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What AI "art" can teach us about art

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ABSTRACT

In the last years, the use of the words "AI art", i.e. art produced by artificial intelligence, has exponentially increased. Sometimes, they have been used without philosophical awareness, from public discourse to strictly scientific and technological literature. Sometimes, they have started entering the philosophical debate, from the philosophy of technology to the philosophy of art. In what follows, I shall reflect upon AI art by combining my expertise in both the philosophy of technology and the philosophy of art as what has characterised my work as a philosopher over the years. More precisely, I shall reflect upon AI art as an opportunity to further question what we mean when we use the word "art".

After a brief literature review (first section), I shall specify what kind of AI art I consider (second section). In the third section, I shall analyse the most important reason why AI artefacts are defined as art. In the fourth and fifth sections, I shall use thought experiments to argue that AI artefacts cannot be defined as art. And, in the sixth section, I shall conclude by questioning what the use of the words "AI art" can show us about both art and our technological era.

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Introduction

The use of the words "AI art", i.e. art produced by artificial intelligence, has exponentially increased in the last years both when it comes to contexts not characterised by philosophical awareness, from public discourse to strictly scientific and technological literature, and when it comes to the philosophical debate, from the philosophy of technology to the philosophy of art.

In the case of public discourse, the launch of ChatGPT by OpenAI in November 2022 stimulated debates on both its possible relationship with art and, more generally, possible relationships between AI-based emerging technologies and the vast sphere of art and typically human capabilities and activities, as *The New York Times* questioned in two articles published at the end of 2022 (see Krugman 2022; Proulx 2022). Also, numerous debates arose when artists were even furious at art contests won by artefacts generated by AI (see Chayka 2023; Edwards 2022; Metz 2022).

If we move from public discourse to research, at least two literature reviews are noteworthy. The first one (Taylor 2014), which is less recent, considers the more general phenomenon of humans' negative reaction to technologies increasingly replacing typically human capabilities and activities (especially from the perspective of the history of art). The second one (Then et al. 2023), which is more recent, considers the more particular phenomenon of the relationship between AI-based emerging technologies and art (especially from the perspective of computer science).

As Then et al. (2023) also show, when it comes to research, scientists and technologists contribute more than philosophers to the reflection upon the varied relationship between AI and art. In the case of strictly scientific and technological literature, both enthusiastic and cautious attitudes are present, even though the former seem to prevail over the latter. At least two cases, in addition to the case on which I shall focus in what follows, are noteworthy when it comes to enthusiastically expressing the idea according to which AI can make art. In the first case (see Elgammal 2019; Elgammal and Mazzone 2019; Elgammal et al. 2017), the idea is that it is possible to create an AI as "an almost autonomous artist" (Elgammal and Mazzone 2019, 3): "[t]he physical act of an artist, either applying paint or carving marble, becomes optional. This removes the necessity of a human body (the artist) to make things and allows us to imagine that there could be more than one kind of artist, including other than human" (7). In the second case (see Terzidis, Fabrocini, and Lee 2022), the idea is that the distinction between a human being and an AI even dissolves when it comes to identifying the artist, in that, "if we focus just on the outcome of the artistic process, the intentionality of the artist does not have any relevance.

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[…] In other words, what matters is the […] the output […] rather than the […] process" (Terzidis, Fabrocini, and Lee 2022, 1715), which is precisely the kind of idea I shall counterargue in what follows. Also, a particular openness to AI's artistic capability and activity is offered by Dorin (2013) and Du Sautoy (2019). Conversely, when it comes to cautious attitudes, other authors express the idea according to which AI cannot make art, in that it is nothing more than a tool used by artists who are necessarily humans. Even though the contexts are not professionally philosophical, the ideas expressed are both clear and interesting. There are authors who particularly emphasise the opportunity of collaboration between (human) artists and AI, from Hertzmann (2018) to Daniele and Song (2019). And there are authors who particularly emphasise the risk of replacing (human) artists with AI, from Ch'ng (2019) to Cetinic and She (2022).

In the case of the philosophical debate, from the philosophy of technology to the philosophy of art, a kind of optimism, sometimes more cautious and sometimes less cautious, seems to prevail. At least four authors are noteworthy, to limit myself to the kind of issue on which I shall focus in my article (but I shall develop philosophical contributions in what follows): Boden's seminal works (Boden and Bishop 2010 and, together with Boden and Edmonds 2019), Coeckelbergh's (2017), Steiner's (2017) and Miller's (2019) varied kinds of openness. For instance, according to the second author, it is possible to think that, "[i]f people experience the machine as revealing something that has been hidden before and as shedding a different light on the world, then the machine is doing what human artists also are supposed to do" (Coeckelbergh 2017, 300). Finally, it is worth saying that within the vast sphere of the arts and humanities, even though outside philosophy, artists themselves express their visions, from more pessimistic approaches, according to which we need humans as artists (see Smith 2019; Ridler 2020, which I shall also consider in what follows, and Audry 2021), to more optimistic approaches, according to which we do not need humans as artists, to the point that, as Moura (2018) writes, "[w]hether a work of art is made directly by a human artist or is the product of any other type of process is nowadays of no relevance" (Moura 2018, 3).

As in the case of emerging phenomena in general, the questions raised and their possible answers are exceedingly complex. In what follows, I shall reflect upon AI art by combining my expertise in both the philosophy of technology and the philosophy of art as what has characterised my work as a philosopher over the years. More precisely, I shall reflect upon AI art as an opportunity to further question what we mean when we use the word "art". My primary argument shall be that, if AI's outputs are greatly autonomous from humans' inputs, there is no art, in that, when it comes to art, not only the outputs but also the processes are essential—and what makes humans' processes irreducibly different from AI's processes is what I shall define as "meta-sensemaking", which AI does not, and cannot, have.

I shall articulate my work as follows. After the brief literature review I have done in the first section, I shall specify what kind of AI art I consider (second section). In the third section, I shall analyse the most important reason why AI artefacts are defined as art. In the fourth and fifth sections, I shall use thought experiments to argue that AI artefacts cannot be defined as art. And, in the sixth section, I shall conclude by questioning what the use of the words "AI art" can show us about both art and our technological era.

Autonomous AI art

In what follows, I shall consider the case of AI artefacts as AI's outputs that are greatly autonomous from humans' inputs. That is, I shall not consider the following kinds of cases: when artists think of algorithms themselves as art (as in the case, for instance, of Klingemann[1]) and when, most frequently, artists use AI as a tool among others, especially to reflect upon the relationship between humans and technology (as in the case, for instance, of Ambrosi, Chung, McGregor and Ridler[2]). Conversely, speaking of AI artefacts as AI's outputs that are greatly autonomous from humans' inputs means speaking, for instance, of the following kinds of cases, which I shall consider. The case of Van Arman's images, in that his robots "use deep learning neural networks, artificial intelligence, feedback loops and computational creativity to make a surprising amount of independent aesthetic decisions".[3] Thus, we may say that the images that are finally obtained are greatly autonomous from human intervention. And the case of Goodwin's words, in that he "invited visitors to submit random words that would be generated into poetry by an algorithm".[4] Thus, we may say that the words that are finally obtained are greatly autonomous from human intervention.

But the most notable case of AI artefacts as AI's outputs that are greatly autonomous from humans' inputs is Obvious' *Edmond de Belamy*, which is a portrait produced by AI and sold by Christie's in 2018 for $ 432.500.[5] Specifically, *Edmond de Belamy* is produced by generative adversarial networks, i.e. GANs (also used by Van Arman), whose operation is explained by Goodfellow, who is their inventor, through a metaphor:

> [t]he basic idea of GANs is to set up a game between two players. One of them is called the generator. [...] The other player is the discriminator. [...] The generator is trained to fool the discriminator. We can think of the generator as being like a counterfeiter, trying to make fake money, and the discriminator as being like police, trying to allow legitimate money and catch counterfeit money. To succeed in this game, the counterfeiter must learn to make money that is indistinguishable from genuine money, and the generator network must learn to create samples that are drawn from the same distribution as the training data. (Goodfellow 2016, 16–17)

Thus, the generator produces images that the discriminator cannot distinguish from the human-made images on which it was trained. Specifically, *Edmond de Belamy* is an image that the discriminator cannot distinguish from the 15.000 human-made portraits painted between the 14th and the 19th centuries on which it was trained. Yet, *Edmond de Belamy* is not a copy of the starting 15.000 human-made portraits. Conversely, it is an original image: the images produced by the generator cannot be anything but original, in that it does not know on which human-made images the discriminator was trained. Obvious specifies that *Edmond de Belamy*, together with the other images produced by GANs, is not a kind of average of the starting data. Conversely, if the starting data are the 15.000 human-made portraits painted between the 14th and the 19th centuries, *Edmond de Belamy* is the original image number 15.001 (see Obvious 2020, 180).[6]

Obvious also specifies details upon which it is worth reflecting:

> [d]oes it mean that an artist working with GAN algorithms makes no contribution to the process in terms of inventiveness? No. It simply means that the artist focuses her creativity on other variables of the process or uses a different kind of creativity, and that the visual creation becomes more and more delegated to the tool. Some of the aspects on which the artist focuses are the choice of the theme, research related to the decision to treat this theme, the search for inspiration (which translates here into the search and choice of database components used as input for the algorithm), the programming and fine-tuning of the algorithm and the whole process based on trial and error, and the choice of means of expression. (Obvious 2020, 168, my translation)

Let us list, on the one hand, the actions Obvious attributes to human "creativity" and, on the other hand, the actions Obvious attributes to AI "creativity". The first list is extremely long: "the choice of the theme, research related to the decision to treat this theme, the search for inspiration", i.e. "search" and "choice of database components used as input for the algorithm", "the programming and fine-tuning of the algorithm" and "the choice of means of expression". The second list is extremely short: "the visual creation". Yet, the second list is also extremely important, in that "the visual creation" is nothing less than the shaping itself of the artefact (which, as we shall see in what follows, is essential in art)—the emerging idea is not only that art can be produced through a synergy between a human agent and an AI but also, and especially, that art can be produced through a synergy between a human agent responsible for a variety of actions and an AI responsible for an action that, even though it is one, is crucial: the shaping itself of the artefact.

Thus, the first question to answer is the following: even though the list of the human agent's actions is longer than the list of the AI's actions (action), what does it mean to move the shaping itself of the artefact from the former to the latter?

The shaping, the artistic and the aesthetic

First, we should say that the list of the human agent's actions cannot distinguish making art from making something else. For instance, when we make self-tracking apps (from step counter apps to sleep apps), our actions are also "the choice of the theme, research related to the decision to treat this theme, the search for inspiration", i.e. "search" and "choice of database components used as input for the algorithm", "the programming and fine-tuning of the algorithm" and "the choice of means of expression". Thus, we may rephrase the question asked above as follows: if the list of the human agent's actions cannot distinguish making art from making something else, is it possible to think that moving the shaping itself of the artefact from the human agent to the AI means moving something more distinctive of making art from the former to the latter?

If we consider the most important definitions of art (at least in the history of Western culture), we should answer yes. The shaping of the artefact has been considered as something distinctive of making art for millennia, from a more material sense of shaping to a more immaterial sense of shaping. Even in the case of conceptual art, the shaping of the artefact is far from the kind of randomness that characterises AI's outputs, as I shall argue in what follows. Specifically, according to both the most important paradigms of art, i.e. art as imitation and art as expression, the shaping of the artefact is distinctive of making art (see at least Tatarkiewicz 1975). In the first case, the key role played by the action itself of shaping an artefact is almost pleonastic. In the second case, the key role played by the action itself of shaping an artefact is sometimes less explicit, as in the case of conceptual art. But it does not disappear. For instance, the reason why Duchamp's *Fountain* is artistically meaningful is precisely its being an artefact that, first, was concretely shaped

by a non-artist and, second, was abstractly reshaped by an artist. And, even though we consider the contemporary definitions of art, which are characterised by the increasing autonomy of the notion of art from the (traditional) notion of shape, the action itself of shaping an artefact does not disappear. In the case of more traditional definitions of art, the shaping is even essential, especially from an aesthetic perspective, i.e. through experienceable and judgeable aesthetic properties (see for instance Beardsley 1982, according to whom art is a matter of shapes that can provide us with aesthetic experiences. See also Zangwill 1995). In the case of less traditional definitions of art, i.e. conventionalist (from historical to institutional), even though shapes' aesthetic properties are not essential, the shaping does not disappear, in both the case of historical definitions of art (see for instance Levinson 1990, according to whom art is a matter of artefactual creation consciously produced by considering the artefacts that have been historically defined as art. See also Carroll 1993) and the case of institutional definitions of art (see for instance Dickie 1984, according to whom art is a matter of artefactual creation consciously produced to be presented to the world of art's audience, which makes sense of it. See also Gaut 2000; Davies 2004[7]). We can go even further and say that, even in the following case provocatively proposed by Moura (2018), the shaping of the artefact as something distinctive of making art does not disappear: "[w]hether a work of art is made directly by a human artist or is the product of any other type of process is nowadays of no relevance. Recent art history shows many examples of art works based on random procedures, fortuitous explorations, *objets trouvés* and arbitrary constructions. Surrealism, for example, even tried to take human consciousness out of the loop" (Moura 2018, 3). But a possible counterargument to Moura's provocative proposal is that, if we consider surrealist art, "tak[ing] human consciousness out of the loop" does not mean that what I shall define as (human) sensemaking and "meta-sensemaking" are "out of the loop". Conversely, (human) sensemaking and "meta-sensemaking" can be perfectly at work, even though not necessarily at a conscious level: unconscious sensemaking and "meta-sensemaking" can be perfectly sensemaking and "meta-sensemaking" (as I shall argue by also referring to the case of Borges). Thus, if the shaping of the artefact has been considered as something distinctive of making art for millennia, what does it mean to move it from the human agent to the AI?

Paradoxically enough, the current discourse on AI art does not seem to prioritise the question asked above (which I shall answer in what follows). Conversely, it seems to prioritise a kind of hendiadys when it comes to speaking of AI art: the hendiadys that combines the artistic and the aesthetic by almost dissolving the former in the latter. In several cases, the aesthetic seems to be considered as the most important reason why AI artefacts are defined as art (in addition to Boden and Bishop 2010, on which I shall focus in what follows, see at least Elgammal et al. 2017,[8] Terzidis, Fabrocini, and Lee (2022)[9] and Di Dio et al. (2023)[10]). Boden's version of the Turing test is seminal:

> I will assume that the human carrying out the TT [Turing test] contemplates (looks at, listens to, and sometimes also interacts with) the result produced by the computer for five minutes or so, and then gives their opinion on it. And I will take it that for an "artistic" program to pass the TT would be for it to produce artwork which was: 1) indistinguishable from one produced by a human being; and/or 2) was seen as having as much aesthetic value as one produced by a human being. (Boden and Bishop 2010, 409)

According to Boden's version of the Turing test, AI artefacts are art on two conditions (which are not even necessarily together)[11]: first, their indistinguishability from artefacts created by human agents and, second, the equivalence between the former's "aesthetic value" and the latter's "aesthetic value". Thus, the aesthetic is the most important reason why AI artefacts are defined as art. The aesthetic is not only explicitly involved in the case of their "aesthetic value" but also implicitly involved in the case of their indistinguishability, which cannot but be primarily tested in an aesthetic way.

But the dissolution of the artistic in the aesthetic has at least two counterarguments: first, the most important definitions of art (at least in the history of Western culture), as we have seen, and, second, the following kind of imaginative exercise. According to Boden's version of the Turing test, we can say that *Edmond de Belamy* is art if we cannot distinguish it from a human-made portrait "and/or" if we can judge their "aesthetic value" as equivalent. But, if we imagine that there is a Picasso's portrait we cannot distinguish from *Edmond de Belamy* "and/or" whose "aesthetic value" we can judge as equivalent, would we be ready to say that they are equivalently art? If we can say yes, a logical consequence seems to emerge: we should be ready to define as art any aesthetically perfect copy of a human-made portrait—but are we honestly ready to define as art, for instance, an aesthetically perfect copy of Picasso's *La Celestina* (and are we honestly ready to pay an equivalent sum of money for it)? If we cannot continue to say yes, we should stop thinking of the artistic as dissolvable in the aesthetic—conversely, we should think of the relationship between the artistic and the aesthetic as partially (but meaningfully) divergent, and not as convergent. That is, the aesthetic does not, and

cannot, solve all the conditions for the artistic, in that the former may lack what the latter should not lack, i.e. the special kind of process I shall identify in what follows and define as "meta-sensemaking". For instance, even though the sketch of a dove made by me doodling during a call is aesthetically analogous to one of the doves made by Picasso, the former is far from being artistically analogous to the latter, in that my dove lacks the special kind of process Picasso's dove does not lack.

Thus, if it is true that there is a partial (but meaningful) divergence between the artistic and the aesthetic, it is also true that the aesthetic cannot make AI artefacts art. But where do we find what can make Picasso's *La Celestina* (and dove) art? And do we also find it in *Edmond de Belamy*?

Paradoxically enough, a hint to answer the questions asked above is offered by an AI artist, who uses AI as a tool among others: "although machine learning can copy and suggest it is very much me who is making the work".[12] More precisely,

> I do not mind the idea of machines that paint or GANs that make what is essentially wallpaper – art without intent. I am not interested in trying to teach a machine to draw like a human being or produce images impossibly recognisable as produced by a machine. [...] I am [...] interested in just the opposite – in starting with something cold, sterile, "algorithmic" and reintroducing the human element in it – and I think I have found a way to do it by using AI as a combination of materials and procedures. (Ridler 2020, 127, my translation)

What distinguishes not only, more generally, art from non-art, but also, more particularly, AI art (as art created by using AI as a tool among others) from AI non-art (as "wallpaper"[13]) seems to be precisely the human agent, i.e. "me", "the human element". In the case of AI artefacts that are greatly autonomous from humans' inputs (which is the case of "machines that paint or GANs"), the hint is that they cannot be anything but "wallpaper". In the case of AI artefacts that are not greatly autonomous from humans' inputs (which is the case of the artist herself), the hint is that what can make them art is "me", "the human element".

Yet, *Edmond de Belamy* was sold for $ 432.500, which is far from being the price of "wallpaper" (and which is far closer to the price of art). Why? That is, what is the meaning of the equivalence between something created by "the human element" and something not created by "the human element"?

First thought experiment and AI's (automated) randomness

Thought experiments can serve as promising ways to answer the questions asked above.

The first thought experiment has to do with reflecting upon *Edmond de Belamy* against the background of what Poe states in *The Philosophy of Composition*. Poe's vision of artistic creation is instructive because it is a kind of cross between the idea according to which art can be created by a human agent, whose artistic creativity is irreducible to AI's processes, and the idea according to which art can be created by an AI. Poe states what follows about his poetry, specifically *The Raven*: "no one point in its composition is referable either to accident or intuition – [...] the work proceeded, step by step, to its completion with the precision and rigid consequence of a mathematical problem" (Poe 1846, 163). For instance, if the effect should be its public success, the cause should be calculated before composing it as follows: its length should have "the limit of a single sitting" (164), i.e. "about one hundred lines" (164), its aesthetic property should be beauty as "the most intense" aesthetic property (164), its tone should be melancholy, in that beauty, "in its supreme development, invariably excites the sensitive soul to tears" (164), its refrain should be a single word, i.e. "nevermore" (165) as combining the sounds of "the long *o* as the most sonorous vowel, in connection with *r* as the most producible consonant" (165), *et cetera*.

As our first thought experiment, let us imagine to have at our disposal, on the one hand, Poe, whose *The Raven* is the outcome of "the precision and rigid consequence of a mathematical problem", and, on the other hand, Obvious, whose *Edmond de Belamy* is the outcome of the AI. And let us imagine to ask them the following analogous questions. In the first case: "Why did you decide to characterise your work with beauty and melancholy?". In the second case: "Why did you decide to characterise your work with dark colours and soft edges?" (which are its aesthetic properties). In the first case, it is easy to imagine Poe offering us a sensible answer. It is no coincidence that he offers us an answer that is not only sensible but also calculated before composing *The Raven* when he states that he decided to characterise his work with beauty and melancholy because beauty is "the most intense" aesthetic property that, "in its supreme development, invariably excites the sensitive soul to tears", i.e. melancholy. Conversely, in the second case, it is not easy to imagine Obvious offering us a sensible answer: *Edmond de Belamy*'s dark colours and soft edges do not result from Obvious' autonomy, which means that the latter cannot offer us the reasons of the former's shape. And it is not easy to imagine the AI offering us a sensible answer: even though *Edmond de Belamy*'s dark colours and soft edges result from AI's autonomy, AI's autonomy itself, starting with the issue of its inscrutability as a black box (see at least Finn 2017; Pasquale 2015), does not seem capable of offering us an

analogously sensible answer. That is, it is not easy to imagine the AI analogously stating what follows: "I decided to characterise my work with dark colours and soft edges because their combination 'invariably excites the sensitive soul to tears'". Why cannot we imagine the AI offering us a sensible answer?

Let us add something that seems to converge with AI's inscrutability. When Borges criticises Poe's vision of artistic creation, he states what follows: "The art of writing is mysterious; [...] I prefer the Platonic idea of the Muse to that of Poe, who reasoned, or feigned to reason, that the writing of a poem is an act of the intelligence" (Borges 1970 (2000), 10). Yet, even though we imagine to compare the possible answer offered by Borges (characterised by something "mysterious") with the possible answer offered by the AI (characterised by inscrutability), it is easy to imagine the former as more sensible than the latter. More precisely, there is a sense in which we can imagine to ask Borges "Why did you decide to characterise your work with the specific style you used?", in that the presence of something "mysterious" does not mean that the work is externalised from Borges' autonomy, i.e. capability to autonomously decide, sometimes more consciously and sometimes more unconsciously, what style to use and why. That is, unconscious, i.e. "mysterious", reasons are still reasons. And we cannot even imagine Borges' works as characterised by specific styles that have no reasons at all—which means that we cannot even imagine Borges' works as characterised by specific styles that result from nothing but randomness.

Conversely, there is a sense in which we can say that *Edmond de Belamy* results from a kind of randomness extraneous not only to Poe's writing but also to Borges' writing. The reasons of *Edmond de Belamy*'s dark colours and soft edges are not only inscrutable (which makes it diverge from Poe's work and converge with Borges' work) but also, and especially, random (which makes it diverge from both Poe's work and Borges' work), in that they are nothing but the outputs of the automated process of the 15.000 human-made portraits painted between the 14th and the 19th centuries—they are nothing but the outputs of the automated process of the statistical correlations between the starting data.

And being nothing but the outputs of the automated process of the statistical correlations between the starting data means being random in a way extraneous to both Poe's "mathematical", i.e. conscious, writing and Borges' "mysterious", i.e. unconscious, writing—more precisely, it means that the key reason why the AI's outputs are extraneous to both Poe's work and Borges' work is that they do not result from autonomy, but from automation, as I shall argue in what follows.

Autonomy makes us think of what, according not only to Kant (1785 (1998)) and Kant (1788 (1996)) but also to several contemporary philosophers (see at least Bratman 2007; Dworkin 1988; Ekstrom 1993; Frankfurt 1988; Friedman 2003), identifies even the core of human identity as the human capability to self-give rules and, consequently, bear the burden of individual responsibility for individual decisions and actions. Thus, speaking of autonomy means speaking of both an enormous opportunity and an enormous burden: on the one hand, the enormous opportunity that one has to be thought of as individually self-determining one's decisions and actions and, on the other hand, the enormous burden that one has to be thought of as individually self-determining one's wrong, and even punishable, decisions and actions.

Conversely, when we analyse the etymology of the word "automation", which defines the AI's functioning itself, we learn that the Greek word αὐτοματίζω (transliterated as *automatizo*) from which it results means to "act of oneself, act offhand or unadvisedly",[14] "to be done spontaneously or at random", "haphazard", to "introduce the agency of chance", "of things, [to] happen of themselves, casually", "to be self-produced" and, "of natural agencies, [to] act spontaneously". In addition, the Greek word αὐτοματισμός (transliterated as *automatismos*) means "that which happens of itself, chance",[15] the Greek word αὐτόματον (transliterated as *automaton*) means "accident"[16] and the Greek word Αὐτοματία (transliterated as *Automatia*) means "the goddess of chance".[17] Thus, speaking of "automation" means speaking of something "random" as even the opposite of autonomy's self-determination—more precisely, speaking of an automated AI producing something through randomness means speaking of even the opposite of an autonomous human agent creating something through self-determination.[18]

Even though millennia separate the etymology of the word "automation" from its contemporary use,[19] its meaning is still instructive to understand both the former and the latter. If we imagine to ask Poe and Borges the (necessarily autonomous) reasons of their works, they would be capable of answering by offering us something that we may define as sensemaking (which necessarily results from their autonomy). Even though Poe would put into play "the precision and rigid consequence of a mathematical problem" and Borges would put into play "the Platonic idea of the Muse", both Poe and Borges would be capable of offering us, in the first case, the reasons why the length, the aesthetic property, the tone, the refrain *et cetera* have to do with something we may define as (autonomous) sensemaking (starting with the raven that, in dialogue with the human protagonist, continuously repeats the word "nevermore" in an atmosphere of melancholy) and, in the second case, the

reasons why the specific style has to do with something we may define as (autonomous) sensemaking. Conversely, we cannot imagine to analogously ask the AI the reasons of *Edmond de Belamy*—imagining to analogously ask the AI the reasons of *Edmond de Belamy* makes no sense, in that we can imagine nothing but the answer according to which *Edmond de Belamy* is the output of the automated process of the statistical correlations between the starting data.

Thus, the answer we can imagine to get has nothing to do with something we may define as (autonomous) sensemaking—conversely, the answer we can imagine to get has to do with something we may precisely define as to "act of oneself, act offhand or unadvisedly", "to be done spontaneously or at random", "haphazard", to "introduce the agency of chance", "[to] happen of themselves, casually", "to be self-produced" and "[to] act spontaneously".

If it is true that the two scenarios we can imagine (on the one hand, Poe's and Borges' and, on the other hand, the AI's) remarkably diverge, it is also true that the implicit reason of their remarkable divergence is that we think of sensemaking as essential when it comes to art. Thus, in what follows, I shall address the issue of sensemaking through the second thought experiment, which has to do with reflecting upon *Edmond de Belamy* against the background of something more precise than art's sensemaking: art's "meta-sensemaking".

Second thought experiment and art's (autonomous) "meta-sensemaking"

Let us start with quoting the words of an art historian reflecting upon something more analogous to *Edmon de Belamy* than Poe's work and Borges' work: a portrait, specifically Picasso's *La Celestina* we have already introduced. The art historian writes that

> Picasso's *La Celestina* had one good eye and one bad eye. [...] Celestina's gaze was a punishing one. It operated, like the gaze of the Medusa, as the symbol for a devouring female whose power could petrify its victim. [...] Along with many others around the Mediterranean, Picasso shared a fear of the evil eye, seeing it as a destructive organ that could wound, devour, rob or bite. Using it in his daily life as a reminder to carry out tasks was a constant acknowledgment of its magic power. Celestina bristles with this aura of special knowledge and power as much because of her appearance as because of the name, with all its associations, that Picasso gave her. (Holloway 2006, 118–119)

The words quoted above are nothing but a part of pages and pages of reflection. Yet, complex and profound issues, through which its meaning is understandable, emerge: the past and present history of social and individual culture, the past and present history of artistic culture, the artist's existential history, the symbolic power *et cetera*. Why can the dialogue between *La Celestina* and the art historian be exceedingly complex and profound? That is, why can it be defined as an exceedingly complex and profound sensemaking?

The answer I propose is that *La Celestina* can offer the art historian the extraordinary experience of understanding humans (starting with the art historian herself as a human being) through its shape, which is given by Picasso himself as a human being, as the shape of humans' complex and profound issues. Specifically, *La Celestina* is the shape given by a human being as the shape of the human "power [that] could petrify its victim". And being the shape given by a human being is not random at all—resulting from a human being's experience of and reflection upon humans is the most essential condition on which the art historian as a human being, together with us as humans, can understand the meaning of the human "power [that] could petrify its victim" through Picasso's *La Celestina*. Even more precisely, the answer I propose is that what makes Picasso's *La Celestina* art is its sensemaking, and that sensemaking means that the artefact results from a human being experiencing and reflecting upon the meaning of human existence, and shaping it as what can be experienced and reflected upon by other humans who also experience and reflect upon human existence—the answer I propose is that sharing the experience of human existence, together with reflecting upon it, is the condition on which sensemaking and, finally, art, are possible.

But let us continue the second thought experiment to test my proposal. And let us imagine an analogous dialogue between *Edmond de Belamy* and us. For instance, let us imagine to say, analogously to what the art historian writes, that its dark colours and soft edges "operate" "as the symbol for" a human existence characterised by a melancholy that blurs human identity. Can we actually imagine ourselves saying it? If our answer is yes, let us imagine to compare *Edmond de Belamy* with Poe's *The Raven*, in that melancholy as characterising human existence is put into play in both cases. In the case of *The Raven*, we can imagine to say that the length, the aesthetic property, the tone, the refrain *et cetera* "operate" "as the symbol for" a human existence characterised by melancholy—more precisely, we can imagine to say that *The Raven* can make us understand more profoundly what melancholy means to ourselves as humans. Can we actually imagine ourselves saying it about *Edmond de Belamy*? More precisely, on which of the two, i.e. *The Raven* and *Edmond de Belamy*, would we rely more if we want to understand more profoundly what melancholy means to ourselves as humans? It is hard to imagine that we answer *Edmond de Belamy* against *The Raven*. But, if our

answer is *Edmond de Belamy*, its possible counter-argument is that, even though the production of *Edmond de Belamy* start with 15.000 human-made portraits, it does not mean that the former embeds the latter's sensemaking. Again, *Edmond de Belamy* is not a kind of average. Conversely, it is the original image number 15.001, which does not result from humans experiencing, reflecting upon and shaping their human existence and its meaning, but from the automated process of statistical correlations—again, *Edmond de Belamy* results from an automated randomness extraneous to art as resulting from autonomous humans experiencing, reflecting upon and shaping their human existence and its meaning.

And, again, the partial (but meaningful) divergence between the artistic and the aesthetic emerges. *The Raven*, as resulting from a human being reflecting upon and shaping his experience of human existence, is not only an opportunity of aesthetic experience but also, and especially, an opportunity of artistic experience precisely as sensemaking. Opportunities of aesthetic experiences are several, from *Edmond de Belamy* to sunrises to sunsets (as cases of natural objects) to traffic lights (as cases of other kinds of artefacts), in front of which we may happen to reflect upon the meaning of the passage of time in human life. But we cannot imagine ourselves reflecting upon the meaning of human existence through *Edmond de Belamy*, together with sunrises, sunsets and traffic lights, in the way we reflect upon it through *The Raven*. If our questions are "What does it mean to suffer for a loved one's death?", "What does it mean to feel that suffering has no way out?", "What does melancholy mean?" and "What does despair mean?", together with "What is the meaning of the passage of time in human life?", we need something more than the aesthetic experience *Edmond de Belamy*, together with sunrises, sunsets and traffic lights, can offer us—what we need is an artistic experience, i.e. a dialogue underpinned, first, by an artist as a human being reflecting upon and shaping his experience of human existence and, second, by us as humans sharing the experience of human existence, together with reflecting upon it.

Metaphorically speaking, we may say that, when it is a matter of the questions listed above, asking *Edmond de Belamy*, sunrises, sunsets and traffic lights their answers is like asking a European never gone out of Europe what it is like living in the USA. Metaphors aside, it is like a dialogue underpinned by data (for instance, the European has read something about living in the USA), but not by the experience of data (for instance, the European has never lived in the USA).[20] On the one hand, we have data. On the other hand, we have the conditions on which data can be understandable. That is, on the one hand, we have, for instance, information on living in the USA and information on suffering from headaches. On the other hand, we have, for instance, the first-hand experience of living in the USA and the first-hand experience of suffering from headaches. My proposal is to think of the questions listed above as requiring first-hand experience—that is, if it is true that art is a matter of sensemaking as experiencing, reflecting upon and shaping the meaning of human existence, it is also true that art requires sharing the first-hand experience of being human that AI cannot share. As far as the other examples are concerned, i.e. sunrises and sunsets as cases of natural objects and traffic lights as cases of other kinds of artefacts, it is hard to think of them as capable of offering us sensible answers to the meaning of the passage of time in human life precisely because, even though we may happen to reflect upon it in front of them, the relationship between our reflections and them is random in a way extraneous to art. In the case of sunrises, sunsets and traffic lights, we may happen to reflect upon the meaning of the passage of time in human life regardless their ways of existence (which means, again, "spontaneously or at random", "casually"). Conversely, in the case of art, from Duchamp's *Fountain* to Picasso's *La Celestina* and dove to Poe's *The Raven* to Borges' works, we may happen to reflect upon the meaning of suffering, melancholy and despair precisely because of their ways of existence—in the case of art, what makes us reflect upon the meaning of suffering, melancholy and despair is, again, art's way of existence as sensemaking, i.e. a metaphorical iceberg whose substance is given by reflecting upon and shaping the experience of human existence and its meaning (and whose metaphorical tip, and nothing but its metaphorical tip, is the aesthetic shape with which we are faced, from painting to writing to whatever).

From both an etymological perspective and a philosophical perspective, *Edmond de Belamy* as the AI's output is characterised by the kind of randomness that opposes to the kind of autonomy that, conversely, characterises art as resulting from the first-hand, i.e. autonomous, experience of being human. Even though, for any reason, its dark colours and soft edges make us reflect upon something that has to do with our existence, our reflection is analogous to when we happen to reflect in front of sunrises, sunsets and traffic lights, which may randomly make us reflect upon the passage of time of our existence in the way described above. But we can go even further and say what follows. If, in front of *Edmond de Belamy*, we happen to reflect upon the melancholy of our existence, the relationship between *Edmond de Belamy* and our reflection is random for the following reason, which is more precise: the former does not, and cannot, offer the latter what we may define as "meta-sensemaking". More precisely,

combining the Greek word μετά (transliterated as *meta*), which means posteriority and additionality, with the word "sensemaking" may identify with sufficient precision the reason why *Edmond de Belamy* does not, and cannot, offer us an experience that is not only aesthetic but also, and especially, artistic—we may say that *Edmond de Belamy* does not, and cannot, offer us "meta-sensemaking", i.e. a posterior and additional meaning, which is posterior and additional precisely because it is not offered by the (aesthetic) shape in itself, but by its (artistic) posteriority and additionality given by humans not only experiencing but also, and especially, reflecting upon and shaping the meaning of human existence. Thus, in front of sunrises, sunsets, traffic lights and *Edmond de Belamy*, it makes no sense to say, for instance, that they "operate" "as the symbol for" a human existence characterised by the passage of time and melancholy—and the reason why it makes no sense is, again, that they do not, and cannot, offer us "meta-sensemaking" as a posterior and additional human work on the meaning of being human.

We may also say that, when it is a matter of "meta-sensemaking", artists as humans are not a random element at all, but a necessary element. For instance, *The Raven*'s protagonist suffers for his loved one's death and, when the raven breaks into his home, he finds the answers to his questions in the word "nevermore", which the raven continuously repeats in an ascending climax that moves from melancholy to despair. The reason why *The Raven* can mean and make us understand what suffering, melancholy and despair mean is precisely that its shape (length, aesthetic property, tone, refrain *et cetera*) results from the first-hand experience of being human, specifically experiencing first-hand suffering, melancholy and despair. Experiencing first-hand can also mean experiencing by empathy (for instance, we may say that Flaubert's *Madame Bovary* results from experiencing by empathy what being a woman means). But it cannot also mean experiencing by automatically processing statistical correlations. *Edmond de Belamy* does not, and cannot, offer us "meta-sensemaking" because it is not, and cannot be, a shape resulting from a human being who experiences first-hand and by empathy what being a human being means.

When I want, and even need, to understand more profoundly what is the meaning of my own existence, from my own worst experiences to my own best experiences, I do not ask sunrises, sunsets and traffic lights for the reason why I do not ask *Edmond de Belamy*: I do not trust them, in that they do not, and cannot, offer me what is "meta" – they do not, and cannot, offer me posteriority and additionality as humans' autonomous reflecting upon and shaping the meaning of their own, and my own, experience of human existence. Conversely, I ask Duchamp's *Fountain*, Picasso's *La Celestina* and dove, Poe's *The Raven*, Borges' works and Flaubert's *Madame Bovary* because I trust them: they can offer me what is "meta" as something posterior and additional to human existence—that is, they can offer me the autonomous shaping of experiencing first-hand and reflecting upon human existence.

Conclusion

But, again, why was *Edmond de Belamy* sold for the price of art, and not for the price of "wallpaper"? The logical consequence of my argument is that the condition on which *Edmond de Belamy* can be sold for the price of art is that we increasingly think of art as a kind of absolute and self-referential shape not only without "meta-sensemaking" but also without sensemaking.

It is no coincidence that, in the last two centuries, the move from the classical culture to the romantic culture has also introduced the idea according to which there is a coincidence, and not a relationship, between shape and sensemaking, starting with the coincidence between the real and the ideal in art (see especially Hegel 1823 (2014)). And making shape and sensemaking coincide has also meant making the latter dissolve in the former, which has increasingly obtained a kind of absolute and self-referential status. Emerging technologies, starting with AI, seem to frequently serve as accelerators of shapes' absolute and self-referential status.

Several examples can be given,[21] from the case of AI that can make us design in an increasingly automated way to the case of AI that can make us write in an increasingly automated way *et cetera*. By way of example, AI can make architects input data and get outputs as ready-to-use designs: "design software automates common processes. This allows you to save time. You can get designs to clients quicker and enjoy a more efficient workflow. [...] Its key feature is automation. [...] the software offers several tools for automating complicated processes. For example, it has an inbuilt library of stair and rail designs. [...] You only need to enter a number into your variable to create the desired number of elements".[22] Again, (technological) randomness emerges as opposing (human) autonomy, in that architects increasingly trade their (autonomous) creativity, which makes them capable of offering reasons for their choices, for (technological) "sav[ing] time" and "more efficien[cy]".

There seems to be an instructive analogy between the case of AI used by architects to increasingly automate their activities and the case of AI used by artists to increasingly automate their activities. In both cases, crucial phases of their creative processes

are externalised from their autonomy to technological automation. And the ultimate result is that, in the first case, we may end up asking AI designs what our ideal homes are and, in the second case, we may end up asking *Edmond de Belamy*, i.e. "wallpaper", what the meaning of our own existence is.

Thus, the last question to ask cannot but be the following: why do we increasingly trade expertise, sensemaking and "meta-sensemaking" for absolute and self-referential shapes? I have a duty to propose at least a hint as a conclusion, which is the following (and which I developed elsewhere, starting with Chiodo 2020, 2023, 2024). I think that the answer should explain not only disadvantages, from losing expertise to losing sensemaking and "meta-sensemaking", but also, and especially, advantages. That is, what is in it for us? At least the following advantage seems to emerge: unburdening us precisely from the burdens of working on expertise, sensemaking and "meta-sensemaking"—that is, unburdening us from our autonomy's heaviest burdens characterising Western culture, especially from Kant onwards. If we think of the case of architects, what is the burden of their autonomy (and individual responsibility) when it comes to shaping spaces, which are crucial for other humans, in our complex and uncertain global reality? And, if we think of the case of artists, what is the burden of their autonomy (and individual responsibility) when it comes to shaping "meta-sensemaking", which is crucial for other humans, in our complex and uncertain global reality? We may easily answer that their burdens become more and more unbearable. Giotto's frescoes have the strength to show truths underpinned by the scripture. What can underpin with an analogous strength analogous truths shown by contemporary artists? Thus, AI may be read as what can unburden us from our autonomy's heaviest burdens. From artists' autonomy and individual responsibility for shaping "meta-sensemaking" to physicians' autonomy and individual responsibility for diagnosing diseases, AI can move their more and more unbearable burdens from them to itself—that is, from human autonomy to technological automation. We may think of physicians' autonomy and individual responsibility as more unbearable than artists' autonomy and individual responsibility. But, if we consider our complex and uncertain global reality, which is characterised by health emergencies, climate emergencies, geopolitical crises, economic crises, crisis of democracies and crisis of ideals, artists' autonomy and individual responsibility for shaping "meta-sensemaking", i.e. the reflection upon the meaning of human existence in a reality that seems more and more meaningless, may be thought of as even the most unbearable burden—thus, AI may be read as what can unburden us from the most unbearable burden of our complex and uncertain global reality: the burden of shaping "meta-sensemaking" as the reflection upon the meaning of human existence. Yet, even though the desperate attempt to move the most unbearable burden of "meta-sensemaking" from human autonomy to technological automation is an understandable, and even touching, phenomenon, it cannot succeed, in that, as I have argued, "meta-sensemaking" requires sharing the first-hand experience of being human that AI cannot share.

And, if it makes sense, we can go even further and say that one of the next issues on which philosophers, together with other kinds of professionals, should work is the right to always know the authorship of the artefacts, both material and immaterial, with which we are faced.[23] As even Goodman argued in the case of an original painting and its aesthetically perfect copy, aesthetic equivalence does not mean what we may define as artistic equivalence, in that what makes the former irreducibly different from the latter is its history of production. Specifically, according to Goodman, "assurance of genuineness can come only from identification of the actual object produced by the artist" (Goodman 1968, 118), which means, for instance, that "[t]he only way of ascertaining that the *Lucretia* before us is thus genuine is to establish the historical fact that it is the actual object made by Rembrandt" (Goodman 1968, 116), and not by a forger. Speaking of "genuineness" means speaking of a far greater value than the aesthetic value, in that it means speaking of the primary reason why Rembrandt's *Lucretia* matters to us—again, it means speaking of what we may define as artistic value, i.e. "meta-sensemaking". The *raison d'être* of Rembrandt's *Lucretia* is "meta-sensemaking". Conversely, the *raison d'être* of its aesthetically perfect copy is nothing but being its aesthetically perfect copy (with the exception of what may somehow be a kind of "meta-sensemaking", i.e. the action of copying as a way to understand the meaning of the original painting). If we move from Goodman's thought experiment, in which both the former and the latter are produced by humans, to the case of AI artefacts that share *Edmond de Belamy*'s greatly autonomous production, we may say that the difference between their histories of production becomes even more irreducible: we move from the case of two different histories of production that can possibly share a kind of underpinning "meta-sensemaking" (if, again, the forger as the author of the aesthetically perfect copy uses the action of copying as a way to understand the meaning of the original painting) to the case of two different histories of production that cannot possibly share a kind of underpinning "meta-sensemaking" for the reasons argued above.

Speaking of "meta-sensemaking" means speaking of a kind of base note that both the classical culture and the

romantic culture share, even up to the contemporary definitions of art we have seen: a kind of base note we may also define as a kind of representative power, symbolic power. Kant masterfully teaches us that speaking of art's symbolic power means speaking of "spread[ing] itself [imagination] over a multitude of related representations, which let one think more than one can express in a concept determined by words" (Kant 1790 (2000), 5: 315). We may say that *Edmond de Belamy* can even unburden us from the burden of "think[ing] more", in that, by offering us nothing but an aesthetic experience, can even unburden us from the burden of an artistic experience: again, "the burden of "think[ing] more"—again, the burden of "meta-sensemaking", especially when human existence's complex and uncertain global reality is characterised by health emergencies, climate emergencies, geopolitical crises, economic crises, crisis of democracies and crisis of ideals.

And, if it is true that "traditional" definitions of art, from the classical culture to the romantic culture to their contemporary articulations, can sensibly change when novel phenomena emerge, it is also true that the opposite can make sense, at least from time to time—which means that, at least from time to time, "traditional" definitions of art can serve precisely as our promising tools to distinguish cases of non-eligibility from cases of eligibility when it comes to deciding if something can be defined as art. AI is a disruptive novel phenomenon, to the point that we even start having kinds of AI physicians and psychologists. Yet, if we agree that "traditional" definitions of physicians and psychologists necessarily include empathy as a special kind of human relationship, we should also agree that their "traditional" definitions can serve precisely as our promising tools to distinguish cases of non-eligibility from cases of eligibility when it comes to deciding if something can be defined as a physician and a psychologist—and I may add that I do not want AI physicians and psychologists for the reason I want to have the right to always know the authorship of the artefacts, both material and immaterial, with which I am faced: both the former and the latter cannot offer me what I still need, at least from time to time, as a human being.

Notes

1. See https://aiartists.org/mario-klingemann (accessed in October 2022).
2. See https://aiartists.org/daniel-ambrosi., https://aiartists.org/sougwen-chung., https://aiartists.org/wayne-mcgregor. and https://aiartists.org/anna-ridler (accessed in October 2022).
3. See https://www.cloudpainter.com/ (accessed in October 2022).
4. See https://artsandculture.google.com/story/jQVh59vuG1tJKA (accessed in October 2022).
5. Obvious is a collective of artists, see https://obvious-art.com/ (accessed in October 2022).
6. It is worth noting that the pursue of originality goes even further. In the case of creative adversarial networks, i.e. CANs, "[t]he network is designed to generate art that does not follow established art movements or styles, but instead tries to generate art that maximally confuses human viewers as to which style it belongs to" (Elgammal et al. 2017, 5). Specifically, "the creative generator will try to generate art that confuses the discriminator. On one hand it tries to fool the discriminator to think it is 'art', and on the other hand it tries to confuse the discriminator about the style of the work generated" (6).
7. See also Danto (1981), according to whom, autonomously from institutional definitions of art, art is a matter of artefactual creation that can communicate a vision to an audience, which makes sense of it, through metaphorical style and rhetoric.
8. Who focus on experiments mostly based on an audience "asked to rate how they like the image in a scale 1 (extremely dislike) to 5 (extremely like)" (Elgammal et al. 2017, 15).
9. Who focus on an aesthetic "value intersubjectively acknowledged" (Terzidis, Fabrocini, and Lee 2022, 9).
10. Who ask individuals questions on beauty when it comes to judging AI artefacts as art.
11. Boden recognises that more complex philosophical issues emerge, but she does not change her version of the Turing test, which is seminal for other authors' reflections.
12. See https://www.clotmag.com/news/insight-bloemenveiling-by-anna-ridler-and-david-pfau (accessed in November 2022).
13. I should specify that I agree with the AI artist quoted above: I do not consider wallpaper as art, but, apart from exceptional cases, sometimes as handicraft and sometimes as industrial production.
14. Liddell-Scott-Jones Greek-English Lexicon, also for the following quotes. See http://stephanus.tlg.uci.edu/lsj/#eid=18225 (accessed in September 2021).
15. Liddell-Scott-Jones Greek-English Lexicon, see http://stephanus.tlg.uci.edu/lsj/#eid=18226 (accessed in September 2021).
16. Liddell-Scott-Jones Greek-English Lexicon, see http://stephanus.tlg.uci.edu/lsj/#eid=18228 (accessed in September 2021).
17. Liddell-Scott-Jones Greek-English Lexicon, see http://stephanus.tlg.uci.edu/lsj/#eid=18224 (accessed in September 2021).
18. Interestingly enough, Terzidis *et al.* also use the word "randomness", even though they think of AI artefacts as art: "In the case of AI art, the intentionality of the artist does not seem to play any role. This is particularly true in the case in which randomness is introduced during the process of creation of the artwork. On the other side, in any case in which neural network architectures are used (e.g. GANs), one could argue that it is always the human artist selecting the sample set used to train the model. However, the issue disappears when the process includes a randomization technique" (Terzidis *et al.*, 9). And, as we have seen, another kind of randomness also emerges when Goodwin "invited visitors to submit random words that would be generated into poetry by an algorithm"

(see https://artsandculture.google.com/story/jQVh59vuG1tJKA, accessed in October 2022). Finally, according to Dorin, "randomness is a key element of generative art" (Dorin 2013, 1).

19. Especially since 1947, when Ford Motor Company established a department of automation (see Rifkin 1995).
20. Which may lead us back to the issue introduced by Nagel (1974).
21. I developed the issue of the kind of autonomy that increasingly characterises emerging technologies in Chiodo (2020), Chiodo (2023) and Chiodo (2024).
22. See https://academy.archistar.ai/top-ten-design-software-for-architects (accessed in November 2022).
23. The recent EU Artificial Intelligence Act is a significant first step (see https://artificialintelligenceact.eu/, accessed in June 2024).

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