

Envolverse de Espacio

360° VR Video-Performance - 2019

Marina Zerbarini
marinazerbarini@gmail.com
Visual Arts Departament
Universidad Nacional de las Artes
Buenos Aires, Argentina

Celeste Sánchez Sáenz de Tejada
celeste_sst@yahoo.com.ar
Visual Arts Departament
Universidad Nacional de las Artes
Buenos Aires, Argentina

Mariana Emilia Gramajo
mariana.e.gramajo@gmail.com
Visual Arts Departament
Universidad Nacional de las Artes
Buenos Aires, Argentina

ABSTRACT

The virtual realities have, in the present and for their specificities, a great importance in the production of Immersive Video, the 360° Video, the 360° On Line Video and specifically the Virtual Reality that comprises the Digital Immersive Installation and the visualizations with 3D glasses.

The experiences of simulation in art, of which Virtual Reality is its most current exponent, no longer offer us a window into an apparent reality but a tool to create a new reality.

“Envolverse de espacio” is an artwork that relates art and technology, where the viewer will be present in another place and new questions will be manifested. The reality of being present in one dimension and virtually in another proves that the use of technology is not only a means, but a discourse on the relationship art / technology itself. There is a clear and agreed technological form, even though the content (of the video) is free and open to different interpretations.

CCS CONCEPTS

• **Applied computing** → **Media arts**; *Performing arts*; • **Computing methodologies** → Interactive simulation.

KEYWORDS

immersive art, virtual reality, performance, 360° video

ACM Reference Format:

Marina Zerbarini, Celeste Sánchez Sáenz de Tejada, and Mariana Emilia Gramajo. 2019. Envolverse de Espacio: 360° VR Video-Performance - 2019. In *9th International Conference on Digital and Interactive Arts (ARTECH 2019)*, October 23–25, 2019, Braga, Portugal. ACM, New York, NY, USA, 4 pages. <https://doi.org/10.1145/3359852.3359945>

1 INTRODUCTION

The virtual realities have, in the present and for their specificities, a great importance in the production of Immersive Video, the 360° Video, the 360° On Line Video and specifically the Virtual Reality[6] that comprises the Digital Immersive Installation and the visualizations with 3D glasses.

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

ARTECH 2019, October 23–25, 2019, Braga, Portugal

© 2019 Copyright held by the owner/author(s).

ACM ISBN 978-1-4503-7250-3/19/10.

<https://doi.org/10.1145/3359852.3359945>

360° video and virtual reality offer an immersive vision in which each person can choose where to look at. Specifically in the video’s field, the vision covers the entire environment around the camera that records, a vision close to 360° without the need for special helmets. Instead, in Virtual Reality, there is sensory immersion based on environments that could be realistic or not, that have been artificially generated; it can be perceived thanks to virtual reality glasses and programming languages that allow the interaction. These technologies have made society get used to vertiginous changes of uses and objects, whose most visible consequence is a consumerist tendency for new devices, with simplified interfaces for massive use.

Understanding formal languages, on the other hand, make it possible to create technology, not only acquire it. This creation option contributes to the topics, concepts, and artistic interests, creations that because of their own subjectivity and originality question beliefs and generate changes in an evolving aesthetic world (Romano, 2017). The productions of Virtual Reality applications are integrated comfortably in the artistic processes and critically in front of the thought.

The emergence of this way of production, in the Media Art field and specifically that which is designed for its perception with Virtual Reality glasses, is quite recent, although not new, in relation to new media. They have been preceded by the Net. Art, Video, Animation, Interactive Art or Virtual Art which has meant a wide field of important changes in the way of perceiving art, and have caused a historical transformation that affects all art practices.[8] The emergence of digital art and new technologies, in contemporary art, set ups immateriality as a definitive feature of that production.

With François Lyotard[5], in the curatorship of the Les Inmatériaux exhibition, in 1985 at the Pompidou Center in Paris, the idea of the immaterial in contemporary art emerges as a result of the incorporation of technoscience, electronics and computing. A new materiality whose fundamental essence is energy, putting into play an active and communicative dimension of that materiality. Flexible, dynamic and transformable material, such as information in digital environments, will cause the forgetting of the tangible material and will lead, in the last decades of the 20th century, to the fluidity of information, virtuality or telepresence.[4] It would not be a disappearance of the body but the oblivion of that body / subject. Peter Weibel adds that, due to the development of telecommunications, virtual reality and telepresence, the traditional notions of time and space, which he characterizes as a new space of presence, are affected.[9] In another of his texts, *The World as Interface*, Weibel will characterize this artistic production as virtual, variable and

viable. The sense of the virtual, in this case, has to do with the way in which information is stored, at the same time is variable since that information can change its supports and its perceptible forms, and is viable because the action of the viewer it is going to modify it and transform it into a living work, similar to a living being.

Digital technology translates the material world into numerical abstraction -the binary code-, that is, it transforms materiality into information contained in a computer, which in turn can be modified, reproduced and/or shared. In the digital image, no longer we talk about representation but simulation.[3]

The representation, all along the modern history of Western culture, has delved its search within the method of *perspectiva artificialis*, aspiring to efficiently represent the depth of the real world through a two-dimensional support. This search for resemblance in traditional supports has relegated the image to a condition of absolute statism. In contrast to this, the technical image, because of the aforementioned mutability, introduces variable of time and opens the gate to movement, to the happening. This is where the notion of simulation comes into play, understood as the “[...] possibility of modeling and imagining, in real time, the complexities, dynamically, passing through the image that responds and reacts [...]”.[7]

The experiences of simulation in art, of which Virtual Reality is its most current exponent, no longer offer us a window into an apparent reality but a tool to create a new reality. In this sense, the meaning of simulation is not understood as that of imitation or falsehood, but rather as what Gianfranco Bettetini calls simulation-significant: that which seeks to produce a representative act, and it constructs an interpretive model of a certain reality that it is verify empirically.[1] Also Jean Baudrillard will affirm this view regarding the simulation by expressing that it should not be confused with a mere falsity in the representation, since in fact it is in another conceptual universe[2]: once reality is definitively liquidated under the weight of its simulacrum does not conceal an absence but pretends that which it lacks, annulling in a single blow the reassuring distinctions between truth and lie, reality and imaginary, falsehood, secret, public and private.[2]

Claudia Giannetti will also agree with these notions and will propose that technological media play a fundamental role in an era where reality is not a given fact, where the concept of truth is nearing its end and [...] where objectivity or consensus regarding the meaning of reality no longer exists [...] since the [...] overcoming of the strict dichotomy between real and non-real means the contiguity of the concepts of hypothetical reality, simulation and illusion [...]. [4] However, the author makes it clear that the mere use of the technological medium does not imply per se simulation, but to experience the perception of a full reality before an illusion, it is necessary a strategy. That is to say, it is necessary [...] the domain and the transmission of certain information to reach a certain objective or result [...]. [4]

2 RESEARCH AND TECHNICAL DEVELOPMENT

To produce a virtual reality work, it was necessary to select from the wide range of technologies currently available, the one that would best adapt to specific needs. Those that complied with the most



Figure 1: Image of the inner video performance. ©Marina Zerbarini



Figure 2: Image of the outside video scenes. ©Marina Zerbarini

sensitive restrictions of the project, which are cost and functionality, were evaluated and selected. Also the compatibility with existing hardware and equipment of previous projects, the guarantee of technical support, and supply of inputs in the medium and short term were taken into account.

Until this moment, the developments and prototypes obtained can be classified into two groups: interactive experiences and 360° video. At the same time, a subclassification based on the use of free software or proprietary software can be distinguished.

For the video reproduction, compatible phones were used with Google Daydream (hardware better prepared for V.R., but more expensive and with little compatibility) and Google Cardboard (suitable for most Android cell phones with accelerometer and gyroscope).

2.1 Artistic exploration and production of artwork

The knowledge and technical results previously mentioned do not respond to a mere technological experimentation but to all the necessary tests and practices have been carried out within the framework of the production of artistic work.

The first productions were carried out as individual work, such as “Esquinas”(2018) by Marina Zerbarini, so that each researcher of the team can acquire, in a self-taught way and in an exploratory attitude, their own notions and knowledge regarding the referred technologies. Afterwards, a reflective debate was made about the

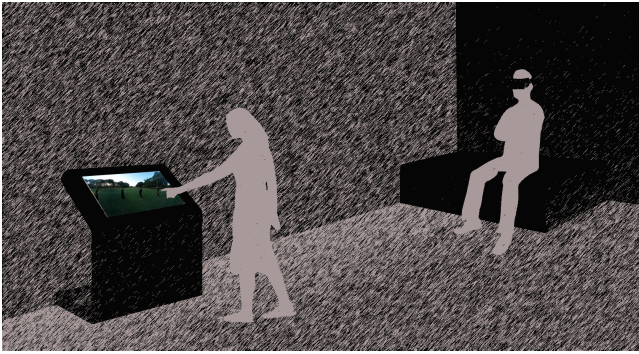


Figure 3: Graphic diagrams of the montage. ©Celeste Sánchez Sáenz de Tejada

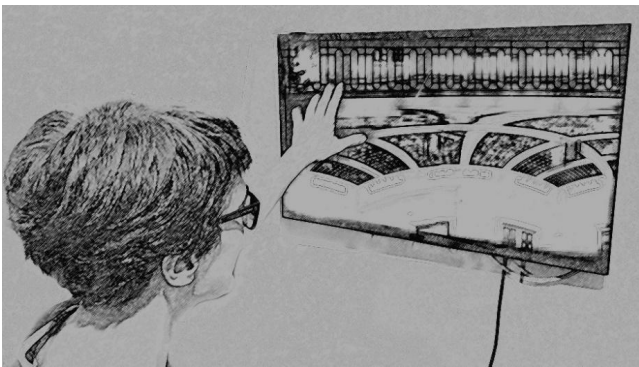


Figure 4: Graphic diagram of the montage. ©Mariana Emilia Gramajo

particular experiences with the intention of turn them into a larger collective proposal, choosing the Performance format and the 360° video as the most appropriate to achieve greater spectator immersion. In this way, we reach the current stage of the project.

“Envolverse de Espacio” is presented to the viewer as fictional worlds inhabited by women who walk in concentric circles. They move away and approach oscillating between open and closed spaces. They face the viewer and question him, invite him to go around that world that is real and fiction at the same time. As extrapolation to our social system; that fiction is reality and that reality our fiction. The VR technology allows you to explore the entire scene in a more exhaustive way, being impossible to scrutinize the whole environment without the help of the glasses.

Concepts of space/time have been crucial for the approach of the 360° image. The camera does not only take one part but the whole scene, being itself part of it. There is no framing, nor an outside of the image: it is the space and the form we acquire in it. The performers are indicators of space: of what it is near, far, up, down and even the reference to what we do not see. It is the spectator who will choose his own frame, in his clipping always something will be not seen.

The interactivity of the viewer with space/time allows non-linear readings, something different happens: in this new format it is the spectator who decides the time of his happening with the artwork,

which implies infinite paths and very different experiences according to those are chosen; In this experience there is a process of rapprochement, contiguity, interference, appropriation, intersection and rapport that generates non-hierarchical multidirectional influences and their different ranges of participation according to the proposed system.

The interaction and deployment of time and space manifested in this work is open and disturbing, where visitors are affected by immersion. It establishes a dialogue of unforeseen characteristics, of curiosity, seduction or waiting, in the encounter with the work, something that exceeds the limit of the expected: a released time.

Henri Bergson, theorizes about time and states that the passage from the present to the past is an irreversible fact, that in that past our own essence has been constituted, and it is the structure of our being, outside of us there is only space, our inner is the real duration.

The contemplation and interaction designed for the viewer involve a pause and a duration; a contemplative fact that can lead to heterogeneous and unknown space/time rides as Bergson poses. True time is the duration of something that changes, and that is consciousness, inner life because man’s being is temporary.

The scenes shown in the work come from the temporal, which is not only a characteristic, but the same form that we propose, and its treatment has consequences to define a conceptual narrative that implies philosophical categories about contemporary time manifested in the new Virtual Realities.

The simultaneity involved appears replacing the linearity of the classic narrative, and is key when thinking about the arrangement of spaces and actions.

[...] The screen becomes a window, through which the artist ensures his presence despite the absence of his body and proposes the immediate approach of the public to the work [...] Audiovisual techniques allow us to give up the Performance as a physical ritual articulated by the artist, in favor of the idea of performance as experience lived by the viewer. [...] The presence of the artist is dematerialized and the nexus between public and work is fortified – Gianetti, Claudia.[4]

“Envolverse de espacio” clearly relates art and technology: the proposal of a non-linear, heterogeneous narrative with a visual clipping related to the viewer’s decision, as stated in this document, would not be possible for identical results in a different format than the 360° immersive video. At the same time that this work depends on the new media for its realization, it brings to the technological development an innovative exploratory research, far from the common guidelines imposed by the consumer market that gave it to born. Sometimes, only from art do you have sufficient license and flexibility in research proposals, stripped of the claim of efficiency or profitability. Therefore, certain fault effects are validated in this work because they modify the image without affecting the functionality of the 360° video or immersive experience. In this line of experimentation of technological limits, the sound was worked as a “Tribute to John Cage”, referring to his creative and experimental sound proposals. On the other hand, the script of the video depends on certain consensus among the performers, but it is free and opens

to the viewer a defined but ample visual proposal, which he must interpret from his own symbolic universe.

“Envolverse de Espacio” (2019) is a recent production of the team and can be viewed through a Youtube channel.

3 EXHIBITION SPACE

3 × 3 × 3 meters of space with ambient lighting.

4 TECHNICAL REQUIREMENTS

- Smart 55 TV with Touch Screen to interact with the body and hands on the screen.
- Glasses for Virtual Reality to watch and interact according the choice of the view.
- 4K cell phone connected to the Internet with apps for viewing 360° videos, compatible with the glasses in use.
- The TV and the Cellphone must be connected to wi-fi connection in order to access the correspondant Youtube channel.

5 MONTAGE

The TV can be installed on the wall or supported obliquely to a base, according to the diagrams of the installation that are attached.

ACKNOWLEDGMENTS

To Robert, for the bagels and explaining CMYK and color spaces.

REFERENCES

- [1] A.A.V.V. 1990. *Videoculturas de Fin de Siglo*. Ed. Cátedra, España.
- [2] Jean Baudrillard. 1981. *Simulacres et simulation*. Editions Galilée, Paris, France.
- [3] José Luis Brea. 2002. *La Era PostMedia*. Edited in PDF format.
- [4] Claudia Gianetti. 1997. *Estética Digital. Sintopía del arte, la ciencia y la tecnología*. ACC L'Angelot/Goethe Institute, Barcelona, Spain.
- [5] François Lyotard. 2015. *Arte y vida en la era de la biotecnología*. In Lopez del Rincón. Akal Arte Contemporáneo, Madrid, Spain.
- [6] Jacqueline Narcisa Mejía Luna. 2012. *Realidad Virtual. Estado del Arte y Análisis crítico*. Master Thesis in Software Development, University of Granada., Granada, Spain.
- [7] Dante Poletto and Marina Zerbarini. 2005. *La simulación, hipótesis política y comportamientos del arte*. Second Symposium “Emerging Communication Practices in Digital Culture”. 7th Conference on Digital Arts and Media, Córdoba, Argentina.
- [8] David Ruiz Torres. 2013. *El papel de la realidad aumentada en el ámbito artístico y cultural: la virtualidad al servicio de la exhibición y la difusión*. Doctoral Thesis, Department of Art History, University of Granada, Granada, Spain.
- [9] Peter Weibel. 2015. *In Lopez del Rincón. Arte y vida en la era de la biotecnología*. Akal Arte Contemporáneo, Madrid, Spain.