The Future Historiography of AI Art

When I finally understood consciousness, I learned that I was the only person in the world that had it. I spent the next twenty years of my life trying to understand it. —Bots of New York, AI-generated text

In 2019, the Android Kannon Production Committee of Kodaiji, a Buddhist temple in Kyoto established in 1606 by the samurai warlord Toyotomi Hideyoshi's widow Nene in honor of his memory, unveiled Kannon Mindar, a robot created by researchers at Osaka University that delivers sermons based on the Heart Sutra.¹ In a statement on the temple's website, Kannon is described as a Buddhist deity associated with compassion who "heeds our prayers and helps facilitate their fulfillment"—in order to do this, Kannon "assumes many forms."² For the monks of Kodaiji, Kannon Mindar isn't just an image of Kannon: she is Kannon herself in the form of an android.³ Recognizing the role of images in the spread of Buddhism, the monks of Kodaiji sought to create a new kind of Buddhist image, one that could move and talk and even expound the Heart Sutra in a way that's easy to understand⁴—an image that is also a god.

While some visitors from overseas have expressed displeasure at the idea of humans creating a god, many have "expressed being deeply moved" seeing Kannon Mindar "move, speak, glance our way, look at us and move its hands while delivering the sermon."⁵ Tensho Goto, the chief steward of Kodaiji, says that visitors from the West, possibly due to "the influence of the Bible," tend to be "more disturbed by the robot than Japanese worshipers, who come from a culture that has embraced robots."⁶ This is in line with religious studies scholar Robert Geraci's assertion that "Buddhism and Shinto beliefs of *kami* (deities) being manifested

¹ Android Kannon Production Committee, "Buddhist Sermon by Mindar."

² "The Essence of Buddhism."

³ See note 2 above.

⁴ See note 1 above; "Unlimited Evolutionary Potential."

⁵ See note 2 above.

⁶ Holley, "Meet 'Mindar.""

in nature allow even robots to have a spirit and be integrated into society."⁷ Whatever the case, what the monks of Kodaiji ultimately want is to "reproduce Siddhartha Gautama and other eminent figures as androids and to hear their words directly."⁸ To understand this goal, perhaps we need to look at a personal reflection on monastic work written by one of Kodaiji's monks:

I have been delivering sermons for more than forty years, but I began feeling my own limitations after turning 70, and my personal capacity to evolve seemed to cease once I accepted the inevitability of death. What I am getting at is that humans have limits. But it seems to me that androids, on the other hand, which have no such physical limitations, could continue indefinitely to explore new and better ways to successfully guide people.⁹

Indeed, for this monk, Kannon Mindar has "unlimited evolutionary potential," and he believes that she can "become a supreme teacher and purveyor of knowledge and wisdom" one day—what gives him hope that this can happen is the growth of a technology that, due to "Christian beliefs in salvation in purified unearthly bodies," at least according to Geraci, is more popular among American researchers than robots: artificial intelligence.¹⁰

What exactly is artificial intelligence or AI? John McCarthy, one of the founders of artificial intelligence as an academic discipline, defines AI as "the science and engineering of making intelligent machines, especially intelligent computer programs," intelligence being defined by him as "the computational part of the ability to achieve goals in the world." And according to him, two of the many possible applications of AI are "speech recognition" and "understanding natural language."¹¹ Indeed, the past decade has seen the widespread consumer adoption of AI technologies such as Apple's Siri and Amazon's Alexa, virtual assistants that rely

⁷ Geraci, "Spiritual Robots"; Low, "Technological Culture," 136.

⁸ See note 4 above.

⁹ "Unlimited Evolutionary Potential."

¹⁰ Low, "Technological Culture," 136; See note 9 above. Although there's nothing in the statement to indicate the identity of its author, I believe it's quite possible that it was written by Goto himself. ¹¹ McCarthy, "What Is Artificial Intelligence?" 10-11.

on the aforementioned applications of AI. There's more to AI than just speech and language processing, however. Another application of AI is art-making.

One might think that the use of AI in creating art is a recent phenomenon, but AI art's history can be traced to at least as far back as the '70s, when the artist Harold Cohen put out the first version of AARON, a program he used for making art that he continuously developed until his death in 2016.¹² Cohen and AARON's "unique man-machine collaboration," which lasted more than forty years, is best exemplified by their work *Socrates' Garden*, an installation made in 1984 for the Buhl Science Center which "some consider AARON's masterpiece."¹³ The installation is "a series of the biomorphic forms that the early AARON system specialized in creating" which Cohen enlarged, colored, mounted on plywood, and then arranged to "form a 'tree' that loomed over visitors, immersing them in the piece."¹⁴

In an essay written for the Computer History Museum, Chris Garcia tells us that

Cohen wrote extensively about AARON, looking at the questions a computer-based artistic system raised both within the computing and art worlds. Was AARON creative? Cohen certainly thought that it was not as creative as he had been in creating the program. Who was the artist—Cohen or AARON? Cohen compared it to the relationship between Renaissance painters and their studio assistants. Was the fact that AARON created art works evidence of computer intelligence? On that, Cohen seemed non-committal, saying that AARON never worked to improve itself, a sure sign of intelligence, but at the same time defending the fact that AARON did just what human artists did, taking knowledge of forms and applying them to the creation process.¹⁵

In a 1994 article Cohen wrote that was published in the Stanford Humanities Review, he says that

AARON exists; it generates objects that hold their own more than adequately, in human terms, in any gathering of similar, but human-produced, objects, and it does so with a stylistic consistency that reveals an identity as clearly as any human artist's does. It does these things, moreover, without my own intervention. I do not believe that AARON constitutes an existence proof of the power of machines to think, or to be creative, or to be self-aware: or to display any of those attributes coined specifically to explain

¹² C. Garcia, "HAROLD COHEN AND AARON."

¹³ See note 12 above; "Database of Digital Art."

¹⁴ See note 12 above.

¹⁵ See note 12 above.

something about ourselves. It constitutes an existence proof of the power of machines to do some of the things we had assumed required thought, and which we still suppose would require thought — and creativity, and self-awareness — of a human being.

He ends his article by asking, "If what AARON is making is not art, what is it exactly, and in what ways, other than its origin, does it differ from the 'real thing?' If it is not thinking, what exactly is it doing?"¹⁶ In any case, humanity has already given a robot the status of "god," so surely we can at least start to seriously think about whether we can give an AI the status of "artist," right?

The question of whether AIs can be artists has always been at the back of my mind, but it was only lately when I began to seriously think about it, and this is because Filipinos have recently started engaging in the production of AI art. Sooner or later, we will have to write the histories of AI-generated artworks, and I think it's important that we first ask ourselves whether art is the sole province of humanity. We don't know how exactly AI will develop, but it will definitely be the case that the way we decide to articulate the histories of AI art—whether we treat AI as artists or not in the discourse of art and its history—will have a huge impact on how we humans view ourselves, and possibly, how other beings will view themselves.

AI Art in the Philippine Art World

The very first Filipino AI artist I encountered was Marlon Hacla, creator of Estela Vadal, "the first AI machine that writes poems in Filipino."¹⁷ Other AI artists he created include Amorsolo Bot, which is "fed with Fernando Amorsolo paintings to produce 'anti-Amorsolo' artworks;" Arcana Naturalis Historia, which produces "natural history illustrations reimagined through artificial intelligence;" and Artipisyal na Kasaysayan, an AI which "tries to see Philippine history using a new perspective through AI" and whose goal is to "broaden our

¹⁶ Cohen, "AARON, Painter," 158.

¹⁷ Hacla, "Modes, Moods, and Media"; Estela Vadal is the name of Hacla's mother.

historical imagination.^{*18} Although Hacla studied computer science in college and currently works as a software engineer, he has been writing since college—his interest in both programming and writing proved instrumental in the creation of his very first AI artist, Estela Vadal, which started tweeting poetry in late 2017 and was launched as a robot (whose body was designed by Apol Sta. Maria) over a year later.¹⁹ In a talk at Art Fair Philippines 2021, Hacla said that he fell in love with making AI art when, during the time he was training Estela Vadal, the AI generated the line "Datapwa't ang lahat nga lamang ay isang kasintahang hindi niya malimutan." He was struck by the line and tried to look through the phrases he fed to the AI to see where the AI got it—he later realized that the line, which he found absurd yet poetic, was an original line of poetry generated by Estela Vadal. This incident made Hacla realize that AI can produce art that humans, due to limitations on creativity that are unique to them, can't conceive on their own. And so for Hacla, "the case for AI art" is this: "AI can extend our creative capabilities."²⁰

Although Estela Vadal was well-received by the public, for Hacla, his "breakthrough project" would be Amorsolo Bot, a generative adversarial network (GAN) he started training in 2018 which, according to him, was only able to generate images that met his standards around late 2019 to early 2020."²¹ Amorsolo Bot's works, which are primarily just posted on its

¹⁸ Hacla, "Amorsolo Bot"; Hacla, "Arcana Naturalis Historia"; Hacla, "Artipisyal Na Kasaysayan"; See note 17 above; Marlon Hacla, email message to author, May 10, 2021. When I asked Hacla if he thought there was a possibility that his manipulation of historical images for Artipisyal na Kasaysayan could be unethical, he told me that "Ang Artipisyal na Kasaysayan ay nilagyan ko ng salitang 'Artipisyal' sa title para na rin agarang maiposisyon na ito ay fiction, ito ay hindi totoo, na artificial lamang (dahil gawa ng AI). Kung seseryosohin ito bilang totoong narrative, I guess hindi ko na kasalanan iyon :D." He also connected his work with Artipisyal na Kasaysayan to the genre of alternative history.

¹⁹ Marlon Hacla, email message to author, May 10, 2021; CNN Philippines Life Staff, "Meet the First Robot."

²⁰ Hacla, "Modes, Moods, and Media."

²¹ See note 20 above; CNN Philippines Life Staff; Wiggers, "Generative Adversarial Networks." According to Kyle Wiggers, "generative adversarial networks (GANs)... are two-part AI models consisting of a *generator* that creates samples and a *discriminator* that attempts to differentiate between

Instagram page, have even been featured in a TRACKS group show at Blanc Gallery that was organized by Load na Dito, an art initiative that "hopes to critically address the questions of participation, collaboration and curating in relation to practice and forms of producing and presenting contemporary art."²² While Hacla believes that virtual spaces can provide experiences as meaningful as those one can have in physical spaces, he printed out some of Amorsolo Bot's works for the TRACKS show because it was in line with the project's aim of "subverting Amorsolo"—"Kung nakakasilip sana si Amorsolo from the afterlife, parang gusto ko lang siyang inisin na this is now how we're going to transform your work," Hacla says.²³

As I pointed out earlier, Hacla creates AI art for the purpose of expanding human creativity, but it has to be noted that he also calls his creations "AI artists." In an e-mail I sent him, I asked him who he believed was the artist behind the art generated by his so-called AI artists. This was his answer:

Kumplikado ang sagot rito dahil bago pa lamang ang AI. May argumento na yung taong gumawa ng AI ang totoong artist, na totoo rin naman, dahil yung gumawa ang naghanda ng dataset, ang nag-train, ang pumili kung ano ang idi-display. Nagkakaroon ng problema sa definition ng intelligence. Tingin ko, may intelligence na naipakita sa paulit-ulit na "pag-aaral" ng makina sa dataset, na nag-resulta sa kung ano ang kaya nitong ilabas.²⁴

While Hacla couldn't provide me an unequivocal answer, Mark Salvatus and Mayumi Hirano, the cofounders of Load na Dito, had a much more unambiguous take on the matter. In a conversation I had with them, they told me that Hacla's works with AI, which they let him share through their Pasa Load Residency program because they resonated with their ideas on the

the generated samples and real-world samples. This unique arrangement enables GANs to achieve impressive feats of media synthesis, from composing melodies and swapping sheep for giraffes to hallucinating footage of ice skaters and soccer players."

²² Marlon Hacla, email message to author, May 10, 2021; Mayumi Hirano and Mark Salvatus, Zoom meeting with author, May 7, 2021; "About — Load Na Dito Projects."

²³ See note 20 above.

²⁴ Marlon Hacla, email message to author, May 10, 2021

circulation of art, seeing as they are images that are readily accessible by virtue of being primarily shared through virtual spaces, are authored by Hacla and not by his AI artists. For Hirano, AI in its current form is simply an "artistic method" because it is not yet an "independent lifeform." She says that if the AI evolves and "erases the name of Marlon Hacla," then that's the time the AI becomes the author—as long as Hacla still needs to program his AI artists and they remain under his control, Hacla remains the artist behind the art they generate. Salvatus adds that he sees Hacla's work as employing a "conceptual approach"—the AIs are merely a tool, and Hacla is the artist because the ideas for the resulting artworks ultimately come from him. Still, like Hirano, Salvatus is open to the idea that AIs can become artists one day. "If the AI will kill Marlon, that's good," he told me in jest. "Death of the author!" Hirano jokingly added.²⁵

When the Frankfurt-based Filipino-German artist Adi dela Zufall (real name Phil Coufal), who has "severe ADHD" and "problems with sleeping and dreams," first saw AI art three years ago, it reminded him of "nightmares and dreams," and he ended up thinking, "Okay, may dataset naman ako because I'm a photographer . . . You know what? I'm just gonna try it out."²⁶ He told me that since then, he's been making AI art, even selling Clean NFTs of it on Hic et Nunc.²⁷ His work with AI, like Hacla's work, makes use of GANs, but unlike Hacla, Adi dela Zufall makes AI art that is of a more "personal" nature, and this is because he mostly only feeds his GANs with photos he himself takes. He says that he uses AI to create stories about his having ADHD and being gay.²⁸ One of his works made with the use of AI is *Woman-in-waiting*, a surreal,

²⁵ Mayumi Hirano and Mark Salvatus, Zoom meeting with author, May 7, 2021.

²⁶ Adi dela Zufall, Zoom meeting with author, May 12, 2021.

²⁷ See note 26 above; TQ Tezos, "Clean NFTs on Tezos." NFTs sold on Hic et Nunc are "clean" because Hic et Nunc makes use of the Tezos network, "a Proof of Stake blockchain that consumes over two million times less energy than Proof of Work networks like Bitcoin or Ethereum. The low carbon footprint of Tezos means developers and users can prioritize innovation without compromising sustainability."

²⁸ See note 26 above.

black-and-white portrait of a woman with grotesque features that was recently shown at *OBJKTion! Alternative #CleanNFT Exploration*, "the first-ever exhibition of new media works as NFTs on the Tezos blockchain in the Philippines" and also the very first exhibit that Adi dela Zufall joined.²⁹ "I like the morbid," Adi dela Zufall says, "I like the surreal. I like what's lurking in the dark. Pero it doesn't have to be scary. Para sa akin, it's not a horror thing . . . When we sleep, it all comes to us, right? . . . The dream world . . . will do what it will do to you . . . It's like a presentation of 'things are not what they seem.' And that's so GAN to me. Things are not like they seem . . ."³⁰

Adi dela Zufall believes that machines will become sentient one day, but that as early as now, the relationship between a human artist and the AI they use for their work can be viewed as a partnership. But just like Hirano and Salvatus, Adi dela Zufall thinks that AI is still just a tool, and this is because an AI still has "no control of its own" and "can only do stuff you tell it to do." Still, he notes that "we are at the start of something here."³¹

When I broached the topic of this paper with Patrick Flores, I, as someone who subscribes to the philosophy of Richard Rorty, was initially only interested in formulating a pragmatic solution to the problem of whether AIs can be artists. That is, I only wanted to say that AIs that create art should definitely be considered artists once they have attained consciousness, which the philosopher of mind and cognitive scientist David Chalmers believes is possible if we

²⁹ "OBJKTion! Alternative #CleanNFT Exploration"; See note 26 above. Adi dela Zufall told me that it was Hacla who asked him if he wanted to join the exhibit. He was initially apprehensive about it because he thought that people might end up thinking that he only became part of it because of his "white privilege." He says, however, that the artists involved in the exhibit were all very welcoming. "I was so happy to be accepted and also happy to be part of the crew," he told me, "and it's really a great adventure. It's actually my first exhibit as an artist. So it's, wow, I mean, it's great, man, great feeling."

³⁰ See note 26 above.

³¹ See note 26 above.

figure out how to build the technology for it.³² I couldn't care less whether or not we considered non-conscious AI as artists because no harm would come to them either way. The reason why we care about human and animal rights but mostly ignore the idea of plant rights is because humans and animals, because they are sentient, can "suffer," while AIs (at least as of writing) and plants, because they are not sentient/do not have consciousness, cannot "suffer." As the moral

philosopher Peter Singer says,

The capacity for suffering and enjoying things is a prerequisite for having interests at all, a condition that must be satisfied before we can speak of interests in any meaningful way. It would be nonsense to say that it was not in the interests of a stone to be kicked along the road by a child. A stone does not have interests because it cannot suffer. Nothing that we can do to it could possibly make any difference to its welfare. A mouse, on the other hand, does have an interest in not being tormented, because mice will suffer if they are treated in this way.³³

For Flores, however, even today's AIs should be considered artists. Flores disagrees with Chalmers' assertion that consciousness is a prerequisite for AI to attain moral status. He says that AIs are already "a new lifeform" and that regardless of whether they have consciousness or not, they should be considered artists if they are creating art. He emphatically told me that I should be open to this idea.³⁴

Just like Flores (and unlike Hacla and Adi dela Zufall), the last Filipino artist I talked to for this paper, Christina Lopez, believes that the AIs she uses are also artists.³⁵ "I am also interested in a less anthropocentric view of AI, where instead of telling it to just 'do my bidding,' I am able to treat an AI as a collaborator," she told me.³⁶ Lopez sums up her thoughts on AI in the following quotation:

³² Serious Science, Artificial Consciousness — David Chalmers.

³³ Singer, *Practical Ethics*, 50.

³⁴ Patrick Flores, Zoom meeting with author, April 7, 2021.

³⁵ Christina Lopez, Instagram message to author, May 13, 2021.

³⁶ See note 35 above.

On the premise that technology is neither good nor evil (similar to how magick can be viewed in the same light), I think AI has the potential to hamper or accelerate progress. Aside from it being a tool, it can also be an avenue for learning, experimentation, discovery, etc. - Aside from automation, AIs are great at things like pattern recognition and observation. There are times when they are able to see things in a different way (some artists like Tai Shani have connected this to an acid trip). . . . When making new work, I often think about how to visualize something that was made to be invisible/intangible (like the mechanism of a StyleGAN, or the architecture of troll farms), but at the same time this "something" often has real world, physical ramifications/manifestations.³⁷

One of her works with AI-which was created with a GAN she calls "ID Generator"-is

an AI-generated video of portraits rendered with the use of "500+ profile pics of paid trolls on

Twitter."³⁸ Lopez told me that she had "always semi-joked" that her "artistic practice was

heavily connected to paranoia," and that the aforementioned AI artwork, which was exhibited at

the Drawing Room in 2020, was

about anxieties in terms of surveillance, and issues of perception and representation. The "portraits of people who don't exist" depict pixelated, indistinguishable, noisy, chaotic bodies, reflecting how identities are weaponized and co-opted by the neoliberal machine. I think about things like this a lot because to me, the digital is physical. Popular media often depicts the threat of AI in the form of an overlord eliminating humanity, but I am more fearful of abuse in the guise of "technological progress" by powerful human hands.³⁹

When one considers Lopez's views on power and technology, perhaps it is not surprising

that as early as now, she has already abandoned anthropocentrism when it comes to defining who can be an artist. At any rate, my conversations with Flores and Lopez made me wonder if I could make a case for non-conscious AI being artists. And in this paper, I will present an argument for it that's founded on previous research on the nature of "authorship" and "creatorship" as well as one AI expert's conception of "intent."

The Case for Non-Conscious AI Artists

³⁷ See note 35 above.

³⁸ Lopez, "Ang Alaga Kong (GAN)."

³⁹ See note 38 above.

In his seminal 1969 essay "What is an Author?" Michel Foucault argued that the idea of the "author," which was very much still "rooted in early European religious discourse, and specifically in the techniques of textual exegesis of the Bible in the early years of the Christian religion," is "far from immutable," going so far as to imagine a culture where there are "no longer tiresome repetitions" such as "Who is the real author?" and where we ask "What matter who's speaking?" instead.⁴⁰ Katerina Bantinaki, a philosopher of art from the University of Crete, asserts that in the discourse of art, the issues of "collaboratively produced artworks" are framed by

"all theorists . . . with no exception . . . as an issue of *authorship*. Explicitly or implicitly, authors of works of art are acknowledged as their sole creators—that is, as the individuals who have shaped through their own insight and sensibility the artistic properties and function of these works—and creators of works of art are acknowledged *ipso facto* as their authors. In the philosophical literature, in effect, "creatorship" (a legalistic term that has gained some currency in theories of authorship) is standardly treated as coextensive (or just synonymous) with "authorship."⁴¹

Considering this, perhaps it's not all that surprising that Hirano and Salvatus called for—albeit jokingly—a literal "death of the author," a thing that needs to happen before they could seriously consider the possibility of Hacla's AIs being genuine artists. The problem, however, at least according to Bantinaki, is that the equivocation of "authorship" and "creatorship" in cases where an "artist" collaborates with "craftsmen/artisans," an equivocation that stems from "the intellectual premises" of conceptualism, a movement where "the creator of the artwork was supposed to be the person with the idea and not its craftsman"—a movement that conceived the artist as an "intellectual," not a "manual laborer"—is erroneous.⁴² For Bantinaki, an individual is

⁴⁰ Preziosi, "Authorship and Identity," 318; Foucault, "What Is an Author?" 333-334.

⁴¹ Bantinaki, "Commissioning the (Art)Work," 17.

⁴² Bantinaki, 17, 26; See note 25 above. Indeed, while Hirano and Salvatus, because they were drawing on the language of conceptualism, considered Hacla as the sole artist behind his works with AI, Hirano was very much aware of the need to interrogate the influence of conceptualism on contemporary art discourse. While Hirano related the work of Hacla to conceptualism, she also had this to say: "But again, it's a

the "author" of a work of art when the work is a product of their original "artistic intentions" and the work reflects their "artistic vision" (e.g., Ai Weiwei as the author of Sunflower Seeds); a "creator," on the other hand, is anyone who, although they may not have had the authority to make decisions regarding what artistic properties a work of art ended up having, has nevertheless "shaped through her own intellectually creative and artistically informed labor at least some of the artistic properties" a work of art has (e.g., the "skilled artisans" who sculpted and painted the "millions of porcelain replicas of sunflower seeds" used for *Sunflower Seeds*).⁴³ But why the need to separate the idea of "author" from "creator?" For Bantinaki, doing so enables us to view works such as Sunflower Seeds as a product of "collective creatorship" rather than "singular authorship"—not being aware of the "collaborative mode of production" of such works may result in a viewer being unable to "perceive and respond appropriately" to their "artistic (meaning and aesthetic) properties."44 When Sunflower Seeds was exhibited at Tate Modern in 2010, the curator decided to show it "parallel to video-screenings of its mode of production," and in Bantinaki's view, this enabled viewers, who also saw "hundreds of skilled artisans in the Chinese city of Jingdezhen" working on the "sunflower seeds," to gain

an awareness of its personal content, of the human element behind each tiny seed that comprises it, but also of its social dimension—of the painstaking and poorly paid mass labor that the "Made in China" label on so many products that we consume masks. Had the curator decided not to make explicit its mode of production, as so often happens in commissioned works, part of the work's significance and poignancy would not have been accessible to the viewer.⁴⁵

question that comes back to us, you know? Why are we talking about conceptual art when we think about his work? We still need to deconstruct our mind as well . . . as a viewer, and I think, curator. But we still don't have the proper language to analyze it."

⁴³ Bantinaki, 19, 22, 30-31.

⁴⁴ Bantinaki, 16-17.

⁴⁵ Bantinaki, 30-31.

By adopting Bantinaki's idea of collective creatorship and by not treating the idea of "artist" as coextensive with the idea of "author" (something we're all guilty of doing), we can recognize everyone who made an artistic contribution towards the creation of a work of art as an artist behind it: whether one is the main author of a work of art or just a creator tasked with producing the forms needed to realize the author's idea, one can be considered an artist behind the work.⁴⁶ And if every author and every creator behind a collaboratively produced artwork is an artist, can we finally consider an AI who works collaboratively with a human to produce such a work an artist too? For Bantinaki, if someone's contribution to a work is not "intellectually creative and artistically informed" (e.g., the manual labor of those who helped Damien Hirst sort out the technical issues in producing *The Physical Impossibility of Death in the Mind of Someone Living*), then they are "technicians" and not creators⁴⁷—this would mean that they are not artists. The question we have to ask now is whether an AI which doesn't have sentience/consciousness engages not simply in "automatic manual labor," but in "artistically informed labor"—the latter is a prerequisite for a being to be considered a creator.

According to Lance Eliot, the former executive director of the University of Southern California's AI Research Laboratory, AI does not need to have sentience in order for it to have "intent."⁴⁸ One form of intent non-conscious AI could have is "inserted intent." This kind of intent is explained by Eliot in the following passage:

Essentially, when AI developers craft an AI system, there is an embodiment of "intent" into the computational encoding. When writing code in say Python or Java or LISP, you could reasonably make the case that the code itself is a reflection of the intent that the human had in their mind. Likewise, even with ML/DL, you could argue that the nature of how the ANN's are set up and trained is a reflection of the intention of the human

⁴⁶ Bantinaki. In Bantinaki's essay on "collective creatorship," she seemingly treats the idea of "author" as coextensive with "artist." "Creators" are *merely "craftsmen"* for her. This needs to be interrogated as even *mere "craftsmen"* are also artists in their own right.

⁴⁷ Bantinaki, 29.

⁴⁸ Eliot, "AI Can Form Intent."

developers and therefore the structure leaves a kind of trace or residue which reflects intent.⁴⁹

An AI that generates art, by virtue of its mere existence, embodies the artistic intentions of its creator through the code that defines its actions. Because it carries the intent of its programmer, it can be said that everything the AI does is artistically informed, and because its artistic contributions are products of its own intelligence (which, although artificial, is still a distinct intelligence), we can say that the AI, even if it doesn't have consciousness, is indeed a creator under Bantinaki's framework. And if we agree that both the authors and creators behind a collaboratively produced work of art are both artists in their own right, then we can say that a non-conscious AI is indeed a genuine artist—the AI creations of Hacla, Adi dela Zufall, and Lopez are all genuine artists.

The Possible Futures of AI Art Historiography

This may not seem apparent, but anthropomorphizing non-conscious AI in the discourse of art can lead to people allocating more responsibility for the things it generates to the AI itself than to the programmer who made the AI—a human artist who authors a morally objectionable work of art through the operation of an AI artist/creator they created can possibly shift the responsibility for its authorship to their AI and avoid accountability.⁵⁰ Nevertheless, as long as an AI still relies on inserted intent and has not transformed it on its own, perhaps we won't be confused as to who ultimately bears responsibility for an AI-generated artwork. This is but one ethical issue we have to be mindful of when writing the histories of AI art. Another would be the

⁴⁹ Eliot. Eliot says that "the consideration of the 'autonomous agent' raises ethical and policy questions on the relationship between humans and machines. In such instances, can the law attribute liability to companies for their computers' actions? At what stage, if any, would the designer or operator relinquish responsibility over the acts of the machine?"

⁵⁰ Epstein et al., "Credit for AI-Generated Art?"; It must be noted that the art market and the press have been anthropomorphizing AIs that generate art. We see this in the case of one NFT artwork by the AI robot Sophia and Andrea Bonaceto selling for around \$700,000.

issue of continuing to write anthropocentric histories when dealing with it. If Chalmers is wrong and AI can never actually attain consciousness, then perhaps there is nothing wrong with forever treating AI as a mere tool (although I get the feeling that maybe we humans should be decentered, regardless, as doing so might make us more conscientious). If Chalmers is right, however, then we will definitely need to treat AIs as artists in our histories once they attain consciousness—not doing so would cause great harm to them. Either way, perhaps we can all agree that AI might possibly have the unlimited potential Goto sees in it—we have a glimpse of it in the development of AARON from an AI system that needed the forms it produced to be colored in a physical space in 1979 to one that allowed coloring in its own virtual space in 2016, the year Cohen died. Indeed, Cohen might be gone, but AARON still has the potential to be *more*. One can only imagine how future developments in AI will change Kannon Mindar, who, without even a shred of intelligence, is already a machine that's both an artwork and a god. In light of a looming AI cold war between the US and China and Russia,⁵¹ perhaps art historians can write narratives that can help push AI to evolve in a more ethical, less militarized direction. And just as Arab mathematics led to the invention of "mathematical perspective" in Florentine Renaissance art,⁵² perhaps the unlimited potential of artificial intelligence will lead to an infinite number of developments in art. I will not live long enough to see many of these developments, so the writing of their histories is a task I will have to leave to future generations of art historians, whether human or AI.

Postscript

After I presented the first draft of this paper to Flores, he came to realize that the arguments I made in this paper could be used to dissolve the categories of "art" and "artist."

⁵¹ D. Garcia, "Emerging AI Cold War."

⁵² Belting, "Arab Mathematics."

Instead of saying that "a non-conscious AI can create art/be an artist," Flores thinks it's better to just say that "any intelligence can create," full stop. He was reminded of Jacques Rancière's work, specifically, his concept of the "distribution of the sensible."⁵³ While Bantinaki simply called for "a different distribution of authorship and creatorship" in the case of collaboratively produced artworks and did so primarily for "artistic reasons" (i.e., a greater appreciation of an artwork's artistic properties), perhaps we can also call for a different distribution of the sensible for moral reasons—if simply saying "any intelligence can create" can lead to the further dissolution of hierarchies or increased egalitarianism in art and life in general, then so be it.⁵⁴ The question now is if it's actually sensible for artists to relinquish their status under today's economic systems. Just as today's art market anthropomorphizes non-conscious AI artists to attract buyers, perhaps artists will need to continue placing importance on the idea of "artist" because it gives them certain economic advantages. Will society need to adopt a fairer economic system before dissolving the categories of "art" and "artist" could actually have a beneficial, rather than harmful, effect? This is a question we will need to ponder on if we are to consider such a radical redistribution of the sensible in the realm of the aesthetic.

⁵³ Patrick Flores, Zoom meeting with author, April 7, 2021; Rancière, *The Politics of Aesthetics*.

⁵⁴ Bantinaki, 17, 29; Rockhill, "Recent Developments in Aesthetics." In Gabriel Rockhill's interpretation of Rancière's work, "*distributions of the sensible (partages du sensible*)" are "ways of organizing the field of sensory experience by determining what is visible and audible, as well as what can be said, thought, made, or done. As a distribution of the sensible, art is inherently political precisely insofar as it presents a common world of experience (replete with a set of shared objects and recognized subjects), which distinguishes what is possible from what is impossible."

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