Virtual Reality and Aesthetic Experience

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Abstract: The problem of aesthetic experience in a virtual environment could be reformulated as: what can we learn about aesthetics from the perspective of ‘aesthetic experience in virtual environments’, given the specific nature of such an environment? The discourse goes in circles, because it is always from theories elaborated in the field of the so-called ‘real’ that we develop the difference, but it is a process typically philosophical, that, on the other hand, can make sense only if it can be shown that the virtual is an existent being that has an ontological structure of its own. The ontology of this strange object–event, and of its relationship to space–time, must therefore be addressed: what are the conditions of identity for a virtual body? What are its limits? In what sense does it have borders? Also, its specific temporality and its connection to human and computer memories are arguable dimensions that deserve analysis, as they directly affect an ontology of the virtual body, the difference between the virtual and the possible, and the relationship between the human body and the virtual body. However, the specific character of the virtual is to be an intermediate entity between object and event, between thing and image, so that virtual bodies represent a hybrid, interactive world which can be visualized as synthetic image, an immersive hybrid engaging the corporeality of the user and merging with the virtual body’s image; this hybridization, between the body of the spectator–actor and the virtual space in which it is immersed, is difficult to define with singularity.

Keywords: aesthetics; experience; virtual

1. Preliminary Considerations

The role of ‘aesthetic theory’ in the case of the present object of investigation, i.e., the relationship between virtual reality and aesthetic experience, is unpretentious: what is necessary, in fact, is to explicit principles and concepts tacitly presupposed in the practices made possible by neotechnologies, and to expose the ontological commitments these presuppose. In order to do so, I will also resort to fictional elements and imaginative projections [1]—to be thought of as additional means rather than as surrogates—in order to tackle the current lack in the production of experience on the part of current technologies. The result is a micro-example of the philosophy of technology that certainly does not claim the legitimation of objective knowledge, or of knowledge that is apparently objective according to a paradigm that posits the infallible nature of ‘scientifically’ founded statements.

2. On Method: Ontology and Phenomenology

A few remarks on method are necessary. ‘Virtual reality’ is a syntagma that joins two terms—real and virtual—which, in common language, are distinct, and sometimes opposed. We can assume there is a difference between real and virtual; however, if this difference were absolute, we could not speak, as we do, of ‘virtual reality’. We must not, therefore, give the term ‘real’ such an extension as to make it simply coincide with entities: we must rather take into account some of its meanings that are understood by opposition. In this sense, in both common and philosophical language, we speak of real as opposed to apparent or illusory, for instance, in relation to the object of a hallucination for example, or to a dream. Real would then be the object of ‘normal’ perception in the waking state, on the basis of which we can distinguish reality as ‘virtual’. This could be a way to develop our argument, also because so-called ‘virtual reality’ has been defined, among other things,
as ‘consensual hallucination’. The question, however, is not simple, because if we want to also define the term ‘normal’ in the expression ‘normal perception’, we must refer to the agreement between percepts, namely the consensus that is also implied by so-called ‘virtual reality’. The notion of ‘normal perception’ introduces the even more problematic notion of ‘experience’, a polyvalent and complex term, understood in different ways by various philosophical traditions, which is qualified as ‘aesthetics’ by constructing another syntagma indicative of a ‘type’ of experience that should be understood and specified by means of this distinction. Now, the analogy and difference between ‘virtual’ and what we commonly call ‘real’ in our experience will have to be clarified through a brief ontology of the virtual; this will allow us to specify in what sense the term ‘experience’ in the virtual environment can be understood, and finally in what sense it can be qualified as ‘aesthetic’. But first of all, we must linger on the meaning of ‘experience’, since identifying this is essential from a methodological point of view, as it is the starting point for any reflection. What is of interest here, as a point of access, is experience in its phenomenological sense, whereby ‘reality’ itself occurs according to an intentional modality that has an eminently temporal, or spatio-temporal, structure. Experience is that in which, so to speak, life–world becomes an event, which is at the basis of any possible knowledge, but at the same time, and this is its first and proper meaning, experience is a direct relationship with the individual, from which the idea of an intersubjective world takes shape through comparison and agreement with the experience of others. Experience is thus the origin, the starting point of knowledge, and at the same time it plays an essential methodological role, which would be lost if it were understood as receptivity or as construction. Whether experience can be understood as one or the other is a matter of mediation, that is, the answer to this cannot be immediately known. What belongs to the immediate is presence, which in itself is independent of any causal consideration and only in itself is true. Not subordinated to a process of constitution, be it empirical or ideal, experience is individual rather than of the individual, individual as presence that includes the ‘me’ or the ‘I’ in presence itself, and in which the particular and the universal, the subjective and the objective, the punctual and the processual, are indistinguishable. This is, properly, non-subjective experience, although it is of the subject, a concrete, living subject, but not a subject who experiences, rather a subject who is experience itself. Now, from this methodological point of view, the difference between real and virtual does not exist, just as there is no difference between reality and dreams or hallucinations; for this reason, for the purposes of our discussion, it is necessary both to go beyond this methodological stance, and to retain it in order to avoid ambiguities that might arise, for example, by considering the virtual body–image as a kind of representation. It is, in this sense, a matter of better clarifying the aforementioned distinctions: firstly, I will try to define the notion of virtual body, then I will try to identify the difference between such a body and what we generally call bodies as objects of our so-called normal perceptions, and finally I will attempt to clarify what kind of experience is possible in such body–environments. On the basis of these results, it will then be possible to establish whether and when this experience can be called aesthetic, and in what sense. In this regard, it is possible to anticipate a preliminary condition. Firstly, in the field of 20th century aesthetics in particular, and in contemporary aesthetics in general, two lines of thought can be distinguished: ‘aesthetic’ experience is understood as that which allows us to explicate, perfect, clarify, or position the conditions of meaning of experience as such, or as a particular type of experience, autonomous and distinct from a cognitive point of view. Now, in the case of aesthetic experience in the virtual environment, it is difficult to maintain this distinction, since we are dealing with an artificial environment hybridized with the natural–living environment, in which the quality of the user’s experience also depends not only on the perceptive and sensitive possibilities technologically implemented by the user, but also on the procedures of constitution of this environment. In short: the virtual environment has the potential to allow an experience that we could, under certain conditions, define as ‘aesthetic’.
3. Definitions: The Virtual Body

With the expression ‘virtual body’ [2] we can refer to an interactive digital image, which is therefore a body–image: an image perceivable as such not only by sight, i.e., the phenomenalisation of an algorithm in binary format in the interaction with a user [3]. Digital images are all those object–environments with which a user can interact through biorobotic prostheses capable of producing ‘immersive’ experiences. In such environments, the spectatorial function of the user coincides with being an actor in the situation. The programming language, thanks to its algorithmic matrix, produces sensory image effects that can be transformed and modified by users who interact with it. A relationship is created between the movements and intentions of the users and the potential of the programme, which is able to generate the body–environment we call virtual. The more the programming language allows interactivity, i.e., it allows the user’s action to modify the environment in a way not predetermined by the programme itself, or in other words, the more that the algorithmic matrices are ‘flexible’ and plastic, the higher the degree of virtuality of the environment. It is therefore important to construct a descriptive phenomenology of virtual environments that takes into account this degree of interactivity, as well as of immersiveness, that they allow. However, the problem concerning the condition of possibility of effectively interactive actions in the relationship with programming languages, and therefore concerning the relative contingency of virtual environments, is currently being debated. This issue requires mainly a full clarification concerning the conditions of an essential unpredictability in the configuration and development of the installation, that is to say, of the environment that can be said ‘virtual’—an environment produced by a particular technology in peculiar relation (what we call interactivity) with its users. Now, the philosophical word referring to said unpredictability is contingency: interactivity is given if the environment is contingent, and conversely the environment is contingent if interactivity is actually given. As always, in ontology, conditions of possibility are intertwined. One should be aware that if these conditions could be satisfied, we would probably face a new type of being (body, image, system...), a hybrid with an uncertain ontological status, something from the natural–artificial world [4].

4. Virtual Body as Intermediary World

The virtual environment body brings to the forefront the relationship as such, in its ability to institute peculiar realities, showing in an exemplary manner two of its essential properties: intermediarity and virtuality, which are necessarily linked to each other. Virtual bodies are intermediate entities [5] for two reasons. Since the body that provides a virtual environment is phenomenalised in interactivity, it escapes the dichotomy between ‘external’ and ‘internal’; it is not a cognitive product of consciousness, and not an image of the mind—the user is aware that they are experiencing another reality even in the sense of a paradoxical reduplication of perceptual synthesis. Nor is there something ‘external’ to it, for users know that the experience of the body depends on their activity. The virtual body–environment is thus both external and internal—terms which ought not be considered ‘naturalistically’, as if they did not have a phenomenological significance. This means that virtual bodies should not, strictly speaking, be thought as representations of reality, but entities that are realized in their own way, different from that through which other entities are generated in the lived body’s bidirectional participation in the world. Virtual bodies–environments are “artificial windows that open onto an intermediary world” [5] (p. 18). “In this intermediary world space itself is the result of interactivity; the world does not take place in the distancing of oneself, but rather in the sense-feeling of immersion; and the body, perceived as other, takes upon itself the sense of its reality, of its effectiveness, as imaginary and pathetic incision, as production of desire and emotion, to the point that the reality feeling conveyed by a virtual environment relies significantly on how effectively it produces emotions in the users” [4] (p. 61). This, to the point that the sense of reality conveyed by a virtual environment is based, in significant measure, on how effectively it produces emotions in users. This environment takes on the quality of a reality, as an
otherness with respect to users, as an environment in which they can act, as bodies they can manipulate. The virtual body–environment is thus an intermediary not only because it mediates between a digital model and a perceivable image, but more particularly because it is an intermediary between inside and outside, understood as two aspects of one same phenomenon. In this strange place, the boundary transforms into a territory. Moreover, virtual body environments are neither simple images nor simple bodies, but body–images that escape the ontological distinction between ‘objects’ and ‘events’. Like ‘objects’, they have a relatively stable identity and remain the same over time. Like ‘events’, they exist in the occurrence of interactivity. The resulting individual is indeed stable, because it is the subject–object of actions and perceptions, but it is also fluid, precisely because it is interactive.

It is therefore not an ‘object’ endowed with more or less accidental characteristics, but neither is it an ‘event’, something that takes place in a space–time, since it possesses those relatively stable perceptive qualities that we normally attribute to objects, which allow us to identify them, such as a certain permanence in time, constant size, shape and other qualitative aspects. We can, in some respects, define virtual bodies as events that are relatively monotonous under the conditions allowed by the computer environment. Traditional ontological questions, such as ‘there are such things as changes’ are transformed into more articulated questions about the conditions of the possibility of changes appearing as objects.

5. Virtual Body as a System

Now, in the case of the virtual body, an event is an unrepeatable detail that can be defined as a system insofar as it is constituted at least by the interaction of a human body (so a mind–body plexus) equipped with technological prostheses, and an electronic processor implemented by an algorithm (in turn translated into a programming language). It is therefore a question of understanding what the proper place of the virtual body is, whether this place is exclusively occupied, and what it is. Where exactly is the body–event I feel I am perceiving? Since it is perceived thanks to technological prostheses, can we say it is on them, in them? Or is it part of an extended mind, of my mind implemented by a computer memory? The virtual body environment hosts other bodies within itself, starting with those of the users, to the point it becomes navigable by them. In this sense, it would seem that virtual bodies occupy a portion of space–time in a non-exclusive way, thus taking up space in non-virtual environments, where they remain invisible if they are not accessed through the relation of interactivity; it would also seem that they are endowed with, or belong to, a peculiar temporal condition, since they occur in the relation of interactivity but in a certain sense pre-exist this relation, at the level of conditions of possibility in the computer memory that allows their implementation.

Finally: the virtual body is to be considered as a system in which the category of relation emerges as being central, that of relation as subsisting, as the opening of an event-space in which the object–event is this same relation of interactivity. Thus, from an ontological point of view, the virtual body exists as a relation and not as a substance endowed with relational properties. This implies that the virtual body can be understood as an object–event that is unrepeatable and unique, since it takes shape as the instantiation of a flexible and inexhaustible matrix within a potential that is always problematic and unpredictable. The virtual, for reasons intrinsic to its concept, unlike what a certain philosophical tradition claims, perhaps simplistically, referring to the notion of ‘possibility’, does not fully actualize the potentiality of its matrix. The virtual is therefore configured as a tendency that develops in a process endowed with unpredictability, whose forms are only provisionally stabilized, while preserving a transformative dynamic, a constitutive metastability. Since it exists only as a problematic and a dynamic node of forces that tend to acquire phenomenal forms that are not completely pre-constituted and predictable, this process of actualization can be interpreted as a passage from logical computable structures translated into programming language, which are not visible to users, into
aspects that can be perceived and to a certain extent manipulated by users through special mediating devices.

What is at stake here is not a difficult and problematic ontological distinction between natural and artificial. Rather, in the Aristotelian terms used to approach the question, the virtual body is an artificial–natural hybrid, since the interactivity that is part of its nature does not allow us to consider it merely as a technical product. The virtual body mutates, becomes, is transformed, not as an effect of its technical components, which come into play as partial conditions of possibility of its states. The virtual body is an almost living system, a strange subject–object. An eminently relational structure that exists only in the encounter between a living body rendered peculiarly sensitive and a computer script, it invites us to reflect on the category of relation as constitutive of the world and of things, while also allowing us to reflect on an ontology of relations that has been investigated only in part, also able to broaden to a certain degree our philosophical view of the world.

6. Aesthetic Experience

In its original simplicity, aisthesis is constitutively relational [6]. “Any perception entails intention, a synthesis of past and future (protentions and retentions), attentional aiming, passivity and activity” [4] (p. 53). Moreover, being the perfect synthesis of a work of art and its operation, any artistic operation is also relational. It is a relation between the artists and their project—even if this is overtaken by the impersonal character of its inspiration; it is a relation to the materials, the techniques, the culture of its time, and to whoever commissioned the work; it is a relation between the artwork and its author, to those who enjoy it, to their interpretations and the history of its effects. Just as there is, at root, no aisthesis that is not relational, there is no art that is not a relation—as performance art and, in particular, relational art today indicate. Any perception entails intention, a synthesis of past and future (protentions and retentions), attentional aiming, passivity and activity, and so on; in equally simple terms, being the perfect synthesis of a work of art and its operating, any artistic operation is also relation. It is the relation between the artists and their project—although superseded by the impersonality of inspiration; it is the relation with materials, techniques, the culture of one’s time, with the commissioner; it is the relation between the work of art and who achieves it, who enjoys it, with the bystanders, with its interpretations and the history of its impact. As there is radically no aisthesis which is not relation, similarly there is no art which is not a relation—as loudly spoken by performative art and, notably, by relational art today. The stuff of experience consists of adaptive processes that include actions, habits, and functions that do or are done; the stuff of experience is not primarily made up of simple objects. Hence, the immediate deconstruction of the merely naturalistic relationship between object and subject, between inside and outside. Rather, experience is the synthesis of matter and act, and this synthesis is interaction. If we take the word interaction to imply an action ‘in between’ two polarities, it could be argued that the experience is fully completed not when these polarities relate as self-constituted poles, but rather when they are mutually coordinated within a unitary meaning, as indeed happens in the aesthetic/artistic experience. This is neither an emotional nor a practical nor an intellectual experience, but realises all these factors in unity.

7. Virtual Lebenswelt

It is perhaps still useful today to remind ourselves of Husserl’s intervention in Crisis—to think the ‘world of life’, the Lebenswelt, which is to say, the world produced by “all activity of life [...] presupposed by all human praxis and all prescientific and scientific life. [...] the life which, in all its accomplishments, is in them and strives upward from them, shaping from within.” [7]. This extraordinary and banal world cannot be left up to its ‘anonymity’. For Husserl, this is the world of ‘pure experience’, which, far from being equivalent to the experience of ‘sensible data’, instead qualifies as a doxa, a stormy ocean which is in constant mutation, yet also decisive for habits, styles, and ultimately even the content of what we call scientific knowledge. Doxa is a form of experience.
that is knowledge; this knowledge shapes the space–time of everyday experience and specialises in achieving certain ends; it structures the frame within which life’s games play out, that is, the ‘field’ of praxis; this experience is as manifold and varied as the oft-overlapping and interrelated fields of our symbolisation processes. As always, doxa is connected to interacting devices—today, especially, meaning complex technologies. Given the possibilities which some new technological devices allow for, it is appropriate to revisit phenomenology, that is, the relationship between the empirical and the transcendental and their origin in an ‘ego in general’. According to Husserl, the eidetic variation derives from “generically an ego, who already has (in conscious fashion) a world—a world of our universally familiar ontological type” [8] (p. 76); however, if we want to embrace a strong definition of virtuality, the ‘ontological type’ of the world is no longer ‘universally familiar’ nor, correspondingly, ‘the ego in general’.

But what happens when the intentional object is not a body, not an image, but a body–image hybrid? From a certain point of view, such a hybrid is like a painting, a photograph, a picture, a film, an image on a TV screen; it has the same intersubjective quality. Such a quality is always linked to the degree of interaction, but with a degree of interactivity that implies a difference, reflected in the very possibility of experience. And what point of view, what perspective should we adopt for such an investigation? The perspective of a split gaze, both internal and external, to the virtual environment? This leads us to consider the problem from the point of view of the constitution of the aesthetic object, with an inextricably circular interplay between imagination and image. For now, I have only posed a problem: that of delving into the question of ‘presence’ in the virtual environment while also holding firm to the essential phenomenological advantage that makes it possible to account for the complexity of processes. The object of the research is to reach a definition of presence in function of its efficacy: the sense-feeling, so to speak, of presence in a virtual environment is all the more interesting the more it can compete with the same ‘feeling’ in non-virtual environments, or as it is mistakenly said, in ‘real’ environments. Thus, what matters is the degree of illusion which the device produces, and the research is aimed precisely at reproducing the fiction of reality; this is obviously its guiding purpose. As designers of virtual environments well know, so we must limit ourselves to an analysis of the user’s degree of attention: the more the virtual environment loses contact with ‘reality’, the more all-consuming and effective it will be. Thus, what is to be interpreted, here, is the situation in which a user is in a dual environment, virtual and real, and is constantly able to focus their attention on the one or the other. The aim: to encourage immersion in the virtual, especially through the major stimuli that serve to grip and bind the attention. I believe it is appropriate to consider presence in virtual environments as an illusion of non-mediation (a perceptual illusion of non-mediation), and, in correlation to this, to understand non-mediation as revealing the degree of presence. Of course, the quality of presence—taken as an indicator of the quality of immersion and also of interactivity—involves the possibilities of action within the given environment, and the relevant expectations and adaptations, understanding and dispositional attitudes. It thus delineates a field of considerable theoretical density. It is thus necessary to enter into the speculative quality of this interweaving, into a conceptual depth that proceeds from perception to culture, also taking into account the inescapable background layers of complexity as we seek to evaluate reflections on the ultimate theoretical proposal.

8. Virtual as Body–Image

The question that then arises is: how important, in the analysis of the sensation-feeling of presence in the virtual environment, is the deviation or variation from a tendentially perfect simulation? Note that the analysis of the field (a field of interacting forces, in this case consisting of users and virtual bodies) cannot be a merely verbal description of the content of a user–consumer’s experience, even if the user is the one who describes it. For the use of language itself attributes the contents of the experience a conscious awareness that may not be legitimate. Rather, these contents are the unfolding of the layers of history
that led to that experience, a regressive demonstration of development, a comprehension of the dynamics of its constitution, but without any claim to universality, which is radically denied by the development of technology itself. However, the question is not to think of the negation of the living body, so much as to think of the body that results from organic–inorganic integration as a living body. This is not a matter of thinking of the non-living as organic, but of thinking of the living as inorganic without being inanimate: “Doubless unsuited to this purpose is the notion of a hierarchy of mere body-objects, on the one hand, which would exist partes extra partes, and the living body, on the other hand, as a condition for ‘having a world’. The idea of the body as a space of appropriation, as that which can be inhabited and directed from within, is also lacking. Any internal-external difference more profound than that essential internal-external involvement on which only the view of the living body allows to be thought, is therefore to be abandoned. Moreover, the possibility is also indicated of an overcoming of the univocal relation between consciousness and identity that developed from the theory of the living body as an organon or schema of self-consciousness” [9] (p. 577). Moreover, when it comes to an intentional opening—one which assumes the world such as it presents itself in the very movement of opening—a body is not a simple object, and it cannot be grasped in its complexity by the objectifying perspective. For this reason, it must always be set as a presupposition for any scientific approach and be posed as a condition of possibility for any descriptive language: it is a pre-objective vision able to perceive its own movement as an event in the environment, a complex of affective and kinaesthetic sensations, a ‘body schema’, a space–time complex-in-situation that determines the very existence of the space–time characteristics of the environment. It is an embodied consciousness that assumes the environment both as a possibility for action and as a possibility for expression that constitutes qualitative horizons. In the intentional openness that is proper to the lived body, the image-consciousness has a function of unreality, and it has its noematic correlative in the imaginary: thus, the ‘image’ is clearly ontologically distinguished from ‘perception’.

This is not the case in the case of the virtual body environment, where it is impossible to distinguish what it means to ‘have an image’, from ‘have a perception’, since it is not clear what can be called an ‘image’: insofar as the virtual body–image is intentionally constituted, it is structurally ambiguous. “In a virtual environment, it is not true that what is conventionally called image is immediately given as such to reflection, but what happens is that perception and imagination rather mysteriously fade into one another, because the percept, faced as perceptual intention, is not properly external, it is neither in consciousness nor in the world; it is external-internal, it is itself an image, which is not a thing image of the world (e.g. a painting, a photograph, a cinematic image, a digital image like TV images), but a body-image, constituting itself in the very interaction” [2] (p. 235). This implies, among other things, that what happens to the subject–spectator–actor in the virtual environment—unlike the traditional viewer of a device showing a picture or film—is an incentive to movement, rather than its suspension; it is a super-commitment of kinaesthetic functions, a feeling of inclusion within the scene and in the relationship with the characters involved, a feeling of inclusion intertwined with a feeling of distinction. The voyeuristic drive is replaced by a drive for inclusion, for unlimited intervention, for omnipotence inhibited only by the limits of the programme. Thus, the metapsychological regime of immersion, the processes of identification, of imaginary constitution and distinction of the self, change radically. We will have to learn to think of aesthetic fruition as devoid of the typical distance that has traditionally been a condition of possibility of an artistically relevant form. Rather, we will have to try to think of function in the form of a ‘sucking in’, that is, of the interpenetration of the body of the user into the body of the work and—vice versa—of the work into the body, or into the imaginary, in a fusing or mixed regime. This implies an emphasis on the pathic and panic dimension of the relationship: being at one with the work, which undergoes the effect of my presence and modifies my feeling, which is, in turn, transformed by this process. Saturation seems to be typical of the virtual environment: a filling effect, a presence effect, as if there were no absence and no distance:
the spectator–actor does not present himself/herself as being in a state of lack (virtual only in the sense of potential): there is no effect of suspension of reality, but rather a presence of another reality, its very enhancement, rather than a protection from the real. What is cut off is the regression and suspension of reality, and after all the possibility—always plural—of any identification with the represented object. This is especially true in the narrative arts, through the represented characters: the immersion in them is made too strong to allow any projection or identification: the virtual spectator cannot identify with the subject of his/her vision–action. Now, this cut of a primary identification implies a cut of processes of secondary identification, which deals especially with the different temporality of the virtual.

On the one hand, virtual simulation, although it may deal with ludic or commercial aspects, gives virtual artwork the possibility to disconnect from reproduction as a simulation of ‘real’ experience, or an experience of ‘reality’. Artistic production implies accomplishment of the imaginary, which is always ‘unreality’, and implies the openness of that split in existence that digital technologies allow. On the other hand, we are confronted with a deep novelty, as the virtual artwork is not reproductive nor reproducible: being interactive, it embodies in a new way the user’s action, because the user’s action is the very being of the artwork, its ontological structure. This notion of interactivity does not imply a subtraction but an enhancement of unrepeatability and uniqueness of the artwork (which is no more an ‘object’ or an ‘event’, but rather an ‘object–event’) and makes the notion of authenticity more complex. Actually, the specific virtuality of the virtual body stresses the fact, implied in its very definition, that the digital interactive body–image never turns itself into an actuality in its algorithmic matrix; the virtual, contrary to the potential, configures itself as a problematic complex, a net of tendencies which require a process of actualization.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The author declares no conflict of interest.

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