

Chapter 6

Immersive Artistic Forms – What They Are and How to Identify Them

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I. Introduction

This text presents an account of what we might call ‘immersive artistic forms’ by proposing a list of criteria to identify them. The first part is dedicated to the topic of technology and consists of two sections focused on the relationship between art, knowledge and operational practices. The second part, also divided into two sections, addresses some issues in the metaphysics of art, the relationship between form and structure, and presents the identification criteria to use the term ‘immersive artistic forms’.

II. Technology

1. Knowledge

Numerous aspects concerning the nature of the arts, their current condition and the experiences they can offer are linked to the use of the latest-generation technologies as well as to resources offered by research in the computer and electronic fields and to those made available by the Internet and its tools. Many of the achievements in contemporary arts – for example, in New Media Art, in the fields of video art and Net Art, in certain works of theatre, dance and in some types of installations and performances – are due to the recognition of the role of technology in the framework of the possibilities of artistic production.¹ Far from being a

1 For more on the relationship between art, science and technologies, and the fruitful possibilities it yields in different artistic fields, see Wilson (2003); on the relationship between technology and medium, with particular attention to the issue of time in the field of video art, see Rush (2005) and (2007); about the implementation of technological resources and their achievements in areas such as theatre,

recent question, the question of technology is an ancient one that refers to an assumption at the base of all artistic practices: human activity.

Two factors characterize human activity: decisions and industriousness. Both refer to the relationship between knowledge and practice that also guides artistic production, and both are pivotal for the relationship between technology and human activity. Therefore, these elements are important to investigate in order to clarify the meaning of ‘immersive artistic forms’, a term referring to the outcomes of those practices that foster viewers’ immersion in works of art. As these are not a definite kind of art but rather the *outcomes* that can be achieved through different artistic practices, instead of using the general term ‘art forms’ I propose the more specific ‘artistic forms’.

a) *Planning*

For studies on the nature of the arts, the subject of technology is one of the most important to examine, as it allows new means of expression through research in the computer and electronic fields. Today, works that allow us to have immersive experiences – namely ‘to enter’ scenarios that, although essentially visual, offer various degrees of practicability, exploration, and interaction through the aid of VR helmets and other devices – are based on the implementation of several technological resources. On closer inspection, however, long before reaching its virtual version, it was precisely in reality that important results were achieved in several artistic fields, both on the technological front and on that of ‘immersivity’. The latter term mainly refers to the possibility of entering a work of art, of being able to experience it differently than usual. This was based on an important change, the reduced distance between work and viewer. Indeed, instead of observing the artwork from the outside, one can discover it, so to speak, from the inside.² However, ‘entering a work of art’ can mean very different things. Although today this possibility is primarily encouraged by

dance, installations and performance art, see Dixon (2007); for an overview of the relationship between art and technology useful for clarifying the developments of artistic practices based on the changes that occurred in the twentieth century, see Popper (2009); for an overview of the most recent directions in new media art and digital art, see Paul (2016).

- 2 To learn more about immersive images and the new experiences of practicability and habitability that they can offer, see Pinotti (2017) for the essential elements concerning their nature of ‘an-icons’, and Pinotti (2020), to go in deep about the

new technological devices, it has already been offered in more traditional works. Following important changes occurring in the twentieth century, immersive experiences were brought back to the fore. Above all, this was due to research by numerous artists in the 1960s and 1970s, well before the worldwide spread of the web and the latest immersive technologies.

The first example of immersive experiences in artworks of the past is described by the art historian Oliver Grau in his important study dedicated to virtual art.³ Grau emphasizes how immersive experiences were first made possible by achievements that occurred primarily in the field of painting. More precisely, this occurred by painting the walls of certain rooms of physically accessible prestigious buildings. Two instances made by Grau are particularly emblematic: the *Camera degli Sposi* (1465–1474) created by Andrea Mantegna in a room in the tower of the Castello di San Giorgio in Mantova, and the panorama of *The Battle of Sedan* (1883) created by Anton von Werner depicting a scene from the 1870 Battle of Sedan.

In both cases, the link between technology and immersion stands out. In other words: if the work is considered immersive, it is because it was created by the artist to also offer other experiences than those provided by the mere visual observation of the work. However, and this is one of the most important aspects highlighted by Grau, the potential of immersion – namely the access to the work – requires us to consider the increase in the virtual dimension of art. This increase was the result of images research. Through a considerable implementation of technological resources, it now possible to further emphasize their virtual character. This is crucial for works of art to offer illusions, namely visual experiences through the configuration of a two-dimensional surface while not being limited to it. These possibilities are also decisive for the relationship between vision and imagination.⁴

This connection – evidently of technological nature – between image, the virtual dimension of the artwork, and illusion⁵ had already been brought into focus in the mid-twentieth century by the philosopher Su-

boundaries of icons, the ‘environmentalization’ of images and its impact on their experiences.

3 Grau (2003).

4 As the philosopher Richard Wollheim observed while investigating what he called ‘seeing in’ and the nature of representations in relation to the imagination. See Wollheim (1998).

5 To learn more about this connection and many other issues related to the nature of images, see in particular Grau/Veigl (2011).

sanne K. Langer, who focused on the idea that works are *symbols* that convey ideas of feeling.⁶ In her successive studies on the theme of creation in the arts, Langer wonders what it is that an artist creates. Considering the role of the image – in particular, the kind resulting from pictorial production – she describes it in ontological terms as “an apparition”, “a vision”. Indeed, she writes that “[t]he whole picture is a piece of purely visual space”.⁷ Shortly after, Langer specifies that it “is an apparition of virtual objects (whether they be ‘things’ in the ordinary sense or just coloured volumes), in a virtual space”.⁸ Developing her explanation, she compares a mirror image and a painting. Unlike the former, the latter offers a different appearance: “[t]he space beyond the mirror is really an indirect appearance of actual space. But the virtual space of a painting is *created*”.⁹

The first aspect to consider for our reflection on the relationship between technology and art, and in particular on the role of the image in the context of the immersive possibilities offered by the arts, precisely concerns this inclination of artists to arrange everything so that the work can succeed. Art is primarily an organizational activity. Artists identify the conditions of possibility to create their work and try to implement them. They do several things for this purpose. Indeed, as Langer writes, “[t]he illusion of space is created”.¹⁰

b) Processing

Why should the organization of the artwork interest us? Mainly because it allows us to recognize that what the artists do are essential for their work to be in one way or another. Of course, their initial decisions may be very different from what the final outcome. However, the production and form of the latter are certainly influenced by the former. Thus, this means that we should not only consider the final appearance of the work, but also the assumptions that guided its creation.¹¹ Should the artist choose to work on image processing – as Langer finely observes – these assumptions would also include the premise of creating illusions, of offering virtual objects in

6 See Langer (1953).

7 Langer (1957) 28.

8 Ibid. 29.

9 Ibid.

10 Ibid.

11 I will return to this in the second part of this text, in the section dedicated to the relationship between form and structure.

a virtual space. This is in line with Grau's reflection on the achievement of illusion in relation to what he calls "aesthetic distance", i.e., how close the experience allows users to be to the work.

Indeed, this distance (or proximity) is determined by the creation process, the illusion it offers and the degree of immersion possible. Of course, these results ultimately concern the type of work that the artist carries out on the medium. As Grau proposes, this allows artists to move from offering illusions to creating experiences based on immersion in their works through the implementation of different technological resources. As the history of the arts shows, the artist can carry out this activity by emphasizing the role of the image, as Grau also points out. "At best, the medium of virtual reality can be objectified through knowledge and critique of the image production methods and an understanding of their technical, physiological, and psychological mechanisms, for *everything* is an image".¹² For everything to be an image and an immersive experience, including illusions and virtual spaces, it is essential that the artist's practice proceeds according to resources that are cognitive and operational.

The second aspect that is important to consider is to shed light on the relationship between art and technology concerns these resources which are crucial for the *processing* that makes artistic production possible. The implementation of technological resources is performed based on knowledge. This includes not only the knowledge that, allows an artist to create works that involve virtual reality experiences through helmets and other devices but also *operational knowledge*. This is the basis of many human activities and in particular of what we call 'artistic practices'. Such knowledge can be applied differently in each area and does not necessarily require a hierarchy between the cognitive and executive levels. 'Operational knowledge' means both the set of theoretical and cognitive references that an artist uses to create works and those applied directly by experimenting, doing, and working even without any knowledge guiding the practice. There are in fact numerous cases in which artists start from the practical level and make discoveries on the theoretical one, or the other way around. Among other human activities, artistic processing can be easily characterized by either procedural direction.

A crucial theme one needs to address to recognize and further clarify some aspects of artistic activity is that of organization, which was highlighted by the philosopher Alva Noë. Underlying the arts, Noë writes, there are human activities which he considers essentially as organized ac-

12 Grau (2003) 202.

tivities. They can be conducted individually or socially, on a large or small scale, and are related to our organic nature in what can be considered a fruitful relationship between the human being and the environment. In particular, organized activities indicate our biological condition characterized by its own structure.¹³

According to Noë, artistic practices could be considered as reorganizational practices. More precisely, they allow us to highlight the very fact that we are organized in a certain way – as he points out by taking dance as an example. As human beings, we organize our activities in a certain way and are organized by them. When we make art, we can reorganize them and make manifest the organizational character that distinguishes us. The link with technology is determined by what Noë calls “evolving patterns of organization”¹⁴ that we can implement based on the technological tools we can use. Indeed, as he remarks, taking up an already established idea, “technologies are natural for us. People use tools naturally, in something like the way bees build hives and birds make nests. We are designers by nature”.¹⁵

In the arts, especially through the research and practices conducted during the 1960s and 1970s, the natural technological attitude that characterizes us is highlighted. But – it is important to reiterate it again – this happened long before virtual reality devices or the tools made available by the Internet and the web. The latter are certainly important. However, they were obtained in parallel and in some cases even *after* some of those obtained in the arts – as shown by the immersive possibilities examined so far.

2. Practices

Art practices are based on human practices. While this may seem elementary, in the light of the evolutions of the arts, our attention to what is ‘artistic’ is primarily directed to the visible results of human practices,

13 Precisely as Noë writes: “We are organized. We get organized. We are organisms! Our lives are structured by organized activities, in the large, in the small. Our lives are one big complex nesting of organized activities at different levels and scales. Talking, walking, eating, perceiving, driving. We are always captured by structures of organization. This is natural, indeed our biological, condition. It is the basic fact about us.”; Noë (2015) 10.

14 Ibid. 18.

15 Ibid. 20.

rather than to the practices themselves. One of the most important teachings offered by numerous artists who have contributed to transforming the arts in depth, especially since the second half of the twentieth century, was precisely this: besides the visual outcome, it is even more important to consider *how* this outcome was obtained.

To explain the relationship between human and artistic practices, Noë considers technology and the possibility that through artistic practices, human beings reorganize themselves because they are absorbed by them. Indeed, he also considers artistic practice as a way to examine our *absorption* in it.¹⁶ This indication is valuable because it allows us to recognize that artistic practices can also reveal the very relationship between technology and human activity. Usually, especially in traditional artistic practices, this link is crucial in functional terms but not in terms of content. That is to say, the technology is functional for the purpose of a certain result that can be obtained through a certain human activity. The link between technology and human activity is therefore crucial for the purposes that artists aim to achieve, being a decisive element for the *means* they can use. These changes made possible by the research conducted by numerous artists in the second half of the twentieth century offer a different perspective: artistic practices can manifest the link between technology and human activity. Showing it means making it an *end* and not just a means for artistic practice. The latter, in fact, can consist of different activities shown for what they are, phases of a human activity carried out at different times.

a) Dispositions

Practices can be arranged in different ways. The artistic practices that manifest human activity are those carried out between the 1960s and 1970s, which developed new and alternative methods to traditional art making. These practices can be called ‘conceptualist’. Their specificity lies in the artists’ choice to emphasize the processes rather than the form and the production methods rather than the results. Art is conceptual since

16 Noë explains this possibility considering, for instance, dance and the role of choreography as follows. “Choreography is concerned with the ways we are organized by dancing. Crucially, dancing is natural for us. It is our nature to be absorbed into organized activities, and dancing is an organized activity; it is one of the activities that absorb us. Choreography is a practice for investigating our absorption.”; Noë (2015) 14.

it expresses the role of processes through forms which are reduced to a minimum.

Let us consider some artworks. *The Shortest Day at My House in Amsterdam* is a work made by Jan Dibbets in 1970. It consists of a series of photographs taken by Dibbets from dusk to dawn from a room in his house. After installing the camera in front of a window, the artist took numerous photographs over a period of twenty-four hours. The photographs show the darkness and the first light at dawn, the increase in brightness during the morning hours and its progressive decrease in the afternoon and evening, eventually going back to darkness. Dibbets's work manifests indeed the different phases of a human activity – taking a photograph – carried out at different times. What matters is not the form but the process that makes it possible. Through it, Dibbets records the change of time and, at the same time, the light variations during his “shortest day”.

One can understand what it means to emphasize the process or a method of artistic production rather than the result by considering a second example. The importance of human activity is crucial in *Hand Catching Lead*, a work made by Richard Serra in 1968. The video details a hand opening and closing in the foreground as it attempts to grab some pieces of falling lead. This gesture is repeated for the entire duration of the short video (about three minutes).

The mentioned works share the same trait: the artistic practice is not simply a production activity, namely a medium, but an ‘end’. What matters in these works is what the artist means and does, the concept and the action. The result is that the form, viewed as an external aspect of the work, is of secondary importance.

This difference between practice as a medium and practice as an end is further clarified by distinguishing between artistic practices. ‘Traditional artistic practices’ are those conducted by humans in the arts that have spread throughout history and are recognized thanks to the modern classification proposed by the philosopher Charles Batteux¹⁷: painting, sculpture, dance, poetry, and music. Next to these there are also architecture, literature, cinema, and photography. Broadening Batteux's interpretation, we can recognize that these kinds of art are characterized by three traits: imitative, expressive, and representational. Each trait may be more significant in certain art than others. For example, the imitative and representational traits are less incisive in music and architecture, in which the expressive

17 For further details on the modern classification of arts, its features and main theses presented in it, see Batteux ([1746] 2015).

trait is much more important. The latter is fundamental for conceptualist practices where processes, creation methods and human activity are brought to the fore. Indeed, in traditional arts, absorption – determined by the degree of reorganization, according to Noë¹⁸ – is usually decisive for the link between technology and human activity to be functional. Conversely, in conceptual arts absorption is crucial because the link itself becomes the content of the work. The purpose of conceptual artworks is to emphasize the technological resources, the possibilities of human activity, and the ingenuity that guides the countless new art making methods proposed since the second half of the twentieth century.

b) Reality

The aspects addressed so far allow us to recognize that, in the arts, practices can be arranged in different ways, considering them as medium or also as ends. Thanks to technological resources, the possibilities for making art has changed. These resources can be regarded in two ways: (i) as means additional to human activities and which, as Noë¹⁹ proposes, allow for an increase in absorption, making their reorganization possible; and (ii) as elementary devices that naturally belong to the human being. In the second case, they are linked to operational knowledge, to the range of creative possibilities that allow artists to make art according to their work programs. In this way, the reorganization would occur based on means already available to the human being: making art then becomes a way to make this condition visible, to show making as making.

This latter artistic attitude naturally belongs to alternative or – as happens in many cases, radically new – practices compared to traditional ones. These practices are precisely those of a conceptualist orientation. They allow the artist to manifest the idea they wish to express or represent and, depending on the case, also the activity they must perform to create their work. I will return to conceptualist practices in the next sections, addressing some themes in the metaphysics of art. Now, I wish to conclude the reflection on technology by highlighting the following issues.

An artist can use traditional technology such as painting to make an immersive work because, as Grau²⁰ shows, they can work on the surfaces

18 Noë (2015).

19 Ibid.

20 Grau (2003).

of a room and on the image dimensions to achieve immersion. An artist can also choose alternative tools. Instead of processing images, they can resort to what already exists in the world, working on a space that exists in reality. Using traditional artistic practices, an artist can both add tools and use those that they naturally have as a human being: poetry, dance and theatre are excellent demonstrations of this second possibility. Conceptual arts such as performance, relational and participatory practices, certain ways of making installations and certain uses of video art as video documentation, show equally well what results can be achieved based on the technological resources implemented. Using the human body in its entirety, making gestures, saying something out loud, performing an action in a certain (natural or artificial) environment, involving other human beings in shareable activities, etc.: these are all implementable technological resources in artistic practices. This is because, as the philosopher Maurizio Ferraris writes, technology is characterized by two aspects in particular: (a) its median position between what there is (ontology) and what we can know about what there is (epistemology); and (b) its iterative trait: the basis of the production and reproducibility of works of art is the possibility of repeating the practices, of implementing and re-implementing technologies.²¹ As Ferraris remarks, technology can be decisive because “it ensures the transition from ontology to epistemology”.²² Indeed, in his view, ‘technology’ is the name of multiple operations that enable the relationship between what there is and what we can say about the things of the world which, before being true or false, are present or absent.²³

III. *Metaphysics*

1. *Structures*

Along with many others, the things we call ‘works of art’ decorate our world. They are characterized by their aesthetic properties (which make them the objects of our appreciation, and thanks to which they arouse pleasure, interest and emotions), representationality (the artworks stand

21 To learn more on this, see Ferraris (2019) 5–12, and, in particular, *ibid.*, § 1.2.3, 11–12.

22 Ferraris (2017) 119.

23 For further details see *ibid.* 123–128 (English translation of the quoted text by the author).

for the contents and subjects they represent), expressiveness (they convey content, emotions and information), and the relational property of aboutness (works of art have a meaning and are about something that the artist intentionally chooses to express or represent through them).²⁴ These are just a few criteria that identify works of art. In fact, in addition to these we could add another one: their formal essence. Numerous scholars, critics, artists, and philosophers share the idea that artworks are essentially forms, namely conclusive manifestations of activities that are carried out by artists, who work precisely to develop new forms.²⁵ On closer inspection, however, this reading does not work as well as it seems.

a) *Forms*

Aristotle's metaphysics theory has long informed the discussion regarding form. By examining the relationship between form and matter, Aristotle confirms the indissoluble link (the *synolon*) between the organization of things and the appearance they have in accordance with their form. However, numerous questions arise from this link about the very nature of form which, as he writes, comes before matter, configures it, and is more than it.²⁶ Matter is organized in a certain way, in accordance with its form. However, the latter is not only transposed into the external appearance of matter, precisely because form is also its organizing principle. Drawing from the Aristotelian teaching, form is considered in both ways, as the organization and as the external aspect of things. However, there are also other aspects. As an organization, form determines the appearance of a certain entity. This determination, being a resolution, therefore also implies the essence of the latter: the form of *x* determines what *x* will look like. This also means that through its form, *x* will have a certain appearance to the extent that it materially translates a certain organization project.

24 The best-known philosophical research dedicated to the semantic nature of works of art, which defended the thesis that aboutness is one of the necessary conditions to define what art is, was developed by the philosopher Arthur C. Danto. To learn more on this, see Danto (1981).

25 Form has often been the subject of reflection also in the writings of numerous artists: in Kandinsky (1911) form is a constant reference; form is also present in the reflections on the nature of theater, in the writings collected in Kantor (1977). In the history of art, important accounts on this topic have been presented. Two examples are Focillon (1934) and the reflection on the history of art as the history of things developed by Kubler (1962).

26 Cf. Aristotle, *Metaphysics*, Z, VII, 1029a, I-5.

Furthermore, this organization *defines* the entity that is formed in a certain way: a thing (*x*) is in a certain way because it is formed in that way; it is so because its form establishes it. In fact, the form allows one to answer the question ‘what is the substance’ of a certain entity because the latter is as it is by virtue of the form it has.²⁷

As a principle, the form entails the ‘planning and articulation’ of things and ultimately, their resolution. This condition characterizes form, in its autonomy, both in natural processes and in those that feed the activities of human beings – including artistic ones. The idea that artworks are also forms emphasizes that they are the results of processes, outcomes of activities that lead to the development of a certain configuration. This conception is fairly shared by commentators, although it is crucial to agree on the meaning of the concept of ‘form’. The philosopher Władysław Tatarkiewicz identified at least five meanings of ‘form’,²⁸ showing an oscillation between what we can consider as two ‘dimensions’ that naturally belong to it, one internal and one external. The first, the internal dimension is that of form as organization. The second is that of form as the external aspect of things.

These two dimensions are very important. Indeed, when we consider the arts, the internal dimension of form – the organization of the work – anticipates and orientates the artistic practice. Conversely, the external dimension characterizes the outcome that can be obtained through the latter. Now, in art as in many other human activities, not only is it possible that what one envisages may lead to unexpected results – therefore that there is no coincidence between the two dimensions – but that a form is also an expression of the dynamism that animates the work, or even be open rather than closed.

Langer was inclined to consider form in the first way, attributing two additional characteristics to it. Firstly, that it is an “organic unity”²⁹ that can be perceived and manifests the vital dynamism that makes it possible. Since it is perceptible, the work as a form is a semblance: it is a set of aspects that can be seen in different ways. Furthermore, to manifest the vital dynamism that animates it, a work of art expresses ideas of feeling or the subjective condition of those who made it: “a work of art presents

27 To learn more on this, see also Berti (2013).

28 Among others, Tatarkiewicz mentions the following meanings of form: composition or relationship between the parts; concrete definition of an object; its outline; the essence of a substance; the contribution of the intellect. For further information see Tatarkiewicz ([1975] 1980), in particular chap. 7, 220–243.

29 Langer (1966) 7.

something like a direct vision of vitality, emotion, subjective reality”.³⁰ But that the work of art is considered a form, or rather an organic unity, also means that it is thought as a closed result, namely as the determination of a certain setting – also in accordance with the presupposition of entelechy made by Aristotle, according to whom it is possible that entities have their own end in themselves. Therefore, their forms determine their essence. However, Langer also considered another aspect of the form that allows for further considerations: its abstract dimension, which shows the connection with structure.³¹

In his first studies dedicated to various themes concerning arts, the theory of communication and the assumptions for his researches in semiotics,³² Umberto Eco examined the connection between form and structure, highlighting important findings. His proposal was to consider the work of art not as a form but as a system of relations between several elements, i.e., precisely as a structure. In this way, it would be possible to recognize numerous aspects of it, linked both to its organic planning and to the vital dynamism that makes it possible. This is because the structure would be the main reference also to evaluate the relationships between the different formal dimensions of the work: between its organization and the appearance it has; between what the artist does by creating it and what the user can add to it with their experience.

The structure includes several elements, among which form as organization and as semblance.

From a metaphysical point of view, considering works as structures is very advantageous. In particular, for one reason: as structures, they can be investigated in relation to the variability that can characterize them. Structure is a crucial reference because it reveals that things are transformable and that the sense of being is not unique but multiple.³³ Being a system of relations, structure collects this mutability and the form, as an external semblance, can offer traces of it. Eco considered this aspect in relation

30 Ibid. 9. For more detail see *ibid.*, in particular 7–9.

31 Exactly as Langer writes: “[...] ‘form’ in its most abstract sense means structure, articulation, a whole resulting from the relation of mutually dependent factors, or more precisely, the way that the whole is put together. The abstract sense, which is sometimes called ‘logical form’ is involved in the notion of expression, at least the kind of expression that characterizes art. That is why artists, when they speak of achieving ‘form’, use the word with something of an abstract connotation”; Langer (1957) 16.

32 See, in particular, Eco (1962), (1964) and (1968).

33 In this regard, see also Berti (2001).

to the opening of the work. Extending his proposal,³⁴ defining works of art essentially as structures allows us to shed light on numerous aspects concerning the relationships between their organization, the appearance they have and their profound link with human nature.

b) *Hybridizations*

That human nature – or rather, as Noë proposes,³⁵ our biological condition – is structured in a certain way, also means that it can be considered in terms of a system of relationships between several elements which has also been observed in other studies.³⁶ This system is characterized by its continuous transformability and sensitivity with respect to our position in the world, our experiences, the possibilities of interaction that it offers us, and the relationships we can have with it. This dense network of relationships is naturally influenced by the flow of events and by the variability that characterizes the complex and vast set of processes that determine reality. Symmetrically, even works of art – being structures – can express or represent these and many other aspects. Here, again, there is good reason to evaluate the median position that characterizes technology – in agreement with Ferraris³⁷ – and that allows works of art to be different based on the decisions and activities carried out by the artists.

34 I worked on this possibility in Dal Sasso (2021a), in which I presented the main characteristics of Eco's position and showed some first directions for setting up a positive philosophy of the arts based on the conception of the work of art as a structure; I further developed the hypothesis in Dal Sasso (2021b), formulating an ontology of works of art conceived essentially as structures developed on the basis of different rules for artistic creation.

35 Noë (2015).

36 In this regard, two essential references are Alfred North Whitehead's philosophy of the organism and the systemic conception developed by the biologist Ludwig von Bertalanffy, with the identification of fruitful applications in various theoretical and cultural fields. The main reference for Whitehead's philosophy is Whitehead (1929); the reference study for understanding von Bertalanffy's position is von Bertalanffy (1968). The two references are precious because they show the growing interest of the philosophical and scientific fields in a structural conception of reality and biological human nature. Such conception is based on the recognition of the considerable role played by the processes, the relationships between numerous elements that characterize them, and the variability that naturally influences them.

37 Ferraris (2017).

Making art is a matter of rules. Much more than we tend to believe, what artists do is based on rules. These rules have a pragmatic value and guide artistic work, making it possible to begin and complete it. One might object that if there is one area among human activities where there is no place for rules, that is precisely what we call ‘art’. Note that this remark presupposes that we intend art only in the (restricted) sense derived from the modern concept that we still share today. This is, in fact, the concept of ‘fine arts’ that Batteux presented in his treatise, stating that what unites the practices we call ‘artistic’ would be the principle of imitation since they all aim to create similarities. According to Batteux, artists do not invent anything. Rather, they follow the patterns offered by nature and instead of the true, their goal is the probable. Perhaps we could say that in this limited sphere of activity, the role of rules does not immediately become apparent. On closer inspection, however, this is not the case. Each artistic field is based on its own rules – which also allow artists to learn their craft, in line with traditional academic teaching. Furthermore, if we consider especially conceptualist practices, we can recognize that it is precisely the rules that come to the fore in them.

To get a better idea of this aspect, it is important to start by clearing the field. Rather than being philosophical, dematerialized or based on sophisticated analyses focused above all on language and thought, ‘conceptual’ is a kind of art that can be specified in different ways precisely because it is based on operational rules that differ from traditional ones. What we can call ‘conceptualism’ is precisely an operational code, a set of rules that allow artists to create works based on the use of ordinary objects, industrial materials, or performances through their own bodies or those of others.³⁸

The implementation of technology can include both repetition (of practices, resources, operational choices, etc.) – in agreement with Ferraris³⁹ – and the introduction of variants. In both cases the metaphysical definition of works as structures is pivotal to proceed with the investigations. Creativity in particular, brings variability to artistic practices. In general, creativity also entails the human capacity to make an idea possible. Above all, it allows us to propose something new⁴⁰ by introducing

38 The first study on this conception of conceptual art is the basis of Dal Sasso (2020); further developments are offered in Dal Sasso (2021b).

39 Ferraris (2019).

40 These aspects of creativity have been examined in various studies: for a general philosophical overview on the matter see Tatkiewicz ([1975] 1980), in particular, chap. 8, 244–265; on the possibility of introducing innovation and in particular on the relationship between art and creativity, see Boden (2012); on the

variations. Whenever an artist introduces new rules, they can make works differently than usual. In fact, the variants are linked to the rules that the artist accepts, rejects, or combines to make their work. In this sense, creativity is the principle of variability that allows the identification of new resources. Thus, it favours the introduction of variants in the structures created by artists. Some structures resemble each other – for example those of the works of traditional arts – despite presenting variations. For instance, the works of Pablo Picasso, Tiziano Vecellio and Jackson Pollock are all paintings; each, however, has different variations (the decomposition of the subjects, scenic lyricism, the sole presence of the colour dripped on the canvas). We can say the same for the products of cinema, theatre, sculpture, etc. Other structures, however, are *essentially different*: these are the outcomes of conceptualist practices. Rather than a result of activities aimed to achieve a high degree of complexity (what we can call ‘maximalism’), conceptual works are based on the opposite possibility: to achieve a lot by working with the essential (what we can call ‘reductionism’).⁴¹

Herbert E. Cory wrote that art could be a continuation of nature because it shows some aspects of it. He therefore considered it as “a fulfilment of some of nature’s groping tendencies”.⁴² For this reason, he emphasized *the relativity of form* from its energy and matter in nature, to its organization and activities that make artistic production possible, among others. The meaning of ‘artistic form’ therefore lies in a relationship, which is that between what we call ‘art’ and human nature. Works of art are structures precisely because they are systems that gather multiple relationships. The term ‘artistic form’ is useful to point out this trait: it highlights this system of relations that metaphysically characterizes the work of art.

The works made through traditional practices are maximalist structures, whereas the products of conceptualist practices are reductionist structures. However, artists may very well make different choices as well. In fact, there are also works that are the result of combinations of several practices: hybrid structures. These can result from the combination of different kinds of art (between theatre and dance, video and installations, sculpture and video, etc.). The outcomes are therefore partly traditional and partly conceptual works. The combination occurs at different levels. The basic hypo-

conception of creativity as a search for originality and innovative enterprise see Wilson (2017).

41 For further clarification of the concepts of ‘maximalism’ and ‘reductionism’ see Dal Sasso (2021b).

42 Cory (1926) 324–25.

thesis is that each work, being a structure, can be composed of different modules. Hybridization is therefore based on the possible combination of different modules.

Hybrid structures have one specific characteristic: they cannot be classified in any kind of art. For example, consider *Ello* (2003), a work by Tony Oursler composed of a video projection on a fiberglass tridimensional prop: it is neither only video nor only sculpture. It is even less clear whether it is possible to include John Bock's *1 = 2 + Kleinod* (1999) as a kind of sculpture. The work consists of different objects: a table with fabrics, other models above and below it, but also pots, bottles, vases and more. It is no coincidence that terms such as 'installation' or 'mixed media' are used for these works: both indicate that they are hybrid structures. In many cases, it was precisely the practices of hybridization that made the production of immersive works possible (even the *Camera degli Sposi* and the *Sedan panorama* could be called *ante litteram* installations). This happens because, as Stephen Wilson writes, the research conducted by artists "might simultaneously use systematic investigative processes to develop new technological possibilities or discover new knowledge or perspectives".⁴³

What we can call 'immersive artistic forms' arise from the artists' choices, from their researches and ways to implement technologies in creating their works, thus offering new possibilities of experience. Immersive artistic forms can result from hybridizations for two reasons. Firstly, since they are actually composed of several modules, and secondly, as they develop the illusory and virtual potentials of a module through the processing of its structure which is based on technological implementation. In this second case, the image processing performed to make two-dimensional environments explorable, favouring immersion in simulated three-dimensional environments, is a change that occurs on a structural level. Thus, concretely, there may be a helmet and another device that ensure user access in a scenario that is based on a highly complex modular structure, precisely because it is a hybridization.

43 Wilson (2003) 49.

2. Immersivity

The two traits of technology highlighted by Ferraris⁴⁴ are significant because they clarify some aspects concerning artistic practices and the immersive possibilities they offer. The median position of technology, between reality and knowledge, makes it decisive for artistic practices for their development, continuous evolutions and the experiences they offer. Note that the very passage from reality to its virtual version is explainable precisely in these terms. The intervention of technology – namely of resources made available based on research conducted in the fields of computer science, electronics and contemporary sciences – has enabled various degrees of immersion where users can enter works of art in a different way from what happens in actual reality.

a) Interaction

In particular, there are two aspects that are important to consider to further clarify the nature of immersive possibilities: *scale* and *accessibility*.

Scale is the system of relationships established by the artist based on the technology they implement to create their work. This system therefore determines the size of the artworks and the experiences it offers. Images painted on walls are the result of the technologies of the past, whereas those made available for today's immersions are the result of more recent technological tools. The difference between them ultimately lies in their scale. The former are based on an *environmental scale*, determined by relationships of magnitude established by the real relationship with the environment (for example the walls on which a painting is made). The latter are based on a *visual scale*, namely on relationships determined by results established parameters about the possibilities of visual perception (as happens when helmets and visors are worn to interact with virtual scenarios).

Based on its scale, and therefore on the technologies used by the artist to make it, a work can be more or less immersive, namely it can favour a greater or lesser integration of the user in it. And this depends on its degree of accessibility. Access to a work can vary: paintings on a wall are not accessible, while the room in which they are located is; the scenario of experience is accessible to the viewer, but what can be seen cannot al-

44 Ferraris (2017).

ways be fully accessed. This second accessibility (the one that characterizes virtual reality) has two characteristics: the exploration and accessibility of the work which vary depending on the production method of the work. The success of an immersive work – in the second sense, namely works that based on the implementation of the latest generation technological resources – is ultimately due to the degree of simulation. Indeed, a virtual reality experience allows different degrees of exploration and practicability which are however subject to the settings and the technological organization of the work.

Another important aspect is related to the differing degrees of accessibility offered. *Unpredictability* is the trait that distinguishes our experiences in reality. In virtual reality it is linked to the elaboration of scenarios and, above all, to the potential of simulation. We can grasp this difference by considering an example based on the experience of reality. For his solo exhibition held in 1971 at the Tate Gallery in London, Robert Morris chose to present some interactive works. His goal was to engage visitors by allowing them to use the materials on display, to step onto the platforms and touch the ropes, surfaces and other available elements. The interactive nature of the works, however, encouraged incorrect behaviour on behalf of the visitors. This caused the temporary closure of the exhibition which was rearranged and opened at a later time. Together with fostering new ways of interaction, precisely because people were able to immerse themselves in the works, Morris' choice also encouraged other ways of experiencing and relating to works of art.

In relation to reality, it is possible to recognize that immersive works allow different experiences. Interaction, i.e., the possibility of encountering something by acting and triggering a reaction, can therefore be differentiated as follows. We have what we might call 'mediated interaction' when there is a device that makes it possible: in the past it was images, today it is helmets and other tools. Mediated interaction is based on the possibility of relating with environments and elements present in them. This interaction can be described in terms of simulated viability of scenarios based on sampling of two-dimensional visual fragments. Otherwise, it would be termed 'immediate interaction' which occurs when one actually enters a space and experiences it. Immediate interaction is based on the possibility to relate to the work, and potentially change, environments and elements that are really present – which may not always be available for modifications or alterations – in spaces that are actually practicable through the use of our body. This occurs when we enter a work of art and the experience it offers.

b) *Identification Criteria*

As anticipated in the previous sections, the immersive possibilities of art have already been explored by artists with works based on the intervention in reality. *HON – en katedral* is a work by Niki de Saint Phalle and Jean Tinguely in collaboration with Per Olof Ultvedt and Pontus Hultén, the director at that time of the Moderna Museet in Stockholm, the site of its exhibition in 1966. *Hon* was an installation based on a large sculpture of a reclining woman that one could physically walk inside where there were several explorable environments, including a bar, and many objects like some works of visual art. *Hon* is a great example of a hybrid structure that offers an immersive artistic form based on interactions in a real space. A different case, since it is a reductionist structure, which is however just as valuable for our investigation, is that of the excellent environmental work of art the *Grande Cretto* made by Alberto Burri between 1984 and 1989 and completed in 2015 on the ruins of Gibellina. The work was born from a tragic event, the terrible earthquake that destroyed the old city of Gibellina in 1968, and that claimed numerous victims. The rubble was compacted and submerged by a large pour of concrete with which Burri created several geometric modules that occupy an area of about 80,000 square meters. Between the modules there are numerous slits about two to three meters wide that one can walk into. Visitors can thus enter those spaces and move within what are ideal lines of a three-dimensional map but, above all, cracks in the earth.

The use of the term ‘immersive artistic forms’ today seems to be especially profitable to clarify the specificities of the intense experiences offered, for example, by a work such as *Carne y Arena*, a virtual reality installation created by the film director Alejandro González Iñárritu in 2017. This is a simulation lasting little more than six minutes in which the user, by wearing a helmet, finds themselves among a group of immigrants on the Mexican border with the United States. The illusory and immersive potential of the work is given by several elements that characterize its structure: the images of the film, the bodily experience of the installation in which you can really walk on the sand while wearing a helmet with visor, the ambient sounds.

The mentioned works are based on at least two main assumptions. First, to point out the possibilities offered by interaction and the exploration of the environments – possibilities that are naturally given by actual experiences in real environments. Second, to underline the relationship with the continuous mutation of forms: events happen in the ordinary flow of the unpredictable processes of reality, that make them possible and transform

them. Both assumptions have been decisive in the arts as well as in other areas since, in different ways, they make it possible to work on immersive possibilities and on the link between reality and appearance.⁴⁵

The key word needed to grasp the nature of virtual reality and recognize the potential of immersion is ‘simulation’. But how can we orient ourselves with respect to different immersive works? And how can we recognize the links – assuming there are any – between, say, *Hon*, the *Grande Cretto*, and *Carne y Arena*?

A good way to address these questions is, first and foremost, to recognize what such works have in common. To do this, I propose a list of criteria⁴⁶ which, in my view, allow us to use the term ‘immersive artistic forms’ and to identify many of their characteristics, despite their different structures. There are seven criteria: (i) immersive accessibility, (ii) subjective engagement, (iii) structural exploration, (iv) interactivity, (v) extensional offer, (vi) formal mutability, and (vii) immersive unpredictability. I introduce each with a short description in what follows.

- i. *Immersive accessibility*: the user enters the work and experiences it from the inside. Users form part of the work because it offers an access mode that can be differentiated based on its structure. Depending on the work done by the artist on the structure, it can offer different degrees of immersive accessibility.
- ii. *Subjective engagement*: instead of being an observer, the user becomes an active participant; entering the work users can be part of it and involved in different ways, depending on the decisions made by the artist and the structure of the work, sometimes also entering a relationship with the components of the latter.
- iii. *Structural exploration*: from inside the work, the user explores and investigates its spaces by walking through them according to the possibilities granted by the artist who created the structure. This explorato-

45 In fields such as universities and museums, these conditions are important for the significant results that can also be achieved on an educational and didactic level. To learn more, see, for example, Garoian (2018) and Roldan/Lara Osuna/Gonzalez-Torre (2019).

46 My choice to proceed with the formulation of a list of criteria is based on a significant lesson drawn from Stanley Cavell’s philosophy, according to which the investigation of a concept requires to proceed with the identification of criteria for its use. Identifying the latter is therefore crucial to better clarify the use and meaning of the concept to be examined. For further details about his analysis see Cavell (1979).

- ry possibility derives from the artist's choice to offer different degrees of immersion determined by the role of reality or its virtual version.
- iv. *Interactivity*: by entering the work, the user interacts with the environment, its parts and the different elements that may be available; based on the work's structure, different degrees of interaction are offered: moving some of its components, using them, triggering cause-effect relationships, etc.
 - v. *Extensional offer*: the work is composed of one or more modules. In the latter case, the modules are combined in different ways, partly material and partly immaterial, two-dimensional, and three-dimensional. The aim is to increase the perceptive experience of the user to involve them on a cognitive level and allow them to enjoy the work in terms of extensional possibilities – from their body to the experienced environment.
 - vi. *Formal mutability*: unlike static two-dimensional images, numerous aspects and compositional elements of immersive works are subject to continuous modification. In real environments, these are actual changes determined by the flow of processes that make the plot of events possible. In virtual environments, they result from mutations of shapes obtained above all on a visual level. In both cases, the formal changes belong to the structure of the work and do not necessarily contribute to altering its integrity. It depends on the artist's choices, and also on what happens.
 - vii. *Immersive unpredictability*: the experiences offered by immersive works are based on different possibilities of access and immersion and characterized by different degrees of unpredictability. In virtual reality, the latter is the result of an organization already contained in the structure of the work: something occurs in an unpredictable way, despite being foreseen among the events offered by the work. In immersive works elaborated in reality, be they reductionist or hybrid, the degrees of experiential unpredictability are higher: something happens without the possibility of control, precisely because reality is experienced.

The seven criteria identified make it possible to use the term 'immersive artistic forms' to reference works where the aspects mentioned are recognizable. They aim to show two aspects in particular: (a) the connection between immersive works based on analogue technologies in real environments and immersive works based on digital technologies that offer virtual environments; (b) an increase in the possibilities of accessibility compared to other types of works. The guiding principle for drawing up the list was the difference between experiences in reality and experiences in fictional

contexts, based on the potential of the human faculty of imagination. The key assumption of this list is effective presence, which is real in immersive works based on real environments and simulated in immersive works based on virtual environments.

IV. Conclusion

The present study offers an account about the origins and features of immersive artistic forms. To formulate it, I addressed the relationship between technology and art by highlighting the link between art, knowledge and operational practices. Through reflection on some issues on the metaphysics of art, I evaluated the connection between form and structure and presented a list of identification criteria to use the term ‘immersive artistic forms’. The term can be used referring to the outcomes achieved through different artistic practices that foster users’ immersion in works of art, rather than to classify a kind of art. Immersive artistic forms are works of art structured in different ways that can offer immersive experiences not only in virtual reality but also in the real world.

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