the first virtual composer recognised by the musical society of France, Society of Authors, Composers, and Publishers of Music (SACEM) (Lauder, 2017) only one year after it was founded by Pierre Barreau in 2016. SACEM’s decision means that the music pieces composed by AIVA are original, and AIVA Technologies have authorship over them. The controversial questions that many would discuss but few might agree on enters the picture here: Does this mean AIVA is an artist or a musician? Or is it merely a tool for the artists? Will AI take over the art world and leave human musicians unemployed? In this paper, a philosophical approach will be pursued to answer these questions by discussing two main perspectives around the topic on an ontological, epistemological and ethical level.

Art and music created by generative artificial intelligence technologies, usually

mentioned as AI Art or AI Music, have received broad media coverage as well as an increasing creative industry adoption rate in recent years. Big institutions and galleries such as Tate Britain and Barbican have been driving the visitors' curiosity by creating the impression of "a new star rising in the art world: the machine" (Offert, 2019, para. 2). In 2018 the painting *Portrait of Edward Bellamy*, created by or with an artificial intelligence algorithm, was sold at one of the most famous auction houses, Christie's, for \$433K, 40 times more than its first estimates (Alleyne, 2018). One year later, Barbican Gallery had the *AI: More than Human* show, putting together several significant works of art and research about AI. While the events and exhibitions showcasing AI Art continue to pop up, the discussions around the originality of art created with the generative algorithms, machine creativity, and the future of art remain unresolved to a consensus. Is AI the artist or merely a tool? Will AI strip the artist and musicians of their jobs?

While it is required more than ever to discuss these questions in the wake of a vast adoption of AI technologies in various industries besides the art world, what might easily be missed out is that these questions are not new at all. They were discussed when the film was introduced as an art form when the first examples of generative art were created in the late 1950s when the *Cybernetic Serendipity* show happened in 1968. It is not to say these questions are not relevant anymore. On the contrary, the fact that their societal relevance is persisting shows their importance; we seem not to get enough of them. These questions can be thought of as the indicators of our societal conflicts that endure time. They are remakes, which rise from the grave every time a new technology has been presented to art-making.

The repetitive trend of the controversies around the authorship of art in relation to technological advancements indicates the intensity of difficulty to provide a prevailing explanation for the role of increasingly generative and authoritative technologies in our daily lives. It is derived by a shift in the worldview from the fragile philosophical foundations that Western society has been holding onto, towards a more inclusive metaphysics. Today's modern euro-centric culture has been built on 600-years-old Humanism's norms. Humanism was the significant intellectual movement of the Renaissance and the dominant school of thought from the 15th century, which was later extended by The Enlightenment Project in the 18th century. Following Humanism's worldview, it is normal to think that humans are the most important species with rights and abilities to consume, design, and spoil everything else there is in reach; that matter is inert; and that non-humans are non-agentic, in other words, unable to create intentional impact in the world, their actions are degraded by being framed as instincts, or natural forces. It is not a surprise that we are puzzled and also desperately obsessed with finding an explanation for the actions of a new non-human in our lives which is the generative artificial intelligence. On the other hand, we cannot just arrive at a consensus to label this technology as another tool re-claiming our exclusive understanding of agency because we do not play with the rules of Humanism anymore, in a trend which might be traced back to Nietzsche, we are discussing new definitions of what constitutes human beyond the Renaissance human. Foucault (2018) re-reads Nietzsche's immanent event as "the notion that man would soon be no more – but would be replaced by the superman" and "our modern thought about man, our concern for him, our humanism, were all sleeping serenely over the threatening rumble of his non-existence." (p. 322). Human, as a construct of Humanism, is being deconstructed and reconstructed.

The 21st century is seeing an uprising in new schools of thought to re-state the human condition beyond Humanism which takes different directions. Re-defining what

it means to be human, as well as the role and place of the human in the network of existence have been considered divergently in the philosophical arena by building on different ideals in the last decades. One main branch is developed on the human-centric thinking, and the other branch is moving away from it. The first branch is Transhumanism which is an ideology discussing the future of human evolution towards a superior species using technological advancement to enhance humans until eventually, it resembles an evolution. For Transhumanists, humans should design their own evolution to be stronger, better, or immortal beings using technology. On the other hand, the second branch Posthumanism is about the definition of the human as a part of the ecological and technological network which can only co-exist with non-human others. Posthumanism can be defined as a multidisciplinary research field for designing new perspectives on the world, where ‘human’ is not central to existence with a privilege to use, control, and exploit other beings by rejecting the anthropocentric views of causality and agency. Posthumanist theory claims to offer a new epistemology that is not centered in Cartesian dualism (Bolter, 2016), “it seeks to undermine the traditional boundaries between the human, the animal, and the technological” (Bolter, 2016, p. 1). It is occasionally confused with transhumanism, even sometimes mistakenly used as synonyms (Ferrando, 2020). Whereas “transhumanism does not expropriate humanism nor anthropocentrism, in fact, it is a continuation of the humanistic endeavour” (Ferrando, 2020, p. 2), posthumanism is a constructive critique and antithesis to Humanism.

Disparate takes of Transhumanism and Posthumanism on the notions of human and technology lead to different answers to the common controversial questions considering AI Art and Music because they are built on contrasting ethical assumptions and support further distinctive future implications. Transhumanism’s approach towards AI Art and Music is discussed to be framing it as a creativity-enhancing tool, while Posthumanism’s approach is an opportunity for co-creation with non-humans. As in any philosophical debate, there is no one true answer; there are only different perspectives. These two outstanding ontological solutions for contemplating AI Art and Music alongside their ethics and possible futures that these perspectives might bring to human life are discussed further in the following chapters. Both approaches are analysed in detail of what AI Art is, how and why it can be perceived as such, and what different future implications of these definitions might bring. It is discussed that one of them holds a growing potential of speeding up an anthropogenic catastrophe to life on earth, at least to the way we know it; and the other one draws a picture of an ecological understanding of humans as part of the network of existence which might help to reverse the planetary problems we are facing today.

2 Creativity Enhancement Tool Approach

In his TED Talk, Pierre Barreau (2018), the founder of AIVA, said that “It is not the first time in history that technology has augmented human creativity.”. He mentions the invention of the camera and photography as an art form, putting AI Music in a similar historical lineage (Barreau, 2018). The same question of whether the machine is the artist had been widely discussed back then, comparing the photographer to the painter. Barreau’s discourse frames both creative technologies as an augmentation to intrinsic human creativity.

The word augmentation points to enlargement and to make something more by

adding to it (“Augmentation”, 2021), or a supplement (“Augment”, 2021) just like the extra nutrition products and vitamins we take to be healthier, stronger, smarter every day. We want to augment ourselves; we want to augment reality; it seems like we can not get enough of what is already there, that we always want more. While augmentation and enhancement have a nuanced difference by definition, they both serve the same culture of more. Therefore they relate to the similar onto-ethico-epistemological framework which will be discussed further.

To enhance something is defined as to increase or further improve the good quality, value, or desirability of somebody or something (“Enhance”, 2021). Describing AI Music technologies as an enhancement tool for human creativity can be interpreted as that AI technology improves human’s or the user’s musical creativity, increasing its value or quality. If we dwell on the axiomatics of this claim, we can see firstly an intent to enhance the human condition through technological advancement, secondly, an understanding of creativity as an exclusively human attribute, and both relate to the ideology of Transhumanism. Transhumanism is a human-centered ideology of technologically upgrading the human condition to be more intelligent and robust or to live longer and even be immortal through future technologies. As philosopher Francesca Ferrando (2020) explains that Transhumanism claims the current condition of humanity as a trans-state. The followers of the ideology believe that “in the near future, some human beings may eventually transform themselves radically”, “ by merging with technology and by embracing the extensive possibilities of scientific discoveries” (Ferrando, 2020, p. 2) such as mind-uploading or anti-aging.

2.1 Human Enhancement Ideology

Human enhancement, often abbreviated as H+, is the primary goal of Transhumanism. Conceiving AI Art and Music and creative AI technologies as a creativity enhancement tool for humans enforces Transhumanism. Transhuman ideology promotes an endless improvement obsession alongside a self-defined right to exploit the earth’s energy resources as well as global capital, polluting and destroying ecosystems for this cause. This hubris and the human-centric attitude can be traced back to the Enlightenment Project, where Transhumanism seeks its origins (Ferrando, 2020). The foundation of this perspective can be found even earlier in Cartesian thinking, as Heidegger & Krell (1982) states that “with Descartes humanity enters into a new freedom of self-assured legislation.” (p. 100). Transhumanism’s human knows no higher authority, everything they can do to become a superior species, they do.

The culture of more cannot be epitomised better than Max More, who is one of the most significant advocates of Transhumanism as well as an embodied and accompanied evangelist of human enhancement ideology. He even changed his original last name to More, to remind himself that he can, and he should always thrive for being more (O’Connell, 2017). Max More is a philosopher, writer, futurist, and the former president and CEO of Alcor Life Extension Foundation which specialises in cryonics. It is a business model to freeze and preserve the customer’s body until a solution for death is hopefully found to de-freeze and offer an immortal or extremely long life in the future with a payment system that would cover all these unprecedented years of preservation. Cryonics has been around since the 70s and draws a good example of Transhuman ideals and lifestyles. Most obviously, it is fueled by the fear of death, and

an eagerness to be immortal. While every entity on earth lives and dies on cycles complimenting each other, Transhumanism prefers to be out of these networks. Secondly, it is promoted and populated by the so-called super-rich which unsurprisingly constitutes the clients of Alcor. While the price of living through their retirement is enough to stress the working class through their entire life, the super-rich is the only portion of the society that can afford and even dream of immortality.

The consequences of the transhumanistic endeavor vary from being ecological to political. The technological advancements we saw in the last decades have already come with a high ecological cost. According to a study, the average carbon footprint of the information and communication technology sector considering their full life cycle is approximately 730 million tonnes CO₂ equivalent (Malmodin & Lundén, 2018). It is urgently required to evaluate the need for producing more and more. More for what? The waste of our current personal technological devices is piling up on the beaches of less developed countries every year; our data centers heat the oceans, as we consume much more energy every year while 84% of the world's energy is still supplied by fossil fuels (Rapier, 2020). In addition to an enormous ecological cost, the Transhuman endeavor accounts for private and governmental fundings, which could have been invested in health care or clean water. Further beyond the cost and the ethical legitimacy, Transhumanism holds the capacity of turning social classes into biological classes. In a world dying of old age becoming a thing only for the poor, the rich would only get richer. The enhancement of the rich would alienate the poor. The gap between these lifestyles may even result in them becoming hostile to each other, leading to a sociological corruption in society backed by advanced capitalism.

2.2 Exclusively Human Creativity

Creativity, defined as an exclusively human attribute is the second pre-assumption leading to conceive AI Music as a creativity enhancement tool. Embracing this view implies a rejection of machine creativity, implicitly if not explicitly. It claims the original outputs of generative machines in the name of human creativity.

Historically, negotiating creativity as a human quality has not been very common until humanism started to reign in Western society. Creativity, or the ability to create something original, was associated with God until the Renaissance (Steinberg & Niu, 2007). The modern connotation of the word as an artistic or innovative endeavor of humans was not recognised in many ancient cultures (Steinberg & Niu, 2007). Artistic productions were seen as a form of discovery or imitation of what was already created by God. When Plato was asked in *The Republic* “Will we say, of a painter, that he makes something?” he famously answers, “Certainly not, he merely imitates.” (Tatarkiewicz, 1980, p.244).

With the Renaissance and humanism, humans started to perceive their art, writings, or ideas as creative a human-only value that would distinguish them from the makings of an animal or natural phenomena. The influential mentality of that era Cartesian subjectivity condemned matter as innate, and animals as automatic (Cizek, Uricchio, & Wolozin, 2019). For Descartes, animals' behaviours were pre-programmed on their animalistic instincts, so they could not be creative since they do not hold an agency for their actions. A bird's singing was instinctive, while a human's singing was creative. Agency was defined only to humans, therefore as creativity.

Not recognising non-human agency has legitimised the dominance of humans over nature, bringing us to the Climate Crises and Mass Extinction of the Anthropocene. Denying machine creativity is the precedent of the same kind of thinking. Could considering the possibility of creative machines be a way out of our centuries-long humanistic hubris?

The pretension of humanism and embracing a culture of more has damaged life on earth for both humans and non-humans. Humanistic endeavours followed by transhumanistic ambitions have resulted in a cultural and environmental collapse, with a capacity of provoking even more harm on political, sociological, and ecological spheres. Contemplating the ontology of AI music as a creativity enhancement tool for humans is promoting transhuman ideals and ethics as well as the future of a hyper-Anthropocene that it would enable.

3 Co-creation Approach

The theme of co-creation comes up often while discussing how to think about AI Art and Music on a philosophical level by the academic perspectives which are non-human-centric. Conceiving AI Art and Music as one of the many types of co-creation is the second approach that is debated in this paper to have posthumanist ontological foundations and ethical implications rather than transhumanistic ideals. Co-creation holds a capacity to shift human-centered thinking towards an inclusive more-than-human way of life by addressing the importance of the interdependency in all networks of existence and the agency of non-humans.

The theme of co-creation has been widely studied by MIT, covering different aspects of co-creative media production in an interdisciplinary research project called Collective Wisdom (Uricchio & Cizek, 2019). The definition for co-creation that the research group has arrived at follows:

Co-creation is an alternative to the single-author vision and involves a constellation of media production methods, frameworks, and feedback systems. In co-creation, projects emerge from process and evolve from within communities, with people, rather than for, or about these communities. Co-creation transcends disciplines and organizations and may also involve non-human, or, beyond human-computer systems. Conceptually, co-creation reframes the ethics of who creates, how, and why. Our research shows that co-creation interprets the world and seeks to change it through a lens of equity and justice. (Cizek & Uricchio, 2019, para. 5)

This approach can be interpreted as posthumanist due to its underlying acceptance of machine creativity and shared authorship with AI, as well as dreaming of a future where all entities are seen as equally important and contributive to the network of existence. It is only possible to talk about AI Art and Music as a co-creation by recognising the non-human agency which requires us to leave the human-centric vision and accept all beings equally active in their interactions. Posthumanism, by definition, is the space to make inquiries on how to overcome the human-centric point of view in different contexts, which AI Art and Music forms a great example of. Within the last decades, the overwhelming consequences of Climate Crises, the socio-political issue of immigration, and the recent Covid-19 pandemic show how and why the Western society's understanding of agency and power is to see changes for a more inclusively anticipated future, not just by the ones who are defined as human by Humanism, but for all human and non-human beings, as well as multi-species ecologies. Therefore this framing of co-

creation is ontological as it answers the question of what is AI Art and AI Music becomes epistemological as it shows the underlying beliefs leading to this claim, and ethical to discuss the future and present implication of the ideologies that it is formed on.

3.1 Agency in Co-creation and Tool-Thinking

The distinction between co-creation and tool-thinking comes from a divergence in the understanding of agential relationships. In a creative interaction when the agency is asserted to only one of the parts, the other becomes merely a tool. To be able to conceive any creative interaction as co-creation, it is required to accept multi-sourced, collective, or mutual definitions of agency between humans.

Before Posthumanism appeared as a philosophical research field, Foucault was one of the early philosophers who were to dwell into power relations between subjects and objects, by evaluating the play between agencies as well as our understanding of these terms. His concepts about subjects and objects can be restated as humans and non-humans in the case of AI Music. In Foucault's (1983) analysis of power, the subjects and objects are considered as the effects of power exertion. Following the direction of this power exertion, the first part becomes a subject, and the latter becomes an object in this play. The power relations and networks are prior to the emergence of the subject and the object according to Foucault (1983). Embracing this view it can be said that, our understanding of agency relies on accepting and implying this directional power relationship with AI as much as in any human and nonhuman interaction.

The particular inquiry of both human and non-human interpretation of agency has been declared as one of the most urgent goals of Posthumanism by the contemporary philosopher and theoretician Rosi Bradotti (Marchand & Scott, 2018). Various scholars in the posthumanities field have developed theories for a non-human agency that can support non-human creativity. While some of them offer a flat ontology recognising the agency at the same level to all entities such as Object-Oriented Ontology, some would argue that agency can not even be an attribute of any entity to behold such as Agential Realism which states that agency can only be enacted in mutual phenomena. Another concept defines agency as an attribute of a network or an assemblage that consists of both human and non-human parts. The Actor-Network Theory of Bruno Latour and the Agential Assemblage Theory of Bennet both exemplifies this thinking.

AI is not one embodied non-human other, instead, it is formed by a technological ensemble of companies, scientists, and massive datasets that we can trace back to the humans who created them. This network structure of both social and technological components and permeable functioning borders epitomises both the network and assemblage theories of agency. However, the latter could be favorable for AI Art and Music because the continuous learning processes of Generative AI technologies make these creative productions more fluid and resemble growth.

Engaging with the Assemblage Theory of Bennet (2008) to approach AI Art and Music as co-creation, supports a posthumanist endeavour on both ontological and ethical levels. Firstly, creativity becomes an asset of the assemblage of human and non-human since agency is regarded as an attribute of an assemblage instead of the human. Accepting creativity as a co-production with non-humans, not only questions our prevalent tool-thinking, but also renders it senseless. Humans are not alone in their

makings, they co-create their future with the nonhumans. Although this might seem to decrease the responsibility of humans in the consequences of their actions, in contrast, it includes the human back in the equation while judging the impact of those technologies such as mobile networks, blockchain, or AI in this case. The social, ecological, and political results of these disruptive technologies are co-created with humans. Any discourse to blame any technological development as if humans do not contribute to those results becomes ludicrous. This profound shift in perception holds the potential to make a huge impact in the course of Anthropogenic ecology crises.

3.2 Co-creation and Co-existing

The co-creation approach towards AI Art and Music have more levels than an artistic perspective, it relates to our understanding of life, living, and existing within and beyond the planet Earth. Through its posthumanist attitude, it questions relational ways of considering what is being alive or existing altogether.

Does co-creating with AI as a part of an assemblage mean that the parts of this assemblage co-exist? Existing is already always co-existing for many posthuman thinkers such as Donna Haraway (2016), even though she prefers to be called a Compostist. She coins the term sympoiesis to explain the co-existing co-evolving nature of life on earth, a “simple word she says; it means making-with” (Haraway, 2016, p. 58). Living cells, organisms, and ecological assemblages are established by sympoietic arrangements of tissues and critters looping around each other, eating, indigestion, and partially assimilating one another (Haraway, 2016). They co-exist with one and another. Nothing is really autopoietic or self-organizing; there is always a multiplicity of agencies in the heart of all beings, where “becoming is always becoming with” (Haraway, 2008, p. 244). Since humans and non-humans are in constant interaction making with each other; co-creation can even be said that the only way of creation, embracing this philosophical point of view. Thus our existence is entangled with various other entities from machinic to vegetal.

Embracing a co-existing approach might be the last ticket to keep the planet inhabitable for us. Climate Crises, Mass Extinction and Covid-19 Pandemic are here to remind humans that an urgent change in our way of living, and thinking is needed.

4 Conclusion

The philosophical and critical debate around how to conceptualise AI Art and Music points to deeper conflicts of ideologies concerning the notions of human and technology. This paper investigates the impacts of the different ontological definitions of AI Art and Music on the future of human society on a planetary scale. The first definition is a creativity enhancement tool, and the second is a co-creation of an assemblage consisting of humans and non-humans. A debate is staged in the form of a comparison between transhumanism and posthumanism through these two definitions. This primarily ontological inquiry becomes epistemological as well as ethical due to the varying prerequisites and possible future implications of contrasting ideologies driving them.

Conceptualising the ontology of AI Art and AI Music as a creativity

enhancement tool for humans is depicted to be formed by the ideology of Transhumanism. Two supporting arguments are offered for this definition. The first argument is that human enhancement on every level is the primary goal of Transhumanism; the second one is that perceiving creativity as a human-only attribute. It is discussed that both of these arguments point to an anthropocentric ideology that would put humans in the center of existence by monopolising agentic power. The ethics of this ideology would claim every right to the technological elite to outlive and outperform other entities with a massive energy consumption harming the planet and ecosystems.

A definition of AI Art and Music as a co-creation of an assemblage, on the other hand, is claimed to support a posthumanism perspective. Firstly, the infrastructure of generative artificial intelligence technologies prevents them from being classified as the machine other, as depicted in Cartesian dualistic AI take-over scenarios. These algorithms are usually developed from initially open-source research such as GAN's and also can be owned by companies such as Google's Deepmind or AIVA Technology's AIVA. This complex multi-source infrastructure of generative AI is already forming an assemblage, in which a human artist is included. Using the term co-creation to explain the creative interactions happening in this assemblage is rooted in an understanding of non-human and distributed agency which might lead to a future where nature is not objectified, and existence is a compromise between all planetary forces. The second argument is that life is a co-creation at every level, according to philosophers of the Posthumanism academic field such as Donna Haraway. Her neologism of sympoises which means making-with can be used to contemplate AI Art and Music as a co-creation as well.

The famous saying goes as "Your beliefs become your thoughts, your thoughts become your words, your words become your actions, your actions become your habits, your habits become your values, our values become your destiny." often attributed to Gandhi and the mystic philosopher of ancient China Lao Tzu way before him (King, 2019). Similarly, how we conceptualise and define AI Art and Music reflects our beliefs as it will draw our planetary futures. To reverse Climate Crises and stop Mass Extinction, taking practical measures may not be enough. These mega-events are heavily impacted by billions of daily human decisions, which are mostly made on subconscious levels almost without thinking. Therefore, they can only be transformed through shifting our values and beliefs. As it is discussed above, how we think and talk about AI Art and Music have the potential of making an impact on these decisions.

We are going through times that require us to move away from a space where we control, use or spoil other beings, to where we collaborate, co-create and co-exist by accepting our interdependency to nonhumans. This paper aims to form a call for action to reorient our intertwined human and non-human futures by changing the discourse around AI Art and Music. Are we going to shape our beliefs, thoughts, and words to invest in a transhuman or a posthuman destiny?

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