

Toward a Richer Account of Illusion in the Experience of Narrative

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ABSTRACT. This study takes a closer look at the structure of the concept of illusion as it is used in Werner Wolf's theory of aesthetic illusion. This conception is widely regarded as a functional explanation of the phenomenon that more often than not accompanies our engagement with narrative – namely, the fact that we feel in a certain sense absorbed by it. The concept of aesthetic illusion is based on Marie-Laure Ryan's notion of immersion and remains closely linked to it through mutual support, shared assumptions, and a similar breadth of scope. However, the study aims to show that the concept of aesthetic illusion can, in fact, hardly live up to its ambitions. In an attempt to provide clarity and specify what aesthetic illusion actually consists in, Wolf, and by extension Ryan, adhere too firmly to a single model of illusion, namely optical or perceptual illusion. Although this model is, generally speaking, the first thing that comes to mind when illusion is discussed, once it becomes the dominant framework for an entire theory of reception, it leads to a rather distorted construal of narrative experience. In the first place, it marginalizes or even excludes other possible accounts of illusive or illusion-like effects bound to a feeling of absorption that we might, with proper tools at hand, discern within the multifarious experience of narratives. The question is whether there are other ways of approaching the phenomenon of absorption.

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1. Introduction

When reading, readers can occasionally experience the feeling that the narrative has progressively absorbed them – that they stop paying attention to place, time, and conditions of their actual location, that their thoughts, emotions, sensations, and even their very sense of what is what are in the grip of that narrative, coloured and shaped by it. This can last for the duration of the reading or (if the experience is particularly strong) even after the book has been closed. This power of narratives has been described in various ways, and it points in the same direction as Peter Brooks does when, quoting the character Tyrion from *Game of Thrones*, he remarks that “there’s nothing in the world more powerful than a good story” (Brooks 2022, p. 3).

The idea of absorption is quite eloquently brought to the fore by Victor Nell by the very title of his 1988 book. While reading, we sometimes feel *Lost in a Book*: “Among the mysteries of reading, the greatest is certainly its power to absorb the reader completely and effortlessly, and on occasion, to change his or her consciousness through entrancement.” (Nell 1988, p. 73) Such a feeling of absorption or entrancement that one can experience while reading – and arguably also while watching – a narrative has recently been conceptualized mostly through two influential and interconnected notions: *immersion*, developed by Marie-Laure Ryan, and *aesthetic illusion*, advocated by Werner Wolf. There are certainly other conceptual alternatives proliferating – for instance, *transportation*, developed by Richard Gerrig (1993) and endorsed by Emily Troscianko (2017), or *presence*, as discussed by Göran Rossholm (2017). It is, however, aesthetic illusion and immersion that have gained the most widespread recognition and acceptance, and the corresponding entries are now indispensable in any compendium or handbook devoted to the theory of reader/viewer experience, with aesthetic illusion even having its own Wikipedia entry. It seems to me that one of the main strengths of these two concepts lies precisely in the emphasis they place on the illusory aspect of absorption, the way they stress the sense of being gripped by the narrative. They thus highlight the power narrative has to manipulate its recipients – to make them interested and emotionally engaged, and to reassert or challenge recipients’ notion of how things are. I want to argue that it is precisely this feature of the concept that makes it stand out among the available alternatives. At the same time, however, it seems to me that the notion of illusion, as employed by the reception theory in question, does not fully succeed in realizing its potential.

Let me briefly outline the two concepts. The core of immersion and aesthetic illusion, as proposed by their advocates, lies in the idea that the phenomenon of absorption we experience while reading or watching allegedly consists of an imaginative relocation or entry into a distinct world as it is designed by the text. Ryan suggests that this immersive entry into the represented world should be understood as a kind of rendering of virtual reality for the recipient, providing them with virtual sensations – mainly visual ones – in a manner closely analogous to an actual VR machine, as an ultimate illusion-generating device (Ryan 2001). Wolf, in turn, builds on her concept in developing his own account of aesthetic illusion.

Aesthetic illusion consists predominantly of a feeling, of variable intensity, of being imaginatively and emotionally immersed in a represented world and of experiencing this world in a way similar (but not identical) to real life. As opposed to delusions and hallucinations, this constitutive immersion is, however, counterbalanced by a latent rational distance, which operates owing to the culturally acquired awareness of the difference between representations and reality (Wolf 2013, p. 52).

Along the lines of the psychological term pseudo-hallucination, aesthetic illusion is therefore more appropriately conceived as a pseudo-illusion. Thanks to a certain distance, an awareness of artificiality is always at least latently present. What we obtain, then, is a quasi-experience consisting of quasi-perceptions (Wolf 2013, p. 22). In this respect, both conceptions presume that we experience a represented world in a quasi- or virtually sensory manner and, from this point of view, they share the same fundamental premises.

There are also similarities between the ambition and scope of these two congruent projects. Ryan considers her notion of immersion the fundamental descriptive instrument for explaining basically every possible form of absorption mentioned above. Immersion is responsible for a feeling of forgetting one's *hic et nunc* in favor of alternative space-time coordinates, for our emotions towards characters, suspense, and, in an extreme case, for the condition she calls *Don Quixote Syndrome*, leading the one affected to confuse the world in question with his or her lived reality (Ryan 2001, p. 99).

Wolf's conviction about the scope of aesthetic illusion is very similar. He suggests that "whoever for instance, has felt fear, horror, and suspense when reading a novel or playing a computer game, whoever has been moved to tears during emotionally loaded film scenes and whoever has pitied tragic characters such as *King Lear* on stage testifies to have been in the grip of

aesthetic illusion” (Wolf 2013, p. 4). Wolf also repeatedly reflects on the significance of aesthetic illusion and its impact on readers or viewers on a broader scale. In addition to accounting for affective response, aesthetic illusion also exerts a crucial influence on the persuasive – or, to put it more starkly, manipulative – power of narrative:

A persuasive purpose may also be seen at work in the compensatory potential of aesthetic illusion to make the recipient more readily accept a general tendency of aesthetic representations towards an ‘unrealistic’ surplus of coherence and meaning, i.e. to present worlds whose closure and meaningfulness (most conspicuously in the narrative use of coincidences and the convention of ‘poetic justice’ and teleological closure) could be regarded as deviating from the openness and contingency of life (Wolf 2013, p. 53).

Aesthetic illusion is thus apparently meant to account for an emotional dimension of absorption, a tension tied to the unfolding of narrative, as well as the appeal of poetic justice. And, on top of that, it is intended to do so across all kinds of representational media. With this being said and with aesthetic illusion given such a large agenda, it is necessary to take a closer look at the inner structure of the term ‘illusion’ as employed in this fashion (section 3). Before I do so, I present one particular objection to the theory of aesthetic illusion (section 2). Although the theory has been criticized from various angles, this objection strikes me as especially interesting because at its core lies a conceptual question: by bringing to the fore illusion’s inherent proximity to delusion, might the very notion of illusion, by its nature, hinder an adequate understanding of the problem of absorption?

My own position, presented in section 4, is, in a sense, a middle one. I will argue that the real problem does not lie in the notion of illusion *per se*, but rather in a particular understanding of it. The core of Wolf’s theory, I suggest, rests on an adherence to the model of perceptual, optical illusion. Through the prism of this model, however, some cases of absorption appear less readily explicable than others. In this paper, I aim to illustrate my claim by taking a closer look at Wolf’s own paradigmatic example of aesthetic illusion in action and by comparing it with another case which, according to Ryan, represents a situation in which absorption reaches an extreme level. Her example, I argue, cannot be explained by means of immersion-based aesthetic illusion – the very mechanism that is supposedly responsible for all absorption associated with the experience of narrative.

2. Illusion and Delusion

Although the theory of aesthetic illusion (similarly to the related concept of immersion) has received considerable attention among literary and film theorists, it has also recently been subjected to criticism from various directions and on various grounds. Some critiques target the notion of immersion as entering a fictional/represented world, which, according to critics, treats such a world as a kind of space-container and thus evokes something stable and complete – thereby contradicting the processual nature of reading. Moreover, this leads to a privileging of sensuousness, particularly visual perception. Such an approach assumes that inducing aesthetic illusion through text requires more imaginative effort from the recipient than visual or spatial media do (Caracciolo and Kukkonen 2021). Other critiques question the breadth of the term, arguing that we need more fine-grained concepts for different aspects of absorption and engagement (Pettersson 2017), or that illusiveness should be discussed only in connection with certain types of narratives (Richardson 2015).

Although these and other objections certainly carry weight, I want to begin here from the criticism put forward by Emily Troscianko. She challenges the viability of the very concept of aesthetic illusion, and her critique is therefore conceptual in this regard. The main problem, she argues, lies in the fact of mutual affinity between illusion and delusion. Once we describe the recipient's experience in terms of illusion, the objection goes, the whole experience moves dangerously close to misperception, deception, or even fraud. Even everyday English, she notes, shows how close the terms illusion and delusion are. Yet, no one would seriously claim that while we are reading, we succumb to illusion in the sense that we truly believe our imaginings to be real perceptions, or that when watching an action scene, we genuinely think we have found ourselves in the middle of a car chase alongside the hero. What then is the point of calling the experience illusory?

Werner Wolf does not, of course, think that we are fully deceived. As we have seen, an essential component of aesthetic illusion, alongside the feeling of immersion, is the distance that makes aesthetic illusion a pseudo-illusion. Yet it is precisely this manoeuvre that, for Troscianko, constitutes the reason why using the notion of illusion – or pseudo-illusion for that matter – in this context does not make sense: “The term's proprietor remarks that the experience denoted by the term in fact involves non-presence of what the term normally means” (Troscianko 2017,

p. 243). It thus seems that in order to use the notion of illusion in this context at all, we must first negate it or at least substantially weaken it. I want to argue, however, that although such an objection may seem reasonable at first sight, it in fact derives its strength from a certain presumption that has been readily accepted by Troscianko and, to some extent, by Wolf as well, as is shown by his attempt to save the situation by modifying his crucial term. Namely, the objection presumes that the experience of narrative is in no sense a form of delusion and manipulation. But can we really be so sure? It seems to me that Victor Nell's *Lost in a Book* suggests we cannot: the feeling of being absorbed and a certain kind of deception may not be so far apart after all. We find ourselves under an external influence, living somebody else's life within a foreign world. Peter Brooks speaks even more directly about the manipulative – in his words, seductive – power of narratives, warning us against their capacity to absorb and manipulate us all too easily. Precisely because of the power narratives possess, we had better be careful: “We need as listeners and readers to resist a passive narcosis of response” (Brooks 2022, p. 23). I suggest that rather than banish the notion of illusion from the realm of reception, as Troscianko does, one should examine more fully what is actually meant by illusion within these debates. Understanding the concept of illusion more fully would, at least, help clarify what Wolf aims to avoid so cautiously by adding that relativizing prefix pseudo-. Let me now take a closer look at Wolf's own account of what is going on when one is allegedly in the grip of aesthetic illusion.

3. Optical Illusion Model

To describe the absorbing power of aesthetic illusion in progress, Wolf gives us a description of his own experience while watching the blockbuster movie *Day After Tomorrow* by Roland Emmerich.

[A]t first I had a curious kinetic impression of hovering over an Antarctic landscape – in spite of remaining seated in a cinema seat in Graz/Austria. And in the ensuing scene I felt interest, suspense, if not fear, and started to empathize and almost identify with the endangered scientist – and nevertheless I did not feel any urge to come to his rescue myself (Wolf 2013, p. 3).

This description quite aptly illustrates the general claims referred to above. There is the immersive aspect of the experience that leads the recipient directly through the representation

into the represented, portrayed by the feeling of ‘being there.’ There is also the element of distance, insofar as Wolf reportedly does not feel any urge to rescue the protagonist. And finally, there is clear evidence regarding the intended scope of aesthetic illusion, embodied in the enumeration of emotions and responses such as the impression of flying, interest, suspense, fear, and empathy.

In that case, however, it seems legitimate to ask how interest or tension is related to the quasi-perception that we are allegedly afforded through the operation of aesthetic illusion. Without further explanation, we are forced to assume that the relationship between quasi-perceptions and tension resembles that of cause and effect: because the recipient experiences quasi-perceptions, they can not only empathize with the characters but also feel tension about what will happen next in the story. But why should tension – clearly tied to the unfolding of the narrative – be based on the quasi-perceptions of the things represented?

Importantly, this quote illustrates the core of aesthetic illusion consisting of a state of perceiving something – that is, a flat screen inside of a cinema in the city of Graz – while getting the impression of something else – a quasi-feeling of moving through the 3D space. What is crucial here is the fact that such an account seems to have the form of a two-part schema. In short, something seems different from what it, in fact, is (with an obvious proviso that *fact* and *reality* are tricky concepts). This aligns with psychologist A. D. Smith’s definition of illusion as “any perceptual situation in which a physical object is actually perceived, but in which that object perceptually appears other than it really is” (Smith 2002, p. 23). It is, in a manner, quite similar to Akiyoshi Kitaoka’s *Rotating Snakes*. In front of us, there is simply a picture or a flat screen, yet what it yields is an impression of movement. What is at issue here is, of course, the very mechanism on which perceptual – and above all optical – illusions are based.

Now, what would happen if we removed the prefix and reconsidered this situation as a case of illusion proper (e.g. delusion)? Wolf himself offers an example of such a collapse of distance and degeneration of aesthetic illusion into illusion in the common sense of the word. In Book Two, Chapter 26 of Cervantes’s *Don Quixote*, we find an episode in which the protagonist watches a puppet-theatre performance about a damsel in distress. He becomes so absorbed, however, that he decides to intervene physically and proceeds to beat up the puppet enemies (Wolf 2013, p. 14). According to Wolf, Don Quixote is not able to keep his distance, and because of it, he loses a latent awareness of the difference between representation and reality and falls for the illusion

completely. In other words, he misperceives and mistreats the representation for the represented.

In short, such an account displays a pronounced bias toward making sense of aesthetic illusion by adhering quite rigidly to a model of optical illusion. But why should it matter whether the model in question is an optical illusion? There is an important point that needs to be made explicit. Optical illusions seem to require two clearly identified – or even explicitly defined – members of a schematic pair; that is, *what* exactly appears to be *what*. When such a schema is applied to the experience of narrative, we are compelled to construe aesthetic illusion on the basis of a stimulus–response mechanism in which the two parts of the situation are sharply delineated and one is taken for the other in an either–or fashion. In Wolf’s example, this means that the representation is taken for the thing represented. In this light, Wolf’s attempt to ground the recipient’s tension in quasi-perception appears all the more problematic. Most importantly, aesthetic illusion, which was intended to serve as an explanation of the recipient’s overall absorption in a narrative, is thus substantially diminished and fragmented. From this perspective, what we are left with is a series of rather partial, momentary, and ephemeral effects, such as a ‘feeling of hovering’ – something we might call ‘spectacles.’ Rather than accounting for the processual absorption elicited by engagement with narratives, this conception seems instead to privilege, as it were, spectacular effects best achieved by IMAX projections – to which Wolf, after all, explicitly refers (Wolf 2017, 55).

4. Dropping the model?

From this point of view, Troscianko’s concerns about using the term illusion as an explicative concept when considering the experience of narratives seem justifiable. Even with distance, we seem to get too close to misperception when experiencing Wolf’s aesthetic illusion. The point is, however, that the model of optical illusion, upon which the very notion of aesthetic illusion is based, is only a tool. And when it is not useful, there is always an option to drop it and maybe look around for a different one.² Many possibilities present themselves, for example, in the conceptual arc constructed by W. J. T. Mitchell, which connects various forms of illusion:

² Similar attempt involving a search for a different model of illusion upon which an account of illusiveness in reception could be based, is to be found in Stjernberg (2017). There the notion of cognitive illusion or bias is employed as a solution of the Paradox of Fiction.

[I]llusion is something built into the very conditions of sentience, and extends from areas of animal behavior such as camouflage and mimicry right into *trompe-d'oeil*, and ultimately, I want to argue, into the universal structure of ideology or false consciousness. This is illusion as *error*, delusion, or false belief (Mitchell 1990, 77).

In searching for hints of something genuinely different from optic-like illusion, we may not even need to look very far. If Wolf's anecdote about Don Quixote's predicament allegedly illustrates a lack of distance that leads the protagonist to mistake a puppet for a real villain, Marie-Laure Ryan offers a rather different interpretation of Cervantes's novel. I already noted that she invokes a certain state of mind called *Don Quixote Syndrome*, characterized by the inability to distinguish between the textual world and the actual world, and she regards this syndrome as an extreme case of absorption with a strong scent of illusiveness. However, this kind of absorption resembles neither perceptual illusion nor entry into another textual world. As the novel in question has it, Don Quixote lets the inner logic of chivalric romance break loose from the realm into which it belongs and, moreover, approaches his own lived reality through its prism. So, if we were to stick with the spatial metaphor for the moment, it is not that Don Quixote immerses himself in the textual world, but rather that something from this world steps out. True, his condition occasionally leads him to mistake innkeepers for lords and windmills for giants, and such episodes might possibly be explained by the mechanism of Wolf's aesthetic illusion (in its extreme form). In general, however, the essence of the syndrome lies in the fact that Don Quixote is not able (or willing, perhaps) to escape the power of the narratives he loves and finds absorbing. He stays in the grip of illusion all the time, sticking to the idea of knighthood even when the whole real world opposes it, worshipping the credo of poetic justice throughout all his real-life existence. The various episodes of misperceptions and mistreatments can thus be regarded as symptoms of such a general condition. A person suffering from Don Quixote syndrome might as well be described as someone extremely entranced (in Nell's words) or seduced by narrative (as Brooks would have it).

Evidently, when a person so entranced is described as someone who 'falls for an illusion,' the notion at stake is not being employed with the model of optical illusion in mind. I have identified the two-part schema as the conceptual core of optical illusions in general. At first sight, it may appear that this schema still applies here – after all, Ryan does speak of a textual world on the one hand and the actual (real) world on the other. The crucial point, however, is that the relationship between these two components exhibits a markedly different dynamic from that

found in optical illusions. Rather than one replacing the other, the textual imposes itself upon the real, blending with it – just as poetic justice contaminates the protagonist’s idea about how things work – and forming a complex illusion within which Don Quixote lives.

5. Conclusion

These remarks, however tentative and provisional, indicate at least one thing: just because the notion of aesthetic illusion turns out to be in fact limited, this does not necessarily mean that the notion needs to be abandoned *per se*.

Emily Troscianko’s criticism served as an impetus for me. And on this basis I attempted to identify the source of her concerns, which in the end turned out to lie in the fact that Wolf’s notion of (aesthetic) illusion quite strictly follows a model of optical or perceptual illusion and is therefore heavily dependent on a two-part schema in which something appears different from what it actually is. This schema foregrounds a strong imperative to identify its components concretely and thus leads the theorist toward an all-too-literal conception of illusiveness, in which the represented is effectively smuggled in as the representation. Instead of offering a comprehensive and all-encompassing account of the phenomenon of absorption and its role in the reader’s/viewer’s experience, the notion of aesthetic illusion is therefore suited primarily to explaining marginal reception effects that I have nicknamed ‘spectacles.’

By highlighting an interesting example of the Don Quixote Syndrome, I intended to highlight once more the limits of the model of optical and perceptual illusion. The only way to make it function across such a broad field – as absorption and illusiveness within experience of narrative undoubtedly is – is to marginalize or assimilate effects and modes of operation that do not fit. Yet I did not mean to suggest merely that it would be beneficial to look for additional tools and models in order to gain a better understanding of illusiveness and absorption. I also wanted to indicate that the discussion itself already contains forms of illusiveness or distinct facets of absorption that are not based solely on the optical model. And that seems to me to suggest that completely banishing the notion of illusion from the field of study focusing on reader/viewer absorption would mean giving up too much. Moreover, *pace* Troscianko, it seems to me that the very proximity of *illusion* and *delusion* that she worries about is a line of inquiry worth pursuing. And finally, one might agree that the Müller-Lyer illusion is probably not the same

as the Heider-Simmel illusion, let alone the kind of illusion Sigmund Freud refers to when famously reflecting on religion. It might be illuminating in this context, to regard the very notion of illusion rather as an assortment of various contents or sub-concepts, of which optical illusion is only one among many that may be employed when reflecting on the power of narratives to absorb their recipient.

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Anti-Entropic Fields: Art and the Inversion of Time.

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ABSTRACT. *The present paper aims to verify the relevance of the notion of anti-entropy within visual arts and aesthetics, where the term emerges—or is implied—to describe the artwork's metaphorical capacity to counteract the laws of nature, suggesting a possible transcendence of the principle of entropy. Nevertheless, anti-entropy corresponds to a precise scientific definition. This research will verify the relation between the scientific and aesthetic conceptions through a further specification of the distinction between “anti-entropy” and “negentropy”. The key to accessing the concept from a philosophical perspective is to draw on the theories by Bernard Stiegler, alongside recent philosophical inquiries into entropy and energy dissipation. The following discussion will develop this argument through the analysis of the work of three visual artists active since the 1960s: The article considers the body of work of Giovanni Anselmo and Gino De Dominicis, confronted with the already existing theory around Robert Smithson as a dialectic figure for this research. The objective of this study is to elucidate the “anti-entropic” implications of their work, with a particular focus on the paradoxical endeavor to impose a reversal or suspension of the conventional temporal progression, in order to counteract the deterioration of matter.*

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1. Introduction

The principle of entropy, stemming from the second law of thermodynamics and referring to the gradual shift towards disorder and energy loss, has gained increasing significance as an aesthetic subject since the 1960s, particularly after the publication of two pivotal texts: *Entropy and the New Monuments* (1966) by Robert Smithson, and *Entropy and the Arts: An Essay on Disorder and Order* (1971) by Rudolph Arnheim. Over the following decades, various interpretations of the concept have come to reflect an understanding of decay and disorder as essential features of contemporary society, particularly in the context of the intensifying climate crisis marked by the progressive depletion of natural resources (Mussett, 2022). As defined on the website of Tate London: “entropy is the inevitable and steady deterioration of a system or society. The concept is articulated by the Second Law of Thermodynamics (the tendency for all matter and energy in the universe to evolve towards a state of inert uniformity)”.² This conception, involving radical reflections on notions of materiality and time, has been particularly influential in the visual arts field (Lee, 2004; Bretkelley-Chalmers, 2019). Building on this evolving conception, this paper seeks to verify the significance of a secondary notion that emerges from the notion of entropy: that of anti-entropy.

A concept common to both the natural sciences and the humanities, anti-entropy coincides at the same time with an extremely precise and a purely metaphorical meaning. This paper aims to explore the extent to which these two perspectives intersect, representing a preliminary attempt to connect them conceptually and to highlight the relevance of the notion of anti-entropy in the field of aesthetics. It also aims to offer a reconstruction of the main artistic practices and theories that have so far been explicitly linked to the concept. Following an initial exploration of the existing literature, I will develop interpretative hypotheses of works of art through the lens of anti-entropy, while also expanding on the anti-entropic role of art itself.

² <https://www.tate.org.uk/art/art-terms/e/entropy>

2. Origins of the Concept of Anti-Entropy between Science, Philosophy, and the Arts

The first use of the term anti-entropy appears in an unpublished text by Pierre Teilhard de Chardin in 1951, where the author uses it to describe an effect that “draws a portion of matter in the direction of continually higher forms of structurization and centration”.³ Anti-entropy, though, is now widely recognized as a mathematical principle theorized by Francis Bailly and Giuseppe Longo, which envisages a form of creation connected to the biological organization of complex organisms, which does not counterpose the action of entropy but envisions a form of order increasing in parallel with its action. It can be interpreted as the “opposition to disorganization” and is a physical-mathematical explanation of the biological phenomenon of increasing organization (the complexification of organisms) (Bailly and Longo, 2009).

The definition of anti-entropy necessitates a distinction with the concept of negentropy, which originates primarily from the research of Erwin Schrödinger, and could be summarized as “entropy with a negative sign” (Schrödinger, 1944). Negentropy implies that organisms absorb order from their environment, enabling the creation of “order from order”. An example of such a process highlighted by Schrödinger involves the metabolic processes, whereby humans do in fact “reduce entropy”, as living matter locally opposes entropic decay.⁴

From a philosophical perspective, the notion of negentropy – as well as that of anti-entropy – has been explored by philosopher Bernard Stiegler, who contextualizes such reflections by inserting them into the more complex frame of the Anthropocene (Stiegler, 2018).⁵ Stiegler’s work is of particular significance in the translation of such scientific concepts into philosophical ones. He was able to intuit the centrality of the conceptual relationship between entropic forces and the gradual destruction and abuse of natural resources on our planet, evidenced by his definition of the term “Entropocene”.⁶ In a collaborative essay with Maël Montevil, Giuseppe

³ Pierre Teilhard de Chardin, “The Transformation and Continuation in Man of the Mechanism of Evolution” in *Activation of Energy: Enlightening Reflections on Spiritual Energy*, [1951] (Hancourt, 1970).

⁴ The edition that has been taken into consideration is the following: Erwin Schrödinger, *What is Life?*, 14th ed. (Cambridge University Press, 1967).

⁵ Further argumentation could be found in: Rasmus Sandnes Haukedal and Nikolaos Mylonas, *Entropy and Negativity: The Ecological Implications of Dialectics*, Technophany Vol.2 No.2, 2023.

⁶ Stiegler states how “The theory of entropy – deriving from thermodynamics some thirty years after the advent of industrial technology and the beginning of the organological revolution that lies at the origin of the Anthropocene, that is, after the steam engine – redefines the question of value, given that the relation

Longo, Ana Soto, and Carlos Sonnenschein, Stiegler explores the intricacies of translating such concepts, interweaving them with the disciplines of information theory, economic analysis, and philosophy.⁷ Here, anti-entropy finds its humanistic equivalent in the notion of *anti-anthropology*, defined as the extension of anti-entropy to social organizations.⁸ The employment of the term is explained by the necessity of curtailing the deleterious effects of technology towards the evolution of human subjectivities, by contrasting it with local actions of *noesis* – extensions of human “work” as the invention of a novel configuration of senses – which encompasses artistic activities.⁹

The authors of the essay *Anthropocène, Exosomatisation et Néguentropie* (2020) establish the foundational point of intersection between the scientific and humanistic conceptions of anti-entropy. However, this intersection does not enter the realm of art theory and history, opening the possibility of proposing an interpretation of their intersection within a broad philosophical framework. But what happens if we explore the literature of the visual arts in order to seek an alternative perspective, starting from works of art and their subsequent interpretations?

A point of departure for such an investigation could be found in the literature on Robert Smithson’s work, which has already been mentioned for its central role in demonstrating the influence of entropy in the arts. In his text *Entropy and the New Monuments*, Smithson reflects on how “the awareness of the ultimate collapse of both mechanical and electrical technology has motivated these artists to build their monuments to or against entropy”.¹⁰ The term “against entropy” appears to imply a conception of time and progress as something that could be potentially reversed. As highlighted by the philosopher Olivier Schefer, Robert Smithson “opposes to the entropic ravages [...] the countermodel of a time which is together timeless and eternal”.¹¹ In this context, the opposition to entropy activates and unsettles the central notion of time, revealing how a “negative” relation to entropy within the field enters, above all,

entropy/negentropy is really the question of life par excellence. It is with respect to such perspectives that we must think, organologically and pharmacologically, what we should in fact call the Entropocene and neganthropology”, Bernard Stiegler, *The Neganthropocene* (Open Humanities Press, 2018).

⁷ Maël Montévil, Bernard Stiegler, Giuseppe Longo, Ana Soto, Carlos Sonnenschein. “Anthropocène, Exosomatisation et Néguentropie”, in Bernard Stiegler, *Bifurquer Il n’y a pas d’alternative*, (Les Liens Qui Libèrent, 2020).

⁸ Ibid.

⁹ Ibid.

¹⁰ Robert Smithson, “Entropy and the New Monuments”, in *Artforum*, June 1966.

¹¹ Olivier Schefer, *Sur Robert Smithson. Variations dialectiques* (La Lettre volée, 2021), 192. Translated by the author, original version: “en opposant aux ravages entropiques [...] le contre-modèle d’un temps intemporel et éternel”.

a paradoxical dimension—one that departs from philosophical and scientific rigor and instead takes root in the visionary perspective enabled by its own language. In fact, as we will subsequently observe, the term rather emerges within the arts to describe the artwork's metaphorical capacity to counteract the laws of nature, suggesting its possible transcendence of the principle of entropy (Rewakowicz, 2014). It is evident that Robert Smithson has been profoundly influenced by science fiction, as this counter-entropy seems to rely on fictional and metaphysical tenets, including the inversion of the arrow of time, the cessation of energy dispersion, and the ultimate triumph over mortality. The critical reading of the selected artworks aims to enhance their potential perspectives, offering possible rereading of the intersections of art, energy, and temporality in addressing contemporary challenges.

3. Anti-Entropy at the Intersection with Visual Arts: The Case Study of Gino De Dominicis (1947-98) and a Parallel with Robert Smithson (1935-73)

Among the artists whose body of work constantly and poetically struggles with the defeat of the second law of thermodynamics, Italian artist Gino De Dominicis stands at the forefront. In his oeuvre, the artist offers unconventional perspectives permeated with a profound sense of spirituality, which develops in parallel with an obsession with immortality. These concerns are exemplified in his *Letter on Immortality* (1970), which starts as follows: “Dear...I think that things do not exist [...] to truly exist, things should be eternal, immortal. Only then would they not be mere verifications of certain possibilities, but truly things. In fact, by constantly changing, they are used by ‘nature’, which verifies all the possibilities at its disposal through their transformations”.¹² The distinction between the “thing” as existing, or as being a mere device of nature, is for the artist the condition of its immutability, the capacity of escaping its transformation and, consequently, its decay. Entropy is therefore defined as the property of non-existing things, namely, the force that corrupts them.

Among the artworks more explicitly oriented towards the perspective of the defeat of entropy, the artwork-event *Cocktail party to celebrate the overcoming of the second principle of thermodynamics* (1972) is particularly noteworthy. The event formed part of the project *Roma, Mappa 72*, a series of

¹² Gino De Dominicis, *Letter on Immortality*, 1970.

events taking place at Palazzo Taverna in Rome curated by Achille Bonito Oliva, within the Incontri Internazionali d'Arte directed by Graziella Lonardi Buontempo. Moved by an entirely paradoxical intent, the event consisted of a genuine cocktail party, marked by the cutting of a cake, which bore the date 2085.¹³

But what is particularly meaningful within the context of De Dominicis' production is a work that directly addresses anti-entropy, namely *Anti-Entropic Chandelier* (1980), which was exhibited at Galleria Pio Monti in Rome. The following excerpt, taken from the critical catalogue on the artist, describes the genesis of the piece, while providing an insight into the cultural context of Rome in the 1980s:

On May 16, 1980, the opening of Gino de Dominicis' solo exhibition was announced at the Galleria Pio Monti in Rome, on Via Principessa Clotilde. The artist asked for his canvases, brushes, and paints to be brought to the gallery, where he had chosen to remain locked away for several days. Everyone expected a painting extravaganza. He remained locked in the gallery alone until late in the evening; only around 10 p.m. did he allow the public to enter, who found themselves facing an empty space dominated by a single work consisting of all the canvases he had painted, destroyed, and assembled into a solid form hanging from the ceiling like a chandelier. He called this work Anti-Entropic Chandelier because it stored all the energy that the artist had poured into the painted canvases and concentrated energy, conserving it rather than dispersing it.¹⁴

It can be posited that anti-entropy is here indicative of an interruption of the energy flux and, consequently, of the dissipation of matter, through the prevention of light dispersion, which becomes the material and visual manifestation of the energy itself. From a closer examination, one could read this work by De Dominicis as a concrete counterpart to the anti-anthropic function described by Stiegler, in which the local manifestation—the artwork—appears capable of generating a new order that counters the broader tendency toward disorder, and ultimately toward entropy itself, as he noted in his Letter on Immortality. As Giulio di Gropello states:

According to Gino, art is one of the vehicles that can enable humans to overcome their limitations: the limitations of the laws of nature. The anti-entropic character is present

¹³ *Incontri 1972* (Arnoldo Mondadori Editore, 1979. Quaderno n. 3 del Centro d'Informazione Alternativa), Centro Archivi MAXXI Arte, Fondo Incontri Internazionali d'Arte, AIIA/AT/AI/008.

¹⁴ Italo Tomassoni, *Gino De Dominicis. Catalogo ragionato* (Skira, 2011), p. 307.

in all works: according to Gino, a work of art is only such when the energy used to create it is less than the energy that the work of art gives back to you. And it is obvious that the final judge of this will be time. In my opinion, almost all artists struggle on this front, even if only Gino has clearly made this his manifesto.¹⁵

This excerpt offers a precise understanding of how, even when viewed from a strictly metaphorical standpoint, the role of energy was key to Gino De Dominicis and remained anchored in something physical and measurable: the action of the artist and the actual energy expended in producing the artwork. Within this line of reasoning, matter remains essential, allowing us to ground an abstract discourse in a concrete form and enabling us to consider the issue of energy exhaustion from another angle – that of ruin. This perspective appears particularly relevant in the study of entropy, where once again a parallel with the work of Robert Smithson could provide a valuable critical point of comparison. Olivier Schefer discusses how the notion of “ruin in reverse” in Smithson “is inseparable from the concept of entropy, which refers not only to the inevitable decline of all things, as described by the second law of thermodynamics, to a zero degree of sensitivity, but also, and perhaps above all, to his conception of time as a process of reversal”.¹⁶ From this perspective, when De Dominicis’ and Smithson’s work is considered together, the role of ruins and destruction appears to be conceived in opposite senses. De Dominicis’ ruin involves the sacrifice of the work as a means to generate an energetic field that stores energy and avoids its dispersion. Smithson, on the other hand, seems to envisage the dispersion as the condition for the energy to flow, where there is no actual interruption of time; rather, the flow of time extends in two directions, either forwards or backwards. The concept of deep time, referring to a geological dimension, is central to Smithson’s work as it attempts to align human action, which is carried out arbitrarily and over a limited time, with natural forces that rely on the unpredictability of atmospheric events and the long timescales of their sedimentation.

¹⁵ Laura Cherubini and Giulio di Gropello, “He Systematically Destroyed any Proof that any Particular Work of Art Had Been Made by Him”, in *Flash Art*, May 16, 2017.

¹⁶ Olivier Schefer, “Ruines à l'envers Robert Smithson et quelques fantômes contemporains”, in Olivier Schefer, Miguel Egaña, *Esthétique des ruines: Poïétique de la destruction*, Presses Universitaires de Rennes, 2015, p. 44.

Translated by the author, original version: “L'idée de ruine à l'envers [...] s'avère donc indissociable du concept d'entropie, lequel renvoie non seulement à l'inéluctable déclin de toutes choses, propre à la seconde loi de la thermodynamique, à un degré zéro de la sensibilité, mais aussi, et peut-être avant tout, à sa conception du temps comme processus d'inversion”.

4. Inverting the Geological Time: the work of Giovanni Anselmo (1934-2023)

This vision of geological time is best realized through the use of natural elements, particularly minerals, which have accumulated through sedimentation over a long period of time and which ontologically represent the resulting outcomes of a distant past. Among these, we can find a work by Giovanni Anselmo, one of the leading Arte Povera artists: *Trecento Milioni di Anni* (1969), part of the collection of the Musée d'Art Moderne de la Ville de Paris. The sculptural piece consists of a block of anthracite juxtaposed with a light bulb, a metal sheet, and a piece of metal wire that supports the lamp, with the metal elements fastened to the lithic block. The artwork poetically reflects on the possibility—or rather the impossibility—of inverting the process of geological sedimentation through the action of the energy produced by the light of the small lamp. According to the artist's intentions, the energy produced by the lamp reverses the sedimentation process and returns the block of anthracite to its original form. As the artist states, that the block “was once a plant or a reptile, or in any case something organic and animate, before the transformations of the Earth's crust buried many aspects of life and also removed them from the light”.¹⁷ In this way, he continues, it “cancels out the time that has passed between us and what, precisely, this material could have been then...”¹⁸. Such an intuition fits well with the “paradoxical” anti-entropic interpretation emerging within inquiry into the visual arts. Moreover, it also appears to evoke the Freudian pull from the organic to the inorganic, commonly known as the death drive. Further interpretation of the work within this framework reinforces the proposed reading, where the anti-entropic function is closely linked to the ability to interrupt, or rather restore, the flow of time. As in *Anti-Entropic Chandelier* by Gino De Dominicis, the action of light manifests the vital energy that redirects the entropic orientation of the piece. While in Anselmo, the light is a utopian force that opposes the evolution towards the inorganic, in De Dominicis it becomes the manifestation of the flow of life itself, interrupted by the resistance of the destroyed canvas, which stands as a metaphor for contemporary ruins.

¹⁷ Suzanne Pagé and Daniel Soutif, *Giovanni Anselmo*, [exposition, 27 juin-22 septembre 1985, A.R.C, Musée d'art moderne de la Ville de Paris], (Paris: Association Paris-Musées, 1985), p. 7.

¹⁸ Ibid.

5. Conclusions

The article set out to verify possible intersections between scientific, philosophical, and artistic conceptions of anti-entropy, while also clarifying their peculiarities in order to provide a preliminary survey of the main literature on the topic. Examining these intersections seems particularly valuable as a means of reflecting on how the interdisciplinary perspective provides new tools for interpretation, allowing for a different reading of already established and widely debated authors and artists. This approach proves particularly productive when considering energetic processes and their transformations, a topic which is increasingly compelling not only for artistic research, but also for addressing to the socio-cultural challenges of our time.

Methodologically, rather than forcing unlikely associations, the article opted to propose focused studies on the different fields, highlighting pre-existing connections where they emerged (Montevil, Stiegler, Longo, Soto, Sonnenschein, 2020) and acknowledging philological grounding to articulate further hypotheses, as in the case of works by Gino De Dominicis and Giovanni Anselmo. Though the anti-entropic properties of the works by De Dominicis have been thoughtfully discussed by authors such as Achille Bonito Oliva, Laura Cherubini, and Giulio di Gropello, they haven't been contextualized in an interdisciplinary reflection. As such, the proposed interpretation of Anselmo's work presented here is a new contribution.

The article also reiterates the importance of recognizing the specificity of the artistic field: namely, the possibility of setting aside strictly philological interpretations in favor of intuition, as well as acknowledging the formal and poetic autonomy of the artwork, as the essential precondition for any rigorous interdisciplinary exploration.

In conclusion, although the proposed analysis has focused on already historicized artists, the interdisciplinary perspective outlined could be further expanded through research on living artists, given the growing entanglement of art, technology, and science today. This line of inquiry will be further developed in studies stemming from the present one, with the aim of better highlighting the social and political implications of this field, especially in light of the environmental crisis.

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