

# Presence: A Network of Reciprocal Relations

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## Abstract

*In this paper, I propose an alternative explication of presence based on the theoretical framework provided by theatrical presence. In my opinion, a unified and consistent discourse about presence has emerged since the earliest theorizations and explications of telepresence in the '80s. Scholars, scientists, engineers, psychologists, philosophers and virtual reality experts have defined remote and virtual presence according to a common denominator: the assumption that presence is the result of subjective sensory rich experience mainly given by immersion and unilateral activity (vision and action). On the contrary, according to the explication proposed in this paper, presence occurs when natural and/or technological conditions allow for reciprocal relationships. Finally, political and social issues related to presence and remote presence are taken into account.*

*Keywords---* **Theatrical presence, presence, remote presence, ethics.**

## 1. Introduction

More than ten years ago, Thomas B. Sheridan, one of the firsts scholars to investigate the concept of presence, maintained: '[a]t present, we have no theory of presence, let alone a theory of telepresence or virtual presence. This is in spite of the fact that students of literature, the graphic arts, the theatre arts, film, and TV have long been concerned with the observer's sense of presence' [1].

In this paper, therefore, I propose to pick up Sheridan's suggestion and look at one specific art form in particular – the theatre – in order to see how it can contribute to the explication of presence.

Since the earliest theorizations and explications of telepresence and teleoperation, I argue, the underlying notion of presence has been understood and described mainly as a subjective or ego-centric sensory experience, provided by unilateral interaction (action and vision) and immersion. According to Marvin Minsky – one of the pioneers of artificial intelligence – telepresence is the name given to robotic devices, such as mechanical hands or movable platforms, which can be remotely controlled to accomplish various kind of tasks: '[t]o convey the idea of these remote-control tools, scientists often use the words teleoperators or telefactors. I prefer to call them telepresences' [2]. Ten years later, in his musings on telepresence, Sheridan defined telepresence as an experience deriving from teleoperation, namely the 'human control of vehicles, manipulators and other systems using video, audio, kinaesthetic and tactile feedback from the remote site' [1].

For Paul Virilio, telepresence, telerobotics and teleoperation are all interconnected; in fact, he defines telepresence as 'an advanced form of teleoperation in which the robot operator gets a sense of being "on location", even if the robot and the operator are miles apart; control and feedback are done via telemetry sent over wires, optical fibers or radio' [3]. Lev Manovich's definition is exemplary in confusing both teleoperation with telepresence. He defines telepresence as 'the ability to remotely manipulate physical reality in real time through its image. [...]. A better term would be teleaction. Acting over distance. In real time' [4, original emphasis]. More recently, and more specifically, the notion of presence has been described as the 'perceptual illusion of non-mediation' [5], as 'the observers subjective sensation of "being there" in a remote environment' [6], 'the experience of being there in a mediated environment' [7]. Furthermore, presence has been explicated as 'tied to one's successfully supported action in the environment' [8], and as 'a series of moments when cognitive and perceptual reactions are closely tied to current sensory impingements' [9].

Conversely, theatrical presence, I argue, offers an alternative model for explicating presence, which I believe could be usefully implemented also in the context of remote and virtual environments. Basically, the explication of presence proposed here is not based on the dichotomous relation between an active subject and a passive object. According to the model proposed here, presence occurs when natural and/or technological conditions allow for reciprocal relationships. Furthermore, and most importantly, the approach to presence based on reciprocity brings to the fore an aspect which is still missing in current research: namely, the ethical and political implications of presence.

In section one, I will introduce the reader to current varieties of theatrical presence. In section two, I will propose a general explication of presence. In section three, drawing on telepresence art, I will provide the reader with two examples of remote presence based on reciprocity. Finally, in the last section, I will take into account the social and political issues concerning presence.

## 2. Theatrical presence

Theatre has always been considered as the mirror of the world. Calderon de la Barca's 'el gran teatro del mundo' and Shakespeare's 'all the words is a stage' are just two of the most popular statements confirming the relationship between life and theatre. No surprise, therefore, if in this paper I will set theatre to cast some lights on the notion of presence.

Indeed, the concept of presence is one of the tenets of theatre art, and with the passage from "mechanical reproduction" [10] to "technological presentation" [11] its relevance has become even more crucial. The literature

about theatrical presence is rich and vast. However, in what follows, I will sum up the main varieties of theatrical presence by drawing on the analyses and insights of Roger Copeland [12].

Copeland explains that ‘the word “presence” means different things to different people – and [...] some of these meanings are mutually exclusive’ [12]. Among the many conceptualizations of theatrical presence, Copeland lists “stage presence”, also known as the performer’s *charisma*, which he further subdivides into two other kinds of presence: “possession”, namely the capacity to project a fictional character by the actor; and “authenticity”, that is, ‘the performer’s ability to [...] reveal her “authentic” self’ [12]. According to Copeland there exists another conception of theatrical presence, which has nothing to do with either “charisma” or “authenticity”, and consists of “being in the presence of”. In other words, this kind of theatrical presence takes place when performers and spectators simply ‘share a certain amount of time together in the same space’ [12]. As Copeland remarks, in this case, the only condition for presence to take place is represented by the *possibility* of touching the performers: ‘[p]erhaps being “in the presence of” a performer means that we could, if we so desired, reach out and touch (that) someone’ [12]. Finally, Copeland proposes a last conceptualisation of theatrical presence, according to him, the most appropriate definition of theatrical presence. He maintains that presence in the theatre has to do with the sense of *reciprocity* taking place between actors and spectators, namely ‘a sense that what transpires onstage – in contrast to the movies – is affected almost as much by what happens in the audience as the other way around’ [12]. According to Copeland, therefore, ‘presence in the theatre has [...] to do with [...] the way in which the architectural and technological components of the performance space either promote or inhibit a sense of “reciprocity” between actors and spectators’ [12].

I would like to conclude this section with some remarks concerning the varieties of theatrical presence that I have just discussed. There is one fundamental assumption underlying all kinds of theatrical presence: actors and spectators are physically sharing a space. However, in the variety of stage presence, sharing a space does not seem to be determinant in eliciting presence. As a matter of fact, presence, in both “authenticity” and “possession” varieties, is produced by (and is the prerogative of) the performers only. On the one hand, presence depends on the performer’s ability to remove all forms of theatrical mediation and reveal her nude, true self. On the other, presence results from the performer’s ability to create an illusion, namely, that the characters is there, on stage. Therefore, in both varieties of stage presence, “authenticity” and “possession”, presence is unilaterally determined by the actors, whereas the spectators are not involved in the production of presence.

On the contrary, in the other two varieties, i.e. “to be in the presence of” and “presence as reciprocity”, sharing a space acquires more relevance. In the former case, sharing a space is the only determinant of presence, and to stand up and touch the performers is the proof-test. However, even though sharing a space is a fundamental condition for presence to occur, nonetheless, presence is still understood

as a unilateral event, this time the prerogative of spectators only (i.e., they are in the presence of). Conversely, in the latter case, “presence as reciprocity”, presence is given by the reciprocal relations taking place between actors and spectators. Hence, presence does not characterize just one party, but both; neither is it a subjective experience determined by the abilities of a person – whether authenticity or possession – nor the result of an experiential fact (I touch it therefore I am present). Presence has become a bilateral event, a condition given by external, objective, circumstances, that is, by the architectural and technological components of the theatrical space. Compared to all other varieties of presence, this last definition is more holistic and transitive.

### **3. Towards a general theory of presence: Presence as a network of reciprocal relations**

Drawing on Copeland’s last definition, I propose the following explication of presence: *the way in which natural and/or artificial (i.e. technological) factors/conditions either promote or inhibit a sense of reciprocity between two or more people or between an environment and a person*. I agree with Giuseppe Mantovani and Giuseppe Riva’s assumption that ‘the meaning of presence is closely linked to the concept we have of reality, i.e., to the ontology that we more or less explicitly adopt. Different ontological stances support different criteria for presence, telepresence, and virtual presence’ [13]. According to my ontological stance presence is a natural condition pertaining to all living organisms inhabiting an environment. We all live in a condition of presence even though we are not aware of it. In my opinion, being-in-the-world means being caught up in this network of reciprocal relations. Of course, there might be natural or technological factors preventing us from being present or reducing our condition of presence, as in case of physically impaired people or when technology is purposefully used to inhibit the reciprocal relations that characterize our relations with the environment and the other human beings, as for instance when handling hazardous material by using tele-operation systems or sending an email instead of having a face-to-face meeting.

However, technology can also be used in order to extend and enhance the condition of presence, as for instance in all those cases in which it provides us the means to cross spatial boundaries, allowing us to share a space with somebody, as for instance when making a telephone call.

When talking about presence in remote or virtual environments, scholars have pointed out the necessity of designing and developing more transparent media, disappearing interfaces, tactile sensory feed-back devices and so on. Although I consider these very important research areas, I believe that there can not be presence without reciprocal relations. As a matter of fact, impressive technologies such as those used in warfare, commonly described as telepresence technologies, though providing a sense (or illusion) of being there, they do not allow reciprocal relations and this elicit abstraction and moral disengagement. [14].

According to my understanding, remote presence can be

achieved only when technologies keeps intact the presence condition: i.e. the network of reciprocities. Presence always implies a double flow and the awareness of being in a reciprocal relationship with some-*body* or some-*thing*, to be trapped in a *becoming* which affects the other and myself at the same time. Therefore, to be present is to be subjected to the contingency and randomness of a situation. As soon as I shield myself and escape or avoid one or all these conditions, I am no more present, or, if we want to quantify presence, I am less present.

### 3.1. Maurice Merleau-Ponty's Phenomenology of Perception

The phenomenological philosophy of Maurice Merleau-Ponty, in my opinion, points out the indissoluble relation that connects presence and reciprocity. Merleau-Ponty considers reciprocity a fundamental aspect of existence. This is especially true, if we consider his notions of the *intertwining* or the *chiasm*. Merleau-Ponty explains: '[m]y body as a visible thing is contained within the full spectacle. But my seeing body subtends this visible body, and all the visible with it. There is reciprocal insertion and intertwining of one in the other' [15]. And this is particularly true as regards vision and touch: '[t]here is vision, touch, when a certain visible, a certain tangible, turns back upon the whole of the visible, the whole of the tangible, of which it is a part' [15].

Presence, therefore, seems characterized by a sort of Narcissism, the one Merleau-Ponty speaks of about vision, which can be understood as reciprocal reflection:

'[T]here is a fundamental narcissism of all vision. And thus, for the same reason, the vision he exercises, he also undergoes from the things, my activity is equally passivity – which is the second and more profound sense of the narcissism: not to see in the outside, as the other sees it, the contour of a body one inhabits, but especially to be seen by the outside, to exist within it, to emigrate into it, to be seduced, captivated, alienated by the phantom, so that the seer and the visible reciprocate one another and we no longer know which sees and which is seen' [15]. According to Patrick Burke, for Merleau-Ponty visibility, 'as well as all the other modes of present-ability, is thus characterized by a reversibility of the seer and the seen, of the touching and the touched, and is not a function of either term but of both, insofar as they are originally unified in the flesh' [16].

On the whole, the philosophy of Merleau-Ponty, I argue, describes being in the world as relational, more precisely as the intertwining of the subject with other subjects or between the subject and his/her environment. On the contrary, as seen earlier, telepresence in its ordinary use tends to foster an understanding of presence as based on unilateral activity and subjective feeling.

What is missing, therefore, in the discourse about presence and telepresence brought about by teleoperation, telerobotics and some virtual reality applications, is a fundamental aspect of existence, which can be explained by drawing on another notion introduced by Merleau-Ponty: the 'flesh'. Merleau-Ponty maintains that the flesh 'is not matter, is not mind, is not substance' [15]. According to him,

the flesh is an 'element', 'in the sense of a general thing, midway between the spatio-temporal individual and the idea. [...] The flesh is in this sense an "element" of Being' [15]. The relevance of flesh for my argument is implicit in this passage: 'For if there is flesh, that is, if the hidden face of the cube radiates forth somewhere as well as does the face I have under my eyes, and coexists with it, and if I who see the cube also belong to the visible, I am visible from elsewhere, and if I and the cube are together caught up in one same "element" (should we say the seer, or the visible?), this cohesion, this visibility by principle, prevails over every momentary discordance' [15].

Therefore, the importance of flesh is that within it the one who sees is also the one who is seen and the one who touches is also the one who is touched. The network of reciprocal relations is intact.

Let's stop here and see how a definition of presence based on reciprocity can be put into practice in remote presence applications.

## 4. Telepresence Art

### 4.1. Telephonic Arm Wrestling

This artwork was presented by Canadian artists Norman White and Doug Back in 1986 and took place in two locations simultaneously: at the Canadian Cultural Centre in Paris and at the Artculture Resource Centre in Toronto. As its title tells, the piece consists in an arm wrestling. What distinguishes it from an ordinary arm wrestling is that the competition takes place between two wrestlers located miles and miles away from each other. The piece attempted to reproduce the intensely physical and bodily experience which characterised the arm wrestling, by producing an equivalent physical experience not based on the here and now but on distance. How is that possible that two geographically-distant people can engage in an arm wrestling? Each competitors seated in front of the same identical technological apparatus, consisting of two kinematically equivalent masters, made of boxes, cables and an aluminium stick similar to that of a joystick. The materials used were very simple and low cost: steel, Plexiglas, motors, and custom electronics. The two platforms were connected via telephone line. Using motorized force-transmitting systems interconnected by a telephone data link, the force signal inputted by the hand of the participant in location A was transformed by a modem into an output signal which was sent to another modem in location B which re-converted it in a force signal on the joystick, and vice-versa. The joystick can be considered as the prosthetic interface or the vicarious arm used by the remote competitors.

Although Edward Shanken explains that '[i]t was impossible for the competitors to really have much of a fight' [17] because of the time-delay in the telephone link, White maintains that the lever was remarkably sensitive: 'You could almost feel the pulse of the other person [...] it was uncannily human-like – the sensation of sinews and muscle – not at all like feeling a machine' [18].

Shanken reports that the idea to build an arm-wrestling

device came up to Back and White while talking in a bar about the arms race, a topic very popular in the '80s. Back said: 'Wouldn't it be great if [the arms race] could be resolved by arm wrestling?' [18]. Behind Back's ironic proposal, I believe possible to see the origin a different understanding of technology. Instead of seeing technology as a means to compensate for the loss of physical capabilities or for augmenting existing ones, the idea behind Back's words is that technology can be used to help mankind to settle controversies by fostering antagonistic relationships not based on hierarchical disposition. Technology, therefore, appears as a tool for negotiations and dialogue. The attitude implicit in Back's statement is one of reciprocity and responsibility. The notion of presence deriving from the *Telephonic Arm Wrestling* is based on interactivity. However, interactivity here is not meant as a *unilateral transmission* of actions. In other words, interactivity consists of a *bi-directional exchange* of actions. The robotic platforms do not only transmit action, but they are implemented so as to receive it as well. Presence and telepresence therefore, are the result of a communicat(c)ion, namely, actions taking place in a dematerialised and rimaterialised plane of dialogic communication.

#### 4.2. Telematic Vision

*Telematic Vision* by British artist Paul Sermon took place for the first time at the ZKM Museum in Karlsruhe, Germany, within the context of the ZKM Multimediale 3 exhibition, in 1993. *Telematic Vision* can be described as an installation taking place simultaneously in two identical sets located far away from each other. Each set is furnished with a large blue sofa placed in front of a TV screen which occupies the middle of a room. Inside the room, there are also a blue carpet and two other screens placed at both sides of the sofas. A video camera hangs above the central TV monitor, facing the sofa. *Telematic Vision* works by linking together the two remote locations. The cameras in both locations record the scenes and fed it into a video mixer by ISDN line. Both images are mixed together by using the Chroma-key technique, and then the resulting composite image is sent back to the TV screens in both locations. The blue colour of sofas and carpets is necessary for combining the two scenes together into a single image. The performance begins as soon as a participant recognizes the scene – which Sermon calls 'domestic interface' – and therefore starts to behave accordingly: '[t]he viewers in both locations assume the function of the installation and sit down on the sofas to watch television' [19]. However, instead of seeing an ordinary broadcasting television screen, participants are offered a spectacle in which they are the actors: the audience becomes the scenario and theater of its spectacle. Not only do they see themselves in the screens, but furthermore, they see themselves seated next to somebody which is not physically there and which they do not know. 'At this point they enter the telematic space, watching a live image of themselves sat on a sofa next to another person' [20].

In *Telematic Vision* there was no possibility to exchange vocal messages. Audio was purposefully cut off by Sermon

in order to avoid participants to interact only with voice. In so doing, Sermon compelled them to use other forms of interaction. Shanken offers some examples of interactions taking place among participants: mapping oneself onto the body of another participant, hiding some of the parts of one's own body using the pillows or other objects, melting, touching, caressing, dancing and making shapes together [20].

Apparently Sermon's *Telematic Vision* could be understood as another case of telepresence resulting from immersion and interactivity. As a matter of fact, the sense of immersion and illusion are very high and play a relevant role in the experience.

Yet, I argue, interaction and immersion are different from those implicit in the current discourse about presence and telepresence. Interaction is not unilateral activity. Actions are exchanged bi-directionally and synchronously among participants. The telepresence space created by Sermon is a space where it is possible to touch some other participant, but also to be touched by him/her; it is a space where it is possible to see the other but also to be seen by the other. Presence is not the result of being able to act or spy a target-participant, but is the result of relations of reciprocity. On the other hand, immersion is not the aim of Sermon's piece. In my opinion, immersion and illusion are secondary and functional to providing participants with the means of extending their consciousness in a virtual environment. The illusion deriving from immersion is reduced and lessened due to a sort of "mirror-effect", which is heightening the sense of awareness – in Brechtian's terms, it produces an "estrangement effect". In other words, participants can not only see and be seen, but they can also see themselves while seeing or being seen. Such kind of immersive technique, I believe, rather than aiming at illusion and embodiment, invites the participant to reflect critically on his/her actions. Consequently, the participants' presence is not so much the result of immersion and interaction but it arises from a sort of responsible attitude which derives from participating in Sermon's piece.

#### 5. Presence: Ethics, politics and powers

The condition of presence, I argue, implies always an ethical dimension – one of responsibility – arising from the awareness of being in a reciprocal relation with the other and the environment. Tom Lombardo maintains, '[r]eciprocity has not only served as a primary mechanism for the creation of biological and social complexity, it provides a universal principle upon which human values and ethics are defined. Reciprocity is the foundation of the concepts of justice, equity, and perhaps even human care and kindness' [21].

Indeed, power is given by the lack of reciprocity, or as Jean Baudrillard reminds us, by the lack of "responsibility", that is, the impossibility to respond: 'power belongs to the one who can give and cannot be repaid. To give, and to do it in such a way that one is unable to repay, is to disrupt the exchange to your profit and to institute a monopoly' [22].

Therefore, besides an ontological condition, presence is also an inherently political condition, characterized by an equal balance of powers and responsibility (in both sense,

e.g. the possibility to reply and a careful attitude). For instance, the possibility to act or feel, without exposing or showing one's own body, but from a safe and shielded standpoint, implies a different politics and distribution of powers.

To be in control of an environment, a thing or a human being, to have the power of affecting and acting on that thing, environment or human being – whether remotely or in the here and now – without being reciprocally open to the effects, consequences, or will of that “other” thing, in my opinion, cannot be defined as a situation of presence.

Tele-operation and other technologies sometimes unites through domination, namely they implies always a dichotomous relationship between a subject and an object. On the contrary, presence and remote presence unite through exchange and negotiations. When the network of reciprocal relations which characterize presence is limited or reduced either by technological or natural conditions, then presence is also negatively affected.

## Conclusions

In this paper I have questioned the current understanding of presence, and proposed an alternative explication. Drawing on the theoretical framework provided by theatrical presence and drawing on the artworks of a group of artists doing telepresence art, I have argued that another explication of presence is possible: one consisting of networks of reciprocal relations naturally and technologically inhibited or promoted. Finally, I have also pointed out the political and social issues related to presence.

Of course, there are also non technological factors that prevent us from being in a condition of presence. Cruelty, hate, vengeance, racism and other kinds of discriminations, poorness, sickness, and many more, have in many occasions turned human beings in mechanical devices of destruction and violence, towards the other, the different, the animals and the environment. They have erased every kind of empathy and reduced our presence in the world.

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