Virtual and Real:
Ideas and Tools for an Enhanced Theater in an Empathic Direction

Giorgia Coco

1. VR and Theater. A Paradoxical Encounter

As the computer scientist Mel Slater said, "virtual reality is 'reality' that is 'virtual'" (Slater and Sanchez-Vives 2016). This paradox alone could in part justify the fascination that virtual reality (VR) has had among performance theorists and artists. I use the term *performance* as it is used by the theorist of theater Erika Fischer-Lichte in her *Aesthetics of the Performative* (Fischer-Lichte 2014). French artist Antonin Artaud, in his *The Theater and Its Double,* considers "theater and alchemy to be two similar arts because they are both virtual in that, they contain in themselves neither their objective nor their reality" (Artaud 2000, 165). Thus, it appears evident that the theater director points to the contingent appearance of the real and the virtual as the ontological quality of scenic art. In addition to the coincidence of this first paradox, further affinities between these two media, theater and virtual reality, suggest a common unity of intent aimed at realizing the utopia of a phantasmatic encounter.

Further developing the line of thought of the theorist of the theater as a plague, who declared that in theater (which consists of nothing, but which makes use of all languages) "what counts is naming the shadows and guiding them" (Artaud 2000, 132), it becomes evident how, in Artaud's vision, theater as a medium makes the manifestation of a phantasmatic presence possible, a presence to which a role and a dynamic can be attributed.

The liminal nature of the space of representation as a space of appearance has been closely connected to shadows and their appearance right from its beginnings. Already in the *Republic* (Plato 2014), as we know, Plato, in referring to the pictorial image and in general to imitative art, uses the term *phantasmata* in the sense of an "image that, unlike the *eikon*, no longer respects the existing proportions in the model" (Aristoteles 2010, 11). He does so precisely to specify the deceptive trait of the poet's image, one that

is illusory, he says, like the representation of the whole in the reality of a mirror. It was the sociologist Castoriadis who emphasized the difference between the image as a reflection of the mirror, and the imaginary as the mirror itself or as Other as mirror, which contains all the possibilities of the real (Castoriadis 2022). We owe to the French theorist Quéau the idea of the virtual as a state of the real (Quéau 1993) in which (following the philosopher Lévy) a relationship of mutual participation between beings, signs and things can be realized (Lévy 2002).

Much more recently, the Italo-Argentinian philosopher Tomás Maldonado in his *Reale e Virtuale* recognizes in two iconic elements (the ghost and the mirror) our society's characteristic of a "phantasmal megamachine." In doing so, he cites Stanislaw Lem, who provocatively theorized its existence, suggesting the idea that society was interested in the "supremacy of the marvelous" and that it worked to build a world in which reality was no longer distinguishable from non-reality (Lem 1977). On the other hand, Maldonado insists on the catoptric capacity as a salient element of the qualities of *ominazione*, the coming to knowledge of *Homo sapiens* (Maldonado 2015, 31).

In the process of *ominazione*, therefore, the ability to reproduce images and to identify oneself seems to have been crucial. This would be further confirmed by the thesis of the enactive vision model proposed by philosopher Alva Nöe (2006) and the research in the field of mirror neurons. According to the results of these studies, seeing would be a haptic activity, as it would potentially presuppose the possibility of touching and, therefore, activate, through eye movement, a mental simulation of the action being witnessed.

In this sense, one can conclude that representing reality through its double translates the virtual movement of the enactive encounter of vision, that is, of a virtual encounter with the other, in which the other is a mirrored vision of ourselves.

One wonders whether the virtual encounter with the double, even in the absence of a material body, triggers a metamorphic process equivalent to the relational transformation of co-presence proper to the performative esthetic experience.

Mel Slater affirmed that in virtual reality we find ourselves in relation to reality in an illusion of plausibility, without which the concept of presence itself loses its meaning. However, who brings the concept of presence back to a relational horizon in mixed reality works is the scholar of performance art and new media Giannachi (Giannachi 2004), who suggests that "presence could be read as the network formed by the subject and the

environment" (Giannachi, Kaye, and Shanks 2012, 51). In particular, the participants in a virtual-reality experience are an integral part of the work and, at the same time, have the possibility of interacting with the work itself, which makes them elements outside of it.

For this reason, in mixed-reality performances, the correspondence with the process indicated by Erika Fisher-Lichte as a feedback loop seems to be reinforced in the transformative relationship between user and environment, where the latter must be considered an element endowed with agency, following the direction of the French anthropologist and sociologist Bruno Latour (Latour 2020).

2. *Virtual Capacity as an Emphatic Mechanism of Feeling*

Virtual reality has been identified by immersive artist Chris Milk as the perfect empathic machine (Milk 2015). And, indeed, the concept of virtuality is closely related to empathy, since its first use in the works of scholastic philosophy.

Thomas Aquinas uses it in the *Summa Theologica* to describe the different substance (virtual) of which angels are composed, compared to the concrete materiality of bodies. The philosopher further specifies that the possible forms of contact between bodies are of two kinds: "physical, such as that which takes place between two bodies that touch each other; and virtual, such as that which takes place between the one who saddens and the one who is saddened" (2009, 1002). This movement, which St. Thomas calls *virtual* because it is inherent in the quality of applied virtue, could in other terms be named, precisely, empathy.

Following Mel Slater's proposal, virtual reality represents something that could provide valid tools for the implementation of a critical reflection on reality and thus to its improvement, in the direction of leveling out the inequalities created by physical distance and motor disability, as well as strengthening the ability to put oneself in the shoes of others.

A concrete example of the performative realization of a technological device useful both to improve the quality of life of people with severe disabilities and to produce performative events is *Project Humanity* presented at the Ars Electronica Festival 2023. Through eye-movement tracking and electrical impulses of muscles, a man with amyotrophic lateral sclerosis (ALS), who before the onset of the disease had been a popular DJ, was able to create music for us who were in Linz, Austria. Through an electromyographic signal and an avatar, he was able to dance, virtually, with us. The impact of the performance on the audience was certainly

affected by the exceptional condition of the performer. The sharing of the dance, therefore, represented a moment not only of entertainment but of emotional involvement within a hybrid dimension, in which the desire to participate pertained to something else: To the wonder of an encounter previously thought impossible.

Another example in the same direction is the empathy machine of the *Beanother* laboratory, an interdisciplinary art-science research laboratory based in Barcelona dedicated to exploring the relationship between identity and empathy. The laboratory creates immersive experiences that lead the viewer to place himself, illusorily and plausibly, in the body of another. For the empathy machine, the head-mounted display system and a camera with a first-person point of view and a mirror are used. With this stratagem, the user sees himself, and thus perceives himself, in the body of the other. The empathic machine combines technology and performance art with the intention of sensitization and the breaking down of prejudicial mechanisms, for example, those concerning body or race.

There is scientific evidence demonstrating the validity of an immersive approach in identifying stereotypical mechanisms in the view of the other and in the possible overcoming of them. As the social sciences scholar Cotton suggested, however, it is very difficult to understand with whom the user empathizes during the experience. Indeed, nothing can give us certainty that this is not a solitary, non-transformative experience. Even more so, as the scholar suggests that psychologist John Dewey's practice of "dramatic rehearsal" (Dewey 1960) should be included among the tools of VR-experience (Cotton 2021, 83).

However, thinking of media scholar Marshall McLuhan's thesis that the technological revolution always brings a weakening of the limb that is enhanced (McLuhan 1967), one must wonder whether the use of this device for empathic empowerment might not atrophy that which we wish to empower.

Setting aside the demonizations, there are many skepticisms about this new medium. For example, the philosopher Pinotti points out that immersive environments, by breaking the threshold between reality and representation or fiction, are to be considered as the expression of a new narcissism and not of a desire to enhance the empathic mechanism (Pinotti 2021).

3. Esemplari, an Experiment in VR for Augmented Theater in an Empathic Direction

The empathic result of a performance cannot be taken for granted and depends, of course, on the design characteristics that determine, in part, its effectiveness. Even more imponderable, then, can be the result of mixed-reality works in which, beyond the testing of prototypes, the media involved in the realization of these performances are still in an experimental phase, in which a specific grammar is being discovered.

My direct experience in the realization of a mixed-reality project entitled *Esemplari*, an experimental project written to be both a performance piece and a social experiment, prompts me to agree with those who see theater as a technology, hence, a tool on a par with other media, that contributes, with the richness of its technique, to providing useful elements in the management of narrative effects and emotional engagement in the "new" media.

In the case of the above-mentioned work, mixed reality (VR/live), a 360-degree shot, and a non-interactive scenario were used. The dramaturgical structure is based on a tale with three voices: a man, a woman, and a little girl. Each character lives in a different time and place.

Through a virtual-reality visor, the audience can experience the story of the characters in a 360-degree view. The actors will directly address the viewer, in a dialogue that makes them a part of the story as a witness/companion. The viewer will feel immersed in three different environments, all visible at the same time. This experience allows the viewers to perceive themselves in three different places simultaneously.

From the performer's point of view, the relationship with the environment, the other performers, and the viewer take up relational techniques that are purely theatrical. Specifically, the performing subject is filmed head to toe through an instrument (INSTAPRO2) that does not allow any closeups. For this reason, the performers' gestures have a theatrical, not minimalist (cinematographic) scope. The physical attitude toward the camera lens is that of the actor-spectator relationship. Furthermore, given the co-presence of the performers at the time of the filming, the construction of the work was based on mutual scenic listening. Finally, because the dramaturgical structure is constructed in a symphonic manner and the filming technique does not allow editing, the performance work was developed as a sequence shot or, to use the theatrical lexicon, as the recording of a live performance.

After viewing the VR content through the visor, the viewer will have

a live immersive experience. The viewer will thus find himself placed in another, fictitious but realistic reality. Even in this physical environment, he or she will be placed at the center of the story, involved in a moment of interaction with the performers.

The ambitious objective of this work is to actively engage the audience with both the work and its social message. It is an endeavor to utilize all available analogue and digital tools for a mixed-reality experiment that aims to create a sense of empathy.

4. Conclusion

Virtual reality and theater have such an affinity of objectives that they appear as specular media. Both seem devoted to the realization of a common paradox, namely, to create the utopian encounter between ourselves and our duplicates. In this sense, they appear to be such kindred instruments that one can be called the anamorphic vision of the other. Both media reproduce the principle of representative simulation that is the core of the enactive vision model.

Therefore, imagining this principle of duplication as the main element of effective representation, it is hypothesized that, through mixed-reality works, a strengthening of the empathic involvement and transformative principle proper to esthetic experience can be triggered, as already has been partly made manifest by video art since the 1980s.

Works Cited

Aquinas, Thomas. 2009. *Somma Teologica. Nuova Edizione in lingua italiana*. 1002. www.documentacatholicaomnia.eu

Aristoteles [Aristotle]. 2010. *Poetica*, 11. Milano: Bompiani.

Artaud, Antonin. 2000. *Il teatro e il suo doppio: con altri scritti teatrali*, 132, 165. Turin: Einaudi.

Castoriadis, Cornelius. 2022. *L'istituzione immaginaria della società*. Milan: Mimesis.

Cotton, Matthew. 2021. *Virtual Reality, Empathy and Ethics*, 71-112. Palgrave Pivot. Cham: Palgrave Macmillan.

Dewey, John. 1960. *Theory of the Moral Life*. New York: Irvington.

Fischer-Lichte, Erika. 2014. *Estetica del performativo: una teoria del teatro e dell'arte*. Rome: Carocci.

Giannachi, Gabriella. 2004. *Virtual Theatres: An Introduction*. London/New York: Routledge.

Giannachi, Gabriella, Nick Kaye, and Michael Shanks. 2012. *Archaeologies of*

Presence: Art, Performance and the Persistence of Being, 51. London-New York: Routledge.

Latour, Bruno. 2020. *La sfida di Gaia: Il nuovo regime climatico*. Milan: Meltemi.

Lem, Stanislaw. 1977-1980. *Phantastik und Futurologie*, 2 voll. Frankfurt am Main: Insel.

Lévy, Pierre. 2000. *Cybercultura: gli usi sociali delle nuove tecnologie*. Milano: Feltrinelli.

Maldonado, Tomás. 2015. *Reale e virtuale*, 31. Milan: Feltrinelli.

McLuhan, Marshall. 1967. *Gli strumenti del comunicare*. Milan: Il Saggiatore.

Milk, Chris. 2015. TED2015 Vancouver, Canada. https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine?subtitle=en&geo=it.

Noë, Alva. 2006. *Action in Perception*. 1. Cambridge, Massachusetts: MIT Press.

Pinotti, Andrea. 2021. *Alla soglia dell'immagine: da Narciso alla realtà virtuale*. Turin: Einaudi.

Plato. 2014. *Tutti gli scritti*. Milan: Bompiani.

Quéau, Philippe. 1993. *Le Virtuel: Vertus et Vertiges*. Seyssel, France: Editions Champ Vallon; Institut National de l'Audiovisuel.

Slater, Mel, and Maria V. Sanchez-Vives. 2016. "Enhancing Our Lives with Immersive Virtual Reality." *Frontiers in Robotics and AI* 3 (December). https://doi.org/10.3389/frobt.2016.00074.