


Zooming Through a Crisis

Nolen Gertz, University of Twente, The Netherlands*

 <https://orcid.org/0000-0002-8455-9930>

ABSTRACT

The coronavirus pandemic has led the world not to shut down but to move from the physical to the virtual. Various technologies have been used to maintain a sense of normalcy during the pandemic, as we can now work online, shop online, and socialize online. The perceived success of this technological resiliency in the face of a global health crisis has given rise to questions about whether the move from the physical to the virtual should be maintained even after the pandemic. Given the possibility that this “new normal” could soon become simply what is considered as “normal,” this paper will investigate what it means that we have indeed been able to use technologies to maintain order in a time of global disorder. To answer this question, this paper will focus on the technology that has become most synonymous with the pandemic—Zoom—and use postphenomenology, critical theory of technology, and Arendt’s political philosophy in order to investigate its use during the pandemic.

KEYWORDS

COVID-19 Pandemic, Critical Theory of Technology, Hannah Arendt, Postphenomenology, Technological Resiliency

1. INTRODUCTION

The coronavirus pandemic caused schools to close, businesses to close, and even borders to close. The world appeared to be heading for a standstill as people across the globe were told to stay home for as long as was necessary to try to get the spread of the deadly disease under control. And yet life did not come to a complete stop. For many in fact life did not even have a pause. The order to stay home was not, as may have been at first assumed, equivalent to an order to act as if one was *at home*. Instead, technology was used to bridge the gap between home and not-home. Teleconferencing programs allowed people to continue to meet from home. E-Commerce websites allowed people to continue to shop from home. Streaming services allowed people to continue to see movies from home. Photo- and video-sharing applications allowed people to continue to see the not-home from home.

Netflix, for example, had had a steady rise in subscriptions every year—with 19 million new subscribers in 2017, 25 million in 2018, and 27 million in 2019—but during the pandemic Netflix had a sudden spike in growth with over 40 million new subscribers (Iqbal 2021). This rapid rise in streaming subscriptions fits with the research conducted by Nielsen (the famous American media market analysis firm) that “found an average 61% increase in streaming video” during “major crises” (Spangler 2020). Similarly, Amazon—which operates both a streaming service and a home delivery

DOI: 10.4018/IJT.309097

*Corresponding Author

service, among other pandemic-benefitting services—reported a “44 percent” rise in sales, a “220 percent” rise in profit, and a “51 percent” rise in workers during the pandemic, all of which “surpassed Wall Street’s expectations” (Weise 2021). And the technology that has become most famous during the pandemic, Zoom, saw “sales soar 326% to \$2.6 billion in 2020” while “profits jumped from just \$21.7 million in 2019 to \$671.5 million” (BBC News 2021).

What I wish to examine in this essay however is not the question, the question that seems to have arisen daily since the coronavirus crisis began, of whether these technologies were adequate solutions to the lockdown-caused problems they were attempting to solve (e.g., Denning 2020; Newport 2020; Waller and Chakrabarti 2020). These technologies have allowed us to continue our normal lives during a pandemic, leading us each day to ask if these technologies are poor substitutes for what life was like before or instead if these technologies are in fact improvements over what life was like before. But the question that is less frequently asked, the question that I intend to investigate in this essay, is: what does it mean that we attempted and have indeed been able to use technologies to continue our normal lives *during a pandemic*?

In this essay, I will attempt to answer this question by, first, turning to the philosophy of technology known as postphenomenology. By using postphenomenological methods developed by Don Ihde to investigate the technology that has perhaps become most associated with the pandemic—Zoom—we can see how technologies have helped us during the pandemic to maintain normalcy. Though recent research has shown how the rise of Zoom has had an influence on various aspects of human experience, ranging from the classroom (Lowenthal et al 2020) to the courtroom (Puddister and Small 2020), through postphenomenology we can conduct a broader investigation of Zoom’s influence on human experience itself. Postphenomenology can illuminate both how Zoom has helped us during the pandemic, and how this help can at the same lead us to becoming blinded to how these technologies shape what we experience as normalcy.

Second, I will turn to the work of Heidegger as from the Heideggerian perspective on Zoom we can see the danger of transforming our homes into workplaces as it entails transforming ourselves into mere tools, tools who, thanks to Zoom, can be called upon and ordered to work as needed. Yet by turning back to Ihde, as well as to the critical theory of technology of Andrew Feenberg, we can see why such a Heideggerian critique of Zoom might be too deterministic and might be better aimed instead at Capitalism. For Feenberg it would be particularly important to recognize that Zoom, as an online platform, could provide users an opportunity for not just working from home, but for activism from home.

In order to show the danger of accepting the view that Zoom can have the positive potential seen by Ihde or the political potential seen by Feenberg, I will conclude by turning to the political philosophy of Hannah Arendt. Arendt’s analyses can situate for us the recent rise of Zoom during the pandemic within the historical rise of individualism that she was seeking to criticize in her work. Rather than see Zoom as having helped us by enabling us to continue working from home during the pandemic, Arendt would see Zoom as instead having only helped to continue the demise of political life, a demise that can best be seen in the growing desire to use Zoom even after the pandemic so that we can continue to stay at home as much as possible. From an Arendtian perspective we can therefore see why it is important to question, not whether Zoom has helped us during the pandemic and should be continued to be used after the pandemic, but instead what has become of humanity such that we would see the life that Zoom helps to make possible as something that is either healthy or desirable.

2. COVID-TECHNOLOGY RELATIONS

From the perspective of postphenomenology, there is nothing inherently wrong with our using technologies to try to maintain normalcy during the pandemic. The reason for this is that, according to Don Ihde, technologies have no essence but instead take on various meanings in various situations, or what Ihde calls “multistability” (Ihde 1990: 144). It therefore would be impossible to say that there

is anything inherently right or inherently wrong with how we use them. This is not to say however that technologies lack an essence because they are merely means to human ends. Ihde argues against both essentialism and instrumentalism by claiming that technologies cannot be properly understood by looking at them in a vacuum, as we can only understand the significance of technologies by investigating the relationship that exists between specific technologies and specific users in specific situations, or what Ihde calls “human-technology relations” (Ihde 1990: 21).

Adopting this perspective allows us to see the various human-technology relations involved in, for example, using Zoom to have online meetings with colleagues so that we could continue working from home during the pandemic. The most obvious human-technology relation involved in using Zoom is what Ihde calls an “embodiment relation” (Ihde 1990: 72). Just like using a pair of glasses to see the world when we cannot physically see on our own, we use Zoom to collaborate with our colleagues when we cannot physically collaborate with them on our own.

Following Ihde (1990: 86), we can formalize this relationship as:

(I-Zoom) → World

The parentheses are meant to make clear how we can use Zoom as an extension and enhancement of our bodily capacities such that we come to “embody” Zoom. In such embodiment we often say things to our colleagues on Zoom like “I see you” or “I hear you” rather than saying what would be more accurate, such as “I see Zoom seeing you” or “I hear Zoom hearing you”. So also like a pair of glasses, when we use Zoom to see and hear our colleagues, we can become so absorbed in what we experience that we can forget the role that Zoom plays in mediating what we experience.

It is thanks to such forgetfulness that we might not appreciate that using Zoom can involve not only embodiment relations, but also what Ihde calls “hermeneutic relations” (Ihde 1990: 80). For we use Zoom not only like a pair of glasses in order to enhance and expand our perception of the world, but we also use Zoom like a thermometer in order to enhance and expand our understanding of the world. We can formalize this relationship as:

I → (Zoom-World)

Here the parentheses emphasize how Zoom, and the world we are trying to interact with through Zoom, become intertwined. Such entanglement leads us again to say things to our colleagues on Zoom like “I see you” or “I hear you” rather than “I see how Zoom makes you look” or “I hear how Zoom makes you sound”. In other words, when we are using Zoom, we can interpret our colleagues’ spoken language and body language only through what Zoom shows us of our colleagues’ voices and bodies. We can thus again become so absorbed in the experience of trying to interpret the intentions of our colleagues on Zoom that we can become forgetful of the role that Zoom plays in mediating this experience.

This forgetfulness is not incidental to how Zoom works however but is indeed the goal of Zoom, as it is the goal of any other technology intended to be used in embodiment relations or hermeneutic relations. When Zoom works as expected, we are concerned only with the experience that Zoom provides us rather than being concerned with what it means that it is a technology like Zoom that is providing us with the experience. But when Zoom is not working as expected our concern instead shifts to Zoom itself and then the role of Zoom in mediating our experience becomes visible. This can be seen for example when we start complaining to our colleagues that we cannot see them because “Zoom has frozen” or we cannot hear them because “Zoom is on mute”.

Such breakdown situations reveal how Zoom can also involve what Ihde calls “background relations” (Ihde 1990: 108) and “alterity relations” (Ihde 1990: 97). Due to the longevity of the pandemic, we have come to not only rely on Zoom but to take its presence for granted, much like

how we have come to take for granted that everyone has the equipment (e.g., webcams and Wi-Fi) to use Zoom. In this way Zoom has become just another part of the world, so much so that we can come to forget what the world of work was like before Zoom. This relationship could be formalized as:

I → World-(-Zoom)

When electric lights are working properly, we do not concern ourselves with their existence but only focus on what they illuminate, treating the *illuminated world* as simply *the world*. Similarly, when Zoom is working properly, we do not concern ourselves with its existence but only focus on what it allows us to do, treating the *Zoom working world* as simply *the working world*.

But when Zoom is not working properly, like when computers are not working properly, then we come to lose sight of the world and focus our attention instead exclusively on the malfunctioning technologies (Rosenberger 2009). This relationship could be formalized as:

I → Zoom-(-World)

When Zoom does not work as expected, not only does it consume our attention, but we often tend to blame it for not working, as if it were actively trying to thwart our intentions. In such cases we might find ourselves talking to Zoom as if it were alive, saying things to Zoom like “Why won’t you work?” or “Do you really need to update again?”. It is for this reason that Ihde uses the concept of “alterity” or “otherness” to describe such experiences, experiences that reveal our love/hate relationship with technologies (Ihde 1990: 75-76).

3. ENFRAMING COVID

It is indeed this revelatory aspect of our relationship with technologies that is the focus of postphenomenology. Following Heidegger’s (1977) phenomenological analyses of technologies as being fundamentally revelatory, *postphenomenological* analyses highlight the ways in which technologies reveal and conceal, and especially the ways in which technologies reveal the world to us while concealing their role in shaping the world as it is revealed to us (Gertz 2018). It is because technologies can conceal themselves in this manner that we are led to adopt the instrumentalist perspective towards technologies, thinking of them as nothing but means to our ends and consequently rejecting any concerns about how technologies may be influencing us.

Yet as we have seen, Zoom does indeed have the ability to influence us. Zoom enables us to communicate and collaborate with others online in real time, allowing us to “go to work” while sitting at home in our pajamas. During the pandemic, Zoom has therefore not only helped us to feel social and connected while working from home, but to feel safe and responsible because we are so able to work from home. Such feelings have, unsurprisingly, led to questions about whether we should continue to use Zoom even after the pandemic is over (Waller and Chakrabarti 2020).

That Zoom is becoming used less out of necessity and more by choice suggests that what Zoom reveals is blinding us to what it conceals. For example, as is made clear in Wellner’s (2021) recent analysis of the impact of Zoom on online teaching, Zoom can allow students to experience a lecture without having to be physically present in a lecture hall, but while such virtual presence may seem like a good (and, during a pandemic, healthy) substitute, it can actually produce what Wellner calls a zombie-like, or “zoom-bie” (Wellner 2021: 5), experience in the student. Wellner employs this language to illuminate the disconnect between students merely being able to see and to hear a lecture through Zoom and students being able to find the lecture meaningful through Zoom. Wellner argues that the Zoom lecture can turn students into the walking dead not only because of how exhausting

the experience of a Zoom lecture can be, but also because the togetherness experienced by students sitting side-by-side in a classroom is not successfully duplicated by Zoom merely putting students in boxes side-by-side on a computer screen.

Wellner (2021: 7) concludes, “The Zoom-bie refuses to exercise the active aspects of the digital environment as well as those of embodiment and hermeneutic relations...the result is a distortion in the form of an empty and silent black box.” I believe that we can best understand this refusal by turning to Heidegger. As Heidegger (1977) warned, technologies can empower us, but such empowerment can trick us into thinking that we have mastery over our technologies rather than recognizing that through these technologies we are ourselves becoming more and more like the mere tools that we take these technologies to be. Zoom enables us to work from home, but this means that Zoom also enables us to never stop working. While for workers the ability to never stop working may offer the promise of not having to lose a paycheck due to a pandemic, for Wellner’s students the ability to never stop attending lectures may instead have been experienced as universities not caring about student needs because administrators saw Zoom as a way for them to avoid having to risk losing their paychecks from having to stop collecting student tuition.

Zoom serves to remove the distinction between work and home by transforming our homes from a place where we could be free from work to a place where we could be called at any time to go back to work by simply clicking on a button. In other words, Zoom enables us to become what Heidegger described as “standing-reserve” (Heidegger 1977: 17), to become beings who are expected to work on demand, who are stockpiled like batteries to be called upon and used as needed. As Zoom’s (2022) own website declares, “The workspace is no longer just in the office – it’s wherever you are.” Thanks to Heidegger, we can see both why Zoom would see this as a benefit, and why Wellner’s students saw this as a threat.

Yet, contrary to Heidegger, Ihde would argue that Zoom serving to turn us into on-demand tools is only one possible outcome of using Zoom. As was discussed earlier, for Ihde technologies are “multistable,” which means that we can never predict how technologies will be used, nor can we claim that how technologies have been used *so far* is the *only way* that they could be used. Hence, for Ihde, even if it is the case that Zoom is blinding us from realizing that using Zoom is turning us into “standing-reserve” tools, such transformation cannot be attributed to anything inherent to the nature of Zoom itself, and it cannot be denied that there is always the potential for Zoom to be used by different users in different ways in different situations.

This criticism of Heidegger can be made even more strongly if we turn to Andrew Feenberg, as he tried to bring together philosophy of technology and STS in order to combat what he saw as the techno-dystopian tendencies of Heidegger and his followers. Feenberg would argue that Zoom serving to turn us into on-demand tools should be blamed, not on technology, but on Capitalism. Feenberg (1991) criticizes Heidegger for being a technological determinist and for not appreciating the role of individual, cultural, and political decision-making in the development of technologies. Following Feenberg’s (1991) critical theory of technology we can see that the crumbling of the divide between home and work was not something created by Zoom but was rather a development that has been going on for so long it was already being criticized by Karl Marx in the nineteenth century.

From Feenberg’s perspective therefore, if Zoom is turning us into “standing-reserve” tools then this is due, not to “Enframing” (Heidegger 1977: 19) and the ontological nature of modern technology, but to the hegemonic power of Capitalism. Furthermore, Feenberg might argue that Zoom could actually help us to challenge this hegemony. As an online platform, Zoom offers users access to what Feenberg describes as “the democratic potential of the internet” (Feenberg 2016: 25) and so it need not be used only for working from home, as it instead could be used for political purposes, for organizing from home, as activists have done with other online platforms (Tufecki 2017).

4. DESERT TECHNOLOGY

If we now turn to Hannah Arendt however, we could see why, contrary to Ihde and to Feenberg, we should not be so contented by the “multistable” or “democratic” potential of technologies like Zoom. According to Arendt (2005), politics has become meaningless, as we have come to see politics as something to be avoided, as something we elect politicians to be concerned about and appoint bureaucrats to manage so that we can be free to do better things with our lives. But as Arendt seeks to remind us, for the Ancient Greeks however, politics was not an impediment to life, but was the *purpose* of life.

The ideal life in the Ancient Greek world was the life of a citizen. The reason for this, according to Arendt (1958), was because being a citizen meant being someone who could have a slave, or a wife, or both, manage their household affairs so that they could leave the “private sphere” of the home and join the “public sphere” of the *polis* in order to meet with other citizens and participate in politics. It was thus only through leaving the necessities of life behind, behind in their homes, and going outside the home where they could be free, free *from* such necessities and free *to* participate in politics, that the Ancient Greeks saw themselves as realizing their full potential as human beings.

Arendt (2005) blames the rise of individualism on our coming to see politics as interfering with our lives, as something that we tolerate only insofar as it allows us to live our lives, for which reason we increasingly rely on bureaucrats to be political for us. This advance of individualism means, according to Arendt, not only that politics has lost its meaning, but that so too has human life lost its meaning (Gertz 2019). This is best encapsulated in Arendt’s criticism of what she calls “desert psychology” (Arendt 2005: 201).

People who are suffering from being unable to adjust to the world around them are being led, according to Arendt, to think of their suffering as merely a problem existing within themselves instead of as a problem with the world itself. Arendt (2005: 201) writes:

The modern growth of worldlessness, the withering away of everything between us, can also be described as the spread of the desert. That we live and move in a desert-world was first recognized by Nietzsche, and it was also Nietzsche who made the first decisive mistake in diagnosing it. Like almost all who came after him, he believed that the desert is in ourselves, thereby revealing himself not only as one of the earliest conscious inhabitants of the desert but also, by the same token, as the victim of its most terrible illusion. Modern psychology is desert psychology: when we lose the faculty to judge—to suffer and condemn—we begin to think that there is something wrong with us if we cannot live under the conditions of desert life. Insofar as psychology tries to “help” us, it helps us “adjust” to these conditions, taking away our only hope, namely that we, who are not of the desert though we live in it, are able to transform it into a human world.

Arendt’s worry here is that we are living in a world that is increasingly becoming a “desert-world,” a world that is hostile to humanity because our primary concern is with merely our individual survival. But those who suffer from having to live in such an inhuman world are being “helped” by psychologists by learning to better “adjust” to the world.

Hence rather than recognize that it is the world that is making people suffer, psychologists instead diagnose such suffering as “adjustment disorders” (APA 2013), as disorders arising due to the inability of individuals to adjust to situations in which they find themselves because they feel that these situations are too “difficult” or too “stressful” for them to handle. But from Arendt’s perspective, for these sufferers to try to better adapt themselves to their environment is to try to better adapt themselves to the source of their suffering. In other words, psychological treatment in such cases, according to Arendt, does not reduce suffering, it *perpetuates* suffering by teaching us to simply learn to live with it.

Such treatment is “desert psychology” according to Arendt because it both removes from suffering its potential to motivate us to look for sources of suffering outside of ourselves and teaches us to instead be motivated by suffering to only ever look inside of ourselves. In this way we become ever more individualistic, since we become not only myopically concerned with trying to fix ourselves, but also become fearful that if others learn of our suffering then they will also see us as unable to *fit in* as well as we should. Consequently, suffering not only loses its potential to motivate us to change the world, but also loses its potential to motivate us to seek out others who similarly suffer. Treating suffering as something that is personally wrong only motivates us to hide our suffering from others, which results in us hiding ourselves from others so that we can instead pretend to be *well-adjusted*. Therefore “desert psychology” serves to speed up the “modern growth of worldlessness” because it replaces the political with the personal.

To respond to a pandemic as so many of us have done—by using technologies like Zoom so that we can try to maintain a sense of normalcy by continuing our everyday lives from home—would therefore be seen by Arendt as yet further evidence of the inhumanity of what so many of us now take to be *normal life*. For Arendt, to be human is to be political. Hence, contrary to Ihde, Arendt would argue that we should not be concerned with how individual users relate to individual technologies in individual situations, but rather with the political world in which such relations take place, especially if that political world leads us to view technologies from such an *individualistic* perspective. In other words, Arendt would see the individualistic perspective of postphenomenology (Michelfelder 2015) as not merely a methodological decision, but also as a political decision, as a decision that helps to perpetuate the individualism that we now so take for granted as normal that we do not see such methodological decisions as political.

What would concern Arendt about Zoom therefore is not its “multistability,” not the various ways in which individual users could relate to Zoom, but rather the fact that Zoom is something that we use as individual users in an individualistic world. This is why Arendt would remind us, contrary to Feenberg, that being political requires more than having access to an online platform that could potentially be used for activism. Being political, according to Arendt, requires being in a public space, a space where we can join with others in freedom, in both the freedom to speak and freedom from the necessities of our private lives. We may have replaced slaves with technologies—as the origin of the word “robot” should remind us—but we are not using our technologies as the Ancient Greeks used their slaves, to liberate ourselves so that we can be free to engage in politics, particularly if we see it as a benefit that we can use our technologies to stay at home.

That we use Zoom at home, that we use Zoom to try to be “at work” while also being forced to manage the necessities that come with being at home, means that Zoom is not helping us to stay healthy during the pandemic because it is not helping us to stay *human* during the pandemic. Or to put it another way, Zoom is what we could describe, following Arendt, as a “desert technology” (Gertz 2020). Zoom does not serve to reduce the suffering that we experience from living in an inhuman world but instead, like “desert psychology,” serves to perpetuate our suffering by reinforcing the inhumanity of our world and by helping us to adjust to it. If we feel social and connected while using Zoom, so much so that we are thinking about continuing to use Zoom to work from home even after the pandemic comes to an end, then from an Arendtian perspective this reveals both how inhuman our world has become, and how Zoom does not help us to challenge the inhumanity of our world but instead helps to normalize the inhumanity of our world.

5. CONCLUSION

We can now return to the question with which this essay began, the question of what it means that we have been able to use technologies like Zoom in order to try to maintain everyday life amid a pandemic. As we have seen, for Ihde it would come as no surprise that technologies have helped us to continue on as we had before. Since technologies can mediate our experience of the world by directing our

attention towards certain aspects of the world while directing our attention away from other aspects, technologies like Zoom can be useful for helping us to stay focused on our work even during a crisis.

Though Heidegger would have criticized Zoom as yet further evidence that we are too enthralled by modern technology to recognize its dehumanizing effects on us, Ihde and Feenberg would have criticized Heidegger for having too deterministic and too narrow of a view of technology. Arendt, on the other hand, would have focused less on Zoom as a technology and more on Zoom as a symbol, as a symbol of how individualistic the world has become. For from the perspective of Arendt it is only in an individualistic world that something like Zoom would be invented, something that would allow us to not only work from home, but to think that working from home is a healthy and desirable way for humans to live.

Arendt would thus not blame Zoom for the destruction of the public sphere and of political life. Instead, Arendt would see the existence and popularity of Zoom as evidence that the public sphere must have already been destroyed long before the pandemic in order for us to view the way of life that Zoom makes possible as an acceptable way to live. As Bogost (2020) argued, we were already living in quarantine before the pandemic began as we were already using technologies to stay home as much as possible before the pandemic required that we stay home as much as possible. For Arendt therefore the question we should be asking is not what it means that we used technologies like Zoom to maintain normalcy during a crisis, but rather what it means that we do not see what we take to be normalcy as itself a crisis. That we were capable of using Zoom to adapt ourselves to life during the pandemic would not have worried Arendt as much as the fact that we were capable of adapting ourselves to the individualistic world that made Zoom possible in the first place.

REFERENCES

- American Psychiatric Association (APA). (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). American Psychiatric Association.
- Arendt, H. (1958). *The Human Condition*. University of Chicago Press.
- Arendt, H. (2005). *The Promise of Politics* (J. Kohn, Ed.). Schocken Books.
- BBC News. (2021). Zoom sees more growth after 'unprecedented' 2020. *BBC News*. <https://www.bbc.com/news/business-56247489>
- Bogost, I. (2020, March). You Already Live in Quarantine. *Atlantic (Boston, Mass.)*, 4. Retrieved August 1, 2021, from <https://www.theatlantic.com/technology/archive/2020/03/coronavirus-you-already-live-quarantine/607474/>
- Denning, S. (2020, May). The Problems With Virtual Work. *Forbes*, 6. Retrieved September 5, 2021, from <https://www.forbes.com/sites/stephaniedenning/2020/05/06/does-virtual-work-accidentally-discriminate/>
- Feenberg, A. (1991). *Critical Theory of Technology*. Oxford University Press.
- Feenberg, A. (2016). The Internet in Question. In R. Foshay (Ed.), *Identity, Agency, and The Digital Nexus* (pp. 25–48). Athabasca University Press.
- Gertz, N. (2018). *Nihilism and Technology*. Rowman & Littlefield International.
- Gertz, N. (2019). *Nihilism*. MIT Press. doi:10.7551/mitpress/11773.001.0001
- Gertz, N. (2020). Democratic Potentialities and Toxic Actualities: Feenberg, Ihde, Arendt, and the Internet. *Techné: Research in Philosophy and Technology*, 24(1/2), 178–194.
- Heidegger, M. (1977). *The Question Concerning Technology and other Essays* (W. Lovitt, Trans.). Harper & Row.
- Ihde, D. (1990). *Technology and the Lifeworld*. Indiana University Press.
- Iqbal, M. (2021). Netflix Revenue and Usage Statistics. *Business of Apps*. <https://www.businessofapps.com/data/netflix-statistics/>
- Lowenthal, P., Borup, J., West, R., & Archambault, L. (2020). Thinking Beyond Zoom: Using Asynchronous Video to Maintain Connection and Engagement During the COVID-19 Pandemic. *Journal of Technology and Teacher Education*, 28(2), 383–391.
- Michelfelder, D. (2015). Postphenomenology with an Eye to the Future. In R. Rosenberger & P.-P. Verbeek (Eds.), *Post-phenomenological Investigations: Essays on Human-Technology Relations* (pp. 237–246). Lexington Books.
- Newport, C. (2020). Why Remote Work Is So Hard—And How It Can Be Fixed. *The New Yorker*. <https://www.newyorker.com/culture/annals-of-inquiry/can-remote-work-be-fixed>
- Puddister, K., & Small, T. A. (2020). Trial by Zoom? The Response to COVID-19 by Canada's Courts. *Canadian Journal of Political Science*, 53(2), 373–377. doi:10.1017/S0008423920000505
- Rosenberger, R. (2009). The sudden experience of the computer. *AI & Society*, 24(2), 173–180. doi:10.1007/s00146-009-0190-9
- Spangler, T. (2020). Quarantine Life: Staying at Home Can Drive Up TV Viewing 60% or More, Nielsen Says. *Variety*. <https://variety.com/2020/digital/news/coronavirus-quarantine-life-media-consumption-data-increase-1203535472/>
- Tufecki, Z. (2017). *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. Yale University Press.
- Waller, A., & Chakrabarti, M. (2020). Is The Virtual Workplace Here To Stay? *WBUR*. <https://www.wbur.org/onpoint/2020/06/15/remote-work-here-to-stay>

International Journal of Technoethics

Volume 13 • Issue 1

Weise, K. (2021). Amazon's profits soar 220 percent as pandemic drives shopping online. *The New York Times*.
<https://www.nytimes.com/2021/04/29/technology/amazons-profits-triple.html>

Wellner, G. (2021). The Zoom-bie Student and the Lecturer: Reflections on Teaching and Learning with Zoom. *Techné: Research in Philosophy and Technology*, 25(1), 1–25.

Zoom. (2022). <https://zoom.us/>