

# CORPOREAL EXPERIENCE IN VIRTUAL REALITY

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This paper will discuss the status of body and corporeal experience in the context of new media art, especially through the virtual works of art that involve digital interactivity and immersion. I will argue that an alternative understanding of aesthetics is needed in art historical and theoretical studies because the experience of virtual reality through new media art reappraise our ways of thinking about pictures and images.

This paper outlines a few ideas about the nature of a new kind of interaction with the art works: an interaction in a bodily way with digital works. This experience is made possible via real-time interactive 3D computer graphics and the resulting enveloping space is called virtual reality. I will argue that an alternative understanding of aesthetics is needed in art historical and theoretical studies because the experience of virtual reality through new media art reappraise our ways of thinking about pictures and images.

To get a clear picture of the notion of virtual reality one should begin with its possible definitions. During my researches, I have realized that there are three different uses of the term, corresponding to three different disciplines: science (more specifically optics), philosophy and arts of computer generated imagery. Used in optics, the virtual reality signifies a mirror image. In this context, this term could be substituted with optical illusion. In philosophy, it is defined either as a potentiality in the Aristotelian sense or a hidden, a non-obvious presence in the actual reality. Though in the first context the virtuality is the contrary of actuality and in the second it is already in the actual, both of these definitions accept that the virtual is in the order of reality and it is not its contrary. It is necessary to underline this attribute of the virtual because mostly in the commonsensical thinking we tend to say that if something has a quality of virtuality then it is not real. Yet, it is important to appreciate that virtuality is a part of reality since there is really a virtual reality. And today, when we talk about virtual reality, it has a specific meaning: interactive simulation systems created through computer based three-dimensional imagery. In this paper, we'll use the term in its third sense when referring to virtual reality in digital art.

When we move to the definition of virtual body, we find two different categories. In the field of literary fiction and its declension in films, it is a question of cyber bodies or bodies set free from all material limits. And in the universe of computers, it is a question of a body modelled or moulded by three-dimensional computer graphics, a body immersed in a computer-generated world where a perceptually encompassing environment is created. This experience is promoted either through use of an interactive screen or with head mounted displays combined with haptic and vestibular displays. This device enables the user to complete, extend and reproduce the reality. I'll treat the question of virtual body as it is defined in the second category, meaning as an immersion in an enveloping space created by digital art works.

I disregard if it is an disembodied experience like in the works of Jeffrey Shaw, namely *Place :Ruhr*, or an embodied one like the *Osmose* of Charlotte Davies because in both cases, the body incorporates into images, live them from an intrinsic point of view which could break out the rules of Euclidean space and

the Cartesian understanding of spatiotemporality. Hence this new way of experiencing images arises new phenomenological and aesthetical questions.

In Jeffrey Shaw's *Place: Rurh* (2000), which is an example for the disembodied experience, a rotating platform allows the viewer to interactively rotate a projected image within a large circular projection screen and explore a three dimensional virtual environment. A device on the platform designed as an interactive user interface, with its buttons and handling, allows the viewer to control his movement through the virtual scene. It enables the rotation of the platform and of the image around the circular screen. The field of exploration is open to other sensory organs than the eye: the spectator uses the virtuosity of his/her fingers, gestures and synchronizes his/her movements with the speed of moving images. The hand wins a control function and the eye interacts with it in order to enter the virtual world. Movement of the body from the physical environment to the space of virtual images is accompanied by a sense of continuity that partially masks the difference between physical and virtual space. The ability to move in the space of images doubles the movements of images on the circular screen. Anne-Marie Duguet mentions that in Jeffrey Shaw's works;

The user enters in spaces without any point of reference, in times without direction and in adjustable speeds. He is both on the stage and out of it. He conceives here and there at the same time. [1]

So the aesthetic experience does not remain only as contemplation, but gains a sensitive and cognitive aspect. We can literally say that the audience becomes one with the work and s/he touches the image. Thus, the interactive device allows participation to an unprecedented and multisensorial experience.

To have an idea about the embodied experience within the virtual universe, *Osmose*, the three dimensional installation of Charlotte Davise, is a good one. Davies, a Canadian artist and the director of Visual Research at SoftImage creates *Osmose* in 1995. She builds twelve natural worlds with the themes like landscape, earth or interior view of a body where it is possible to be immersed and to move with the help of a head mounted display and sensors that capture the respiration and the movements of the user. Immersants are placed in *Osmose* for fifteen-minute sessions. In her paper « Techne as Poiesis : Seeking Virtual Ground » Davies speaks of *Osmose* as being a poesies or bringing forth, revealing our being in the world. The prime navigation tool is the breath. Stephen Jones, when describing his experience in *Osmose*, writes:

On breathing in, one rises through the virtual worlds ; on breathing out, one sinks slowly into deeper realms until one gets down to the core machine-code world. The participant gains a sense of being removed from the everyday world and immersed in some environment that does not necessarily behave according to the rules of the known. [2] Davies explains the audience impact of her immersive virtual artwork:

... judging from the participant response, immersion in *Osmose* appears to temporarily suspend some people's capacity for rational thought and conversation. For many, it is an emotional, even euphoric, experience. People feel free of their bodies and yet, paradoxically, grounded in them at the same time. Some feel an intense sense of loss when the immersive session is ending, and even cry afterwards. [3]

With *Osmose*, one have a better understanding of the virtual space and time which operate under laws other than those belonging to the real world. In addition to these characteristics, the digital images in

contrast to traditional ones do not have a fixed or mobile medium as they are immaterial in their electronic form.

Following these examples, we may say that virtual worlds are non-spaces, which do not exist, in our everyday reality. Yet our bodies in these non-spaces can never be non-bodies. This confrontation between non-spaces and real bodies is the core of the question of the corporeal experience in the virtual. At this point I'd like to analyze its conceptual and sensorial consequences of this confrontation from two perspectives, not so sharply distinct from each other : phenomenological and aesthetical.

What is at issue here, from a phenomenological framework is, as art historian Suzanne Ackers suggests, « Renaissance perspective is displaced, and we are learning new ways of seeing, navigating in new kinds of conceptual space. Our perception of time and space becomes a virtual knowledge, no longer fixed to the Cartesian frame.» [4] So we are placed in an original situation where we can perceive physically a theoretical model and in practice act on its intelligible structure but in a reciprocal way this mediation allows us to think, in other words to understand abstractly and categorically physical sensations and configurations of stimulus sensorial. Henceforth, they offer the possibility to cut ourselves off from the world, not in order to retire but to understand it better, to grab its essence. So, the virtual body is not, as it is commonly thought, a body without corporeal envelope, without weakness, just a body of pleasure. But it is rather a body, which would have the chance to ask itself the question of the man, his status and also his own limits. The virtual reality permits to witness the boundaries of reality through an other form. In a phenomenological context, if we refer to Merleau-Ponty, the body grasps its own immediate knowledge by jutting into the fabric of experimental space and time. And since the experience of space and time changes within virtual environments, we can not speak of body image as a stable entity in virtual installations, therefore we should reconsider it: Is it possible to conceive a phenomenological experience of a new order ? If so, to what extent these new sensations and perceptions would change the phenomenological studies ? These questions could be considered as a basis for a phenomenological theory that remains to be founded.

To experience the visual, aural and interactive aesthetics of the work, we don't really leave our physical bodies but we leave it in an imaginative way. Philippe Quéau, a contemporary French scholar and Fred Forest both artist and art theorist who made a great contribution to the literature of the virtual, announce that the virtual is the vertigo of the abyss. Quéau explains that in German, the abyss is Abgrund, which is the contrary of Grund, the base but also the reason, as Heidegger reminds us. If the virtual worlds excite us it is because they create a sense of vertigo, an emotion of abyss, we are leaving the reason. [5] Virtual installations, by enabling people to experience the unusual sensations of seeing and floating through things, changing them, living them from inside, make them get free of their usual, habitual ways of being in the world. So, as our physical appropriation to the art work, our emotional, sensitive and intellectual relation are deeply modified, we should bring forth a new theory of aesthetics. It would be an ignorant mistake to place new media art in the historical continuity of artistic movements related to contemporary art. We should face the question of digital arts as we do in the scientific domains when confronted with a genuine epistemological breakdown. New media creates an exciting occasion to raise broader questions in art theory, philosophy of art, phenomenology and even in epistemology.

### **References and Notes:**

1. Anne-Marie Duguet, *Dejouer l'image* (Nîmes: Éditions Jacqueline Chambon, 2002).
2. Stephan Jones, 'Towards a Philosophy of Virtual Reality: Issues Implicit in Consciousness Reframed,' *Leonardo* Vol. 33 No. 1 (2000).
3. C. Davies, 'Osmose: Towards Broadening the Aesthetics of Virtual Reality,' *Computer Graphics* Vol. 30 No. 4 (1996).  
C. Davies, 'Techne as Poiesis: Seeking Virtual Ground' in *Consciousness Reframed: Abstracts*, ed. Roy Ascott (Newport, Wales: CAiiA, Univ. of Wales College, 1997).
4. S. Ackers, 'Perception of Individual Time,' in *Consciousness Reframed: Abstracts*, ed. Roy Ascott, 2 (Newport, Wales: CAiiA, Univ. of Wales College, 1997).
5. Philippe Quéau, *Le virtuel: Vertus et vertiges* (Seyssel: Champ Vallon, 1993), 25.