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Why Zoom Hurts: A Cultural Sociological Approach

By
Maria Törnqvist & Magdalena Kania Lundholm

Abstract

During the Covid-19 pandemic, videoconferencing rapidly shifted from being a time-liberating support tool to becoming a health concern. This article explores the phenomenon of Zoom fatigue from the perspective of a sample of first-wave blog posts, editorials and chronicles reporting on a drastic digital transition. Besides highlighted complaints over headaches and tiredness, the commentaries convey experiences of failed social relations, a double-burdened work life and a disrupted sense of self. Exploring these accounts, the article broadens the scope of inquiry beyond a media-psychological analysis of a human(body)-technology-problem. We approach Zoom fatigue not primarily in terms of the digital affordances of videoconferencing on the human brain, but as a cultural phenomenon tied to shifts and disruptions beyond the interface design, related to both the unique circumstances of the pandemic and to ongoing transformations in the organization of work life in digitized societies.

Keywords: Zoom fatigue, videoconferencing, body, digitalization, Covid-19

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Introduction

The societal management of the Covid-19 pandemic was, in several ways, a dreadful social experiment. Shutting entire societies down, cutting people off from their workplaces, schools, relatives and friends, are radical interventions of which we still probably do not see the thorough-going soci(et)al consequences. One aspect of this, seemingly less dramatic, yet influential also in post-pandemic times, was the increasing use of digital platforms.[1] Not having a workplace or a physical school to attend means that vital dimensions of everyday social interaction took place on meeting platforms such as Zoom. Not surprisingly, videoconferencing was, and still is, valued for enabling people to maintain a social life in times of physical distancing. Even groups who were previously reluctant to go online, such as some groups of older adults (Kania-Lundholm & Torres, 2018), were connecting to sustain contact with friends and family. However, remedies often come with new complications. While the tech business celebrated (reports tell that Zoom went from ten million users to three hundred million users in a couple of months, Iqbal 2020), accounts of digital exhaustion rapidly started spreading and media critics claimed that the "digital grid" became one among the most powerful images of the pandemic. Rather than making social life flourish, as promoted by the tech business slogan "making the world open and connected", users complained that the platforms narrowed their social life down to a box of squares on the screen and that this way of staying in touch evoked headaches and extreme tiredness. It seemed that the restrictions had caused a new health problem, and a new term was coined: Zoom fatigue.

Zoom fatigue is a morphing term that collects a variety of conditions, from physical symptoms like headache and extreme tiredness to sensations of social disconnectedness, of "video vertigo" and entrapment in "virtual prison[s]" (Lovink 2020: 2, 1).[2] Initially the phenomenon was primarily investigated and commented by neuroscientists and psychologists who pointed at how videoconferencing cues taxed the brain by reducing the "dopaminergic pathways" (Lee 2020). While the topic has become a wider scholarly puzzle, engaging also media scholars and social scientists more broadly, some of the early explanations still hold ground. For instance, Jeremy N. Bailenson (2021) offers a multidimensional model explaining the exhaustion caused by Zoom by pointing out interface factors such as the close-up eye gaze, the cognitive load, the increased self-evaluation and reduced physical mobility. Jesper Aagard (2022) critically discusses the brain-centered discourse on Zoom fatigue and offers a five dimensional phenomenological explanation that partly overlaps with Bailenson's, focusing primarily on the medium and aspects such as awkward turn-taking, inhibited spontaneity, restricted motility, lack of eye contact and increased self-awareness (ibid: 1883). Also Simeon Vidolov (2022b) argues that videoconferencing shapes "different

human(body)–technology relations" which "constitute new emotional dynamics prone to risks and anxieties, but also afford new ways for coping with them" (ibid: 1792).[3]

While scholars have payed attention to the need for critical awareness when facing conceptual booms like that of Zoom fatigue (Aagard, 2022: 1879-1880), the label itself, however, have oriented also the scholarly focus towards technological matters, connected particularly to the platforms' interface design (see for instance Bailenson 2021, who particularly studies Zoom, with the objective of assisting the improvement of the software design). While, the research literature on Zoom fatigue, predominantly in the field of technology psychology and (post-) phenomenology, bring important insights into the lived experience of the body-tech entwinement, we believe that there are additional aspects worth critical attention. In fact, the focus or zooming on the platforms themselves, stressed by the name, risks cutting off the broader societal context and reducing complexity of the cultural phenomenon in question.

Along the line of Eva Illouz, in her book *Why Love Hurts* (2012), we argue that cultural-sociological approaches can add new perspectives to the existing research literature. Just like Illouz use of a sociological framework to address a phenomenon dominated by psychological explanations, thus showing how the social organization of modern life has transformed the lived experience of romance, a cultural-sociological approach to Zoom fatigue implies a shift in focus. In the present article, we expand the scope beyond the media-psychological analysis to also highlight contextual aspects like the meeting culture evolving on digital platforms like Zoom and the ongoing consequences of diffused borders between office and home. We also address digital exhaustion with an explicit focus on the pandemic situation, focusing both on the enforcement under which videoconferencing scaled up and how it translated into a cultural trope that itself became a symbol for the "digital grid" and a reminder of the Covid pandemic.

To sum up, the aim of the article is not to offer a theoretical model to explain Zoom fatigue, but rather to reflect on the phenomenon from a cultural-sociological perspective. Thus, we address Zoom fatigue, not so much as a tech-caused somatic condition, but as a cultural phenomenon related to shifts and disruptions beyond the interface design of the software program. The overall claim is that this complex topic reflects not only the effects of digital affordances on the human brain, but also questions of how the pandemic restrictions and the shifting organization of work life shaped, and continue to shape, life in digitized societies. The response to intensified (often, enforced) videoconferencing thus point, not only to the need of adjusting the code but to the wider implications for online and offline social life, in pandemic times and beyond.

The body in digital interaction

Early scholarly accounts of online interaction during the late 1980s and 1990s often emphasized the disembodied character of digital media. Thus, the disconnect between the "real" and the "virtual" became crucial for the understanding of early online interaction. In these accounts, the Internet was perceived not only as facilitating the distinction between the embodied and disembodied self, but also as a space for developing and maintaining the latter. In practice, this implied, for instance, the potential of creating a "virtual identity", disengaged from social constructions such as age, gender, class, ethnicity, and disability. In other words, the disembodied, virtual self could potentially serve as an alternative, a new construct, disentangled and free from the materiality of "real life" (cf. Lindgren 2017).

Fascination with disembodiment as a positive aspect of digital interaction was also present in late 1980s and 1990s cyberfeminism. Some of these accounts focused on online identity performances and patterns while optimistically emphasizing the *absence* of corporal cues in the virtual. These forms of disembodiment were perceived as potentially beneficial in bypassing social categories, such as the male/female binary (Braidotti 1996). After a quick fascination with potentially liberating aspects, scholars, particularly feminist ones, also emphasized the limits of virtual identities. For instance, the textual and visual representations of gendered bodies and erotic desire proved that it was "new technology with the same old narratives" (Wajcman 2004:70). The importance of bodies and its centrality to what it means to be human and gendered, has also been emphasized by women, including disabled women, who experience online discrimination and mobbing (ib.). Diverse groups have emphasized that social categories of gender, age, class, ethnicity, sexuality, and bodily ability often intersect with one another, both when it comes to technology development and use. Feminist technoscience has, thus, rather quickly, brought the materiality back to the debate on cyberspace (Haraway 1985).

Today there is quite a broad awareness that the digital landscape (of social media) is anchored in the physical, embodied and material world and based on principles of connection and visibility among individuals. This means that online identities and selves are not necessarily all that separate from "real" ones. This is to say that communicative encounters, online and elsewhere, are embedded in material structures. While online communication entails bodies and materiality, the conditions for human embodiment shift with the social and technological context. The body-tech entwinement entails that platforms like Zoom instruct users to press certain buttons to make the program start, and more importantly, that users are facing a socio-technological space with embedded schemes for how to (inter)act. Previous research has addressed how platform affordances both allow

and restrain social interaction, especially when comparing the online and offline experiences, in the context of for instance, tourism (Lu et al. 2022). As Dennis Waskul puts it: "To state it bluntly, places, bodies, and selves are unavoidably translated into the conventions of the medium – they are not 'there' otherwise; in these environments, they must be *made* to exist" (2005: 55). This implies that on digital platforms, people communicate not only with other humans but also "with the algorithm, the code that lies beneath the surface of the application" (Bolter 2012: 39). Undoubtedly, digital transformation has altered the parameters of social interaction by providing both tools and platforms as well as new social and cultural practices. As Simon Lindgren suggests, the key shift in communication practices triggered by the digital transformation has been "from the body and voice to style and content" (2017: 71). Yet, the general question remains. How are bodily aspects of self and other entailed in digital encounters? How are, not only socio-emotional aspects, but also the users' sense of the digital media, such as videoconferencing tools, affected by their experience with digital interaction? And, what are the interconnections between the digital and the non-digital, in terms of, for instance societal restrictions over physical encounters? Such questions have become acutely relevant during and after the Covid-19 pandemic.

Methodological note

This essay engages with the topic of Zoom fatigue from the outlook of an empirical sample of commentary articles. The sample entails commentaries written by academic scholars and lecturers as well as by professionals in psychology and the artistic field. The commentaries were posted, primarily, on university blogs, in scientific chronicles and editorials, thus a form of "light" platforms for scholarly reflection. The main motive for the selection is to explore a group of professionals that belong to a privileged stratum, not obliged to endanger their bodies by the Covid-virus (such as bus-drivers or nurses), while they, at the same time, were targeted by the pandemic restrictions in relation to their work practices. During the Covid-19 pandemic, academic scholars and university teachers, the main group of sample authors, often worked from home and in a work-life setting that involved long hours in digital meetings, in the shape of online-teaching or running collegial meetings. In addition, this group was early on articulating their experiences of intensified videoconferencing and engaged in public conversations on Zoom fatigue. This made them a strategic choice for accessing early accounts that pointed out the need for cultural change and, at times, political transformation.

The sample commentaries were all published during the first two waves of the pandemic, between March and December 2020 (see list of sample articles in list of references). This was a period characterized by a range of emotional

responses – from shock to hope – and a more general uncertainty, both regarding the virus and to how societies, in various contexts, were coping with it. The sample was constructed through a broad net-based search (using Google search engine) and through academically profiled search engines, such as Web of Science and snowballing (references in one article led on to another). Initially we used buzzwords such as *Zoom, digital platforms, body, embodiment, digital teaching, e-learning, Covid-19*. Noticing that most posts explicitly touched upon and themselves used the term Zoom fatigue, the search added the cue *Zoom fatigue*. From a larger search, seventeen articles were selected (including one video interview, one radio show and one interview-article with researchers). Most of them blend personal experiences of intensified videoconferencing with scholarly reflection, mirroring the author's field of expertise – anthropology, sociology, history, organizational management, art history, media and communication, psychology and material science. Rather than being a complete collection of commentaries, the sample captures voices and reflections on Zoom fatigue throughout the first pandemic waves.

The present essay is, primarily, a critical exploration of a cultural phenomenon through a sample of voices – not a media article analysis. This means that we are not, principally, interested in how the accounts are mediated or how discursive substructures unfold. Rather, the sample has been collected with the aim of accessing verbalized accounts, experiences of and explanations to Zoom fatigue. The accounts have been selected with the purpose of extracting and further exploring themes around videoconferencing and fatigue during the Covid-pandemic, at times with the assistance of previous research and sociological theory. The article thus provides a systematized discussion of the initial reception of intensified videoconferencing among a professional group highly affected by the digital transition while it also aims at a cultural-sociological exploration of why Zoom hurts.

The collection of commentaries evokes a few concerns. *First*, we need to be cautious regarding the critical edge of the sample commentaries. The fact that they were selected based on their focus on Zoom fatigue, implies that they, for the most part, entail an outspoken negative approach to intensified use of digital platforms. Another sample, using other buzzwords, would potentially alert more positive accounts. *Secondly*, we should be careful not to over-theorize change. Although sometimes framed as a radical transformation, we should keep in mind that the meeting culture on digital platforms is not a new phenomenon. On the contrary, the professional groups in focus for this essay were often extensive users of Zoom, Skype and Teams, also before the pandemic outbreak. However, and what is in focus here, is how the context of intensified videoconferencing in

times of uncertainty and pressure, comes with new challenges and adds layers of meaning to the use of the platforms.

The sample commentators often connect their and others experiences of fatigue, such as augmented level of exhaustion and reduced cognitive capacity, with the interface design of the videoconferencing devices. However, they do not only touch upon issues related to the software and to body-tech-matters. Beside their search for answers with(in) the technology itself, they also communicate experiences and reflections that, in broader terms, make sense of Zoom fatigue, aiming beyond the topic cues and non-cues. In the following, we will discuss three emerging themes. *First*, we focus on the topic of social presence and digital (dis)embodiment, *secondly*, we address how videoconferencing paved the way for new forms of work life and meeting culture which blurred boundaries between home and work, and *thirdly,* we discuss how life on digital platforms in pandemic times evoked existential queries related to a destabilized sense of self.

Digital (dis)embodiment

Early on, during the first wave of the Covid-19 pandemic, several illustrations addressing the surrealism of the emerging pandemic meeting culture spread over social media. One of them, posted in various shapes, portrays the managerial director meeting her crew in a nice jacket and perfectly done hair, while her lower body is dressed in pajamas. Such images reflect the humoristic aspects of the online integration of various aspects of self. Attending a job meeting in pajamas merges home and work, private and professional identities and transgress both spatial and symbolic boundaries. In a blog post, Annette Markham (2020), professor of media and communication, captures the positive aspects embedded in this figure by stating: "This moment of social distancing is a powerful one: reminding us of the importance of place and simultaneously, the importance of connection, connectivity, social presence. And the recognition that social proximity is not the same as physical proximity. It never was." As Markham discusses also elsewhere, online life blurs spatial boundaries in ways that make "presence" a complex concept, "determined by participation more than proximity" (2013: 281). Referring to the work by Joshua Meyrowitz (1986), she proposes that internet-mediated communication has installed "a distinction of social from physical presence" (ibid: 282). This proposition implies that the physical body can be separated from our embodied online life and that physical distancing can be maintained without reducing the level of connectivity.

This resonates with the pandemic restriction rhetoric. The initial advice from national governments and public health officials for how to stay safe during the pandemic was often framed as "social distancing", while, shortly after, it shifted

to the term "physical distancing". Keeping these aspects apart was a way to argue that restrictions and lockdowns would not abolish social life, only changing its forms. Yet, this rhetoric met resistance. Although digital platforms allow people to team up with colleagues and friends without endangering them and others, the experiences of extreme tiredness and social disconnectedness began troubling the distinction between social and physical distancing. The digital platforms were no "disembodied" virtual spaces (Coleman, 2011: 50), on the contrary they seemed to evoke a more present body, aching of burnout symptoms. In fact, the pandemic situation brought the discussion of on- and offline embodiment to the fore, while shifting focus from identity questions to health issues.

In search of explanations to the somatic condition connected to videoconferencing, the sample commentators partly activate a media-psychological approach. In an article in *Eurozine,* media theorist Geert Lovink (2020: 3), for instance states that this "popular diagnosis" most often is explained by "the brain's attempt to compensate for the lack of full body, non-verbal communication cues." Cyber psychologist Andrew Franklin, interviewed by Julia Sklar in *National Geographics* (2020), and psychologist Jena Lee (2020), stress that it is the absence of "nonverbal cues" that "tax our brain". Psychology professor Brenda Wiederhold (2020) argues that decoding and processing social interaction when important information is missing demands more of us, emotionally. Computer and material scientist Steve Cranford (2020) writes in a *Matters* editorial that meetings on digital platforms enigmatically mirror the zoom-function of a camera lens: it "narrows the field of view but increases the detail." While "zooming in" on certain aspects, other aspects are screened out. Digital conversations are reported to be disturbed not only by the camera angle, but also because the lightning is bad and because technological disturbances cut of the flow, making images freeze and sound lag. In addition, commentators refer to the fact that work meetings and virtual classrooms take place in front of screens covered with black boxes. With the words of digital performance artists Annie Abrahams and Daniel Pinheiro (2020), in a so called Video Article, the anonymizing aspect of videoconferencing makes it "impossible to detect any subtle details … [and] imagination replaces the secondary signs of communication."

In other words, the sample commentators oppose the distinction between social and physical distancing. Several of them, such as media theorist Geert Lovink (2020: 3), in fact argue that the lack of a co-physical presence, a sociality based on bodily proximity, is key to explaining the negative experiences of intensified online communication. Online meetings disturb the communicative flow in ways that affect social relations. One aspect of this is the play of gaze, touched upon also in previous research as a critical moment (Aagard 2022; Bailenson 2021; Vidolov 2022a). From different angles, commentators account

for the difficulties of managing communication on platforms where the natural eye-to-eye contact is replaced by an artificial dead eye that redirects the gaze from other humans to a camera. Christer Sandahl, for instance, professor of psychology, stresses the negative effects that physical distancing has on people's social life and mental health. In an article on pandemic loneliness and social pain, he discusses the use of digital platforms and problematizes the distinction between social and physical distancing, claiming that the physical body and face-to-face interaction is vital for our relations and for relation-shaping activities. Referring to the work of Emmanuel Levinas, and others, he discusses the social dimension of a bodily presence and highlights the importance of embodied perception. "[T]he absence of body-to-body interaction and absence of eye contact" in online meetings makes it difficult to establish "good enough quality of relationships", Sandahl states and concludes that "dialogue in its deeper meaning is a real challenge online" (2021: 7). On a similar note, anthropologist Susan Blum (2020) refers to pandemic videoconferencing as "a tale of human-technology-semiotic mismatch" and speaks of feelings of dissonance when trying to explain why she formally crashed after giving two digital university-classes in a row. On a higher education web page she writes: "I ended up bleary-eyed and exhausted. I just sat and watched something silly on Netflix, drank a glass of wine and did nothing productive until I could finally go to sleep". Blum pulls the explanation that digital meetings are both similar and different from offline communication and that this fuzziness, and our attempts to solve it, causes fatigue. "It is because videoconferencing is *nearly* a replication of face-to-face interaction but not quite, and it depletes our energy."

Relating these accounts to sociological theories of embodiment and interaction deepens the social layers of the Zoom fatigue experience. In fact, several sociological works outside the area of digitalized relations emphasize the body, in terms of a sensory subjectivity that is vital in social interaction. Erving Goffman (1963), for instance, stresses the linkages of the "naked senses" and "embodied transmission" and discusses how verbal messages come, as he claims, with a "richness of information flow", transmitted through the body (1963: 15, 17). Goffman pushes the social importance of the senses to the point that he states them to be the "receiving equipment through which an individual is able to obtain information" (ibid: 14). Contemporary cultural sociologist Randal Collins builds upon Goffman's work and stresses the importance of a bodily entwinement for social relations to emerge. Inspired by Émile Durkheim's work on rituals and social solidarity, and Goffman's classic studies on face-to-face interaction in the organization of everyday behavior, Collins argues that physical distancing and online communication risks breaking what he labels "the interaction ritual chains" (2004), thus reducing peoples' feel for each other. In a piece on social distancing during the Covid-19 pandemic he suggests that: "Co-presence is important

because it facilitates mutual focus, shared emotion, and rhythmic entrainment. By seeing another person's eyes and face, and the orientation of their body, you know what they are paying attention to" (Collins 2020: 482, italics in original). What become disturbances to mute, according to the logic of the software-program, such as humming sounds, are, in fact important bricks in shaping interpersonal relations. Collins brings up a digital research meeting as an example in which it was announced that the group had received a research grant. This news, he tells, was met with silence. No applause, no happy outbursts. This is not strange, he explains, such reactions require a bodily coordination of emotions (ibid: 491). The lack of happy applause, we may add, also impacts on the feelings – how the attendants feel about a research grant and about each other (see also Vidolov 2022b: 1788).4 By reducing the level of bodily interaction, digital platforms thus strengthen formal and instrumental aspects of informational exchanges while, simultaneously, weakening the social solidarity. In other words, both Goffman and Collins, together with the sampled Zoom fatigue voices, point to the complexity of social interaction and the importance of a bodily co-presence for maintaining social relations.

Working from home or living at work?

The fact that online meetings allow users to be at home and at work at the same time is often positively evaluated, not only by so-called digital nomads, i.e. professional groups who take advantage of flexible schedules and detachment from a physical office space. Even parents with small children and long-distance commuters tend to cherish the liberation of time and the enabling of combining work and other duties. While videoconferencing is sometimes valued for transgressing spatial borders, it also, however, generates experiences of augmented workload due to the encapsulation of several spaces/temporalities at once. According to the sample commentators, pandemic work life promoted multitasking, and a fragmented and augmented work performance that was "draining" (Cranford 2020; see Wheater 2020).

Returning to the image of the managerial director, meeting her crew in pajamas, this is not only a clever representation of the merge of private and public spaces but also illustrates a split or double-burdened self. The fact that online meetings allow people – or rather enforce people – to be at home and at work at the same time, attending meetings, checking emails, and, for some, taking care of household duties simultaneously, is brought up as an explanation for digital work-life exhaustion. The image of the managerial director in pajamas is, in a sense, an illusion. Work related duties may be performed in leisure clothing – without making the work more leisureable. On the contrary, pajama working visualizes

the double work-load and requirements of meeting different needs and requests at once – job-related ones and family/home-related ones. One extreme example of this is a Sky News video[5], presumably authentic, portraying a woman who, while attending an online meeting, simultaneously cleans her windows. Rather than blaming her for performing housework on office hours, as suggested by the news heading ("Councilor caught about to clean windows during remote meeting"), the clip represents an extreme example of how digitalized work life opens up for, and creates demands, of a double burdened work life. Likely it is not a coincidence that most of these video clips and images portray women.

It could be suggested that the pandemic-driven transition from office work to working from home has not only led to a greater quantity of digitally mediated communication but a more general communication overload. The problem of exhaustion under such conditions can be related to what Ranjana Das (2022) calls approximation. In a study on the effects of the locked-down home on pregnant women and new mothers during the Covid-19 pandemic, in which everyday practices and routines were moved online, she analyses a "labour-intensive set of practices both embedded within and producing new digital materialities in the locked-down home" (2022: 14). Lacking support in other forms, the mothers account for a "constant digital maintenance of rapports and relationships" (ibid: 9). In other words, the imperative to maintain relationships online, by default, caused an exhausting sense of disturbance of everyday normal.

As Cal Newport (2023) suggests, the full inboxes and endless online meetings are not necessarily part of the office work in a digital era, but rather a response to an unexpected crisis that has simply spiraled out of control. Consequently, "what started with the Great Resignation has become the Great Exhaustion" (ibid). The time spent on digital communication tools, such as e-mail, chat and videoconferencing require constant shifting of attention from one task to another. This situation raises questions that go beyond fixing or repairing software design and touches upon the issue of work culture in general. Namely, that mirroring physical meetings in an online setting is altering our embodied experience without solving the problem of exhaustion (Osler & Zachawi 2022). This can imply, for instance, the lack of transitional spaces for breaks and in-between meetings, such as brief, spontaneous chats by the coffee machine known as the "water cooler effect" (ibid: 10). What has affected the crisis-driven pandemic work culture has also amplified the need for change on a more fundamental level. Do we need so many work-related meetings? Is constant availability necessary for productivity? During the pandemic, scholars addressed such questions by suggesting that "for many of us, this situation [the pandemic] corroded any semblance of work/life balance, and it felt less like 'working from home' than 'living at work'" (Aagard 2022: 1880, see Bagger and Lomborg 2021).

Not only did the sample commentators observe the problem of "living at work" and the exhausting work implied in the efforts to maintain online relations. One consequence of a digital professional life, brought up by several commentators, was that the platforms rationalized social encounters. Not only did they perceive that they were always at work, but also that the work-related encounters lost their pleasure and wellbeing promoting dimensions. The lack of a "social ambient" was said to drain meeting attendants of energy while packing, what could be forums for socialization, with a "hyperfocused" professionalism. As Steve Cranford argues, digital meetings are "more hyperfocused than their in-person equivalents … This is good for productivity I guess, but it sucks out much of the humanity and office camaraderie. It's draining" (2020: 587).

Existential disruption

Although virtual life does not open up a parallel reality, marked by a lower status ontology (Aagard 2022: 1882), intensified videoconferencing comes, for some users, with a shift of the world and its weight. The sample commentators describe intensified online life, due to the pandemic, as disrupting their sense of the world, themselves and others. Cultural anthropologist and research consultant Iveta Hajdakova (2020), for instance, discusses how she experiences feelings of losing grip of reality and self. Exploring the ongoing everyday digital imitation of her office ("If I create a simulacrum of the office, I no longer need the real thing"), she links the process to her sense of self and the fact that digital life puts also her own existence into question. "I don't want to be just a face and voice on Zoom calls, an icon on Google docs, a few written sentences, I want to be a person".[6] In a similar vein, Michael Sacasas (2020), independent scholar of technology and culture, reflects on the difference between virtual representation and co-physical presence and claims that "perceiving an image of a body in virtual space rather than perceiving a body itself in shared space may be worse than not perceiving a body at all." He frames exhaustion partly as caused by the strange attention users direct towards themselves. In his newsletter *The Convivial Society* he writes:

> We are always to some degree internally conscious of ourselves, of course, but this is the usual "I" in the "I-Thou" relation. Here we are talking about something like an "I-Me-Thou" relation. It would be akin to having a mirror of ourselves that only we could see present whenever we talked with others in person. This, too, amounts to a persistent expenditure of social and cognitive labour.

In a much-shared tweet, organizational scholar Gianpiero Petriglieri (2020) suggests something similar when he argues that "dissonance is exhausting". He effectively captures the uncertainty of online meetings when he claims that video calls trap us "in the constant presence of each other's absence". Digital meetings alert a perceptional split of body and mind.

> I spoke to an old therapist friend today, and finally understood why everyone's so exhausted after the video calls. It's the plausible deniability of each other's absence. Our minds tricked into the idea of being together when our bodies feel we're not. Dissonance is exhausting. … It's easier being in each other's presence, or in each other's absence, than in the constant presence of each other's absence.

These statements portray videoconferencing as cutting users' multi-sensoriality and bodily way of grasping the world. As Petriglieri puts it, the mind and the body experience digital relations differently, thus reflecting a de-fusion of the senses and of sensorial impressions. While the mind is "tricked" to believe in the images served by the platforms, the body "feels" a distance.

From a phenomenological point of view, these accounts alert an existential dimension, questioning not only the ontology of the other but also of the self. Along Maurice Merleau-Ponty's work, the body can be framed as the fleshly situation that marks the ultimate condition for human existence as well as the condition for perception and sense of being in the world. The senses extend our existence and take us beyond our bodily situation, our spatial-temporal node. This implies, along Goffman's reasoning, that the body is not just another "object of the world but […] our means of communication with it" (Merleau-Ponty 1945/2014: 95; 1968: 137). By means of a sensorial intentionality, we "envelop, palpate, espouse the visible things", thus embodying them, bringing a kinetic sensorial entwinement to the world (Merleau-Ponty 1968: 133; Törnqvist 2020a; Törnqvist and Holmberg 2021). In this process, through vision and touch, the world enters us, thus forming a sensation of existential condensation through embodiment. According to Michel Serres (2016), and his "topology of senses", this perspective implies that we engage with others through a multitude of intersensorial impressions and bodily perception. Thus, our bodily situation is a precondition for reaching out into the world and being reached in return. This condition is being disturbed by intensive videoconferencing.

As a cultural phenomenon, Zoom fatigue is bound to the rationalization of social life and ultimately to the decay of "aura", defined by Walter Benjamin (1935), in his classic piece on the age of mechanical reproduction, as that which is "tied to […] presence; there can be no replica of it." Like the meme spread on social media

of digital meetings as modern séances ("Elizabeth are you here?"), the disruptions evoked by intensified videoconferencing make users characterize each other as digital ghosts (Törnqvist 2020b). Thus, intensified videoconferencing not only entails a sense of social disconnection but also reflects how digital meetings, in pandemic times, encapsulate an overall sensation of estrangement and disruption between the self and the world.

In line with the representation of videoconferencing as modern séances, Zoom and other platforms have also become lived symbols for life on hold. Digital meetings are in a way markers of a destabilized time and space. As discussed in the introduction, the "digital grid" is a potent image suggesting that digital meetings, as such, are reminders of how the pandemic cuts people off their lives. Such interpretation addresses the problem with Zoom fatigue not so much to be the circumscribed communicative cues or the demands on performance and visibility, but on the contrary the waiting, the doing nothing. As Geert Lovink (2020: 5) writes: "spending hours in virtual conferences is neither a paranoid panopticon nor a celebration of the self. … Instead, we are hovering, waiting, pretending to watch, trying to stay focused ... What's wearing us out is the *longue durée*, not exhaustion after a peak performance. … With society on hold, it is the waiting that tires us out."

We may also add that there are several supplementary explanations for feelings of existential disruption during a pandemic. Not only do people worry over the virus, on their own and their relatives' behalf. Feelings of disruption are plausibly also caused by lockdowns and restrictions, as well as by social isolation, family constraints and dealing with loss of loved ones, among other hardships (Wasshede and Björk 2021). The effects of the pandemic and its societal management also form structural patterns that make already vulnerable groups more exposed to socio-existential troubles, such as groups with weaker positions on the labor market.

Concluding Discussion

Whereas online communication has been valued for allowing an emancipatory interplay with gendered and sexualized identities, destabilizing notions of self through virtual performance, the pandemic experience has evoked experiences of quite the opposite kind. Although digital meetings allow users to escape their bodily appearance on the screen, by checking emails or simply turning off the video camera, the commentators in this article report that Zoom has also become a digital enslavement. They account for a new form of work-related exhaustion, entailing a surprising physical depth, with a variety of syndromes such as sensations of burnout, itching eyes, vertigo and nausea. Together, these accounts

bring forth quite a negative message, pointing to how digitalized communication entails a pressing experience of the bodily predicament. Rather than occupying a space of joyful transgression, the sample accounts portray videoconferencing to be an imprisonment in which users and their homes are constantly (self) monitored and in which work is extended well beyond office hours. Rather than liberating the self, endless performance and visibility provide flesh to the image of digital platforms as a "zoomopticon".

While the platforms enable a sociality that transgresses spatial boundaries, they simultaneously install new borders and dependencies, lived on and through the users' bodies. This echoes an argument by Vidolov (2022a) suggesting that the body is rematerialized through technology rather than being "passive behind the screen". He suggests that the "virtualized intercorporeality is an authentic but distinct way of being with others" (ibid: 17). By screening off communicative nuances, and adding supplementary cues, the social interplay is affected and adds up to a pressing social and cognitive labor. While "social proximity is not the same as physical proximity", as Markham (2020) argues, experiences of intensified videoconferencing disrupt the sharp distinction between the two. From different angles, the pandemic pushed the notion of digital disembodiment to incorporate the body in a full-flesh way. Consequently, the implication of disembodiment through intensified videoconferencing adds a somatic aspect that reminds us that online worlds are always also material worlds (Sundén, 2003). It also prompts that digital practices and rituals often depend on other, offline, contexts and conditions.

The pandemic experience not only testifies to poorly functioning platform software (Bailenson, 2021), but also marks a critical point of heightened awareness about the increased digitalization of everyday life. While the Covid restrictions dramatically scaled up videoconferencing and pulled new groups of users into digital habits, they simultaneously fueled a counteractive trend of frequent users expressing concerns over how online life harms their wellbeing, thus adding a broader experience to the movement of "opting out" and disconnecting from hyperconnectivity (Kania-Lundholm, 2021; Syvertsen 2017). While critical discussions on the "culture of connectivity" (Van Dijck 2013) have addressed addiction stimuli in gaming (such as Pokémon-go) and social media platforms (such as Facebook, see Karppi 2018), the pandemic experience evokes reflections on quite the opposite logic, namely on how technology itself pushes users away. The experience of a translation of bodies and selves into the conventions of virtual meeting platforms has evoked, we argue, a bodily framed critique of digitalized interaction that provides a critical somatic angle to the argument that virtual worlds are always also material worlds.

The pandemic has made for quite a remarkable case of how videoconferencing, over just a few months, changed status from a potentially time-liberating support

tool to a health problem. The sample commentaries bring light to the troublesome cultural, social and existential dimensions of this rapid shift. They account for how the lack of a bodily co-presence affects relational qualities as well as perception of self and the world. In addition, they reflect how the organization of perception shifts due to socio-technological affordances, and how shifting sensoriality is linked to societal and existential transformation. Thereby, Zoom fatigue, and moreover the responses discussed in this article, point towards the limits of ubiquitous digitalization. The sample commentaries reflect an articulation of a bodily framed resistance to a form of digitalization that is no longer perceived only as voluntary and helping people "to connect", but on the contrary being experienced also as an imprisonment with somatic depth. In other words, Zoom fatigue represents a potential rupture, a moment in time, in which people's willingness to live digital lives is at stake and in which a digital discontent is collectively framed and given a name. That way, Zoom fatigue, is not simply a play with words but a global trope with a radical message.

Previous scholarships on the phenomenon of Zoom fatigue have mostly emphasized the impact of technology and design on users' health and wellbeing (or lack of them) (see Aagard 2022, Bailenson 2021, Vidolov 2022a, 2022b). In this article, we argue that the pandemic crisis shows quite the opposite, namely the limits of technology in explaining the increased reports on digital fatigue. The fact that people used Zoom and other platforms before the pandemic without massive outbursts of somatic disorder points to causes other than the interface design. Thus, Zoom fatigue cannot be reduced solely to disrupted communication cues or to cognitive explanations. Departing from the sample commentaries, we suggest that digital exhaustion relates to a more intricate tech-soci(et)al entwinement, by which the enforcement brought upon these devices is what affects the usage and possible implications. Thus, the phenomenon should be addressed not solely from the outlook of technological affordances but also from the perspective of the extraordinary premises for online life during the pandemic, of which some aspects endure. The case of the pandemic reflects a shift in *volume*, in terms of how much time people spend on digital meetings, the level of *dependency* people experience in relation to these platforms for maintaining professional and private relations, and *how* people use videoconferencing tools. Addressed as a broader cultural and social phenomenon, Zoom fatigue reflects aspects such as the shifting expectations and organization of work life and the emergence of new (digital) meeting cultures.

While the sample accounts certainly are bound to the extraordinary pandemic condition, they raise broader questions of how technological development affects various dimensions of peoples' physical, mental and social lives, as well as their sense of perception and lived ontology. Knowing that Zoom at times hurts, we

are now facing the question of how to change the broader cultural and economic infrastructure that makes technology harmful. Entangled with various social problems and contexts, beyond the software interface and the pandemic crisis, the Zoom fatigue experience points to the importance of continuous critical research on the fostering of socially sustainable platforms and working environments as well as a gender equal division of home-based labor. It also activates existential queries in the cross-section of work life research, sociology of health and media studies asking for the price, in terms of physical, mental and social wellbeing, for constant connectivity.

Authors

Maria Törnqvist is an Associate Professor at the Department of Sociology, Uppsala University. Her research covers intimacy and economies of intimacy, gender politics and education.
Magdalena Kania-Lundholm is an Associate Professor in sociology at the School of Culture and Society, Dalarna University. Her research focuses on the relations between society, culture, power and technology.

Endnotes

1 This article targets videoconferencing and do not, primarily, address other forms of online mediated communication, such as chats or voice messaging.
2 According to Google Trends the term Zoom fatigue reached its peak in late April 2020 (Lovink 2020: 6). It is now used in several ways, expressing various forms of negative experiences of videoconferencing.
3 While discussing, primarily, negative experiences of videoconferencing, the research literature also entails a discussion of the promises of a shifting interaction mode. Anna Bortolan (2023), for instance, argues that research has not paid enough attention to the reduced stress-levels experienced by anxiety suffering people, due to the reduction of face-to-face encounters.
4 We should be cautious not to over-theorize the negative social implications. Research on hacktivism, for instance, such as studies on the Anonymous, reveal that solidarity and collaborative relationships emerge also in communities characterized by physical distance and anonymity (see Creswell 2021).
5 "Councilor caught about to clean windows during remote meeting", *SkyNews*, November 23, 2023.
6 These quotes appear in Lovink's article and are collected from a private email exchange, 21 September 2020. See also Hajdakova's blog http://thisbloodyplace.com/

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