Jérôme Bourdon

Telepresence

Or, We Have Always Been Ghosts, from Cicero to Computers

Abstract: From the mid-1970s, new terms (social presence, telepresence, mediated presence) have been coined to refer to synchronous communications at a distance, through telecommunications or computers, with specific affordances: feeling present in a remote space, interacting with faraway humans or machines; a tradition of empirical and theoretical research was soon born. Using telepresence to refer to all those phenomena, this chapter also enlarges the meaning of the term to include previous historical forms of presence at a distance, resorting to "poor" technologies (classic broadcasting, the telegraph, newspapers, correspondence, certain forms of painting) and allowing connection with a variety of creatures, both humans and non-humans, but always, in some ways, humanized. It shows that the experience of human agents was not less rich and complex with "poor" past technologies than with contemporary "rich" ones. It emphasizes the ambivalence of the experience: telepresence has always been celebrated as bridging gaps and criticized for failing to do so, and this basic ambivalence endures across technologies and times. Finally, this chapter suggests a historical research program into various forms of presence, a general anthropological enterprise beyond our obsession with contemporary technologies.

Keywords: liveness, synchronicity, social presence, virtual reality, computer-mediated communication

Since the 1980s, the notion of tele-presence has been conceptualized in various fields, mainly through two technologies, which do not necessarily go together: virtual reality and computer mediated communication. In the mid-1970s, telecommunications researchers had proposed a similar notion, social presence. With or without making a comparison with the digital world and connecting the past and present, some media and art historians also used expressions such as "presence at a distance," "social presence," "electronic presence" or simply "presence," to discuss the power of technologies to "transport" people to different spaces and to faraway people or creatures, not necessarily including interaction. They went back to the nineteenth century (the telegraph) but also to the long tradition of 360 degrees painting, starting out in Antiquity. Others discussed, more generally, the power of images, especially religious images. Finally, the power of letters to provide a sense of presence

is sometimes considered in the history of the epistolary, very early on by past correspondents themselves and more recently by researchers.

In this chapter, I will define, organize, and try to enrich the criteria used by these varied researchers to consider these specific affordances of technology of "disembedding" people from their immediate surrounding and transporting them to faraway places and in the company of faraway people, real or imaginary. For each criterion, I start out with the contemporary debate, and show how it can be historicized. In conclusion, I will refute any teleological attempt to write history as a process of movement from "less" to "more," from low-tech to high-tech: the sense of telepresence (the intensity of the experience) is unseparatedly social and technological and no simple technological yardstick can be used to measure it, as we shall see throughout our lexical-historical promenade.

1 Defining Telepresence

In digital scholarship, numerous reviews of the notion of telepresence have been proposed (Biocca, Harms, and Burgoon 2003; Lee 2004; Lombard and Ditton 1997; Mantovani and Riva 1999; Mantovani and Riva 2001). Such reviews only occasionally wink at the pre-digital world. All quote Minsky's (1980) article as a turning point, that led to the use of "presence" as an abbreviation of "telepresence." Minsky defined "presence" as the possibility of feeling present in a distant environment and, even better, of being able to operate in such an environment. This was an ideal to be reached as much as an existing technological capability. "Can telepresence be a substitute for the real thing?" asked Minsky (1980, 46). Since then, much research has been conducted with a practical orientation in mind, addressing issues such as eliminating transportation, danger at work or facilitating e-learning.[1]

I will not abbreviate "telepresence." I will distinguish between presence per se, or physical presence (actually being in an existing space, with or without other people), and telepresence. This may sound trivial. It is not. Abbreviating "telepresence" is confusing, and this confusion is an ideological matter. The use of the abbreviation "presence" for telepresence reveals the aim of Minsky, no less a prophet of technology than a theorist: making telepresence "as good as" presence.[2]

---

1 See the collection of the journal *Presence. Teleoperators and Virtual Environment*, 1992–present.
2 Such axiological naming is not new in the history of technology: in broadcasting (starting from radio), "live" broadcasting is about feeling the live presence of something which is not actually there, not "life" itself but a representation, again, "as good as" the real thing.

1.1 Social Versus Spatial Telepresence

I also define telepresence more broadly than Minsky, who focuses on the sense of "being there," whether one is "with" other humans or not, and who primes the possibility of operating in the distant environment (for example, performing surgery). Regardless of nuances in the lexicon used, I follow Heeter (1992) and Biocca, Harms, and Burgoon (2003) in distinguishing two forms of telepresence: social telepresence (being together with another, whether one feels transported into another space of not), and spatial telepresence (being there in another space, whether one feels the presence of others or not). Social (tele) presence was first defined in a pioneering book about telecommunications, addressing the telephone but mainly the then new and exciting videoconference: Williams and Christie (1976, 65) defined social presence as "the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships."

1.2 Physical Presence (Copresence) Versus Telepresence

Such definitions help charter the field but should only be considered as ideal-types. There are many grey zones and much overlapping. First, physical presence and telepresence are not always clearly contrasted, and this is crucial for the historian. There are transitional moments, where one moves from one to the next, especially when leaving or meeting someone. Goffman (1959) who had no direct interest in telecommunications called physical presence with other persons "copresence". He uses the phrase being "within range" to characterize the situation of "being with someone" (not through technology). He noted that it depended on many physical factors: the sensory medium involved (viewing, hearing, etc.), the presence of obstructions, even the temperature of the air. But being "within range" is not easy to define precisely.

If you "dismember" the "range" according to the various sensory canals and involve the combination of technological mediation and direct sensory contact, the notion of range can be stretched endlessly. Consider a banal contemporary situation. You take a loved one to the airport. You can no longer hug, but still see and hear each other (although social conventions may prevent you from screaming "goodbye"). You can no longer talk but only see each other. As other people obstruct your visual path, you see each other less and less. Then the person passes a door. (S)he is gone! You send your first text message, you get an answer, now you have moved to a different location, let's say above the duty-free shops where your friend told you (s)he would stop and you receive a

text: "U can c me, look at the entrance of the toy shop". You keep on sending texts and wave to each other. The friend writes, ok, I am checking in, "goodbye for good." Yet you remain in the airport until the plane has taken off, you go to the rooftop, see the plane taking off, you are tempted to wave and feel silly (this sense of silliness also belongs to history, as we will see). You leave the airport for good. Then you look at the photo of your loved one (maybe on your smartphone screen) and kiss the smartphone (not the loved one, although you may want to delude yourself for a while). This story shows how the move from absence to presence is gradual, a mixture of various sensory accesses, belief about the chance of access, a combination of sensory access (touch, voice, view) and technological mediation (texting, looking at pictures – or reading texts – in order to perpetuate a sense of presence). This chapter was written before the coronavirus pandemics but we assume readers will immediately relate this discussion to their own experiences of having to resort to the full gamut of applications and machines, to feel as dense a sense of telepresence as possible despite the various frustrations and delays, not to mention the brutal borders of the experience (discussed below), as opposed to the gradual phasing out we just described in our imaginary experience at the airport.

The border between physical presence and telepresence is complicated even in situations of, purportedly, simple physical copresence (in Goffman's sense of "being with someone"). Consider the peculiar distance created by the theatrical arrangement: the play, the stage, the lighting, the dresses of the actors. You are in the same space, you hear them. But reporting on the event, nobody would say (s)he was "with the actors," except if (s)he paid a visit backstage, after the show.

This has been much discussed by theorists of performance (e.g., Dixon 2007). The performer is out of reach, to a large extent out of range, because of an arrangement that also includes social conventions (except in already trivialized avantgarde plays, performers and spectators do not cross the border between the stage and the audience space). The set, the voice, and the attire create an artificial presence, which we know to be different from a regular encounter with the "same" person (that is, the actor behind the character) in a known, common space. This should matter to communication scholars obsessed with supposedly new technologies: the old apparatus of the theater involves numerous old technologies, for example acoustics, lighting, the building itself and the very old tradition of the mask. Redefining technology in a broad way will be crucial to our historical enterprise.

I now move to the specific criteria which can be used to refine and compare categories of telepresence. I start, and deal more at length, with social telepresence. I first discuss the nature of the entity "at the other end of the line": humans, but also other creatures, including the dead. I then consider directionality (is the experience interactive or not), (a)synchronicity, and the quantitative aspect

of social presence (one to one, one to many). I move back to spatial telepresence, discussing the contrast between the simple illusion of being in another space, and more full-fledged immersion. The notion of immersion will lead me to discuss the limits of the experience of telepresence: even idealistic prophets such as Minsky had to accept that the experience is limited, both in space and time, and is never quite "the real thing." Whether this is, by necessity, a defect, I consider in the conclusion.

2 Social Telepresence

2.1 Humans, but also Gods and Bots

Discussing our binary definition, I start with a crucial point for historians. So far, I have taken for granted the sense of "being with" (someone) as opposed to being alone. This "someone," obviously, is assumed to be another human being, known or not known before the experience of telepresence. In the digital context, this border has been discussed only regarding bots. For example, Lee (2004, 32) defines presence online as "a psychological state in which the virtuality of experience is unnoticed." He then redefines social presence as "a psychological state in which virtual social actors (para-authentic or artificial) are experienced as actual social actors in either sensory or non-sensory ways" (Lee 2004, 45). By para-authentic, he means actual, alive persons. Artificial characters are mainly bots (although he includes fictional characters, let us say in movies, a point which I will not incorporate as it poses problems that I have no space to consider here).

The human collective has many more complex borders with purportedly alive, but non-human creatures. Remaining in the contemporary media age, researchers have shown how media users personalize their technologies, and experience complex senses of presence while they know they are only interacting with a technological arrangement. In a classic book, Reeves and Nass (1996) demonstrate, on the basis of numerous experiments, that in given circumstances, people treat media, broadly speaking, like "real persons": media may refer to a cable channel (who can be nice or whimsical), a machine (a computer), or, more vividly, a mediated representation of a pseudo-person. People humanize all those entities, get irritated at them or are grateful to them. Especially for online representations they can interact with, they react to gender, to supposed personality traits, they can feel flattered or cheated by a "virtual agent." Published 30 years ago, their book has lost nothing of its relevance.

Moving backwards, to the first development of electric (the telegraph) and electronic media, Sconce (2000) retraces the history of the numerous ghosts which have haunted our media. He comments on the rich lexicon used across the years, much before computer-mediated communication: "Variously described as 'presence,' 'simultaneity,' 'instantaneity,' 'immediacy,' 'now-ness,' 'intimacy,' 'present-ness,' the 'time of now,' this [. . .] at times occult sense of 'liveness' is clearly an important component in understanding electronic media's technological, textual, and critical histories" (Sconce 2000, 6). This is a different kind of presence than the one conceptualized by Reeves and Naas, a belief in the existence of paranormal communication, communication with the dead or connection with parallel worlds, which, as Sconce shows, can teach us much about our present fantasies regarding "cyberspace." In addition, Natale (2016) has shown how the rise of this specific form of telepresence was linked to the new entertainment industry: a remarkable example of the rise of telepresence as a new market.

Although Sconce seems to suggest that electronic technologies of communication offered a remarkable chance to connect new technologies with changing beliefs in the afterlife, the whole history of images is replete with beliefs in the presence of distant, paranormal, or religious creatures, residing "in the image." Belting (1994) has retraced this history from Antiquity to the Renaissance. He has shown how holy images of sacred creatures were endowed with specific forms of presence, often against the advice of theologians who had a hard time disciplining such images: images could provide success, comfort, protect against various ailments. Sometimes, they could bleed or cry. In short, the question of "who is present" in telepresence has been a complex issue for a long time and not only in past media and communication ecologies. In addition, all the above is discussed within the modern Westernized world, while other ontologies (animism, totemism) can provide an even richer spectrum of a sense of presence at a distance (Descola 2013).

Less known is the power of another medium with a very long history, the letter, to provide various forms of telepresence, and not only with other humans. The history of correspondence, starting as early as the Antiquity, has immediately included legends and stories about letters allowing communication with the dead or with the gods. Indeed, in the Middle Ages, some people claimed to have received letters from the Virgin Mary or, more threateningly, from the devil himself (Boureau 1991).

Internet research has only recently started exploring the beliefs in the contact with non-human or dead people in the digital world (Natale and Pasulka 2019). As noted ten years ago, folklorists have neglected cyberspace. Yet, for example, Elizabeth Tucker (2009) offers a fascinating example of websites devoted to missing women, which mix information and legends about their ghosts, or reports about sightings. The study of Facebook pages (Brubaker, Hayes, and Dourish 2013; Georges 2014) devoted to grieving has recently grown, and, then

again, websites where images and information accumulate also express, among some participants, the hope for and belief in a form of electronic survival.

2.2 Unilateral or Bidirectional?

Contemporary telepresence (starting from telecommunications) is supposed to be interactive. In media history, the term "interactivity" came to the fore in the first age of cable television in the 1970s: interactivity was supposed to be a remedy to a basic "defect" of television which is mono-directional (see Benjamin Thierry's chapter in this book). It started modestly, with the idea of a "return path" to give feedback to the transmitting channel, which could be used for different services. More ambitiously, interactivity included the full-fledged "visiophone," which was experimented, and later studied as a classic case of technological failure (Lipartito 2003; Ortoleva 1998).

As so often, thinking of a medium in isolation is misleading. Interactivity was celebrated as the remedy for a fault of a previous medium: television. But, without the name, interactive media already had a remarkably long history. The telegraph and the telephone were interactive, although the utopian discourse around these media insisted more on the instantaneity (see below) of communication, by contrast, probably, with a very old interactive (but not instantaneous) medium: correspondence.

For our purpose, it would be worth incorporating correspondence into media history. In the last thirty years, a considerable body of historical work on the epistolary has been accumulated, and not only in the West.[3] The first letters (not on paper, but on numerous other media, including clay, bronze, parchment) were exchanged soon after the invention of writing. Correspondence offered the possibility of exchanging messages in a bi-directional way. For our purpose, we will insist on the fact that time and, again, users of correspondence marvel at its power to make the absent (especially the dear absent) present. In Greek antiquity, the term *parusia* (Greek for presence) was used about correspondence (Ceccarelli 2013). Across history, correspondents used often similar strategies to underline this power, fetishizing the letter, carrying it with them, kissing it, putting into the envelope (when there was one) a lock of hair, a picture, a dried flower, later a photograph (Bourdon 2020).

---

3 One fascinating example of the thick bibliography on correspondence history, which shows us that its powers at "presencing" the absent were reflected upon beyond the West, is by Richter 2013.

Interactivity was key here: the letter was based on an exchange. Although this is hidden by the fact that literary correspondence, especially, has been read as the work of a single author, as the letters of the less valued correspondent (almost always a female one) have been lost, we should think of letters as going in pairs, or in series. An isolated letter never tells the full story of epistolary "telecopresence" as a mutual, reciprocated action.

When the other correspondent disappeared, or stopped writing ("ghosting," in contemporary parlance), emotions ran strong (Farman 2018, for a transcultural and historical perspective): moving from worry (is (s)he sick, or worse?) to anger (why did (s)he stop writing?). Remarkably, this anger could be directed at the correspondent, but also at the technological system (the post office) affording presence. Again, this phenomenon of displaced anger can be found across history. When a conversation runs amok on Skype, users can feel an ambivalent anger, at the person who stopped talking, or is doing something else, until a further exchange establishes that the supposedly reliable technology is, yet again, not working. In an earlier age, we blamed the post office for losing our letter (but worried this could be used as an excuse by lazy correspondents).

2.3 Synchronous or A-synchronous: The Relativity of Speed

Much research in computer mediated-communication has compared synchronous or a-synchronous devices, with a practical-empirical focus about the advantages and drawbacks of each, for example in teaching, or in professional exchanges (Watts 2016). Is it better to wait, to have time to elaborate a response (and lose the spontaneity, and the to-and-fro of immediate exchange)? Would not it be better to answer immediately (but maybe too quickly, exposing feelings one wanted to control, or rushing to the wrong answer)? Unsurprisingly, there has been a tendency to conclude that, especially in teaching, a combination of synchronicity and a-synchronicity is desirable.

In such discussions, a-synchronicity always refers to very short delays, counted in hours or days, rarely more. Such short delays, in the pre-telegraph era, would have been considered not as delays, but as fast communication, as quasi synchronicity. This brings us back to correspondence. Ancient correspondents (examples can be found from the Antiquity onwards) mostly lamented the slow pace of correspondence, expressed their impatience at delays and used various carriers (before and during the time of official postal systems) to get their letter to travel faster. More rarely, however, they could appreciate the slow rhythms of their exchanges, which gave time to elaborate long, precise answers, and, exactly as in a-synchronous CMC, to control complicated feelings. "A letter doesn't blush" wrote Cicero while, famously, Madame de

Sévigné (seventeenth century) extolled the pleasure of writing to her absent daughter, confronting a paradox I will return to: "I love writing to you, my dear daughter. This means I love your absence. My God, how dreadful!"

In the history of correspondence, the rise of postal systems in the fifteenth and sixteenth century was felt as a major improvement. Berhinger (2006) has reminded us that the theme of speed became central to the discourse of modernity well before the mechanical engines of the nineteenth century, but with a "low-tech" system, based on the division of labor and the careful calculation of time: the modern postal system. The increase in the rhythm of the circulation of messages was perceived as a major change linked to the new technology, to such an extent that it left specific phrases in major European languages: "post-haste" (found in Shakespeare) "en poste" (meaning, in French, very fast, found in Montaigne), "a la celerita de la estefa" (Italian), were used for centuries.

The nineteenth century and early twentieth century saw the rise of technologies of instantaneity, with the telegraph, the telephone, and broadcasting. Broadcasting, however, proposed a complicated form of instantaneity. While transmission itself was instantaneous, some messages were soon recorded and not broadcast at the time they were performed in front of the microphones and the cameras. In the 1930s, this type of transmission received a specific moniker derived from the idea of life, in some languages ("live" in English, "vivo" in Spanish), or from "direct" in others ("direct in French, diretta" in Italian). This brings us to the crucial possibility of cheating about "live presence", which touches debates about presence far beyond broadcasting (Bourdon 2020). Messages could feel "live" while they had been recorded, especially if programs were recorded in continuity with production ("recorded live," or "direct différé", in French). These debates did not move "wholesale" to contemporary, Internet-connected television, but they are still relevant, especially when programs combine live and recorded (edited) sequences: a program can be felt as live (as if live) even when it is recorded. This is crucial, for example, for some sequences of reality television, another genre whose authenticity is viewed with suspicion (and liveness remains a crucial resource for providing a sense of authenticity through presence). More broadly, there has been a stream of rich theoretical debates about "the meaning of live" and liveness in contemporary life (e.g., Scannell 2014).

Let us move back in time. The sense of speed, and even the apparently clear-cut notion of synchronicity, depends very much on the context. The first medium which triggered a sense of remarkably speedy communication was the postal systems, starting from the "royal" post services of ancient empires, the Akkadian or the Persian cases, for example (Bryce 2003). From a phenomenological point of view, we have numerous examples, across the ages, of correspondents celebrating the sense of being "as if" with the persons, knowing that

the letter had arrived, or would arrive, within what was, for them, a remarkably short time-span. In short, the sense of liveliness, or liveness, is not a mathematical datum, but a human relation. And, as Farman notes about the rise of written messaging, including through smartphones, "though the mythologies of the digital age continue to argue that we are eliminating waiting from daily life, we are actually putting it right at the center of how we connect with one another" (Farman 2018, 23).

2.4 One-to-one, One-to-many: Between Telepresence and Togetherness

We are now moving to a complex form of telepresence, although the lexicon is deceptively simple. For much of the twentieth century, the opposition between one-to-one communication on the one hand, and one-to-many on the other, has been central to communication studies, with broadcasting taking center stage as the powerful, new form of communication allowing one to address many in a synchronous manner. However, the opposition is more complex, and, then again, grey areas abound between the two extreme, pure models, which make it difficult to organize them, for example, into a long-term historical narrative (Balbi and Kittler 2016).

First, both models have long been combined. The letter may be considered as the "pure form" of one-to-one communication, but this idea of an ideal, private dialogue is a recent, romantic one. Numerous letters (from public figures, especially religious ones) were meant to be addressed to many, as in the Christian tradition of the epistle (Bourdon 2019), while the sense of secrecy has been established only recently (by law, only in the nineteenth century in the West). Letters (including official, highly protected ones) have long been threatened by breach of privacy in many ways (Bryce 2003). Email users who believed they were writing only to one person, and discovered that, among other possibilities, they have inadvertently pressed "reply to all," or that their email has been forwarded (intentionally or not) by their correspondent, or that a hacker has read it, have numerous historical companions for such unpleasant experiences.

Furthermore, with all due respect to broadcasting, one-to-many has never been as pure as we think, and has always cohabited with one-to-one. The hypostasis of broadcasting as mass communication bypasses the persistence and also the birth of parallel one-to-one forms of communication. Most simply, the telephone has been relatively ignored by media/communication researchers. The idea of broadcasting as mass-communication emerged only slowly from the use of radio as one-to-one "wireless telegraphy." Any sense of mass togetherness,

through broadcasting or the reading of papers (as famously analyzed by Anderson for the national community), is often linked to other forms of presence: audiences may read in small groups (with someone reading aloud before the era of general literacy), or view/listen to a broadcast program together. They use the material received alone to connect through conversation, anticipate such acts of sharing while viewing or reading. And digital technologies have allowed even more intricate situations of "multicommunicating": tweeting or texting while watching a program, for example.

3 Spatial Presence: From Illusion to Immersion?

From the start of this chapter, I have focused mainly on social telepresence. The notion of spatial presence deserves specific treatment but has drawn less attention per se: imaginary transportation to another space has been treated, in general, as less important than social presence, especially in spaces where there are no humans or living creatures. In science fiction, such transportation to empty worlds brings about fear, more than marveling. See for example the H.G. Wells (1895) story *The Time Machine* in which, at some point, the hero reaches a future without any human presence. Spatial telepresence, so to speak, tends to be treated as the background or the environment of "more valuable" social presence. An exception, of course, is the practical interest in teleoperation (Minsky 1980) in a different space, for example, in abyssal depths. But this wholly practical focus, brought about by new technological affordance, is recent in the long history of telepresence.

However, spatial telepresence is the only aspect of presence which has been the object of a full-fledged attempt at historicization. For example, Grau (2003) starts from the idea that painting has long been used in order to provide spatial telepresence. He discusses at length the first preserved attempt, the room with its four painted walls in the Villa Dei Mister, in Pompei, and the different visual devices used to provide what he calls an "illusion" of transportation into a different space, peopled by humans, gods and mythological creatures. One could say that the aim was practical as well: the illusory space is surmised to have allowed the performance of rituals. Like Belting, Grau is sensitive to the role of religious images but, unlike him, he connects the remote past to the contemporary use of telepresence, especially by artists, at the end of a rich historical voyage through the trompe-l'oeil, the fully painted walls and ceilings of baroque villas and palazzi, and the detailed consideration of a forgotten medium: the panorama.

The panorama's history lasted a century, starting from its invention (and earlier patenting) by Scottish artist Robert Barker in 1792, in a cultural context where the interest in large landscape painting, and the use of a bird's eye view, was growing. A panorama was a 360 degrees huge painting which people viewed from the center of a dedicated building (a *rotunda*), where the landscape "enveloped" them. Such panoramas (unlike the religious frescoes of the past) made claims at being fully realistic representations of existing landscapes and events. Together with the growth of tourism, the panorama was said to be able to replace travel, and also give access to current affairs (the major battles of the time were proposed). The metaphor of "travelling" was widely used to refer to the experience. Variations were proposed: the moving panorama (the paintings circulated and the viewer could remain static) and the diorama (where landscapes changed through the elaborate use of lighting). A whole industry, much commented on in the press, developed. As for other media, utopian and counter-utopian positions existed, the first extolling the wonder of this new form of presence at a distance, the other deriding the cheap illusion it produced, which could, by no means, replace the "real thing." Interestingly, the word "panorama", which we now mostly use for "real" panoramas (but note the option of "panoramic" photographing on your smart phone) was invented for this specific device.

This form of past spatial presence has been easily forgotten, probably because compared to the power of cinema, 3D images and, finally, virtual reality, it feels "weak." Yet, a reconstruction of its history linking it to current forms of telepresence can teach us much about the aspirations of modern societies to create strong illusory spaces. The "realistic" focus of the panorama, for example, as opposed to the religious one of the Villa Dei Misteri, or the massively fictive character of cinema production, tells us much about the desire to see a newly conceptualized, secular "real world". There was a growing market for this, through all forms of nineteenth century communications, including, of course, transportation technologies. In addition, the panorama had a remarkable feature, which made it, if you want, "better" than VR: people did not have to wear an accessory, a prothesis, in order to experience presence. Of course, such accessories may become lighter and easier to manipulate, yet the very act of putting them on and off clearly delineates a border between the "real life" of continuous presence of our surroundings and the pseudo-life of tele-presence. I now turn to this question.

4 "Being There" but Never Completely: the Persistent Borders of the Telepresence Experience

I now turn to an issue which is not explicit in most past or present discussions of telepresence, or only as an obstacle to be overcome: the borders of the experience. Telepresence is a specific experience which removes people from the here and now of their immediate spatial and social surroundings. Being absorbed in reading or writing a letter in 500, immersed in a panorama in 1800, under a VR headset in 2010, praying in front of a holy icon in 1300, playing for hours on Second Life in 2000, the human subject feels (s)he is "not there". However, this "not being there" has a beginning and an end and can only be partial. Even during the experience, simple reminders can destroy the illusion: in all the examples given, think of someone tapping gently on the shoulder saying: it's lunchtime (which may also trigger the feeling of hunger which had been forgotten, "dissolved" into the experience of telepresence).

Frame has been discussed recently as regards virtual reality. Pleading for the power of VR to be used as an "empathy machine", through a strong experience of social telepresence, Milk (2015) expresses his desire to break the screen which has so far been a condition of the access to "other realities" (unknowingly echoing the words of Robert Barker, the inventor of the panorama): "I mean, all the media that we watch – television, cinema – they're these windows into these other worlds. And I thought, well, great. I got you in a frame. But I don't want you in the frame, I don't want you in the window, I want you through the window, I want you on the other side, in the world, inhabiting the world".

The word immersion suggests this: breaking the frame/screen, going through the (looking?) glass: another technological dream whose long roots into myths and literature would be worth a detailed exploration. Assuming VR can successfully "break the frame" of space, there is another frame, that of time. One has to enter the telepresence experience and leave it, "get back" to the real world. Science fiction writers have early imagined experiences of living in a wholly virtual world and no longer being able to distinguish the real places and creatures from the fake or virtual ones, and there is a whole cinematic tradition about this. Importantly, this is mostly treated as a danger, as a pathology (the same was written about the nineteenth century panorama). Being just as good as the real thing may not be a real aspiration. One may need and want limits to the telepresence experience.

One development of telepresence is the possibility of keeping in touch, at a distance, for long periods of time. Madianou (2016) has proposed the term "ambient copresence" for the experience of migrants who live far away from their

family. For example, a mother leaves Skype open on her computer, can hear and occasionally see her faraway children. Interestingly, this expansion of the time frame goes together with a "backgrounding" of the experience, which is, by definition, not very intense. "Ambient presence," even if it is not activated, may remain the horizon of our possible interaction with faraway loved ones, a dream of telepresence without borders in time.

The whole question of intensity, viewed in a historical perspective, is much more complicated than any simple "quantitative" comparison. The whole discourse of telepresence, once it latches onto the modern discourse of technological progress (a tradition which authors like Minsky or Milk continue, precisely at the time they think they are celebrating a revolutionary development) is about the capacity of technologies to offer "more," more full-fledged presence, getting closer and closer to "the real thing." Researchers of contemporary telepresence all mention the increased intensity of the experience, contrasting the "strong" present with the "weak" past, e.g. in the following: "The emphasis on interactive behavior is a more recent component of social presence theories. Most social presence research until the mid-1990s dealt primarily with low-bandwidth media, textual media, or teleconferencing systems [. . .]. Therefore, behavioral variation was limited and rarely extended beyond text-based verbal behavior and a narrow range of nonverbal communication behaviors" (Biocca, Harms, and Burgoon 2003, 465).

Yet, art, cultural, epistolary, and media history reveal that old forms of telepresence were no less intense for their users. The analysis of the use of technologies matters here more than the dry comparison between "bandwidths". Belting (1994) and Grau (2003) are especially relevant regarding visual art and representations. But the written word has its own potential for disembedding its users. Reading past letters of "heavy" correspondents, such as Madame de Sévigné or Diderot, show how they were absorbed, for hours, into their letters. Human beings early developed "second lives" not only through digital media but also through any communication technology. The intensity of the experience lies in the body of the user, and should not be judged anachronically, from the perspective of promoters of "better", more recent technologies.

The appreciation of intensity is also a matter of the specific historical techno-social configuration. Coming back to our different parameters of presence: when interactivity was lacking, the arrival of interactivity is perceived as key to intensity. When immediacy came (the telegraph), the whole debate switched to immediacy, even for a technology, the telegraph, which performs poorly regarding representation, and offers simply long and short dots to decipher, which one could produce only by going to a dedicated place with the help of an operator. Yet, this "revolution" of instantaneity was a considerable shock for contemporaries.

It triggered mostly a positive utopia: it is hard to find much worry or skepticism about the telegraph. Thoreau is the most famous sceptic, and Walden is ritually quoted by historians of the telegraph: "We are in great haste to construct a magnetic telegraph from Maine to Texas; but Maine and Texas, it may be, have nothing important to communicate . . . " A few other intellectuals or writers express reservations: Aby Warburg stressed the "awareness heightening power of distance, as a condition for intellectual productivity and called it the 'original act of human civilization'" (Grau 2003, 286); he worried that the sudden proximity made possible by the telegraph would threaten this. This latches onto contemporary critiques of the power of always available, instant communications (Rosa 2015).

Conclusion

Exposing the long roots of the recent debates of computer mediated communication and virtual reality, I have proposed a few analytical concepts for telling the long history of telepresence. Full-wall frescoes (or even 360 degrees painting), the theatre, or the modest letter have long given their spectators and users a sense of being transported from their here and now to see far-away, imaginary places and people, and even to communicate with them. Telepresence has always been supported by physical presence, and reciprocally, as they are today, although the experience of "pure" telepresence is of course much more frequent than in the distant past.

People have long thought they could make the dead, gods or supernatural creatures present through various magic devices, but also through letters, and this was combined early with electronic presence. This dream of communication with the afterlife continued with television, and today with the Internet.

Intensity is not related to the measurable power of technologies but to the emotional experience. Similarly, the sense of instantaneity is relative: the celebration of instantaneous telepresence, starting with the telegraph, hides from our contemporary eyes the sense of speedy communication with distant persons through the letter, a modest and powerful medium. Finally, the sense of being together with a vast audience has never been the privilege of broadcasting: newspapers, religious epistles, but also, most simply, public speech in vast assemblies and churches, have remarkable histories.

And maybe most importantly, technologies of presence have always been ambivalent for their users. While, starting with the telegraph, the contemporary age has tended to celebrate the power of technologies to make up for absence and distance, the experience of technologies has been replete with experiences

of frustration, delays (Farman 2018), "buffering", "ghosting" and their ancient accoutrements. It is befitting here to come back to Warburg. In his comments on the merits of distance, what he suggests is that more can actually be less, that being "as good as the real thing" also means being a poorer, one-dimensional access to presence at a distance, unable to go through all the facets of experience and to exploit the human capacity for "scaling" crucial experience in different ways and reflecting upon them. We need presence and distance, the voice and silence, the body and the ghost, together. The whole spectrum of partial presences has long contributed to make us fully human and will continue to do so.

References

Balbi, Gabriele, and Juraj Kittler. "One-to-One and One-to-Many Dichotomy: Grand Theories, Periodization, and Historical Narratives in Communication Studies." *The International Journal of Communication* 10 (2016): 1971–1990.

Behringer, Wolfgang. "Communications Revolutions: A Historiographical Concept." *German History* 24, no. 3 (2006): 333–374.

Belting, Hans. *Likeness and Presence. A History of Images before the Era of Art*. Translated by Edmund Jephcott. Chicago: University of Chicago Press, 1994.

Biocca, Frank, Harms, Chad, and Judee Burgoon. "Towards a more robust theory and measure of social presence: Review and suggested criteria." *Presence: Teleoperators and Virtual Environment* 12, no. 5 (2003): 456–480. 105474603322761270.

Bourdon, Jérôme. "Live television is still alive. On television as an unfulfilled promise." *Media, Culture and Society* 22, no. 5 (2000): 531–556.

Bourdon, Jérôme. "From correspondence to computers. A theory of mediated presence in history." *Communication Theory* 30 (2020): 64–83.

Bourdon, Jérôme. "The Internet of Letters. Comparing Epistolary and digital audiences." *Participations, a journal of reception and audience studies* 16, no. 2 (2019). https://www.participations.org/Volume%2016/Issue%202/18.pdf.

Boureau, Alain. "La norme épistolaire, une invention médiévale." In *La correspondance. Les usages de la lettre*, edited by Roger Chartier, 127–158. Paris: Fayard, 1991.

Brubaker, Jeff R., Hayes, Gillian R., and Paul Dourish. "Beyond the Grave: Facebook as a Site for the Expansion of Death and Mourning." *The Information Society* 29, no. 3 (2013): 152–163.

Bryce, Trevor. *Letters of the Great Kings of the Ancient Near East: The Royal Correspondence of the late Bronze Age*. London: Routledge, 2003.

Ceccarelli, Paola. *Ancient Greek letter writing: A cultural history (600 BC-150 BC)*. Oxford: Oxford University Press, 2013.

Descola, Philippe. *Beyond Nature and Culture*. Chicago: University of Chicago Press, 2013.

Dixon, Steve. *Digital performance: A history of new media in theater, dance, performance art, and installation*. Cambridge, MA: The MIT Press, 2007.

Farman, Jason. *Delayed Response: The Art of Waiting form the Ancient to the Instant World*. New Haven: Yale University Press, 2018.

Georges, Fanny. "*Post mortem* digital identities and new memorial uses of Facebook. The identity of the producer of a memorial page." *Thanatos* 3, no. 1 (2014): 82–93.

Goffman, Erwing. *The presentation of the self in everyday life*. Garden City: Doubleday, 1959.

Grau, Oliver. *Virtual Art. From Illusion to Immersion*. Translated by Gloria Custance. Cambridge, MA: The MIT Press, 2003.

Heeter, Carrie. "Being there. The subjective experience of presence." *Presence, Teleoperators and Virtual Environments* 1, no. 2 (1992): 262–271.

Hochfelder, David. *The Telegraph in America 1832–1920*. Maryland: The Johns Hopkins University Press, 2012.

Lee, Kwanmin M. "Why presence occurs: Evolutionary psychology, media equation, and presence." *Presence: Teleoperators and Virtual Environment* 13, no. 4 (2004): 494–505.

Lipartito, Kenneth. "Picturephone and the Information Age: The Social Meaning of Failure." *Technology and Culture* 44, no. 1 (2003): 50–81.

Lombard, Matthew, and Theresa Ditton. "At the heart of it all: The concept of presence." *Journal of Computer-Mediated Communication* 3, no. 2 (1997).

Madianou, Mirca. "Ambient copresence. Transnational family practices in polymedia environments." *Global Networks* 16, no. 2 (2016): 183–201.

Mantovani, Giuseppe, and Giuseppe Riva. "Building a bridge between different scientific communities: On Sheridan's eclectic ontology of presence." *Presence: Teleoperators and Virtual Environments* 10, no. 5 (2001): 537–543.

Mantovani, Giuseppe, and Giuseppe Riva. "Real" presence: How different ontologies generate different criteria for presence, telepresence, and virtual presence." *Presence: Teleoperators and Virtual Environments* 8, no. 5 (1999): 540–550.

Milk, Chris. "How virtual reality can create the ultimate empathy machine". TED TALK: Ideas Worth Spreading. 2015. https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine.

Minsky, Marvin. "Telepresence." *Omni Magazine* 2, no. 9 (1980): 45–51.

Natale, Simone. *Supernatural Entertainments. Victorian Spiritualism and the Rise of Modern Media Culture*. University Park, Pennsylvania: Pennsylvania State University Press, 2016.

Natale, Simone, and Diana Pasulka, eds. *Believing in Bits. Digital Media and the Supernatural*. Oxford: Oxford University Press, 2019.

Ortoleva, Peppino. "Il videotelefono". In *Oggetti d'uso quotidiano* (objects of daily use), edited by Michela Nacci, 52–67. Venezia: Marsilio, 1998.

Reeves, Byron, and Clifford Nass. *The Media Equation*. Cambridge: Cambridge University Press, 1996.

Richter, Antje. *Letters and Epistolary Culture in Early Medieval China*. Seattle: University of Washington Press, 2013.

Rosa, Hartmut. *Social Acceleration. A new theory of modernity*. New York: Columbia University Press, 2015.

Scannell, Paddy. *Television and the Meaning of Live. An Inquiry into the Human Condition*. London: Polity, 2014.

Sconce, Jeffrey. *Haunted Media. Electronic Presence from Telegraphy to Television*. Durham: Duke University Press, 2000.

Short, John, Williams, Ederyn, and Bruce Christie. *The social psychology of telecommunications*. New York: Wiley, 1976.

Tucker, Elizabeth. "Guardians of the Living: Characterization of Missing Women on the Internet." In *Folklore and the internet: vernacular expression in a digital world*, edited by Trevor J. Blank, 67–80. Salt Lake City: Utah University Press, 2019.

Watts, Lynette. "Synchronous and asynchronous communication in distance learning: A review of the literature." *Quarterly Review of Distance Education* 17, no. 1 (2016): 23–32.

Wells, Herbert George. The Time Machine. London: William Heinemann, 1895.