Al as an Artistic Medium

Alice C Helliwell

Abstract

In 2022, Stephen Marche, writing for The Atlantic, claimed, "We're Witnessing the Birth of a New Artistic Medium." However, since then, we have seen dismissive criticisms of the use of AI in the arts. This paper takes Marche's claim seriously and argues that Artificial Intelligence (AI), understood as machine learning algorithms, is a new artistic medium. In this paper, I begin by discussing the concept of the medium in the arts. I apply this concept to AI, following the tradition of legitimisation and evaluation of new media through medium analysis (as has been done with photography, cinema, comics, and video games). I also consider some initial objections about AI as an artistic medium, arguing that these objections fail. I then move on to discuss the medium-specificity thesis. This is the idea that each medium of art offers particular qualities that affect what artists can achieve within it, and this, in turn, informs how we can properly evaluate works in that medium. I apply medium specificity to AI, considering first a strong version of medium specificity, then Gaut's weaker (but arguably more defensible) claims of medium specificity. Through this, I argue that AI can be considered as a medium with unique features, the quality of which we might call 'machinic' (much like the cinematic as applied to the medium of cinema). Finally, I argue that AI may indeed constitute not just a medium but also an artform, albeit one which we have yet to see reach full potential. With this paper, I aim to demonstrate that understanding Al as an artistic medium is helpful for reasoning about works of art made with Al, and suggest a potential way forward for critical evaluation of AI art.

Introduction

The recent proliferation of generative Artificial Intelligence (AI) systems has led to considerable controversy and criticism of the use of AI in creative settings, particularly in the arts.¹ This has mostly been directed at the explosion of AI images online, whether presented as artworks or more generic attention bait (what many have taken to labelling AI-generated "slop") (Read 2024). As Eric Reinhart recently writes of AI art, "What remains is a kind of spectral mimicry, a simulacrum that may deceive the eye but not the soul" (2025), or, as Rebecca Jennings more bluntly puts it, "AI Art will always kind of suck" (2024). Anecdotally, at least, some people working in the arts think that AI is unpromising as an artistic medium – that nothing interesting is being made with AI. However, others are more optimistic about the promise of AI for the arts. For example, Stephen Marche declares, "We're witnessing the birth of a new artistic medium" (2022).

No doubt, some "Al art" leaves much to be desired. But we are still in the early stages of the application of Al to the arts (particularly visual arts). There are many unexplored possibilities of Al, and, as with possibilities of this new technology. In this vein, this paper argues that Al (understood as machine learning algorithms) is a new artistic medium. Beyond this, this paper utilises the perspective of medium specificity to argue that Al art as a medium can offer unique artistic properties to artists. Ultimately, I aim to show that thinking of Al as a new medium can offer us a way of analysing works that use Al (in particular by looking for 'machinic' qualities), without prescribing how artists engage with this new technology.

The paper begins by discussing the concept of the medium as used in art theorising and addresses some initial objections about AI as an artistic medium. I then move onto discussing the concept of medium specificity, before applying this to AI. I argue that AI can be considered, much like cinema, as a medium with unique features, the quality of which we might call *machinic*. Finally, I argue that AI may indeed constitute not just a medium but also, following Berys Gaut (2010), an artform. With this paper, I hope to demonstrate that understanding AI as an artistic medium is helpful for reasoning about works of art made with AI and to suggest a potential way forward for critical evaluation of AI art.

The Artistic Medium and Al

The idea of an artistic medium as a critical tool emerged in the 18th Century. Theorists of the medium attempted to identify what art works and art forms are made of, in order to articulate key standards or norms of artistic evaluation (Wack, no date). The concept of the medium has since been used to assess both traditional arts (such as painting and sculpture) to properly define these art forms, and has also been used extensively in the analysis of new, emerging, and popular art forms (such as photography, cinema, and video games) to articulate the new norms of these media, to understand how they arise from new materials and technologies (Wack, no date), and to legitimise them (Gaut 2010). It is for these reasons that the idea of the medium can be particularly useful for the discussion of AI art. If we can consider AI as an artistic medium, we may be some way to legitimising AI art and improving critical engagement with works of art made using Artificial Intelligence (AI).

According to David Davies, an art medium is:

presumably something that mediates the transmission of the content of an artwork to a receiver. Art media, so conceived, have been characterized in a number of different ways: as material or physical kinds (e.g. oil paint, bronze, stone, bodily movements); as ranges of sensible determinables realizable in material or physical kinds (e.g. pitch, tone, texture, colour); as ways of purposively realizing specific values of such determinables (e.g. brushstrokes, gestures), or as systems of signs ('languages' in a more or less strict sense). (Davies 2009, 181)

This is an instrumental conception of artistic medium. The medium is the means of transmitting some content. As a view, this exists in opposition to the idea that "the medium is the message", famously coined by Marshall McLuhan (1964), who emphasised the importance of attending to the medium in place of privileging only meaning.

Not all agree that a medium exists at all, or that it is worthy of attention. Beardsley (1981) felt the concept was useless, and, in a more contemporary criticism, Noël Carroll also encourages a rejection of the notion of the medium (notably in his 2003 essay "Forget the medium!"). However, as Dom Lopes writes, "Every work of art is made by employing some means or other" (Lopes 2014, 134).² Thus, at the most basic level, the medium has relevance in discussing art.

So far, I have only gestured at what an artistic medium *is.* This recalcitrance to define the central concept at hand is rather typical in theorising about artistic medium:

Because the connection between a description of a medium, an art form's material basis, and the artistic experiences appropriate to that medium is a matter of some controversy, clarification of the philosophical insights and confusions associated with the concept of artistic medium must start not by arriving at its comprehensive definition, but rather by noting the characteristic forms of reasoning in which the concept is used. (Wack, no date)

This is the approach that I will take in this paper. I will argue that AI itself is an artistic medium. More specifically, I wish to argue that *generative deep learning* is a medium, which may constitute an art form of AI art. Rather than by comparing AI to the definition of an artistic medium and analysing how it measures up, I will instead demonstrate that, as far as we can reason about paintings, cinema, sculpture, and photography by appealing to the idea of the medium, we can also reason about art made using AI (understood as machine learning algorithms) as a medium. I will demonstrate this through the use of medium-specificity approaches. Before moving on to this, I will address a couple of initial objections to the possibility that AI can be an artistic medium.

Many media are defined by their physical material: the stuff they are made of. Unlike paint, for example, AI is not a physical material. Is it even possible for something non-physical to be considered a medium? Despite this intuition, a medium is not necessarily synonymous with physical materials. We can distinguish, according to Davies (following Margolis, 1980, 41-2) between the "physical medium" and the "artistic medium" of a work. As Davies highlights, we could consider the difference between the physical medium of paintings (pigments of different kinds such as oils, acrylic, etc, and the surfaces they are painted on, e.g. canvas, wood, etc.) and the artistic medium of "a purposeful system of brushstrokes" (Margolis 1980, 41-2; quoted in Davies 2009, 183). As Davies writes "The artist characteristically works *in* a particular artistic medium when working a physical medium" (Davies 2009, 183). In the case of AI art, we could say that the artist works *in* the medium of machine learning (AI) and *works* the code, prompts, datasets etc.

A second objection to address here is that AI is produced in an already existing medium – that of digital art. As we have seen already, the artistic medium is not necessarily co-extensive with the physical matter in question, though the two will relate; what can be done in an artistic medium will depend, to an extent, in what

can be done with the material in question. However, it does not matter that Al works (generally) are instantiated as digital works. As above, the "physical" matter (or here, digital) does not need to be distinguishable from (say) other kinds of digital object. An artist working in a digital medium could, for example, also utilise coding as a way to produce digital images. In this case, though, the medium would be digital art. The "artistic" medium of Al art, I suggest, is machine learning (Al). This is the means by which the work comes into being.

Medium Specificity

Whilst media analysis is an enduring area of research in fields such as media studies, in philosophy the discussion of the medium waxes and wanes in popularity. In recent years, analytic aestheticians have returned to what is referred to as the medium-specificity thesis (Gaut 2010; Lopes 2014; Carroll 1985; 2003). The medium-specificity thesis claims that each art medium has particular qualities that affect what artists can achieve within it, and this, in turn, informs how we can properly evaluate works in that medium. I will show that it makes as much sense to talk about AI art in terms of medium specificity as it does other artistic media like sculpture, film and photography, thus demonstrating that AI is a medium.

The first claim of the medium-specificity thesis stems from Gotthold Ephraim Lessing in 1766, who held that visual arts should imitate the body and poetry should imitate action (Gaut 2010, 285). This claim is a normative one, rooted in the medium of each art – painting understood as utilising signs "in space" and poetry "in time" (Lessing 1957). As Davies notes, Lessing's view, and those derived from his position, could be considered as particularly strong instantiations of the medium-specificity thesis, that the medium is the primary driver of artist activity, and that the medium is the proper basis for the evaluation of art (2009, 184). This kind of view has a strong tradition in more recent emergent media, for example through the work of classical film theorists such as Arnheim (1938) and Bazin (1967).

A version of medium specificity, which is stronger still, is that of "medium purity" (Davies 2009). This view holds that art forms have particular functions determined by the medium (Weitz 1950). For example, as Gaut writes:

The art critic and theorist Clement Greenberg argued that painting is distinctive in being the art of flat, coloured surfaces and that this feature sets the proper goal and course for the development of the art; hence Abstract Expressionism and Colour Field painting were, he argued, the highest contemporary fulfilment of the art of painting. (2010, 285)

Views like Greenberg's (1961) have been criticised as essentialising, notably by Carroll (1985). Carroll's criticisms have led to a weakening of the kind of medium specificity defended, at least by philosophers of art. Gaut puts forward one such weaker version of medium specificity in *A Philosophy of Cinematic Art* (2010). He argues that three claims relating to medium specificity are defendable:

MSV: Some correct artistic evaluations of artworks refer to distinctive properties of the medium in which these artworks occur. (287)

MSX: Correct explanations of some of the artistic properties of artworks refer to distinctive properties of the medium in which these artworks occur. (288)

MSF: For a medium to constitute an art form it must instantiate artistic properties that are distinct from those that are instantiated by other media. (288)

Gaut justifies the first position, MSV, in two ways. First, he argues that we evaluate works of art in terms of achievement. And, in order to properly understand the extent to which a work is an achievement, we must understand the medium in which it was crafted. As Gaut writes:

to appreciate the scale of this achievement, one must grasp some differential features of the medium. For this is carved sculpture, carved in marble. Suppose that a counterpart of Apollo and Daphne had been made as cast sculpture, cast perhaps in bronze. With cast sculpture one can use materials such as wax or clay to build up a mould around an armature to form a shape from which the final statue is cast. Certainly, the cast version of Apollo and Daphne would be an impressive achievement, but it would lack that extraordinary sense of reckless danger that the carved version possesses; for if the artist broke part of the mould in modelling the twigs, he could easily have repaired it before casting the final statue. So one must know not just that this is a work of sculpture to appreciate it, but also must grasp some of the distinctive features of the media of carved, as opposed to cast, sculpture. (Gaut 2010, 293)

The second justification Gaut gives is that there is appropriate praise and criticism applied to artworks which reference the differential features of the relevant medium. As Gaut puts it:

A film can be praised for being cinematic, or criticised for being uncinematic. A painting may be celebrated as being very painterly, or condemned (as is true of many of Magritte's works) for displaying no interest in painterly facture. A work of literature may be honoured for being very literary, or derided for being written in flat and halting prose. These terms are all evaluative, and they claim that the works in question are good in part because they exploit features that are distinctive to the medium. (2010, 294-295)

As Gaut writes of film, "we can regard the uncinematic as a certain kind of defect: it is a kind of *pro tanto* merit that a film is cinematic, and a *pro tanto* defect that it is uncinematic" (2010, 295), This is not a claim that works cannot be good *in toto*, or with respects to other aspects of a work. Magritte's works, for example, can still be considered as good overall, "because of the interest of the ideas that he uses these flat and toneless paintings to convey" (2010, 295).

Let's turn to Gaut's second claim: "(MSX) Correct explanations of some of the artistic properties of artworks refer to distinctive properties of the medium in which these artworks occur" (288). MSX links to MSV; if we agree that it is appropriate to refer to medium in the evaluations of art, then it must also be appropriate to refer to the medium (and its distinctive properties) in explaining a work correctly (Gaut 2010, 296). To defend this claim, Gaut refers to many examples of properties of a medium factoring into the proper explanation of a work of art. One such example references Scruton's (1981) discussion of the fictional incompetence of photography:

The fictional incompetence of photography contrasts with other media, such as painting and literature, which can and do represent fictions. The explanation of this photographic incapacity is, as we saw, straightforward: the photographic relation is a causal one and one cannot have a genuinely causal relation with a non-existent object. Painting and literature, in contrast, have an intentional relation to their subject matter, and therefore can represent non-existent objects. (2010, 296)

The point Gaut is trying to illustrate is that this is an instance of MSX, that it is correct in this case to refer to the distinct, differential properties of photography in the explanation of a work of photography – namely that it cannot (unlike literature, painting, etc) be fictional.³ This is dependent partly on the process of

different media, such as photography using a camera and film relying upon multiple contributors (2010, 298-300).

Gaut's final claim of medium specificity (MSF) connects the medium to the idea of the art form. In order to be an artform, a medium must "instantiate artistic properties that are distinct from those that are instantiated by other media" (Gaut 2010, 288). This view is in opposition to objections raised by Carroll (1988) that this is too prescriptive. Carroll takes the notion of uniqueness to indicate that a medium should only do what is unique to it. As Gaut writes:

Narration is common to both films and novels, so from above other arts. This version of the specificity thesis it follows that neither films nor novels should narrate, since both do; or that films should not narrate (since novels were in place first); or that novels should not narrate, but should cede priority to the newcomer; and all of these options, Carroll correctly notes, are absurd. (Gaut 2010, 290)

Gaut pushes back on this position, arguing that he does not mean that an art form can *only* do what is unique to it. Gaut instead highlights that a medium might be nested. For example, he writes: "in discussing a film, I may explain some of its features by appealing to the fact that it is in a visual medium, and other of its features by the fact that it is in a photographic one. Both of these features are differential and involve nesting" (2010, 291). In discussing medium specificity then, Gaut emphasises the importance of differential analysis of mediums (2010, 291-292). When distinguishing an artform, we should attend to what is different in that medium compared to others, rather than attempting to set parameters for what might be done with it.

Carroll, as a key objector to the medium-specificity thesis, highlights further issues with the account that are worth considering. Carroll acknowledges that the idea of the medium (and particularly medium specificity) gave legitimacy to cinema as an autonomous art form (Carroll 2021, 23). It also provided guidance to those producing films. The feeling was that filmmakers should aim at those features which cinema is uniquely placed to achieve. And critics could use this guidance also in the judgement of works. However, Carroll notes, this also became an imposition in some ways: "As V. F. Perkins and David Sorfa have observed, medium-specificity criticism imposed an agenda or set of standards dictating what artists should do" (Carroll 2021, 24). The concept of medium specificity then became, detrimentally, a limiter to the art of film. Carroll also points out that medium specific critical engagement does not always mesh with how we actually assess works of art; for example, sometimes we might praise a film for something

that is precisely not cinematic (2021, 25). Finally, Carroll provides a further criticism that medium-specificity theorists do not agree on upon which features of the medium are pertinent for their prognostications" (Carroll 2021, 27). Indeed, Carroll points to disagreements, again in the medium of cinema, between "realists" and "montagists".

I am inclined to agree with Gaut that the problem is not with the concept of medium-specific engagement with works, but rather the prescriptive nature of the kind of engagement Carroll is discussing. It is not appropriate to use medium specific considerations as the sole guiding force behind the assessment of works of art – I certainly would not want to claim this. However, this does not mean that there are no legitimate references to medium that can be made when creating or assessing works of art in that medium. Furthermore, where disagreements arise about which approach is best or 'most cinematic' we can easily point to Gaut's use of differentiality – regardless of what good cinema does, it likely will have something to do with the moving image, and not to do with static three-dimensionality, and the ability to move around the art object (that we might think relevant to sculpture).

Medium-Specificity and Al

Although not all agree with the medium-specificity thesis, I will adopt it for the purpose of this paper. This is because there is something particular about the medium of generative deep learning that is best explained by the concept of medium-specificity: it allows artists that utilise it to do certain things that are not possible in other media. This is important, because it offers a counter to the idea that Al cannot be used to make art of any value, for example, because it does not offer any connection to the artist, or because the process is non-artistic. Artists making use of Al can make works that are valuable precisely because of their use of Al. If the medium-specificity view is correct, it will be necessary to understand the medium of Al for proper judgement and appreciation of Al works (see e.g. Anscomb 2025).

Let us first consider a 'strong' claim of medium specificity such as Greenberg's, that there is a "proper goal and course for the development of the art" in a particular medium. If we are to accept a claim like this, what is the 'proper goal and course' of Al art? I propose that the distinctive nature of Al art is that it is from data. Today, Al is considered almost synonymous with machine learning, and machine learning relies upon the learning of a distribution of data. If there is something that Al art ought to be doing, it is exploring the machine: data synthesis, non-human processing, and non-embodiment.

In order to support my claim, let's take an example: the work of Jake Elwes. Elwes's work draws attention to what AI can and cannot do, through the use of AI algorithms. One such example is the work A.I. Interprets A.I. Interpreting 'Against Interpretation' (Sontag 1966) (2023). This is a 25-minute video loop of an Al dialogue. An algorithm (a diffusion model) interprets Susan Sontag's essay "Against Interpretation" visually, and those images are then re-interpreted into language by another AI system (Elwes 2023). In the three-channel version, three screens display the work. The small screen on the left shows a quotation from Sontag's essay. The larger centre screen shows surreal images which morph into focus, and the rightmost screen displays text which seems to loosely interpret the image. For example, in response to the quotation "Interpretation takes the sensory experience of the work of art for granted, and proceeds from there" the diffusion model has produced an image that has a painted quality, which appears to show a distorted image of a gallery; on the left side of the image are strange sculptural figures, with unrecognisable limbs. On the right, a figure in blue appears to study a blurred painting, which melts into its frame. Wall text looks to sit beside the frame. The screen to the right shows the AI response to this image, which reads "This is a list of the largest art museums in the world, I know a lot of people hate this list." Elwes writes of this work:

Sontag writes in 'Against Interpretation' about her dislike of critics over-interpreting works of art, how we read too much into content and meaning over just experiencing the work of art and it's [sic] form. In this video however we have an Al nonsensically reading too much into Sontag's words, this also has additional prescience since the generative Al is arguably (uninterpretable,) creating pure mimesis and form since it is devoid of any human artist's intentionality, meaning or content.

The visuals are created with an image generating diffusion model with Sontag's sentences as its raw prompts / inputs (open-source Disco Diffusion thanks to Somnai & Katherine Crowson). These images are then interpreted back into language using an image labelling algorithm (GPT2 & CLIP). These large pre-trained AI models were created using huge datasets of images and text taken from the internet representing a frozen snapshot of a biased section the internet a particular point in time. The re-interpretations are bizarre in how authoritatively and brazenly they seem determined on spreading disinformation. (Elwes 2023)

This work is rooted in the nature and limitations of machine learning. Elwes highlights the biased responses, the bizarreness, and the brazen nature of the machine outputs. These features stem from the data, the processing of this data by a non-human system, and the lack of access of the system to anything beyond the training data (and the prompt). This work, then, is directly utilising features of AI as a medium.

Al art which does not engage with the fundamental nature of AI (be that through capabilities or limitations) is not engaging with AI as a medium. If we agree with the stronger versions of medium specificity, then a lack of engagement with the nature of AI is an appropriate source of criticism of AI works. Indeed, I would posit that this is why we find much AI art so shallow.

Now, perhaps we do not want to commit to the normative nature of the claims of Greenberg – these strong medium-specificity claims. Indeed, this would seem to suggest that other works made by AI are less 'proper', perhaps less valuable or less successful in some way (and that these same claims can be defended in the case of other works). I would not wish to claim this. I am certain that there may be works of art that utilise AI systems to engage with a concept.⁴ Let's therefore turn to the weaker claims defended by Gaut and see how these fit with AI works.

MSV

Gaut's first claim regards medium-specific evaluation: (MSV) Some correct artistic evaluations of artworks refer to distinctive properties of the medium in which these artworks occur (2010, 287). This does make sense in the context of artworks made with Al. In order to properly evaluate the work of Al art, we must, at times, refer to distinctive properties of Al (or machine learning).

Gaut's first point of support for this claim, as we saw above, was that reference to medium is relevant when considering artistic achievement. We can see this play out with AI art. Anscomb (2025) has argued, for example, that understanding the relevant contributions to (and processes of making) AI-generated works is necessary for the appreciation of works of AI art (particularly, as she refers to, synthetic images). Proper understanding of the attribution of these works is also necessary to recognise them as creative achievements of artists.

Anscomb's point meshes well with Gaut's point regarding medium-specificity, as applied to the context of AI. Although Anscomb is highlighting the importance of understanding artists' contributions (and the attribution of authorship) for the

proper evaluation of works of 'synthetic imaging' (Anscomb 2025),⁵ the relevance of the medium is clear. It is important to understand how artists work with machine learning algorithms (i.e. the medium) in order to achieve their artistic aims, and to evaluate these appropriately. It is, for example, key to understand the distinctive qualities of Al generated works to know that developing a distinctive style of image in a system built on a large dataset of varied data is difficult. As Anscomb writes, discussing the work of Annika Nordenskiöld⁶:

For instance, in her *promptographs*, Nordenskiöld consistently leverages the ambiguities present in the Al-generated images to further the content of the work and heighten the sense of ambiguity in the relationships between the depicted figures. The ability to do so with a non-deterministic image generator arguably constitutes an achievement in its own right and reminds us that, without the autonomy and intentionality to choose whether to ratify works as part of an oeuvre, generative Al systems cannot be said to build considered bodies of work in the same way as humans. (Anscomb 2025)

In order to understand what kind of achievement a work in the medium of AI is, it is relevant to consider what is possible with AI, and what is difficult with AI systems (here the development of a style). This is a medium-specific consideration that directly relates to the evaluation of the achievement of works of art.

The second justification Gaut gives for MSV is that there is appropriate praise and criticism applied to artworks which reference the differential features of the relevant medium; recall the comparison between cinematic and uncinematic works of film. This also works well for consideration of works made using Al. First, we are in need of standards, not necessarily dictating what artists do with Al in all cases, but to dictate what makes something a good work of Al art *qua* Al art. This claim is weaker than the normative claim above about what a work in a medium should *properly* do. Instead, it focusses on what makes something a good example of a work in this medium.

Take an example: Jason M. Allen's *Theatre D'Opera Spatial* (2022). This work, made with AI, gained international attention when it was awarded first prize in the digital art category at Colorado State fair. Judges had not realised that Allen had used AI in the making of the work, although he had declared the use of Midjourney (a text-to-image generator) in his submission. This caused major controversy, as online dialogists declared it "the death of artistry" (Roose 2022). The work itself is a two-dimensional digital image.

The image appears to depict a scene of science fiction or fantasy, with several robed figures in the mid-ground, and a backdrop of ornate patterning and a large circular "window" in the centre, seeming to look out onto a city.⁷ Allen spent considerable time prompting Midjourney, and edited the image in Photoshop (U.S. Copyright Office, 2023).

I would argue that a work such as Allen's Theatre D'Opera Spatial (2022), whilst judged to be a nice image, is not a good work of AI art qua AI art. It offers no engagement with the machine learning that instantiated it. The work does not lean into non-human processing, the rapid generation of novel imagery, the synthesis of large amounts of data, or the non-human quality of the depiction. Now, this does not necessarily mean that the work is bad in toto. We can consider the criticism of a film as not very cinematic, despite being good (Gaut 2010, 295). Smith (2006) gives the example of My Dinner with André (1981) as a film which is good but uncinematic - as it is a recording of a conversation, it could just as easily be a play and have lost very little. Similarly, we could imagine that a work of art made with AI could be good - but not very 'AI'. It could have been created with digital methods that don't utilise deep learning, and nothing would be lost. Theatre D'Opera Spatial is, I think, like this. It's a fantasy image, but little is added by the fact that Midjourney was utilised (along with a pre-Al version of Photoshop) to make the work. It could very easily have been made as a non-generative digital image. In fact, this is exactly what judges originally thought it was.

Compare this to a work like Mario Klingemann's Uncanny Mirror (2018). This work utilises a generative adversarial network, trained on paintings. As the work is displayed, the system is rigged up with a camera and a screen. The system records images of viewers, which are processed by an algorithm and then displayed on the screen in eery and distorted echo of their faces. This work, then, responds in real time to the people walking by, producing an image on the basis of the dataset it is trained on. Without AI, the uncanny nature of Uncanny Mirror would likely be lacking, or there would be a long delay to see the image (thus making it less 'mirror-like'). As Gaut writes of film, "we can regard the uncinematic as a certain kind of defect: it is a kind of pro tanto merit that a film is cinematic, and a pro tanto defect that it is uncinematic" (2010, 295). In so far as this Klingemann's work engages with machine learning (ML) then, this is a kind of merit of the work. What might we call this? I would suggest we call this quality the machinic. This can pick up on key qualities we can see in works that utilise deep learning. They may have machine artifacts in the image, they may have a quality of the non-human and they may have a particular 'averageness' to them, which can tell us something about the underlying dataset.

There is a potential objection here. Can a work of AI art even be an achievement? Given the vast objections to "AI art" as being plagiarism, copying, etc., we could question whether any work that utilises a machine learning algorithm could be considered an achievement of any kind, or whether it is just a shortcut. We can dismiss this objection. Beyond the examples discussed above, we could consider achievements resulting from the following:

- 1. Deft prompting
- 2. Development and training of one's own algorithm
- 3. Recognising and/or developing characteristics that are particularly interesting or valuable
- 4. The effort to create coherence in something made by an Al

In each case, we must know something about the medium to understand and recognise this achievement. If you have ever utilised a prompt-based system such as a text-to-image generator, you may recognise that skill is involved in pulling a desired image from the system (i.e. prompt engineering). To develop and train an algorithm is also incredibly time consuming and effortful. For example, Anna Ridler (2018) highlights this through her work, also showing the dataset, she has created to train her AI system as a work in its own right (see, for example, her work *Myriad* [Tulips] 2018).

MSX

Gaut's second claim addresses the explanation of artistic properties: (MSX) Correct explanations of some of the artistic properties of artworks refer to distinctive properties of the medium in which these artworks occur (2010, 288).

Gaut's discussion here, referencing photography, has particular relevance for AI, as we can make a similar case for the use of AI as a medium of art. The point Gaut is trying to illustrate is that this is an instance of MSX, that it is correct in this case to refer to the distinct, differential properties of photography.⁸ This is dependent partly on the process of different media – such as photography using a camera and film relying upon multiple contributors (2010, 298-300).

We can make a similar case for AI works. Much like photography can only represent what is in front of the camera (vs. fictionality), AI is also limited in what it can represent. This limitation however is caused by the dataset, rather than the world in front of the lens. There are two things to note about this claim. First, this

does not mean that there is no novelty at all in AI outputs. In fact, the possible rapid generation of new images (in so far as they are not direct copies) is a candidate for a unique feature of AI. It does mean, however, that AI cannot vary wildly from what it has been trained on.

Consider the work *Edmond de Belamy* (2018) by art collective Obvious. The Generative Adversarial Network (GAN) used to make this work is trained to generate head-and-shoulders images of people with a painted quality ('portraits'). The AI, once trained, cannot generate an image of a bird or a landscape, for example: it has been trained on portraits, and the images it generates will be portrait-like. Furthermore, as it has only been trained on paintings, its outputs will all have a painted appearance. Whilst this GAN has a limited dataset, we can also see evidence of this in other AI systems that have a broader range of training data. For example, diffusion-based text-to-image generators, such as that integrated into ChatGPT, have struggled to generate an image of a full (to the brim) glass of wine (e.g. see Rai 2025). This is likely because there are not many such images in the dataset (if you conduct an internet search for images of a glass of wine, the overwhelming majority of images are not glasses filled to the brim) and the system does not have a concept of full glasses that it can add to the concept of wine (or so is suggested, see Dedezade 2025). The support of the primages of the concept of wine (or so is suggested, see Dedezade 2025).

Whilst AI is, like photography, limited in what it can represent, unlike photography we might suggest that AI can only produce the unreal. This is because AI is referential to the dataset, and not to the 'real world'. With several works of AI art, the fact that machine learning from a dataset as been used is extremely relevant to explain the work. This seems then to be a medium-specific quality, relevant to the explanation of AI works. One might object that this is not a feature of AI in general, just some AI systems. In contrast to GANs and diffusion models, the Creative Adversarial Network (Elgammal et al. 2017) is designed to create images with stylistic variations compared to images from its training dataset. However, it is still narrow and domain-specific, and has been trained on flat images. It will not create a sculpture or a piece of music, and the works it does generate will still be drawn from the learned distribution.

Some of the artistic properties of an AI work may indeed be that it represents something of the dataset, not merely the choices of the artist. Even where the dataset was carefully curated, unexpected qualities can appear in the output of the AI system as a result of the dataset, and the machinic 'understanding' of the data. Take for example, the work of Refik Anadol, such as *Machine Hallucinations – ISS Dreams* (2021).

Anadol's works are typically displayed as videos (sometimes in 360 degrees), described as "data paintings". The works are non-representational, with flowing pixels of colour. As listed by Christie's:

Part of the ongoing *Machine Hallucinations* series, this work stems from years of research into Al's ability to process and reimagine vast datasets. Since 2016, the artist's studio has collaborated with machine learning models—such as DCGAN, PGAN, and StyleGAN—to interpret collective visual memories of space, nature, and urban environments. By filtering and structuring these datasets, the Al generates surreal dreamscapes that bridge data, memory, and imagination. (Christie's 2025)

The explanation of this work directly references the Al's use of vast datasets. In order for the work to be explained as an interpretation of collective visual memories, generating 'dreamscapes', we must refer to the use of a dataset, which the algorithm has learned. The output of the Al is based on the distribution it has learned. If we thought these videos were simply made using traditional digital animation techniques alone, we would not understand this work. Something is lost here when we ignore that this work is made through a process which relies upon the synthesis of data.

MSF

The final claim Gaut defends broadens out from the medium as relevant to explaining and evaluating art, to the idea of a medium as an art form: (MSF) For a medium to constitute an art form it must instantiate artistic properties that are distinct from those that are instantiated by other media (2010, 288). On this premise, Gaut also writes: "MSF also fits naturally with the perspective of an artist confronted with a new medium: what, she might wonder, can she do now that is of artistic interest that she could not do before?" (Gaut 2010, 300). Al may well be such a new medium, which may constitute an art form. If so we can ask, what can artists do with Al that they could not do before? Again, here are some suggestions I have discussed in parts above:

- 1. Synthesise large amounts of data into a final output (an image, a sound, text). Consider the work of Refik Anadol, as discussed above.
- 2. Produce artificial images (of non-existent subjects). See, for example, Anscomb (2025) discussion of synthetic imaging.
- 3. Automate the process of rapidly making *novel* images (i.e. not the same each time). For example, the work of Mario Klingemann, discussed above.

- 4. Produce outputs which do not rely upon human processes (e.g. images with 'non-human' qualities). For example, see Helliwell (manuscript).
- 5. I think that these are unique possibilities created by the use of machine learning algorithms that are unique to the medium of Al. These are possibilities which some artists are pursuing.

We might be concerned that neither 'Al Art', nor critics evaluating it, seems to engage much with these approaches. However, this does not mean that Al is not an art form. What we need to establish is that this medium can create distinctive artistic effects (Gaut 2010, 301), and if so, it is an appropriate candidate for the status of 'art form'. This does not mean that all works made using an Al tool are works in the art form of Al art (or the medium of machine learning). Consider how some works of art might use paint and yet not be paintings, such as a painted sculpture or installation.

We might also be concerned that works of "Al art" at times are utilising features which are not unique to the medium. For example, though Anadol, discussed above, utilises machine learning in his works, his works are also videos. Are they not then in the medium of (e.g.) video art? As Gaut writes, a medium, to be considered an art form, must have unique devices. However, "unique devices can be combined with other features of the medium that are not unique to it, such as acting, to create composite effects that are distinctive to the cinematic medium" (Gaut 2010, 303). As unique features of the medium can be combined with non-unique features, the utilisation of a moving image does not preclude Anadol's work from being considered as Al art.

Although we are now shifting away from consideration of specific works, allow me to demonstrate how AI works might show such combinations of unique and non-unique properties. Consider again the work of Klingemann. The *Uncanny Mirror* (2018) could not exist without utilising machine learning. The work combines capacities of a digital camera and 2D digital painting. in order to capture images of visitors to the work, and to produce painterly images. However, the machine learning component allows Klingemann to produce a piece which can generate many novel responses to visitors in real time. Additional qualities of the work are the somewhat weird, distorted and dreamlike nature of the images, typical of AI works, that produces an "uncanny" version of the visitors, as opposed to mere reproduction of their likeness. This work then combines the unique properties of the *machinic* medium of deep learning with other properties.

Perhaps you find this particular case unconvincing – the differences that Al presents might seem artistically uninteresting. We could, for example, rig-up some basic animation to track visitors faces. However, I do not need to find an example of Al having been used in a unique way to suggest that it is an artform. I merely need to show that this is a *possibility*. We can await artistic exploration of this new medium, much like occurred with cinema. Comparing works of 'films d'art' and later, arguably more cinematic works, Gaut writes:

But note what the example of films d'art also brings out: these films do not add any artistic value to what could be achieved simply by being in the auditorium, watching an equivalent play; so there are no distinctive values realised by the recording medium in such cases. But Griffith's films showed that new, distinctive artistic possibilities were available in the cinematic medium through exploiting the plasticity of its recording capacities, and therefore that the medium could constitute an art form. So a full account of the cinematic medium's status as an art form invokes MSF. (2010, 304)

If we take the 'birth of film' to be in 1895, then the works under discussion, the most successful use of the techniques described was perhaps Griffith's infamous 'Birth of a Nation' (1915), 20 years later. Whilst machine learning is not a completely new concept, algorithms that could generate new images (GANs in 2014) or text (LLMs in 2022) are still recent developments. We are not yet even 20 years from the invention of these systems. There is much that could yet develop from Al art as an art form. As Wack writes.

The possibilities for an art form, whether traditional or newly emergent, can only be discovered by artists in acts of artistic creation. For this reason, the relation between art forms and their media develops and changes as the art forms continue to be discovered and reimagined by artists. (Wack, no date)

Whilst I have tried here to demonstrate how applying medium analysis to AI can provide valuable insight into the explanation and evaluation of AI art, it remains to be seen what artists can achieve in exploring this new medium.

Conclusion

In this paper I have shown how we can consider AI (understood as machine learning algorithms) as new artistic medium. Following the tradition of the analysis of new mediums as a form of legitimisation and evaluation (as has been done with photography, cinema, comics, and video games – see Wack, no date). I apply the approach of medium specificity to Al art. I first introduced the concept of the artistic medium as used in art theorising and argued that initial objections to the application of this concept to AI fail. I then shifted to the particular application of the medium in the arts: medium specificity. Considering first a strong version of medium-specificity, then Gaut's weaker (but arguably more defensible) claims of medium-specificity, I argue that AI can be considered as a medium with unique features. We might call the particular evaluative quality of AI the 'machinic' (much like the cinematic as applied to cinema). Finally, following Gaut's MSF claim, I argued that AI may indeed constitute not just a medium, but as an artform, albeit one which we have yet to see reach full potential. With this paper, I hope to have shown that that understanding AI as an artistic medium is helpful for reasoning about works of art made with AI, and to have demonstrated, by way of examples, how understanding AI as an artistic medium can aid in the critical evaluation of works of Al art.

Author Biography

Alice C Helliwell is an Assistant Professor of Philosophy at Northeastern University – London. Her work focusses on philosophical issues in computational creativity and art made by and with Artificial Intelligence. In 2025 she was a visiting fellow at the Centre for Philosophy of Artificial Intelligence Research (PAIR), and is lead for Creativity in NU London's Computational Philosophy Lab. Orcid iD 0000-0003-0147-7700

Acknowledgments

Thanks to the Centre for Philosophy of Artificial Intelligence Research (PAIR) members and visitors for the stimulating discussion on this topic which prompted the development of this paper.

Funding

This paper was made possible with funding from the Philosophy of AI Research Centre (PAIR) Visiting Fellowship, and support from Northeastern University London.

Notes

- ¹ See, for example, AI art protests (Milmo 2025).
- ² Lopes builds his account on an understanding of appreciative kinds, rather than a theory of art. I will not do that here, though I think what I put forward is not incompatible with his view.
- ³ Note here that *differentiality is* key it's not that a medium must be unique in being able to instantiate a property (Gaut 2010, 299-300). Rather the differences between media have explanatory value.
- ⁴ Though, I would suggest that perhaps these works, whilst using AI, are not works in the art form of generative ML perhaps they are conceptual, for example.
- ⁵ Anscomb (2025) refers to synthetic images as an 'art kind', which, she says "incorporates these [AI generated] images as a result of activities that might include building or selecting models and visual datasets, training models, prompting, and curating". As Anscomb notes "synthetic imaging depends on AI-generated images" (2025). Under my view, synthetic images would be in the medium of AI (machine learning).
- ⁶ Nordenskiöld's work can be views on her website: https://rita.se/ and on Instragram: https://www.instagram.com/annikanordenskiold
- ⁷ I should note here that this is my own interpretation of the image which is somewhat indeterminable.
- ⁸ Note here that *differentiality* is key it's not that a medium must be unique in being able to instantiate a property (Gaut 2010, 299-300). Rather the differences between media have explanatory value.
- ⁹ It's worth noting that the algorithm used to make this work used open-source code from Robbie Barrat, without credit (Hicks 2019). Barrat's own work in AI art is of considerable merit, see: https://aiartists.org/robbie-barrat
- ¹⁰ This does not mean it is always accurate in what it represents, i.e. it may not always produce a recognisable image of a person, for example.

Bibliography

- Anscomb, Claire. "Who authors AI art? (And why does it matter?)." AI & Society. 2025. https://doi.org/10.1007/s00146-025-02325-7
- Arnheim, R. "A New Laocoon: Artistic Composites and the Talking Film." In R. Arnheim, Film as Art. Berkeley: University of California Press, 1964, 1938, 199–230.
- Bazin, André. What is Cinema? Translated by Hugh Gray. University of California Press, 1967.
- Beardsley, Monroe C. Aesthetics, problems in the philosophy of criticism. Hackett Publishing, 1981.
- Carroll, Noël. "Forget the Medium!" In Engaging the Moving Image. New Haven, CT, Yale University Press, 2003. https://doi.org/10.12987/yale/9780300091953.003.0001
- Carroll, Noël. "The specificity of media in the arts." *Journal of Aesthetic Education* 19, 4: (1985) 5-20.
- Carroll, Noël. *Philosophical Problems of Classical Film Theory*. Princeton University Press, 1988.
- Carroll, Noël. *Philosophy and the Moving Image*. Oxford University Press, 2021. DOI: 10.1093/oso/9780190683306.003.0002
- Christies, Refik Anadol (B. 1985) Machine Hallucinations ISS Dreams A. *Christies*. 2025. https://onlineonly.christies.com/s/augmented-intelligence/refik-anadol-b-1985-6/249742
- Davies, David. "Medium in Art." In *The Oxford Handbook of Aesthetics* (online), edited by Jerrold Levinson, *Oxford Academic*, 2009. https://doi.org/10.1093/oxfordhb/9780199279456.003.0009,
- Dedezade, Esat. "ChatGPT Can Now Generate a Full Glass of Wine Here's Why That's A Big Deal". Forbes. 26 March, 2025. https://www.forbes.com/sites/esatdedezade/2025/03/26/chatgpt-can-now-generate-a-full-glass-of-wine--heres-why-thats-a-big-deal/
- Elgammal, Ahmed, Bingchen Liu, Mohamed Elhoseiny, and Marian Mazzone. Can: Creative adversarial networks, generating "art" by learning about styles and deviating from style norms, 2017. arXiv preprint arXiv:1706.07068.
- Elwes, Jake. A.I. Interprets A.I. Interpreting 'Against Interpretation.' 2023. https://www.jakeelwes.com/project-sontag.html
- Gaut, Berys. "The role of the medium." In A Philosophy of Cinematic Art. Cambridge University Press: 2010, 282-307
- Greenberg, Clement. Art and Culture. Beacon Press, 1961.
- Helliwell, Alice C. (manuscript) "The aesthetics of Al art: funny, uncanny, or just plain weird?"
- Hicks, Olivia. "ART-ificial Intelligence: The Curious Case of Edmond De Belamy." *Isis Magazine*, March 1, 2019. https://isismagazine.org.uk/2019/03/art-ificial-intelligence-the-curious-case-of-edmond-de-belamy/

- Jennings, Rebecca. "Why AI art will always kind of suck" *Vox*, 23 May, 2024. https://www.vox.com/culture/351041/ai-art-chatgpt-dall-e-sora-suno-human-creativity
- Lessing, G. E. Laocoön: An Essay on the Limits of Painting and Poetry, trans. E. Frothingham. First published 1766. New York: Noonday Press, 1957.
- Lopes, Dominic M. "Appreciative Kinds and Media" In Beyond Art. Oxford University Press: 2014, 125-144. https://doi.org/10.1093/acprof:oso/9780199591558.003.0008
- Marche, Stephen. "We're Witnessing the Birth of a New Artistic Medium" *The Atlantic*, September 27, 2022. https://www.theatlantic.com/technology/archive/2022/09/ai-art-generators-future/671568
- McLuhan, Marshall. "The Medium is the Message." In *Understanding Media, The Extensions of Man.* McGraw-Hill Book Company, New York, 1964.
- Milmo, Dan. "'Mass theft': Thousands of artists call for AI art auction to be cancelled." *The Guardian.* February 10, 2025. https://www.theguardian.com/technology/2025/feb/10/mass-theft-thousands-of-artists-call-for-ai-art-auction-to-be-cancelled
- Rai, Shubhransh. ChatGPT can't Draw a Full Glass of Wine. *Quantum Information Review, Medium*. February 23, 2025. https://medium.com/quantum-information-review/chatgpt-cant-draw-a-full-glass-of-wine-5d2c4a44bf7a
- Read, Max. "Drowning in Slop A thriving underground economy is clogging the internet with AI garbage and it's only going to get worse." *Intelligencier*, September 25, 2024. https://nymag.com/intelligencer/article/ai-generated-content-internet-online-slop-spam.html/
- Reinhart, Eric. "The trouble with AI art isn't just lack of originality. It's something far bigger." *The Guardian*, May 20, 2025. https://www.theguardian.com/commentisfree/2025/may/20/ai-art-concernsoriginality-connection
- Roose, Kevin. "An A.I.-Generated Picture Won an Art Prize. Artists Aren't Happy." New York Times. September 2, 2022. https://www.nytimes.com/2022/09/02/technology/ai-artificial-intelligence-artists.html
- Scruton, Roger. "Photography and representation." *Critical Inquiry* 7, no. 3 (1981): 577-603.
- Smith, Murray. "My Dinner with Noel; or, Can We Forget the Medium?" Film Studies: An International Review, 8 (2006): 140-148.
- U.S. Copyright Office. "Second Request for Reconsideration for Refusal to Register Théâtre D'opéra Spatial." Available at: https://www.copyright.gov/rulings-filings/review-board/docs/Theatre-Dopera-Spatial.pdf
- Wack, Daniel. "Artistic Medium." In *Internet Encyclopedia of Philosophy*, no date. https://iep.utm.edu/artistic-medium/#H2
- Weitz, Morris. Philosophy of the Arts. Cambridge, Mass.: Harvard University Press, 1950.

Artworks Referenced

Jake Elwes, A.I. Interprets A.I. Interpreting 'Against Interpretation' (Sontag 1966; 2023). https://www.jakeelwes.com/project-sontag.html

Jason M. Allen, Theatre D'Opera Spatial (2022).

https://www.jasonmallen.com/space-opera-theater

Anna Ridler, Myriad (Tulips), 2018. https://annaridler.com/myriad-tulips

Obvious, *Edmond de Belamy*, 2018. https://obvious-art.com/portfolio/edmond-de-belamy/

Mario Klingemann, Uncanny Mirror, 2018.

https://quasimondo.com/2020/08/29/uncanny-mirror/

Refik Anadol, Machine Hallucinations: ISS Dreams (2021).

https://refikanadol.com/works/machinehallucinations-iss/