

Interview with Valentina Temporin, ULTRA

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DOI: 10.54103/milanoup.223.c381

Abstract

This text presents an interview conducted by Fabrizia Bandi with Valentina Temporin, co-founder with John Volpato of ULTRA, a project focused on virtual design, immersive environments and new technologies.

Keywords: Digital Architecture; Virtual Reality; Maurizio Sacripanti, Osaka '70.

Abstract

Questo testo presenta un'intervista condotta da Fabrizia Bandi a Valentina Temporin, cofondatrice con John Volpato di ULTRA, un progetto incentrato sul design virtuale, gli ambienti immersivi e le nuove tecnologie.

Parole chiave: Architettura digitale; Realtà virtuale; Maurizio Sacripanti; Osaka '70

This text presents an interview conducted by Fabrizia Bandi with Valentina Temporin, co-founder with John Volpato of ULTRA, a project focused on virtual design, immersive environments and new technologies.

F: Let's begin with the origins of ULTRA. How did you approach virtual reality? You and John have different academic backgrounds, how did your project come about?

V: I come from a background in architecture and John from a background in art and new technologies. I studied at the IAUV, in Venice, and John at

the Academy of Fine Arts. We both had previous careers in Venice linked to technological innovation, which had already broadened our research fields, but were not yet focused on what we are doing now. When we met, he and I were combining spatial design with technology to create immersive interactive environments. We met in a laboratory in Rovigo, *Poplab*, which is part of the Science and Technology Park/Galileo Visionary District in Padua, a hub for innovation in architecture and design. As part of this experience, we decided to purchase a virtual reality headset. It was an environment that was already rich with tools tightly linked to Manufacturing 4.0, such as milling machines, 3D printers and the Internet of Things (IoT). For instance, John and I had collaborated on a project that later won an award from Eni on the use of IoT technology in photovoltaics. So there had already been a form of experimentation in that direction: the idea itself of experimenting with new technologies, especially with potentially interested companies in mind, was in fact a testing ground linked to the Venice Region General Confederation of Industry.

F: Virtual reality is more than just an image. Through this medium, we can enter and explore a digital environment designed for interaction, not merely observation. What opportunities have you discovered in VR as a designer and creator?

V: Initially, the purchase of the headset was intended as a way to make our project presentations in physical spaces more compelling, and then as a working tool to draw clients closer to the projects we conceived. Yet from the moment we first tried it, we realised it was a much more powerful medium than that. We understood that VR was not merely a tool for showcasing a project in physical space, but also a powerful medium for displaying content directly into virtual environments, content designed specifically for virtual spaces. We realised how involved users were in this kind of project narrative. Later we won public funding from the Veneto Region, which aligned with our vision. This project gave us an opportunity to experiment with this perspective.

F: Let's now discuss the work that brought us together, *Osaka '70* (Fig. 1), a work dedicated to an iconic and visionary project of kinetic architecture that was never actualised. How did the idea for this project come about during such a “particular” time – that of the pandemic – when virtual reality was creating new possibilities for connection?



Figure 1. *Osaka '70*, ULTRA

V: We won the project at the end of 2019 and started working on it in February 2020. We all know what happened after that, but I think it gave us an additional incentive to continue. The health emergency somewhat transformed the original direction of the project: it led us to consider a multi-user mode of interaction within the virtual environment, a now crucial element in our work. Initially, the first prototypes of this experience, *Osaka '70*, were in single-player mode. Later, we reconsidered our approach to the project, because we had few social interactions and we were locked inside our labs and homes.

We wanted to bring it to the public, so on the one hand we imagined a home tour: instead of exhibiting the work in a museum space, we would be taking it to the homes of architects, designers, professionals. This was an intriguing first step. But on the other hand, we wondered how, despite physical distance, we could create a connection, you could say an empathic connection.

F: Indeed! One common criticism of this medium is precisely that it promotes isolation: popular works often involve only one person at a time, suggesting a solipsistic experience.

V: Yes, *Osaka '70* prompted us to explore a different direction, driven by the need to create something that would allow us to illustrate this content, Maurizio

Sacripanti's project. One of the first people we shared it with was architect Franco Purini, who was Sacripanti's young assistant at the time of the project's inception. We thought it was essential. We got him involved in the project and demonstrated how it was done. We were very concerned because he belongs to a different generation and we feared that he would not fully grasp this method of navigating a virtual environment. This circumstance prompted us to consider a guided mode of experience: entering together, creating a story, a narrative, guiding participants as if in a museum.

F: Drawing from our experience as a user research group, bringing unrealised projects to life requires a delicate balance between preserving their original elements and integrating them with creative innovations. I'd like to ask you now about the challenges you faced with *Osaka '70*, but also about the beauty you uncovered in "manipulating" and interpreting Maurizio Sacripanti's work.

V: Yes, there were different stages and levels of awareness along the way, as it was our first encounter with this technology. At first, we took the classic approach of studying and researching Sacripanti's documents. It was then that we realised that some details had been omitted: and they weren't simply missing, we realised that he had not considered it useful to delve into the details of a project that had to be, first and foremost, an expressive icon. So, we came to the conclusion that we had to create an environment where what was missing could not be concealed. In a virtual space everything is visible. Everything is explorable, so we couldn't fool anyone. On the other hand, we didn't want to add fictitious elements, that we had no record of, so we tried to research some missing aspects through interviews with people who had worked on the project. Other elements we decided to completely omit, and that was when we realised that the project's essence was not in showcasing, but in translating what we had, granting the visitors a degree of freedom. We let them imagine what the final design could be, using each individual's imagination to shape the project in its entirety and complexity.

For us, this is what it means to interpret a piece: bringing to light what was most important to Sacripanti at the time, which is the idea of dynamic architecture. It was clear that dynamic architecture was the project's protagonist and at that time he did not need to define the materials for the balustrade or the height of the step, and the same was true for us. We decided that the key to the interpretation of these drawings was specifically the theme of dynamism, so we focused on that: we meticulously reproduced the dynamic aspects of the project. As for the structure, we also tested its feasibility, while leaving other details broadly sketched. We always emphasise to our audience: this is not the realisation of Sacripanti's construction, but his vision of this project. This is an important distinction. It's a bit like taking a tour inside his head. We've seen

other digital reconstructions of the *Osaka Pavilion*, almost down to the last detail. But we believe that this is not the best way to create an immersive work. You run the risk of taking the author's place, leaving no room for the audience to interpret and imagine.

F: Yes, of course. It's like gaining access to the creative process rather than looking at the finished work. It's a very different experience. In the Virtual Architecture course you held at the Raffles Institute in Milan, you presented other projects of buildings that were never constructed, could you tell us about them?

V: Yes, it was a very challenging experience. What I aimed to convey to the students was the narrative quality that can be created through the virtual space at our disposal. What we need to convey is not so much the raw drawing, the model, as can be seen even in the preliminary sketches. Rather, it is the narrative that unfolds within, driven by sensations. The atmosphere, noises, sounds, and lighting are also very important. A particularly talented student in the course presents the case study of a synagogue designed by Louis Kahn that was never built in Jerusalem. She recreated an atmosphere with a dry light, an almost dusty interior, as if there truly was a desert outside.

F: You got me thinking about the whole matter of atmosphere. The philosopher Gernot Böhme talks about atmosphere generators, including sound and light. These fantastic atmospheres – not in the sense of unreal – are on the contrary very real, tangible, felt on the skin. They have to do with our bodies, albeit shifted and relocated. Virtual space seems to offer us a deeper understanding of the physical one, as if it were a kind of reverberation. Jean Baudrillard and Paul Virilio, among others, argued that the virtual, the digital, the simulated might engulf the real, but perhaps one way forward is to view the virtual as something that gives us back a sense of the real. The light, the sound... I loved your description of this environment as “dusty” because it evokes a multi-sensory dimension. VR is all about stimulating the senses, and one could argue that these environments also foster a particular form of multisensory experience.

V: Yes, you're right. Sight does dominate, that's true. But the challenge lies in being able to activate the other senses without neglecting those that are inaccessible at that moment. It's a new way of experiencing that dimension too, of expanding in a different way within a space. As you say, there is a return, a reverberation.

F: It's a delving within, a reactivation of aspects that we don't normally use in this way. Pierre Lévy, echoing Gilles Deleuze, argues that the virtual relocates us, compelling us to rearrange ourselves according to the environment.

V: Among creatives, this critical awareness has certainly not yet developed. We're still in a phase of experimenting and perhaps an understanding of the results will come later.

F: This is another important point: the spread of the medium as a creative tool. The age of consciousness, as Vilém Flusser put it, takes a certain amount of time. Another project of yours, *The Deception of the Senses* [*L'inganno dei sensi*] (Fig. 2, 3), I found particularly interesting in regards to this subject matter. I would be curious as to how it has developed and what form it has taken today. I think this work is particularly important because you've created an experience in a *mediarcheological* perspective – that's one of the axes of the AN-ICON project we have developed at the University of Milan.



Figure 2. *The Deception of the Senses* [*L'inganno dei sensi*], ULTRA.

V: *The Deception of the Senses* is a project that made us more aware of the tool. This experience is a contemplation of the special relationship between the work of art and the viewing eye, when the work of art itself asks its viewer to be integrated into the apparatus, to participate in its construction and trigger the magic of illusion. Immersive virtual reality is now seen as a powerful tool to exploit the deception of the senses, but the process itself is not new; in past centuries, increasingly effective objects and machines were built to stir the audience's

curiosity and steer it to a possible elsewhere. Ultra therefore proposes an investigation into the ancient relationship between the physical world and its possible extensions. We became clearer about what we wanted to achieve. Undoubtedly, through this work we realised that an important element for us was to be able to guide the public across virtual spaces. In the initial stage of the path a series of objects are placed around the visitor, evoking the deception of the senses and the search for a possible elsewhere in past ages, from the stereoscope to the magic lantern, a phase in which one remains somewhat passive. However, in the final stage of the experience, there is a generative, active part where participants engage interactively with each other. We aimed to incorporate the role of the guide figure, who we call a “human performer,” more consciously into the experience. We use this term to denote someone who accompanies the audience and activates specific modes of engagement within the virtual world. We consulted with a company of actors who began contemplating what it means to perform for a virtual world, where there isn’t, let’s say, an audience standing in one place, there isn’t a stage and a defined space, but a whole realm of possibilities. Compared to what you experienced, this work has now been optimised and we have presented it at several international festivals. However, feedback highlighted that a multiplayer and guided work is complex to set up and manage during events. This made us wonder about the future of VR. We genuinely questioned, as authors, which direction we should pursue. We know of successful location-based multiplayer works that are showcased internationally, but we wanted to explore something different, so now we are also exploring the relationship between single player and space.

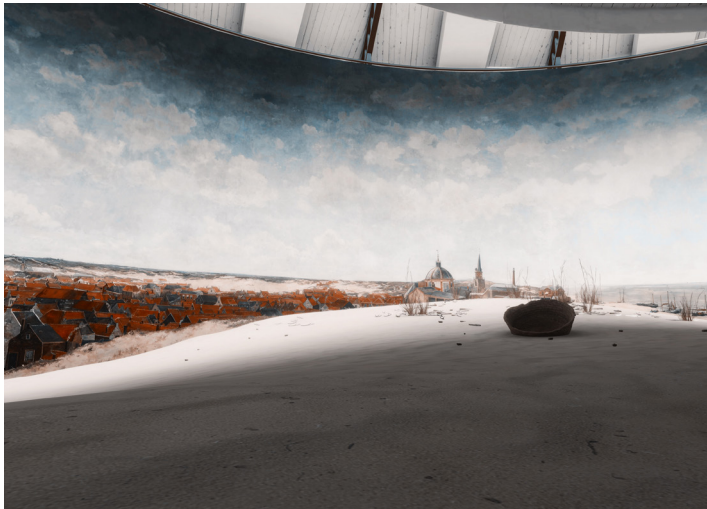


Figure 3. *The Deception of the Senses [L'inganno dei sensi]*, ULTRA.

F: When you work with single players, the intimacy is different. Perhaps you focus more on the sense of presence that VR gives you, the so-called *being there*.

V: Yes, definitely. It's also fair to think that these works should be enjoyed by as many people as possible. So we need to find a formula that is sustainable, which makes it accessible to the public, otherwise we would be creating works for a select few. For that reason, we're focusing on formats that still support multiple users, but may not require a guide.

F: Where do Italian institutions stand regarding VR? From my experience as a user, I have to say that there are few contexts in which I've found adequate preparation, especially when the works require physical movement. Unfortunately, this can sometimes detract from the experience itself.

V: It's fair to say that finding exhibition spaces perfectly equipped to host VR works is still challenging. Even distributors don't like the idea of curating an *ad hoc* installation, organising a suitable space and following it up from a technological point of view. Sometimes museums lack the necessary tools: a work designed for Quest 3 may not be compatible with Quest 2. In contrast, in France, they are creating dedicated venues for VR experiences so as to broaden public accessibility to such works.

F: Staging and presentation to the public are also crucial aspects of the work, perhaps even more so than in other artistic genres at present.

V: Yes, absolutely. Last year we created a metaverse for a large company in Madeira. During the presentation, the CEO wore the visor and stood in front of a gathering of 350 people, with a big screen behind him on which the virtual world was displaying the virtual world. However, instead of simply mirroring the visor to the screen (which could have made the audience feel sick), we developed a software specifically to create a "second person ghost" that showed what the CEO was seeing, thus avoiding perceptual effects that would cause discomfort to the audience. So, there's a whole study that goes beyond content production.

F: Taking into account what we've discussed, what direction will your future projects take?

V: As I mentioned, we've revisited the concept of single-player experiences, imagining a kind of intimacy with space. We're proposing this format in our third work, *Our Place* (Fig. 3), based on a contemporary opera by Marco Gnaccolini. It's a very poetic, at times poignant, twenty-minute work that

F: There's a lot of talk about artificial intelligence these days. Are you working with it? In particular, I was wondering if your work as creatives, as well as the experiences themselves, could somehow be part of this new technology?

V: We believe AI can become an integral part of the narrative. In *Deception of the Senses*, we hinted at this possibility: in the final chapter, set in a future world, there's a generative aspect: the user interacts with the environment (which has an algorithmic matrix), which responds to gestures by creating new forms. The reference to artificial intelligence is evident here. There can be elements in a scene that don't solely originate from the author's imagination, but from the interaction between the individual and the environment.

In a project we submitted to one company, we experimented with AI as a tool for the creative organisation of archives. I believe that this technology can be an essential resource in this field. For example: it can help in sorting through our seemingly unlimited possessions, both tangible and intangible. In our experimentation of this approach with this particular company, which has a huge textile archive, we imagined taking their archive, dividing it into thematic areas (patterns, colours, etc.) and creating a narrative experience in virtual reality, generating new images, patterns or colours. In this way, AI can serve as a tool which expands the narrative, making it truly generative.