While "video chat" or "videotelephony" technology (enabling real-time communication via audio and video channels between two or more people) has been available and widely used for over a decade, this technology has seen a change in usage over the last few months due to the coronavirus pandemic. Enacted due to concerns over the spread of the deadly virus, social distancing measures have caused communal events and activities to either be discontinued or be suddenly adapted to videotelephony technologies such as Zoom, Skype, and FaceTime. "In cyberspace we need not worry about a growly stomach, an errant sneeze droplet, or a postprandial dental remnant," wrote John Durham Peters in his 2015 book, Marvelous Clouds (p. 274). What, then, is there to worry about, with the sudden introduction of the digital (by strict necessity) to mediate what was once personal? There are many facets of the medium of videotelephony, as it is now being used, to be laid out and contextualized. As a software product, these technologies are built with both explicit and implicit control structures. In addition to insidiously added architectures of power, aspects of being together are also lost. Videotelephonic systems fail to successfully mediate full presence at a distance, particularly for certain activities that would not be conducted virtually in a pre-pandemic world (mourning and prayer being but two examples). In building these facets of control and removing these aspects of presence from social, occupational, educational, medical, religious, and political spheres (to name a few), the introduction of videotelephony to mediate daily life during the coronavirus pandemic deserves careful consideration.

In the context of the pandemic, the structures of control built into the architecture of videotelephony technologies (which now mediate countless new interactions) leave previously unenforceable powers in the hands of the administrators of these technologies. To take school as an example: whereas in a pre-pandemic classroom, students had the ultimate control over the words they spoke to the class, in a videoconference classroom, the teacher may pre-emptively mute students when it is time to listen rather than talk. Students directed to pair off and discuss a reading used to move of their own free will; now, they are transported electronically into preselected or random groupings. The essences of participation, free choice, and freedom of expression throughout one's education, are, to some extent, suppressed. To (arguably) raise the stakes, consider a town hall, held by an elected politician to answer voters' concerns. This town hall becomes extremely difficult to effectively protest when held on Zoom: protestors can simply be muted. The showing of physical power that would ordinarily be required to remove such a disruption (and the associated shame and accountability with this exposure of

force) has been done away with. Power that used to be stark and delayed has, in videoconferences, become quiet and subtle.

A pandemic as a backdrop for the institution of stronger mechanisms of control is nothing new: In *Discipline & Punish*, Michel Foucault introduces his take on Bentham's Panopticon prison architecture with a discussion of the quarantine procedures in a medieval town. Foucault emphasizes the careful separations in space, the ubiquitous authoritative monitoring, and the systems of identification and registration (John Durham Peters might call it "tagging") employed to track the subjugated townspeople (Foucault, 195-198). Throughout the rest of the chapter, Foucault explains the shift from the concentration of power in the authority figures themselves (i.e., those who instituted the plague rules) to the distribution of power into systems of control as diffuse as the architectures of prisons as well as hospitals, factories, and schools. This is achieved by arranging the subjected individuals in highly separated and visible arrangement, whereby each does not know if they are being watched at any given time. "Hence the major effect of the Panopticon: to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power" (201).

Videoconferencing technology is, in some ways, extremely Panoptic in its design. Individuals are segmented carefully into their own little boxes. No one knows if they are being carefully examined by others (even though everyone's eyes are visible, it is impossible to know where *you* are on *their* screen), inducing the very "state of conscious and permanent visibility" that Foucault speaks of. But given the earlier discussion of the new concentration of power in the individual host or administrator of a call (specifically, the power to mute and organize), does this technology emulate the old disciplinary model from the plague town, where humans must discipline, or the automatic model of the Panopticon? We observe a subtle flavor of Panopticism (Panauditism?) in the self-muting culture (what one of my professors called "good mute discipline") which can be observed in many classrooms and meetings: as a default, participants will often mute themselves when they are not currently speaking, even when not required to. The public shame of unintended audible interference with the proceedings and the glaring yellow highlight of your Zoom square that inevitably follows is motivator enough to inhibit one's expressive ability. With mute on as the default, you cannot laugh or cry out and be heard in an instinctive response to a funny or disturbing comment. Indeed, this technology goes beyond the Panopticon in its effectiveness as a widespread disciplinary tool: Videotelephony software is even more viral and automatic

than architectural blueprints. While Panoptic structures must be implemented physically on a macro scale, a Panoptic user interface need only be designed and digitally implemented once and then downloaded everywhere.

While we have discussed what is silently added by the medium of video chat, we must now consider what is lost during such mediation. When considering the use of videotelephonic systems, the aim seems to be convenient and subtle projection of presence across space. In including both audio and visuals (as opposed to audio from a conference call on one's cell phone), videotelephony shoots for telepresence: presence at a distance. How well do modern systems achieve this? To grapple with this issue, we must consider N. Katherine Hayles' conception of the posthuman: "...the posthuman view privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life" (Hayles, p. 2). From Hayles' perspective, the human (as conceived by liberal humanists) on the video chat screen is not alive in the room with you, and cannot be, under pandemic norms. Instead, a well-constructed video chat enables communion with a "posthuman" version of that person. While the matter that makes up the body of the person is not being teleported (as in Charlie and the Chocolate Factory), from the posthuman perspective, matter does not make up a person, information does. Information transferred and reconstructed across distance may enable complete telepresence for the posthuman – the reconstruction will be more and more faithful as more information is translated – from visual and audio to olfactory, temperature, the third dimension, etc.

Even if videotelephony succeeds at telepresence for the posthuman self, this is not quite success in the eyes of both Hayles and John Durham Peters. Hayles presents the posthuman as the implications of the theories of 20<sup>th</sup> century cyberneticists on what it means to be human, but not as her take on the matter—in fact, she critiques its assumptions. "It is this materiality/information separation that I want to contest… to complicate the leap from embodied reality to abstract information by pointing to moments when the assumptions involved in this move were contested by other researchers in the field and so became especially visible. The point of highlighting such moments is to make clear how much had to be erased to arrive at such abstractions as bodiless information" (Hayles, p. 12). Peters has an idea of what is erased in this way as a means to act on the "abstraction of bodiless information" that is attempted by videotelephonic technologies:

We don't get to see how tall others are, what their feet are doing, or whether their legs are crossed. A neglected zipper or the postural effects of high heels play no role. A keyboard can negate a stutter or mask an unpleasant voice. Computer-mediated communication pushes many of the ancient information-laden sources of sizing each other up to the background. If humanization starts with the feet, what does the footlessness of cyberspace mean? Having our feet in the same place as those of others matters in some way. Every-one knows that the best indicator of a person's class or attitude is their shoes. Online it is hard to know where you stand, or to put yourself in someone else's shoes. (Peters, Marvelous Clouds, p. 277)

Peters points out the body mediates and expresses valuable information about a person. But perhaps, with enough sensors, all of this can be rendered virtually. Perhaps in future pandemics (well, extremely futuristic pandemics), one will not use Zoom but a brain linking technology: just plug this ethernet cable (efferent cable?) into your brain, and all motor commands will be routed to your virtual body, with all sensations from the virtual world routed back to your real-life brain. What we would still be missing, however, is the one piece of the puzzle that cannot be converted by the material-to-information transformation (unless we're dealing with brain-in-a-vat Cartesian demons, which we are not): the knowledge itself that you are physically present with another human being.

This bit of knowledge, of where your material body resides in relation to your companion's physical body, may seem unimportant in most pre-pandemic applications of videotelephony and virtual reality systems. It does not matter to us if my friend and I aren't physically in the same room as we play a videogame in immersive virtual reality. In some sense, our minds are hanging out together - if we're far apart, it's the best we can do. But under the new normal of the pandemic, we don't have a choice of which activities we would like to experience in the virtual world versus the physical one. Using videotelephony to "attend" a funeral was unfathomable four months ago, in February of 2020, but by April, it was a grim new reality. In the Zoom funeral that I attended, no one could give or receive a hug or squeeze a hand, limited by the nature of the medium itself. Even if we had that neural link technology, and we could virtually do so, the knowledge itself that we were physically present together in support of a friend in mourning would still be missing, no matter how beautifully a virtual world were rendered. In a strange and sad reversal, the mourners had become the spectres (Meillassoux, *Spectral Dilemma*, 2008). We hung around as projections of our usual selves onto two-dimensional pixel grids, haunting the boxes on each other's screens, unable to complete our business of collective reminiscing, schmoozing, and hugging, of simply being in each other's presence.

Is presence in the posthuman sense, as enabled by videotelephonic technology, presence in the eyes of God? In Judaism, public prayer requires a *minyan*, a critical mass of ten Jewish men, to make one's prayers heard to God. Is a Zoom *minyan* equal in prayer-amplifying power to a real-life *minyan*? Similarly to the case of the funeral, this question was unnecessary before the pandemic. Why bother with videotelephony if you can get the real thing? In pre-pandemic days, calling into synagogue doesn't cut it (and is not permitted); you must be physically present. The current crisis precipitated a new ruling from many rabbis, according an article from The Jerusalem Post: a virtual *minyan* is still a *minyan*. However, when following one of the links on that article to a virtual *minyan*-finding website, I encountered this rhetoric: "Just because we can't daven with a minyan, doesn't mean we can't daven together," and "Click the link next to the Virtual 'Minyan' you would like to join." Apparently, according to the sites themselves, davening (praying) together online does not constitute a real *minyan*. Even when mentioning the phrase 'virtual minyan,' the word itself comes in single quotes, to seemingly indicate it as a cheapened version of the real thing. Though the rabbis say that the virtual is real enough, even the providers of the virtual experience acknowledge the artificial, overly mediated flavor of the Zoom *minyan*.

It is clear that the videotelephonic medium has taken on new functions in today's society under the dark cloud of pandemic-necessity. What remain to be seen are the legion effects that are sure to take hold as a result in social realms both discussed and not addressed in this piece. What will performance art be in a socially distant world, or even in a post-pandemic, socially hesitant world, after months of Instagram Live concerts? What of the many individuals in the world sans access to videotelephonic technologies to bridge the necessary spatial gaps to prevent viral spread? Will we come to see Zoom as "power technology," as Peters characterized writing? "Writing, as a medium that allows voice and mind to transcend the grave, has a long-standing association with death and death-dealing men" (Marvelous Clouds, p 278). In the time of coronavirus, videotelephony also allows voice and mind to transcend the grave threat of proximity. Even in reveling in its usefulness for this purpose, we must carefully examine its built-in structures of power, as well as acknowledge the aspects of presence that it fails to reproduce.

<sup>&</sup>lt;sup>1</sup> A Guide to Finding a Minyan Online During Coronavirus, April 12, 2020. https://www.jpost.com/judaism/a-guide-to-finding-a-minyan-online-during-coronavirus-624427

<sup>&</sup>lt;sup>2</sup> https://virtualminvanim.com/