ARTICOLO

Technical Existence as a Prerequisite for a Political Aesthetics

Information Aesthetics and Its Role in Social and Political Philosophy

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L'estetica di Max Bense prende forma a partire dalla consapevolezza che la tecnica non costituisce più un semplice strumento accessorio, ma una forza strutturante che definisce la realtà moderna. In questa prospettiva, la tecnica non è un attributo dell'individuo, bensì una condizione costitutiva della società nel suo insieme. L'arte, allora, diventa tanto un indicatore dei processi di sviluppo sociale quanto uno spazio critico in cui si riflettono e si mettono in scena le illusioni e le disillusioni materiali generate da tali processi. Questo articolo si propone di dimostrare come l'Estetica Informazionale di Max Bense costituisca un quadro filosofico non solo tecnico, ma anche politico e sociale. L'obiettivo è di evidenziare come i temi della civiltà, della società e del ruolo della tecnica siano centrali nell'approccio estetico fondato da Max Bense – in particolare in relazione all'opera d'arte – che egli considera essenziale nel processo di civilizzazione.

Max Bense's aesthetics originates from an acute awareness of a world where technical progress is no longer a mere accessory but a force that permeates our society. Technique is conceived as a structural dimension of society at large, rather than an attribute of the individual, while art functions both as a marker of societal development and as a realm where material illusion and disillusion are articulated. This article aims to demonstrate how Max Bense's Information Aesthetics constitutes a philosophical framework that is not only technical but also political and social. We seek to highlight how the themes of civilization, society, and the role of technique are central to the aesthetic approach founded by Max Bense – particularly in relation to the artwork – which he considers essential to the process of civilization.

Parole chiave: Estetica Informazionale, Esistenza Tecnica, Civilizzazione
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1. Introduction

The goal of this article is to demonstrate that Information Aesthetics – founded by Bense in the immediate postwar period – does not advocate for a conception of art as a wholly autonomous sphere, detached from politics and society, as many have interpreted it. Instead, we show how Bense viewed art as necessarily influenced by – and actively shaping – the social and political dimensions of its context.

In 1949, Max Bense published an article titled *Technische Existenz*, in which he expressed consciousness of the imminent and contemporary societal transformations of the time. Writing shortly after the end of World War II, Bense confronted a society – German society in particular – dealing with the consequences of war, which profoundly altered human's perspectives.

Bense remained in Germany during the war and never explicitly opposed the Nazi regime, though he never openly endorsed its ideology either. Alexandra Skowronski describes his approach as a *Rhetorik der strategischen Offenheit* (rhetoric of strategic openness), a form of intellectual resistance to the Nazi regime that avoided explicit opposition. For instance, Skowronski cites an extract from *Die abendländische Leidenschaft oder Zur Kritik der Existenz* in which Bense criticises the anti-intellectual propaganda by the Nazi regime through an implicit allusion to the National Socialist thinker Ernst Krieck[1].

Indeed – as a proponent of rationalism and intellectualism – Bense could not align himself with the anti-intellectual, irrational, and mystic tendencies characteristic of National Socialism.

Skowronski also reports that his style of writing has been described as *verdecktes Schreiben* (covert writing), but she strongly criticizes this definition. Nevertheless, Bense's rhetoric allowed him to evade the regime's censorship while enabling his ideas to be understood by a select circle of intellectuals.

This brief digression into Bense's political stance during the National Socialist regime helps frame the relationship between his aesthetic philosophy and political and social thought. At first glance, Bense might seem indifferent or even tacitly supportive of the regime due to his lack of open opposition. However, Skowronski's analysis of early works like *Die abendländische Leidenschaft oder Zur Kritik der Existenz* suggests that he not only engaged with political issues but also opposed the regime.[2]

While these premises suggest a connection between Bense's thought and politics, we aim to show that this link is not solely tied to his historical context but is intrinsic to his philosophy. Max Bense's work is not purely aesthetic; connections to political and social aspects are evident from his earliest writings. As we will see – with the end of WWII and the rise of a free society – references to politics and society in his work became increasingly explicit.

With the omnipresent scars of the Second World War not half a decade old, Bense stakes a claim about the role of intellectuals in the betterment of a shattered world, addressing them with an ethical imperative: find their way to a public sphere and establish a discourse of sincerity and accountability. To be an intellectual in Bense's view means to have an audience; to have an audience is, for an intellectual, to be free[3].

One of the key elements that connects art to society – according to Max Bense – is technique. In *Technische Existenz*, Bense argues that technique concerns us entirely because it permeates and shapes the society in which we live, think, and create. He describes technique as a "reality within/between reality," but also as an irreversible process.

Bense describes it as a process, because technique is intrinsically temporal and dynamic, always oriented toward refinement, and thus also irreversible. It cannot become static, as becoming static would undermine its very identity.

Humanity itself cannot escape technical existence, both because the process is already underway and – by definition – cannot become static, and because the process is nothing but the projection of human existence itself, as Bense explains:

> In diesem Prozeß der unermüdlichen Perfektion der technischen Welt lebt, hungert, friert, dürstet, argwöhnt, sinnt und hofft der Mensch, absorbiert von einem Sein, das er selbst hervorbrachte und weiter hervorbringen wird und aus dessen Dasein er nicht heraus kann, weil dieses Dasein die Projektion seines eigenen Daseins in die Möglichkeiten der Materie darstellt.[4]

What is particularly evident from Bense's article is that his worldview – which recognizes the world as one undergoing evident technical evolution – is neither pessimistic nor catastrophic. On the contrary, it is pragmatic and even optimistic. Bense approaches technology with an analytical mindset that allows him to grasp its crucial aspects, namely that its nature is not only instrumental but also creative and generative. This perspective – which he elaborates in his aesthetics – also enables him to identify in technology the premises for a transformation that will be both individual and societal. His approach is thus free from the preconceptions and fears characteristic of the irrationalist and mysticist attitudes prevalent at the time.

Bense describes technique as something that shakes and transforms us, and as a force whose relevance increases daily but for which we still lack an adequate description. For this reason, he decides to delve deeper into its features and themes, fully aware that the future world will be a technical world, that art will become digital art, and that society itself will evolve into a technical society.[5]

Moreover, it is also evident from *Technische Existenz* that Bense was both knowledgeable about and interested in Marx's philosophy, particularly in Marx's analysis of the technical process within societal development. Bense identifies distinct phases in the realization of technical existence and observes that – at the conclusion

of the mechanical phase – with the advent of the thermodynamic and electrodynamic phases, sociological, ethical, and political concerns emerge within technical phenomena. These concerns – he denotes – are already articulated in Marx's class theory of historical materialism.
Bense recognizes in technology the potential to create a classless society where the state would no longer be necessary, and that the technical consciousness arising from the now-established technical existence will no longer remain exclusively mathematical, aesthetic, and rational; instead, it will inevitably evolve into a social, political, and militant consciousness.

> Es ist auffällig, daß mit dem Zurückweichen des mechanischen Stadiums der technischen Existenz und mit der Heraufkunft des thermodynamischen und elektrodynamischen Zeitalters der Technik soziologische, ökonomische, ethische und politische Interessen am technischen Phänomen erwachen, deren Sammelbecken die Klassentheorie von Karl Marx, der historische Materialismus, darstellt. In seinen Untersuchungen, die früh, allzu früh zur Ideologie erstarrten, wird technische Existenz nicht mehr als Existenz eines Individuums, sondern als Existenz der Gesellschaft, der Klasse, der Masse verstanden. Das technische Stadium erkennt, daß es ein Zeitalter geben wird, in dem die Gesellschaft eine klassenlose Gesellschaft und in dem der Staat ein absterbender Staat sein wird.[6]

Also in this passage from his 1949 article, Bense outlines a connection between aesthetics – understood as necessarily technical – and politics. This demonstrates that his conception of aesthetics is – by its very nature – political. Indeed, it takes shape through the development of a technical consciousness, which facilitates its expansion and its eventual transformation into a social, political, and even revolutionary force.

2. Information Aesthetics

The publication of *Statistische Graphik* by Georg Nees in 1964 marked the foundation of the *Stuttgart Schule*, along with Information Aesthetics[7]. This aesthetic framework is grounded in the theory of information and communication, semiotic theories, and an overall mathematical and physical approach to the study of art.
The necessity of founding a modern aesthetics was recognized by both Max Bense and Abraham Moles – as co-founder of Information Aesthetics – in response to the observation of a world – both artistic and non-artistic – increasingly oriented towards technique and technology, especially digital.
This rational spirit – inspired by the scientific method they acquired in their scientific and technical studies – emerged in response not only to aesthetic needs, such as the introduction of digital technology into artistic practices for the first time, but also to intellectual pressures. As noted in the introduction, these demands called for a philosophical response to a European society that – at the time – had glorified irrationalism and mysticism at the expense of rational and scientific methods.

Another fundamental aspect to consider in understanding the emergence of Information Aesthetics is its practical – as well as theoretical – nature. From the outset, Max Bense and Abraham Moles actively collaborated with artists and scholars from various disciplines. This engagement enabled them to cultivate a heightened sensitivity to an artistic world undergoing profound evolution. The intrinsic interdisciplinarity of Bense and Moles' method is undoubtedly the key to studying and understanding their Information Aesthetics.

Through this approach, they demonstrated a profound understanding of the complexity of a newly emerging reality in which different fields were interconnected. By stating that aesthetics cannot be confined to aesthetic or artistic methods and language but must also draw on mathematical, physical, and semiotic knowledge, they claim that it is crucial to understand that the interrelation between these domains is real and existent. This interrelation reflects a new materiality, a “second reality” – as Bense defines it in *Technische Existenz* – that merges with our traditional understanding of the world, reshaping how we perceive and engage with it. Recognizing this shift underscores the need for theoretical tools capable of addressing this layered and interconnected reality.

Information Aesthetics is primarily grounded in knowledge derived from the study of information, as advanced by scholars and theorists such as Shannon and Wiener. Their work enabled Bense and Moles to interpret the world as a network of communications, languages, and relationships. This approach necessarily requires an examination of the medium through which these relationships are formed – the sign – and thus the study of semiotics becomes indispensable. In fact, both Bense and Moles were interested in semiotic studies, especially those by Morris and Peirce.

Furthermore, Bense and Moles emphasized that wherever communication occurs it necessarily takes place within a society, and that it inherently influences and shapes the society in which it unfolds.

The two authors place at the centre of their aesthetic inquiry not only the work of art – a necessarily human creation – but also the human being – whether artist or art consumer – understood as a nexus of relationships and communications occurring within a broader relational context. Thus, the human role emerges as crucial, analysed not merely in its capacity for creation or perception, but in its continuous engagement and relationship with the broader context of the society.

In particular, Moles emphasizes that the human being occupies a key role in the scientific study of the world, when considered through the lens of communication. The dialectic highlighted by Moles is one of action-communication, arising from human interactions facilitated by various mediums. This dialectic – he argues – must be analysed using the tools provided by the human sciences, such as psychology, sociology, and aesthetics.

The central focus on the dialectic between communication and action in Moles' studies already reveals an early acknowledgment of the social character and

functions inherent in communication. Information Aesthetics embraces the awareness of the necessity to integrate concepts developed by communication science in response to the ongoing technological revolution. Accordingly, it combines aesthetics with mathematical and physical theories capable of analysing contemporaneous communicative phenomena.[8]

This integration – according to both authors – requires not only an understanding of mathematical and physical theories but also insights from psychology and sociology, enabling a comprehensive grasp of communication and its impact on both individuals and society.

This interdisciplinary approach is a shared characteristic of Moles and Bense. Both philosophers, as well as physicists and engineers, recognized interdisciplinarity as an essential prerequisite for interpreting the contemporary artistic landscape. By integrating mathematical and physical approaches – inspired primarily by their background in quantum studies – they acknowledged the necessity of expanding the tools of aesthetics to address a world undergoing continuous technical evolution.

Starting from the premises of a post-Hegelian aesthetics, which emphasizes artistic beauty and human creation, Bense – in his *Aesthetica* – integrates traditional elements along with innovative ones. This synthesis enables him to develop an aesthetic approach that is rational, if not even scientific, and analytical.

First, Information Aesthetics begins by redefining traditional key concepts of aesthetics, such as object, aesthetic pleasure, and perception, and then progresses toward the exploration of more specific and new concepts within the aesthetic field, including message, repertoire, transmission, and, most notably, information.

Information emerges as the central concept underpinning the aesthetic inquiry. This notion integrates naturally with the aesthetic framework developed by the two authors, as it is simultaneously a physical and a cognitive phenomenon. Information speaks to us of measurement and quantifiable originality while also involving reflection on objects and, by extension, relationships.

Moreover, the notion of relationships becomes even more central when information is elevated to the status of an aesthetic concept. This transition necessitates engaging with the semiotic process, an interpretative mechanism that underscores the significance of relationships.

In the framework of Information Aesthetics, relationships are indispensable, as they drive the analysis of both informational exchanges and semiotic interactions. Indeed, the very act of interpreting symbols presupposes an ongoing exchange of information between the interpreting subject and the interpreted object. In this light, relationships are not merely a framework but the essential mechanism through which both meaning and communication are constructed and perceived.

Concerning the aforementioned concept of information and its application in redefining traditional aesthetic concepts, we observe how Bense employs it to redefine the very notion of a work of art. According to Bense, artworks are defined as

such when they achieve a certain degree of order – moving toward improbability – thereby evidencing their high informational content. For Bense, a work of art is information made manifest.

Consequently, information becomes a foundational concept for the new aesthetics, encompassing a range of characteristics inherent to it. For instance, it can be approached mathematically, but it is also a social element, inherently tied to relationships as dynamic processes.

It is also significant to note that Bense and Moles distinguish between semantic information and aesthetic information. They describe semantic information as logical, structured, articulable, and translatable, while aesthetic information is fundamentally untranslatable. These two types of information differ not only in their intrinsic nature but also – and perhaps more importantly – in their effects. First, semantic information is oriented toward the future and action, relying on elements statistically shared by all humans (the sociocultural matrix). Second, aesthetic information addresses emotional states and draws from a repertoire shared by a more limited group.

Despite these distinctions, the two forms of information are never entirely separate. The transition from semantic information to aesthetic information occurs through a transcending of the former, moving toward the unpredictability inherent in the latter. Moles refers to this process of transcendence when he characterizes the work of art as *submerging*, highlighting its capacity to transcend and transform.[9]

This nature of the artwork brings with it the concept of *co-reality*, which Bense defines in his *Aesthetica* as the essential mode of being characteristic of art. The notion of *co-reality* is both modern, drawing inspiration from Becker's concept of *co-necessity*—and Hegelian, as it reflects the semblance quality essential in art. *Co-reality* serves as the correlate of the aesthetic state encapsulated by the concept of beauty. In this sense, *co-reality* is the condition that allows art to transcend representation and become an autonomous, yet interconnected, mode of existence. Thus, to grasp the beauty of a work of art, one must investigate its mode of *co-reality*.

The conceptualization of the artwork prior to its realization by the artist is not directly linked to the artwork itself, but rather to the means through which, combined with the artist's action, beauty can be brought into being. In Bense's aesthetic framework, there is no pre-existing representation of beauty, not even an imagined one. Beauty exists exclusively in its production and, subsequently, in its perception. Thus, it is the artist, through their creative act, who holds the power to produce beauty.

The concept of beauty in Information Aesthetics is also what enables the artwork to transcend and surpass reality, granting it the capacity to express a distinct mode of existence. Beauty thus facilitates *co-reality*, as it allows the artwork to exist not only as real but also as *co-real*.

Another significant feature of art analysed by Information Aesthetics, through the lens of information theory, is the relationship between comprehension and the need

for originality in the perception of the artwork. Indeed, a viewer engaging with the artwork must be able to comprehend it to appreciate its innovative aspects.
However, the aim of the artwork to achieve the highest possible level of transmittable information conflicts with the necessity for the viewer to understand, at least partially, the information being conveyed. Human beings are constrained by a limit in their capacity for apperception, which prevents them from processing information beyond a certain threshold. This limitation stands in contrast to the aesthetic requirement for the artwork to be as informative as possible.
Therefore, what must be balanced in the artwork is the relationship between a high level of information content and the viewer's capacity for apperception. The information within an artwork should strive to be maximal, yet it must remain sufficiently low to be comprehensible – and thus perceivable – by the viewer engaging with the artwork.
These are just a few insights into the elaborate work of analysis of the artwork and the study of aesthetic methodology that Information Aesthetics has started. In the next section, we will focus on how Max Bense – through and beside his aesthetic studies – explored the relationships between man, spirit, and technology.

3. Man and technics

In *Technische Existenz* (1949), Bense examines the relationship between humanity, more specifically, the human intellect or *Geist* – as he frequently terms it – and technology. He describes a world in constant technical evolution, a process that offers no possibility of regression but instead promises constant progression. This process profoundly impacts our *Geist* (understood as the fusion of heart and mind). Technology – according to Bense – eludes our direct control, yet paradoxically, we ourselves are technology.
The relationship between humans and technology is characterized as both inevitable and mutually dependent. While technology escapes our control and its process is irreversible, it is simultaneously a product of human intellect, and thus only the *Geist* can potentially dominate it. Bense argues that the form of intellect capable of controlling technology cannot be searched in myth or art, instead it must reside in pure theory. For the first time – he asserts – the *geistige Mensch* – the intellectual human being – exists in a context where life without theory is impossible.
This reality is both necessary and unavoidable; in fact, our technical existence is a projection of human existence itself. For this reason, humanity is intrinsically bound to the technology, which it simultaneously creates and is influenced by, which it controls, and is sometimes controlled by. Technology surrounds our existence and embodies our intelligence, our *Geist*. Recognizing this reality enables us to understand

the ontology of the world and demands the rational creation of a theory capable of describing and conceptualizing technical existence.
Moreover, the technical world is sustained by our intellect and our existence within it as functional entities. We "operate" within it, and in modern society, our existence is fundamentally functional. Here too, the relationship between humanity and technology is characterized by mutual dependence: we serve as functions of technology, while technology, in turn, serves our needs.

> Ich sagte ja schon, daß die technische Welt nur Bestand haben kann, wenn der freie, einsame, schöpferische Mensch noch eine Realität besitzt, weil gerade die technische Welt sich durch die Schöpfungen der Intelligenz erhält. Aber dieser geistige Mensch der Freiheit, der Einsamkeit und der Schöpfung ist kein Luxus, sondern Generator, notwendiges Lager der unablässigen Umdrehung aller Dinge. Ich will es so aussprechen: man existiert nicht in der technischen Welt, indem man sich dem ästhetischen, ethischen oder religiösen Stadium hingibt, man existiert in der technischen Welt dadurch, daß man *funktioniert*, daß man in *Funktion* ist, daß man eine Funktion darstellt.[10]

Approximately twenty years after writing *Technische Existenz*, Bense authored an essay titled *Auto und Information. Das Ich, das Auto und die Technik*. In this work, he employs a quasi-phenomenological method to examine the distinction between having a self and being a self, as well as the delicate edge separating the human self from the machine self. To illustrate this, Bense focuses on the automobile and the act of driving it.
Bense describes the automobile as a *transclassical machine*, one that processes data and produces communication but also performs the functions of a classical machine, which are generating energy and executing tasks. He asserts also that an automobile possesses a self but is not a self. The self it possesses is that of the driver, who provides the data the car processes (the driver's movements and actions, which the vehicle transforms into motion).
Therefore, the automobile moves the self it possesses, that is the driver. However, it does not merely transport the driver's self but also carries its reflection, its thought. The self follows the car in its motion, aligning the thinking being with the driving being. Yet, during the act of driving, the driving self begins to function automatically, progressively detaching from the thinking self and creating the illusion that the action is occurring independently, as if autonomously.
At this point, Bense highlights that consciousness becomes – in principle – placeless and insubstantial, instead manifesting as a function. This leads to the surreal convergence of self and automobile, merging into a surreal automaton where the boundaries between the two grow increasingly indistinct and difficult to delineate.
Then, what emerges is a new form of existence, that is a perfect human-machine symbiosis, composed of a machine resembling a consciousness or a car resembling a self. By slowing the car’s speed, the self regains control over its dual existence as both

thinker and driver. However, according to Bense, the act of driving has already compromised – or perhaps demolished – the inherent stability of the thinking self.[11]
Bense identifies technical existence as a new form of human life, drawing a parallel to the experience of a tourist, whose consciousness lacks a fixed locus. This analogy highlights the fluid relationship between body and place, particularly in the context of the automobile. His analysis goes beyond ontological or phenomenological concerns, adopting a sociological perspective to examine how humans and automobiles both "inhabit" urban spaces. By placing human and technical existence on the same analytical level, Bense highlights the integration of cars – or machines in general terms – into the social dynamics of cities, subverting traditional notions of stable human habitation. He argues that the automobile, as a product of human intellect, embodies human intelligence and forms an active, dynamic relationship with it, participating in the evolving interplay between humans and technology.
Through these texts we could understand that everything is interconnected, yet this interconnection does not marginalize humanity. On the contrary, it reinforces the centrality of human beings, who serve as the key node binding together the car and the city – and more broadly – machines and society.
Within a technical society, humans achieve the fullest realization of their potential. This environment allows them to become the strongest entities because they are indispensable to the coexistence and integration of the various elements that constitute such a society, which is a role they cannot assume in a natural, pre-technical environment.
What emerges from these two works, which are but examples of Max Bense's engagement with the relationship between humanity and technology, is his profound interest in analysing a developing technical society. Additionally, Bense demonstrates a clear consciousness of the necessity of developing new methodologies and tools capable of addressing the complexities of a "modern" world. Equally evident is his recognition of the crucial role technology plays in shaping society, an aspect he examines from a theoretical perspective while maintaining an acute awareness of the social and political dimensions that such analyses inevitably involve.
In the following section, we aim to demonstrate the profound interconnectedness Bense identifies among sociology, politics, and aesthetics. This connection is grounded in his theoretical understanding of the relationship between humanity and technology, which serves as the basis of Information Aesthetics.

4. Aesthetics and civilization

In his aesthetic inquiry, Bense reflects on whether – with the advent of new technologies and the increasing prevalence of digital art – it is still possible to speak of art in the traditional sense. The answer is evident in his establishment of a modern

aesthetics, which underlines the necessity for philosophy to adopt a new approach to studying art. This new approach must be capable of recognizing and describing art through updated criteria and utilizing tools and concepts that grasp its evolving nature.

However, Bense offers another response, rooted in the quintessentially Hegelian question of the possible existence of art within civilization. He argues that art is inextricably tied to the concepts of civilization and progress. Indeed, as a creative act, a work of art reflects the evolution of a civilization, embodying the progress and innovative motivation that characterize its drive toward advancement.

Bense argues that automation and innovation – much like technique and information discussed in the introductory paragraphs – represent partial processes within civilization, capable of both excluding and complementing one another. The two ideal outcomes of these processes are science and art, which emerge as the driving forces behind societal progress and the advancement of civilization, operating within a dialectical relationship.

The process of civilization advances through art by generating information and communication, which express social and cultural dynamism and innovation. In doing so, art inherently limits automation, the other partial process of civilization. Within this dialectical framework that forces progress and civilization, art serves as a source of innovation and information, reaffirming its unpredictable nature.

Furthermore, as aesthetic information, art cannot be the result of deduction or a system capable of predicting its creation. This distinction separates art from a mere technical product, such as a tool or a non-creative machine. This capacity for innovation enables art to contribute to the advancement of civilization while positioning its existence in contrast to the process of automation, which is characteristic of pure technique unconnected to artistic application.

Bense asserts that art is essential to the process of civilization and embodies its innovative dimension. Digital art – being both artistic and technical – enables technique to articulate a distinct civilizing process that pure technique – without creative input – could not achieve. According to Bense, every process of civilization involves an intrinsic dialogue between the technical and the aesthetic realms, which progress and balance one another, making each simultaneously necessary and opposed to the other.

Viewing art through the framework of Information Aesthetics reveals how artistic creation substitutes data – a key element of intellectual communicative dynamics – with fact. This substitution enables a shift from an ontological reality to a semantic one. As an active agent of human existence, art stands as one of the two most representative and impactful figures within the horizon of human action.

Moreover, art and civilization – in the Information Aesthetics perspective – share a processual nature, characteristic of artistic creation, which concludes only at the discretion of the artist, that is also emblematic of the development of society itself.

What this article aims to show is how Information Aesthetics – through its interdisciplinary approach – not only incorporates a social and political perspective but establishes it as one of its foundational characteristics, essential for its full understanding.

In Bense's vision we observe how art – and especially the creative and realization process of the artwork – is intrinsically a social and political act in its drive toward progress. Bense asserts that the world is fundamentally "buildable", and every action that increases information modifies and adds to the previous social landscape. By recognizing the potential of technology and machines to be creative – and therefore artistic mediums – Bense attributes to digital art the capacity to act upon the world.

Thus, the perspective provided by the analysis of the informational aspect of art allows us to highlight its communicative role within a society. Furthermore, it enables us to discuss language, but also historical, social, political, and even economic contexts.

Bense argues that with the advent of technology and the subsequent transformation of our existence into a technical existence, the interconnections between our actions and our technical actions become increasingly close and significant. At a certain point, our technical actions are inseparably tied to our actions upon the world.

In addition, also Lindsay Caplan affirms that Bense's perspective is a social one and she affirms – talking about Bense and Gustav Metzger – «They each imagined generative art as a means of catalysing a more engaged public community and a more transparent, participatory, and democratic world»[12]. In her article, she sustains that Bense's Information Aesthetics is not only a philosophical contribution in the aesthetics framework, but it is also a social one. She saw in Bense's link between art and civilization a precise political idea, which extends beyond the relationship between artistic practice and civilization to recognize how digital art – by virtue of its nature and framework – can actively work toward this goal.

5. Conclusion

In conclusion, Information Aesthetics recognises art as inherently a political act, both because the artwork's creation inevitably transforms the environment by adding information, and because of the increasing relationship between art and technics. Therefore, digital art in particular – created using technological tools – can be fully recognized as a communicative agent and, as such, inherently social and political.

The theories of Max Bense and Abraham Moles demonstrate that aesthetics can still hold a critical and political role within broader cultural reflections. By addressing the challenges of a technical world and its societal implications, their approach transcends the boundaries of a purely neutral or abstract aesthetic reflection. Instead, it positions aesthetics as a field capable of engaging with and influencing the social

and political transformations of their time, understood not only as a theoretical sphere but also as a creative and generative force able of producing new forms of interaction within the society.

Note

1. Skowronski 2019, p. 11

2. Skowronski 2019, p. 11

3. Stewart 2020, p. 79

4. Bense 1949, p. 126. Translated by William Stewart: «In the process of the technical world's untiring perfection, humanity lives, starves, freezes, thirsts, mistrusts, thinks, and hopes, absorbed by a being that it brought forth itself and will continue to bring forth. Humanity cannot escape the existence of the technical because this existence presents only the projection of humanity's own existence in the mode of a material potentiality» (Bense 2020, p. 53)

5. Bense 1949, p. 124

6. Bense 1949, p. 136. Translated by William Stewart: «It is notable that with the decline of technical existence's mechanical stage and the advent of technics' thermodynamic and electrodynamic moment, sociological, economic, ethical, and political interests in technical phenomena arise that are gathered up in Marx's class theory of historical materialism. In his analyses, which quickly, all too quickly ossified into ideology, technical existence is understood no longer as an existence proper to the individual, but rather belonging to society, the class, the mass. The technical stage recognizes that there will come an age in which society will become classless and the state will wither away» (Bense 2020, p. 60)

7. Klütsch 2012, pp. 65-66

8. Moles 1958

9. Moles 1960

10. Bense 1949, p. 127. Translated by William Stewart: «Again, the technical world can preserve itself only if the free, individuated, creative human still occupies a reality, because the technical world preserves itself precisely through creations of our intelligence [Intelligenz]. The intellectual who exhibits freedom, individuality, and creativity is no luxury, but rather a generator, the axle and bearings necessary for the incessant revolution of all things. That is to say: we do not exist in the technical world by indulging in aesthetic, ethical, or religious states. We exist in the technical world in that we function, in that we exist by functioning, that we are realized in a function» (Bense 2020, p. 54)

11. Bense 1970

12. Caplan 2019, p. 52

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