CC BY

ASRI
ARTE Y SOCIEDAD
REVISTA DE INVESTIGACIÓN
EN ARTES Y HUMANIDADES DIGITALES

AGENCY WITHOUT INTENTION. ARTIFICIAL CREATIVITY AND AI IMAGES

AGENCIA SIN INTENCIÓN. CREATIVIDAD ARTIFICIAL E IMÁGENES DE IA

Snježana Šimić
Rennes 2 University

DOI: 10.33732/ASRI.989

Recibido: (08 07 2026)
Aceptado: (23 09 2026)

Cómo citar este artículo
Šimić, Snježana. (2026). Agency without Intention. Artificial Creativity and AI Images. *ASRI. Arte y Sociedad. Revista de investigación en Arte y Humanidades Digitales, (31),* e989.
Recuperado a partir de https://doi.org/10.33732/ASRI.989

Abstract
This paper examines artificial creativity in the context of recent advances in AI technologies. Rather than focusing on AI outputs or their resemblance to human artworks, the paper shifts attention to the technical processes underlying their production. Against the dominant view that intentional agency is a necessary condition for creativity, I argue that the absence of intention in machines can enhance their creative potential by revealing an analogy with living beings and biological creativity.

Resumen
Este artículo examina la creatividad artificial en el contexto de los recientes avances en IA. En lugar de centrarse en sus resultados o en su semejanza con obras humanas, el artículo se dirige a los procesos técnicos subyacentes. Frente a la idea dominante de que la agencia intencional es necesaria para la creatividad, sostengo que la ausencia de intención en las máquinas puede mejorar su potencial creativo, al revelar una analogía con la creatividad biológica. Basándome en la estética, la filosofía con-

CC BY

Drawing on aesthetics, continental philosophy of technics, contemporary literature on AI, and Boden's account of self-organisation and biological creativity, I argue that machines display a kind of agency without intention, analogous to biological autonomy and spontaneity. I characterise this spontaneity as "contingent autonomy" because it is at the same time self-determined and without predetermination. This positive tension could be understood as an archetypal form of spontaneous creativity found in nature, one that occupies an important place in certain aesthetic theories and has often served as a model for artistic creation. Finally, techno-artistic projects involving AI-generated images will serve as illustrations and possible artistic materialisations of this theoretical paradigm. Ultimately, this perspective questions whether machines can be creative and invites us to reconsider creativity as such.

Keywords
(Artificial) creativity, (intentional) agency, spontaneity, self-organisation, AI images.

tinental de la técnica, la literatura contemporánea sobre los sistemas de IA y la concepción de Boden de la autoorganización y creatividad biológica, argumento que las máquinas manifiestan un tipo de agencia sin intención, análogo a la autonomía y espontaneidad biológicas. Caracterizo esta espontaneidad como "autonomía contingente" porque es, al mismo tiempo, autodeterminada y sin predeterminación. Esta tensión positiva podría entenderse como una forma arquetípica de creatividad espontánea presente en la naturaleza, la cual ha servido de modelo para la creación artística. Por último, se presentarán proyectos tecnoartísticos con imágenes generadas por IA que servirán como ilustraciones de este paradigma teórico. Esta perspectiva cuestiona si las máquinas pueden ser creativas y nos invita a reconsiderar la creatividad como tal.

Palabras clave
Creatividad (artificial), agencia (intencional), espontaneidad, autoorganización, imágenes de IA.

Introduction: mimicking human art

Images, texts, videos and music produced by generative artificial intelligence (GenAI) have become a familiar part of the contemporary cultural landscape. Only a few years ago, artistic competitions sparked controversy when juries, knowingly or unknowingly, awarded prizes to AI-generated works[1]. Some artists refused the prize, while others defended AI as simply another artistic tool. Today, however, such episodes already seem almost dated, as AI-generated content has become ubiquitous. But, more importantly, this is not an entirely new story. Consider, for example, David Cope's *Experiments in Musical Intelligence* (EMI, also known as Emmy), developed from the beginning of the 1980s, which demonstrated that already in that time machine-generated music was often mistaken for human composition, even by some expert listeners (Boden, 2010, p. 411). Moreover, algorithmic composition, a kind of artificial creativity, has already existed for centuries, dating back at least to the eighteenth-century *Musikalisches Würfelspiel*, musical dice game (Cope, 2001). Yet what distinguishes machine-generated art from EMI to today's GenAI is not only the increased complexity of algorithmic processes, but also, and more importantly, the degree of autonomy introduced into the creative process, which earlier algorithmic practices could not achieve before recent technological advances.

[1] For example, *The Electrician* by Boris Eldagsen won the Creative category of the Sony World Photography Awards in 2023, while *Théâtre D'Opéra Spatial* by Jason Allen won first prize in the Digital Arts / Digitally-Manipulated Photography category at the Colorado State Fair in 2022.

Universidad Rey Juan Carlos
ASRI - Arte y Sociedad. Revista de Investigación
Núm. 31. Año 2026. ISSN: 2174-7563
CUVPAC Grupo de investigación CULTURA VISUAL & PRÁCTICAS ARTÍSTICAS CONTEMPORÁNEAS

CC BY

It is precisely this autonomous moment, as Boden (2010) argued before the rise of GenAI, that enabled programmes such as EMI and AARON, Harold Cohen's drawing robot artist, to be considered as having passed what might be called a Turing test for creativity, insofar as their outputs are 1) indistinguishable from human-created artworks and 2) capable of being judged as aesthetically valuable to a comparable degree. Even though, as Boden emphasises, some computer art from the 1990s using genetic algorithms (Todd and Latham, 1992; Sims, 1991 as cited in Boden, 2010) had already exhibited what she defined as transformational, and therefore the highest form of, creativity, these systems still relied on human agents for the evaluation and selection of their outputs. EMI and AARON, by contrast, demonstrated exploratory, arguably a less complex yet still significant form of, creativity, while introducing a higher degree of autonomy into the generative process. Without entering here into a specific discussion of the different types of creativity proposed by Boden in the context of the recent GenAI and their autonomy, it should nevertheless be noted that the latter has reopened fundamental questions about what counts as art and how genuine (artificial) creativity should be defined.

Interestingly, as convincing computer art is not a completely new phenomenon, negative reactions to it are not new either, as Boden (2010) also discusses. The same criticisms we hear today in relation to the widespread use of GenAI had in fact already been directed at earlier forms of computer art, just as similar objections had been raised against photography in the nineteenth century. As Boden writes, "It is commonly said that there can be no such thing as computer art because, in principle, there can be no such thing as computer creativity" (Boden, 2010, p. 412). Our preconceptions about the irreducible nature of human creative agency thus shape the way we interpret the Turing test for artificial creativity. Ultimately, a machine may appear to produce art, but, according to this view, it cannot truly do so because art is traditionally understood as the expression of human spirit.

But I argue that the Turing test is insufficient at yet other conceptual levels. First, the test follows the logic of imitation —as Turing himself described it through the notion of the "imitation game" (Turing, 1950)—and therefore evaluates machines primarily through their resemblance to human capacities. Second, it focuses predominantly on the final product, as if creativity depended solely on human aesthetic appreciation of the resulting artefact rather than on the generative process itself. Finally, both criteria remain deeply anthropocentric, evaluating artificial creativity according to the standards of human creativity rather than considering whether machines might instantiate different forms of creative agency.

In order to address this problem, some researchers proposed an alternative test, the (better) Lovelace test for creativity (Bringsjord et al., 2001), in which the criterion was not merely the success of the "imitation game", but rather the fact that the human architect could not account for how an artificial agent produced an original output. While it is beyond the scope of this article to examine all the details of this test and apply them to contemporary AI, it seems reasonable to argue that the latter, unlike the symbolic AI systems discussed in the original proposal, generates outputs whose production cannot be fully reconstructed by human observers, even though the general structure of the underlying algorithms is known. Nevertheless, what is more important for my argument is that, despite this "epistemic" turn, the test remains deeply anthropocentric by defining creativity through the modern conception of human originality: the production of something that exceeds the programme in a somewhat irreducible way.

CC BY

This does not mean, of course, that originality is not a property of creativity —even though this understanding of creativity is in fact relatively recent in the history of ideas— but rather that we should also ask what creativity as such means in the context of artificial creativity, instead of simply applying a modern human conception of creativity to machines. To approach this question, it seems important not to focus exclusively on the final product, but also on the generative process itself, and perhaps to identify in it something of the spontaneous character of an archetypal model of creativity: biological nature itself.

Thus, the main objective of the paper is to discuss the possibility of genuine artificial creativity without necessarily comparing it to human art or human creativity. Rather than simply searching for resemblances between human and artificial outputs, I will focus on the technical development and generative processes underlying artificial creativity. This shift in perspective will allow us to analyse artificial creativity as analogous to biological one and, consequently, as something that can dispense with intentional agency, which is often taken to be a *sine qua non* condition of human creativity. My main argument, however, is that this "agency without intention", which technical objects share with biological beings, does not prevent them from being creative. On the contrary, it makes possible a certain kind of machinic spontaneous agency that can be understood as the locus of their autonomy and, consequently, of their creativity.

Methodologically speaking, the paper offers a philosophical analysis of creativity, spontaneity, intention and agency situated at the intersection of aesthetics and the continental philosophy of technics. It also adopts an interdisciplinary approach through a comparative analysis drawing on contemporary literature on AI, as well as on Boden's more naturalistic approach to biological creativity and the notion of self-organisation. The latter proves crucial not only for understanding biological creativity as such, but also for developing a conception of spontaneous agency that is at once ordered yet not predetermined, autonomous yet contingent, and that I subsequently define as contingent autonomy. Finally, the paper discusses several techno-artistic projects involving AI-generated images, which serve to illustrate its theoretical hypothesis and possible practical materialisations of artificial creativity.

Artificial creativity as agency without intention

Creativity and AI: novelty and spontaneity

In many philosophical definitions of creativity, we can identify at least three basic properties: novelty (or originality), value and intentional agency (for an overview, see Paul & Stokes, 2024). Although the question of value can be defended or rejected in different ways in relation to both human and artificial creativity, I will leave it aside because it is beyond the scope of this paper and, more importantly, because it is not relevant to my account. The biological creativity taken as a model here does not depend on human values or judgements. It is considered here in ontological terms, as a process that produces novelty, rather than in terms of its value or appreciation for human observers. We could certainly say that novelty is valuable in itself, but, in the context of my argument, this would be logically redundant and thus unnecessary. Instead, I will focus on novelty, particularly in relation to intention, or rather its absence, which is often associated with spontaneity.

It is interesting to note that spontaneity can be understood in philosophical traditions in two different ways. On the one hand, it can refer to a property of human subjectivity, understood as something not

CC BY

reducible to the mechanical laws of nature and therefore connected to freedom. In this sense, spontaneity is closely linked to human intentional agency. On the other hand, in the context of creativity, spontaneity, on the contrary, refers to something beyond routine mechanical procedures, namely something "independent of the agent's intentional control and previously acquired knowledge" (Paul & Stokes, 2024, §4). Also, in the context of machines, we could speak of something beyond the programme. I will use spontaneity here in the second sense. Nevertheless, in both cases, spontaneity refers to something that is not mechanically predetermined and, as will become important later, to something that is not determined by an external cause and is therefore, in a certain sense, self-positing.

When discussing contemporary AI technologies, as already mentioned, it is difficult to deny that they produce results that are both novel and seen as valuable. But what does this really mean? And does this production involve spontaneity in any sense? This does not, of course, mean that they are creators *ex nihilo* in the strong sense, producing radically new things in a radically new way—a type of creativity traditionally attributed to humans. After all, as Arielli concludes, "creativity may be overvalued as a human faculty simply because we do not understand its workings" (Manovich & Arielli, 2024, p. 48). Yet because we are the creators of these machines, or at least the origin of their design, we know that their generative power is more limited than such a conception suggests. Nevertheless, it seems that many recent AI technologies exhibit emergent qualities resulting from their stochastic nature and adaptive structures. GenAI models such as large language models (LLMs), diffusion models and generative adversarial networks (GANs), increasingly used by artists, produce novelty that is not explicitly specified in advance and exhibit a certain epistemic obscurity. Thus, we could speak of a relative machinic spontaneity as well.

Critics will be quick to argue that all of this is ultimately determined by the programme, the data and the statistical operations underlying the system, and that emergent qualities are nothing more than statistical patterns. This is, of course, true in a certain sense, but it is also undeniable that GenAI cannot be reduced to fixed hand-coded rules and linear mechanical logic. In GAN technology, for instance, the generator, which is trained to produce outputs capable of deceiving the discriminator, does not begin with explicit symbolic knowledge or predefined concepts of objects or forms. Instead, such features emerge through a process of learning whose development cannot be fully controlled or predetermined. For example, in the works of artists such as Mario Klingemann or Anna Ridler, canonical examples of GAN-based generative art, the models are trained on a limited dataset of, for instance, historical portraits or photographs of cypress trees. Nevertheless, the resulting AI images were not previously encoded in the system, but were produced through a learning process that, while constrained by the dataset and the artist's choices, was not explicitly directed towards predetermined visual outcomes. In addition, many artists deliberately engage with model errors and other unexpected emergent properties in order to enhance the creative potential of these systems. In a way, what is really creative here is the learning process itself.

On the side of GenAI research, some scholars have attempted to go a step further by developing what they called creative adversarial networks (CANs) (Elgammal et al., 2017; Mazzone & Elgammal, 2019). They used the term "creative" rather than merely "generative" because their aim was to encourage the system to move beyond established styles present in the training data while remaining within a recognisable artistic space. In this approach, the generator receives two different signals from the discriminator: one pushes it towards producing images that resemble human artworks, while the other encourages the production of images that are stylistically ambiguous. In other words, the system is explicitly encouraged

CC BY

to move beyond the stylistic patterns present in the training data, producing novelty not through direct human intervention but through its own generative dynamics.

Moreover, the question of GenAI creativity, especially in relation to diffusion models, has recently attracted more attention in foundational AI research[2], often through what could be considered a contemporary version of the Lovelace criterion: trying to demonstrate that generative outputs go beyond the training set. Kadkhodaie et al. (2024), for instance, showed that diffusion models trained on non-overlapping subsets of the same dataset can learn nearly the same score function and generate similar outputs when given the same initial noise, suggesting that they capture properties of the underlying data distribution rather than merely memorising individual examples. Other studies argue that generative models first enter a phase of generalisation, understood not merely as repetition but as a form of learned abstraction, before reaching a phase of memorisation and copying (Bonnaire et al., 2025), suggesting that this earlier stage may possess creative potential. Finally, another line of research argues that the potentially creative character of diffusion model outputs results from the inevitable imperfection of the denoising process. This means that the target distribution cannot be perfectly recovered in practice.. It is precisely through this inductive bias, inherent to the machine, that divergence from the training distribution emerges and contributes to the model's supposed creativity (Levine & Weiss, 2026). Taken together, these new perspectives leave open the possibility that the adaptive learning structures of GenAI do not simply reproduce predetermined outputs, but may generate results that exceed the training data and the explicit parameters initially established by the model's designers.

Although GenAI is currently the most prominent form of AI creativity in the public sphere, other deep-learning methods have already demonstrated capacities associated with creativity and originality. Consider *AlphaGo* and its famous Move 37, which was highly unconventional and surprising, and certainly not explicitly programmed in advance. It is therefore difficult not to attribute genuine novelty to it (Halina, 2021, as cited in Paul & Stokes, 2024, §6). We can also evoke evolutionary robotics and artificial life, where digital evolution can surprise its creators in a way analogous to biological evolution, through variation, selection and unintended developmental processes across individuals and populations (Lehman et al., 2020; Sims, 1994, as cited in Paul & Stokes, 2024, §6). As Paul and Stokes note: "In this bottom-up approach, no single individual, nor even an entire population, are in any strict sense programmed" (2024, §6). Nevertheless, despite the fact that many deep-learning technologies appear to produce genuine novelty and to exhibit a relative spontaneity of process, this still seems insufficient to accept that AI technologies are creative, because the final requirement, intentional agency, remains in question (Paul & Stokes, 2024, §6). This "argument from no intentions" (Williams et al., 2026) therefore appears to persist as the final frontier defending the supposedly irreducible character of human creativity that cannot be reproduced by machines.

Self-organisation of technical objects

Is intentional agency therefore necessary for creativity as such, and for artificial creativity in particular? While many philosophers and theorists argue that intentional agency is the hallmark of creativity and its absence marks a fundamental difference between human and artificial creativity, some researchers have surprisingly started to defend the view "that state-of-the-art AI systems may already instantiate the relevant forms of intentionality" (Williams et al., 2026). Others, in contrast, have already argued

[2] I am grateful to Louis Laborelli for pointing me towards recent literature on AI and creativity.

that biological and evolutionary processes, which operate without intentional human agency, could nevertheless be considered creative (Boden, 2018).

I aim to defend, from the perspective of continental philosophy of technics, that machines could be, in a certain sense, considered creative, through their relative autonomy as a form of agency without intention, comparable to that found in biological nature. This approach permits us to broaden our perspective on creative technology by considering it, less as a mere property of novel outputs produced by commercial AI software, and more as a consequence of certain self-organising tendencies of, in Simondon's terms, technical objects (Simondon, 2017 [1958]). More than a functional entity executing a rational utilitarian purpose, for Simondon, the technical object develops and evolves analogously to living beings, not as an isolated technical individual but rather as part of a historical lineage of technical evolution. An individualised technical object becomes integrated into its milieu, which both coexists with and co-determines it. This process enables the so-called concretisation of the technical object, which consists in its becoming increasingly organised and, in some respects, quasi-organic. In other words, the machine is a relational being which, through a margin of indeterminacy, adapts to its environment and establishes a recurrent causality leading towards internal coherence. For Simondon, therefore, the technical object is not determined solely by external causes or purposes, but possesses a certain internal finality comparable to the organisation of living beings:

> Viewed from the outside the machine is made in order to obtain a certain result; but, the more the technical being becomes individualized, the more this external finality effaces itself for the benefit of the internal coherence of functioning; the functioning is finalized with respect to itself... (Simondon, 2017, p. 135).

This self-regulating mode gives the technical object a relative spontaneity of functioning and of historical development, which is partially independent of human intentions and initial designs. Simondon concludes: "The concretized object is comparable to the spontaneously produced object..." (2017, p. 50). This means that technical objects are open systems that possess a certain kind of agency, which can be described, following Deleuze's interpretation of Stoic philosophy, through the notion of quasi-causality (1969), rather than only through the linear mechanical causality usually attributed to machines. In other words, machines are not entities that are perfectly rational and closed, functioning only from cause to effect, but also through relations of "effect to effect" that cannot be perfectly predetermined because they emerge from a dynamically organised structure. This is the domain of contingency rather than necessity, of organisation rather than linearity. It is also precisely the domain usually associated with life.

Hui, in his discussion of contingency and recursivity, also refers to Deleuzian quasi-causality specifically in relation to machine learning algorithms, where noise and contingency can acquire a positive meaning (2019, p. 18). Indeed, in order to function, a sufficiently complex machine cannot be complete in every respect; a certain incompleteness is necessary. Consequently, it is precisely in these partially spontaneous and agentive aspects of machines, in their processes of becoming, that we can locate their creative potential. It is there that machines do not merely follow predetermined linear and mechanical rules, but adapt and reorganise themselves through contingent processes, where contingency is understood in this quasi-causal sense.

Universidad Rey Juan Carlos
ASRI - Arte y Sociedad. Revista de Investigación
Núm. 31. Año 2026. ISSN: 2174-7563
CUVPAC Grupo de investigación CULTURA VISUAL & PRÁCTICAS ARTÍSTICAS CONTEMPORÁNEAS

CC BY

Although Simondon emphasises the material reality of machines and their embeddedness in concrete milieus, we can observe analogous dynamics at the level of algorithmic learning processes. For example, in recent research on diffusion models (Levine & Weiss, 2026), discussed earlier, we can in fact detect similar forms of organisation. To begin with, the process of noising and denoising recalls the classic example, dear to many philosophers, of inorganic structural organisation: crystallisation. Crystallisation is often triggered by the presence of an impure, or what we might call noisy, element within a mineral medium. In this sense, the final image, compared to a crystal, can be understood as emerging through a process of organisation that involves the gradual reduction of noise. More importantly, the recent study suggests that creativity emerges precisely from the inevitable imperfection of the denoising process, echoing Simondon's margin of indeterminacy —here translated onto the computational level— and the continuous internal adaptation of the structure through a partially contingent learning process. Following this perspective, the creativity attributed to the model or its outputs is not the product of a perfect prompt or of a supposed intention, whether human or machinic, but rather a consequence of non-intentional and partially spontaneous technical operations that recall certain organisational dynamics of living systems. (Gen)AI thus becomes a contemporary manifestation of a broader form of technical creativity grounded not in intentional authorship, but in adaptive and self-organising processes.

The parallels between Simondon's conception of technical objects and living beings become even clearer when viewed alongside Boden's account of biological creativity. If we put Simondon's conception of technical objects into dialogue with Boden's conception of biological creativity, we could say that, on the level of functioning, the machine exhibits what Boden (2018) calls I-creativity, corresponding in biological creativity to ontogenesis, while on the level of its historical development or technical evolution, we can speak of H-creativity, corresponding to phylogenesis in living beings. Of course, the analogy is not complete, since a machine cannot autonomously build itself from a single cell or evolve over time independently of human intervention. Nevertheless, what Boden identifies as the basis of biological transformational creativity, namely self-organisation, can also illuminate technological creativity, provided that the functioning and development of technical objects are understood as quasi-organic processes.

Moreover, Boden rightly underlines that "self-organization is puzzling: how can something organize itself?" (Boden, 2018, p. 173). She explains that the concept of self-organisation "was not only *not understood* (not scientifically explained), but it was seemingly *not understandable*" (2018, p. 185). Yet, as she concludes, today self-organisation has become a coherent and scientifically respectable concept that can be "understood as the spontaneous generation of order" (p. 186), where:

> Moreover, "spontaneous" doesn't mean *magical*, but *following from the intrinsic nature of the system*. The change is spontaneous, or autonomous, in that it results from the system concerned (often in interaction with the environment), rather than being imposed on it by some external force or designer (Boden 2018, p. 186-187).

It is interesting that a very similar characterisation can be found in Simondon's account of the technical object, even though he speaks more often of self-regulation or self-conditioning than of self-organisation. The idea that there is something self-referential in the machinic system, which constitutes the basis of the technical object, is essential to Simondon: "*The technical object is thus its own condition, as a condition*

CC BY

of existence of this mixed milieu which is simultaneously both technical and geographical" (2017, p. 58). It is precisely this internal coherence, a kind of self-conditioning, that gives the technical object its quasi-organic character.

While, as I have already argued, Simondon grounds the relational and relatively autonomous character of machines in their material organisation, recently authors started to identify similar dynamics at a more abstract level. For Hui, for example, recursivity, or recursive algorithms characteristic of contemporary computation, is a spiral operation, a looping movement that continually returns to itself, and consequently, self-positing (2019, p. 114-115). Although developed through a different line of argument, drawing on Whitehead's reading of Spinoza's notion of *causa sui*, Fazi (2018) similarly argues that computation is not only causal but also inherently self-causal. As before, however, this self-positing is possible only because computation is not a perfectly predetermined operation, owing not merely to inevitable errors but to the more fundamental condition of incomputability. In other words, computation's self-determination emerges through the dynamic relation between what can and what cannot be computed. As Fazi writes: "to look at computation as a self-constitutive process of determination means to understand this process of determination in terms of its self-actualisation" (2018).

Finally, in her work on AI and machine learning, Malabou (2019 [2017]) brings together her reflections on plasticity, epigenetics and (artificial) intelligence. As in the previous cases, Malabou identifies a similar pattern of self-organisation, continuous restructuring and contingent circular causalities across both biological and artificial domains. Moreover, through her analysis, we understand that the prefix "epi-", as in "epicentre", in epigenetics too refers to what happens "upon" or "on the surface" (Malabou, 2014, p. 60), indicating the point of interaction with the environment and the changes that emerge from this interaction. This differs from a strictly deterministic model of genetic causality because epigenetics does not presuppose a single, fixed origin of development; it involves not only mechanical necessity, but also relational dynamics. Consequently, it is precisely because we can identify this kind of quasi-organic plasticity in machines that we could possibly understand them as exceeding the programme and thus possessing creative potential:

> *What can an analysis that seeks to cut plastic intelligence off from any machine functioning, especially that of computers, still be worth? Given all the current advances, how could we not conclude that plasticity is programmable, since it is becoming the fundamental program of cybernetics?* But is a programmable and programmed plasticity still plasticity? *Not that plasticity is the opposite of the concept of program on principle. Epigenetic mechanisms are programmed genetically.* Biological plasticity is, if you like, programmed not to be programmed. *In the end, if the power of improvisation and interpretation of brain plasticity can be entirely simulated by a "synaptic" processor, then what's left of it?* (Malabou, 2019, p. 91, *my emphasis*)

What Malabou shows here is not only that a genetic programme does not prevent biological plasticity, but, in parallel, that there is no reason that programmed machines could not go beyond the programme and, we could add, become creative. This does not mean that this process and self-organisation as such is not puzzling, as we have already seen. This concept proved difficult for science to accept, but the strange combination of something spontaneous (not externally determined) and something governed by rules, since self-organisation is ultimately a generation of order, was also a philosophical problem.

CC BY

This is why some philosophers conclude, insightfully, that paradoxically only something with an absolute beginning, namely something whose cause is in itself, can truly be fortuitous, that is, without an external cause (Lalande, 2021, p. 402). In other words, *only something autonomous can also be truly contingent*, and it is this *contingent autonomy*, as we could call it, that may be understood as true spontaneity. Thus, contingent autonomy is not simply something random, unpredictable or epistemically obscure, but a process of self-determination that cannot be fully predetermined in advance. Now it seems easier to understand why, in relation to creativity, spontaneity appears to have a double meaning: the absence of a predetermined reason (contingency) and self-determination (autonomy). Unsurprisingly, this is exactly what we find in self-organisation, which can therefore be understood as a model or paradigm not only for biological, but also technological, and even human, creativity. In this framework, artificial creativity is not the result of imitation or of a complexity that exceeds our capacity to follow it in detail, but of the inner reorganisation of the learning system and of the adaptive and evolutionary dynamics of technology as such.

Aesthetic dimension and AI images

But how could this argument be defended on more aesthetic grounds? The self-organisational aspect of machines reveals their structural affinity with natural and biological beings, which means that the kind of agency they exhibit is non-intentional. Contrary to the standard view and the argument from the absence of intention, I argue that this quasi-organic agency without intention in fact enhances the spontaneity of technology and opens the possibility of genuine artificial creativity. This is possible because, in this configuration, artificial creativity is aligned with the biological one, which is perceived as natural beauty. For Kant, for example, the reason natural beauty is so significant is precisely because it is without intention, even though it appears "as if" it were intentional (2007 [1790]). A flower is not beautiful because it has been produced according to a reason or purpose; rather, it is beautiful because its beauty appears spontaneous and not determined by a concept.

After all, natural beauty also serves as a model for human creativity in Kant. If nature appears "as if" it were intentional while in fact lacking intention, art should likewise appear as if it were non-intentional, even though it is consciously produced (§45). Interestingly, we can find a similar dynamic in the notion of *automaton*[3], here understood in the Aristotelian sense as something accidental or spontaneous, which appears intentional while in fact lacking intention. It is as if something happens by chance, yet appears meaningful. Moreover, Arielli stresses that Aristotle insisted in the *Poetics* (Book IX) on the importance of accidental elements in tragedy, which can become crucial for storytelling precisely when they possess an "air of design" while remaining completely random (Manovich & Arielli, 2024, p. 156). Although one could emphasise the human act of adding meaning to something that initially lacks it, I argue that it is more interesting to preserve this ambiguity: something without intention that nevertheless appears "as if" it possessed one. In other words, this allows the work of art to resemble spontaneously organised nature, as if the contingent element left the system of tragedy open, incomplete and, we could even say, "cracked", bringing it closer to the logic of biological systems.

In my interpretation, this means that artistic creation should exhibit a self-organisational structure in order to be perceived as beautiful. Seen in this light, artistic intention may appear too heavy, as a deterministic reason that fixes the creation in advance. But if machines are non-intentional and self-organisational, their

[3] For my discussion of creativity and technology through the concept of automatism in the context of photography, see also Šimić (2025).

CC BY

agency without intention becomes an ideal mediator through which human creativity can incorporate organic-like creative processes. This may also explain why some artists working with AI technologies perceive them as liberating. For example, the artist Sougwen Chung, who uses robots to physically paint alongside her, has stated that AI fuels creative growth and helps deepen her understanding of her own processes by translating them into the machine (Chow, 2024). Furthermore, in her project *Recursions*, the artist paints while a custom EEG sensor captures live brainwave activity, modulating the model's response and creating a recursive loop in which previous gestures generate new trajectories to which the artist responds. This provides a particularly clear example of recursion involving both a machine and an artist, where a self-regulating movement produces a form of artistic co-creation. The robot is therefore not merely a tool, but an instance that participates in and enables creative self-regulation. Here, artistic intention is not eliminated but transformed: it is dissolved into an agency without intention, a spontaneous movement that has a framework but is not fixed by a predetermined finality of the result. In this sense, paradoxically, the organised nature of the robot helps the artist attain a more spontaneous form of creation.

Still, does this mean that we necessary need human beings in order to consider AI outputs creative? It seems that we should distinguish here between two different questions: whether something is a work of art and whether something is creative. Arguably, according to many contemporary concepts of art and the institutional logic of the art world, something must be presented and recognised by humans as art in order to acquire this status. Yet this does not prevent us from considering something creative without necessarily considering it a work of art. This was the case with the images produced by the AICAN model, which were not part of an artistic project or a process of human-machine co-creation, but rather generated autonomously and later exhibited as art in a museum, as an experiment, where they received positive aesthetic evaluations (Mazzone & Elgammal, 2019). Nevertheless, even without this institutional recognition, we could still consider them creative because they are the result of a partly spontaneous process emerging from the dynamic structure and inherent indeterminacy of the machine. What makes them creative is therefore not the human intention to make them art, nor their resemblance to human artistic products, but rather the organisational structure through which they generate novelty.

Conclusion

To conclude, we can return to the beginning of this paper and to the early history of AI-generated images, with Cohen's symbolic-AI-based robot AARON, which learned to draw and colour autonomously and which the artist developed and refined over many years:

> For a very long time I thought AARON's work should be indistinguishable from the work made by human artists. That isn't quite the case anymore. I want the work to look *as if* it has been made by an intelligence, but it doesn't have to be a human intelligence (Cohen, 1995, my emphasis).

This quote is important because it captures a broader conceptual shift in our understanding of artificial creativity and AI-generated art. First, we tried to compare artificial products to human ones, following the logic of the Turing test, but we quickly realised that this does not answer the question of their genuine creative capacities. Later, following the Lovelace condition for creativity, we attempted to identify in machines something beyond their programme, but we still struggled to detach ourselves from an

CC BY

anthropocentric conception of creativity. Finally, the argument from the lack of intention is perhaps one of the last anthropocentric vestiges in our understanding of artificial creativity. Moreover, it seems that artists, perhaps more than theorists or philosophers, have forced us to reconsider the limitations of this position, as Cohen already did in the 1990s. The "as if" in his statement is particularly revealing because we could even reformulate it as follows: I want it to look as if it were intentional, but it does not have to be intentional. And it is precisely in biological beauty that we find this "as if" materialisation in its purest form: something that appears intentional while in fact lacking intention. The reason for this is that we perceive the self-organising autonomy of biological systems as intelligent and/or intentional, while it is in reality an agency without intention. As if, to call something creative, we need this subtle tension: that something has been oriented by a certain kind of agency or structural organisation, but must not be fully fixed.

In any case, it seems certain that the "enigma" of artificial creativity posed by recent AI technologies cannot be solved solely through the analysis of their products, or through their comparison with human creativity. The approach I have proposed, which considers this question through the prism of biological creativity and technical processes, has the advantage of "liberating" it from the grip of human intentional agency and human art that have constrained it. But, besides the obvious first-level objection to this approach —that the parallelism between life and machines is maybe exaggerated— its real and deeper limitation lies in the fact that it cannot offer a complete answer to what artificial art should be, given that the concept of art is so tightly linked to the human world and its values. While this remains a challenge for the future, these technologies already invite us not simply to ask whether machines are creative or not, but to rethink creativity as such, even if this means renouncing some long-standing ideas that we hold about ourselves.

References

Boden, M. A. (2010). The Turing test and artistic creativity. *Kybernetes*, 39(3), 409–413. https://doi.org/10.1108/03684921011036132

Boden, M. A. (2018). Creativity and biology. In B. Gaut & M. Kieran (Eds.), *Creativity and philosophy*. Routledge (pp. 173–192). https://doi.org/10.4324/9781351199797-11

Bonnaire, T., Urfin, R., Biroli, G. & Mézard, M. (2025). Why diffusion models don't memorize: The role of implicit dynamical regularization in training. *Advances in Neural Information Processing Systems, 38,* 156679–156699.

Bringsjord, S., Bello, P. & Ferrucci, D. (2001). Creativity, the Turing test, and the (better) Lovelace test. *Minds and Machines*, *11*(1), 3–27. https://doi.org/10.1023/A:1011206622741

Chow, A. R. (2024, February 7). Artist Sougwen Chung on finding inspiration in AI. *TIME*. https://time.com/collections/time100-impact-awards/time100-impact-awards-sougwen-chung/

Cohen, H. (1995). *The robotic artist: Aaron in living color. The Computer Museum*. Conversation with Becky Cohen, La Jolla, California.

Cope, D. (2001). *Virtual music: Computer synthesis of musical style*. MIT Press. https://doi.org/10.7551/mitpress/7106.001.0001

Deleuze G. (1969). *Logique du sens*. Minuit.

Elgammal, A., Liu, B., Elhoseiny, M. & Mazzone, M. (2017). CAN: Creative adversarial networks, generating "art" by learning about styles and deviating from style norms. In A. Goel, A. Jordanous & A. Pease (Eds.), *Proceedings of the 8th International Conference on Computational Creativity (ICCC 2017)* (pp. 96–103). Georgia Institute of Technology.

Fazi, M. B. (2018). *Contingent computation: Abstraction, experience, and indeterminacy in computational aesthetics*. Rowman & Littlefield.

Hui, Y. (2019). *Recursivity and contingency*. Rowman & Littlefield.

Kadkhodaie, Z., Guth, F., Simoncelli, E. P. & Mallat, S. (2024). Generalization in diffusion models arises from geometry-adaptive harmonic representations. *International Conference on Learning Representations (ICLR)*.

Kant, I. (2007). *Critique of judgement* (J. C. Meredith, Trans.). Oxford University Press. (Original work published 1790).

Lalande, A. (2021). *Vocabulaire technique et critique de la philosophie*. Presses Universitaires de France.

Levine, I. & Weiss, Y. (2026). Diffusion models, denoiser architecture and creativity. *ArXiv*. https://arxiv.org/abs/2605.16415

Malabou, C. (2014). *Avant demain: Épigenèse et rationalité*. Presses Universitaires de France.

Malabou, C. (2019). *Morphing intelligence: From IQ measurements to artificial brains* (C. Shread, Trans.). Columbia University Press. (Original work published 2017).

Manovich, L. & Arielli, E. (2024). *Artificial aesthetics*. https://manovich.net/index.php/projects/artificial-aesthetics

Mazzone, M. & Elgammal, A. (2019). Art, creativity, and the potential of artificial intelligence. *Arts*, *8*(1), 26. https://doi.org/10.3390/arts8010026

Paul, E. S. & Stokes, D. (2024). Creativity. In E. N. Zalta & U. Nodelman (Eds.), *The Stanford Encyclopedia of Philosophy*. https://plato.stanford.edu/archives/spr2024/entries/creativity/

Šimić, S. (2025). Photography and the techno-automatic paradigm in art and aesthetics. In C. Misselhorn & L. Schmalzried (Eds.), *Aesthetics, digitalization, and artificial intelligence* (pp. 89–103). Brill/mentis. https://doi.org/10.30965/9783969753477_007

Simondon, G. (2017). *On the mode of existence of technical objects* (C. Malaspina & J. Rogove, Trans.). Univocal. (Original work published 1958).

Turing, A. M. (1950). Computing machinery and intelligence. *Mind*, 59(236), 433–460. https://doi.org/10.1093/mind/LIX.236.433

Williams, I., Rajcic, N., Hatherley, J., Fierro, C., Stamatiou, F. & Søgaard, A. (2026, June 18). *Artificial artists and their intentions* [Preprint under review], https://philarchive.org/rec/WILAAA-25

BIO



Snježana Šimić holds a PhD in Aesthetics from the École des Hautes Études en Sciences Sociales (EHESS/CRAL) in Paris. She previously studied philosophy and French at Sorbonne University and the University of Zagreb. She is currently an associate member of the PTAC (Pratiques et Théories de l'Art Contemporain) research centre at University Rennes 2. She has taught aesthetics and philosophy of art at University Rennes 2 and was a DAAD Junior Fellow at Freie Universität Berlin. She is currently Co-Editor-in-Chief of the *Traits-d'Union* journal for young researchers at Sorbonne Nouvelle. Her publications include articles and book chapters on the aesthetics of photography, continental philosophy of technology, and machine and AI creativity. Contact: snjezanasimic08@gmail.com.