When at Home

A Phenomenological Study of Zoom Class Experience

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Abstract

This paper seeks to answer what characterizes people's online teaching and learning experience during the COVID-19 pandemic in the United States. I conducted a one-month long ethnographic study of five informants using Merleau-Ponty's key phenomenological concepts to examine how current working and studying conditions challenge students and educators' temporal and spatial sensations and what strategies they take to cope with these challenges during their Zoom meetings. Additionally, I employed the autoethnographic method in order to fill in the gap where participation with informants' daily life was unreachable by documenting my personal experience during and beyond the Zoom class. Through a small sample of the target population, this paper captures a snapshot of people's initial adjustment to remote educational channels, particularly via Zoom meetings, and therefore provides helpful information in terms of creating resources and improving Zoom class experience for students and educators.

Keywords

Autoethnography, digital ethnography, phenomenology, home technology, affordance, digital divide, Zoom class,

Since many schools and universities adopted remote-class delivery in response to the COVID-19 pandemic, Zoom classes have become the new norm among students and educators. Compared to previous remote class experiences such as online classes and online degree programs, the current Zoom class structure has two different features. First, it is a temporary strategy to hold Zoom classes and other video-meeting technologies to practice social distancing in order to lessen the severe consequences of the current pandemic. Secondly, isolation and a potentially difficult home environment become evident stressors because of the influence of the pandemic. Focusing on users' adaptation to Zoom classes, this paper is an attempt to characterize online teaching and learning experience during the pandemic in the United States.

As a current student participating in Zoom classes, I have had access to a first-hand view of how people adjusted to this new reality. I conducted a one-month ethnographic study of five informants using Merleau-Ponty's phenomenological concepts. These concepts helped to examine how current working and studying conditions challenge students' and educators' temporal and spatial sensations, as well as what strategies they use to cope with these challenges during their Zoom meetings. Additionally, through self-reflection and documenting my personal experience in a journal, I utilized an autoethnographic approach to fill in the gaps where informants' daily life was unreachable beyond the screen. Through a small sample of the targeted population, this paper captures a snapshot of people's initial adjustment to remote educational channels, particularly Zoom meetings. Therefore, this paper proposes helpful information in terms of creating resources and improving the Zoom class experience for both students and educators.

LITERATURE REVIEW

There is an increasing application of phenomenology when exploring human-technology relationships by using ethnographic approaches in recent years. For example, the ethnographic study by Richardson and Keogh (2017) focuses on how users intimately interact with mobile devices through touchable screens in their daily lives. Pink et al. (2016) use video ethnography and examine users' experience with mobile media by focusing on the users' hands to address the significance of the tactile aspects in exploring people's digital worlds. Pink and Mackley (2013) reevaluate the role of media in household settings and paint a picture of how our daily routines of media use could affect our perceptions of how our homes function. Thus, an ethnographic approach has reliable advantages that could be usefully applied to study the dynamics of people's interaction with home technology.

Although the phenomenological analysis of people's interaction with technologies plays an important role in exploring their digital worlds and embodiment, examining the infrastructural features is necessary as well. A successful and effective Zoom class is indebted to "necessary software and hardware infrastructures, high-speed and accessible Internet, purposeful educational design, as well as empowering, motivating, and encouraging faculty members to participate in such educational programs" (Jafarzadeh-Kenarsari, et al., 2019, p. 2215). The attendance of Zoom class, in this way, not only needs students' commitment to show up during the class time but also accessible technological support to help them finish class without major disconnections. Apart from the constraints of various devices, the affordance of software enables a different experience for Zoom users compared to their previous in-class experience and other video conferencing software. The specific features that Zoom provided could enable various experiences of engagement.

The affordance, on the one hand, influences users' acquisition and adjustment to the new tools. For example, webinar technology allows for synchronous communication, reaching out to potential audience despite distance, and archiving videos (Jafarzadeh-Kenarsari, 2019). Zoom class fulfills expectations of users by allowing people to join a scheduled meeting and participate in discussion by unmuting themselves before they speak; at the same time, users have an option to show their video images and share their screens. The whole meeting is also recordable. Since most schools and universities have purchased education licenses, students and educators usually have full access to premium services provided by Zoom with their institutional credentials.

Affordance is often associated with users' sense of occasion. Using Zoom regularly cultivates a certain pattern of gesturing and thinking even after the meeting session. Richardson and Keogh (2017) documented an occurrence during their mobile media fieldwork, one informant "held her right hand in the air, index finger stretched out, and waved horizontal and vertical lines in the air" (p. 211). This story illustrates the penetrative impact of technological affordance by activating people's muscle memories infused by their daily use of technologies. For example, Zoom users tend to unmute or mute themselves before or after their speaking sections during their regular Zoom classes. After a period of time, such a fostered gesture may come to act without awareness when the user is going to speak using the same or other platforms for online meetings. Doing so now may bring these "feelings of connection" back through the association with habitual movements (Pink et al., 2016, p. 247). If entering the classroom positions students and educators to enter into a learning and teaching mode, their engagement with Zoom class will have a similar effect in non-virtual class by activating their

previously established inhabitation toward a designated environment. Therefore, familiarization with the technology allows for inhabitation.

Richardson (2010) argues that our body and screens are interconnected through a plethora of ontological and embodiment metaphors. The shift to Zoom class accordingly challenges people's pre-pandemic embodiment. Richardson and Keogh (2017) find that users' engagement with digital games are usually multifaceted. Between digital screens and users' gestures, there are multiple fields that ethnographers can analyze, including online communities, domestic spaces, physical and virtual interactions, and user interfaces. Therefore, they stress the significance of considering ethnography as an adaptive methodology for exploring the "ontological diversity of online and mobile media" (p. 212). Such an approach allows ethnographers to take equally diverse fieldwork into account without falling into the dichotomy of online and offline worlds. As with any internet-based technology, Zoom users' performances are interconnected with their embodied experiences within certain social and material contexts. Essentially, these experiences have been transformed into the "material, social, and embodied" play parts that are as significant as digital media in ethnographic fields (p. 212).

Phenomenology provides a perspective for studying body-technology relations in terms of people's lived experience that involves daily personal and social dimensions in a certain cultural context. Richardson and Keogh (2017) view Merleau-Ponty's intercorporeality, as a way to describe the intimate relationship between humans and technologies through the lens of embodiment. As Merleau-Ponty (2012) points out, "one's own body is in the world just as the heart is in the organism" (p. 209). The phenomenological approach is instrumental in collecting and interpreting people's Zoom class experience given specific contexts, particularly their experienced perception and bodily movements. Richardson and Keogh (2017) apply the phenomenological approach to explore how people's daily routines are affected by the use of mobile devices in their daily home settings, for example elements that highlight interactions with mobile technology: "touch, immediacy, proximity, distance, and togetherness" (p. 213). This aspect has a significant impact on people's contextualization of the dynamics between their body and the technology in domestic space.

Another aspect of researching the body-technology relationship calls attention to sensational processes among users' experiences. Richardson and Keogh (2017) stress the significance of understanding the multi-sensory and tactile nature of the world we live in, which offsets the dominant position of audiovisual methods in contemporary media research and is a major practical

application of phenomenological inquiry to ethnographic methods. The engagement with Zoom class inevitably drives the reconfiguration of sensation when we use technology to interact with others. Meanwhile, these changes may cause disturbances to some extent in our post-Zoom experiences and even generate new dimensional sensations to our current situatedness.

Additionally, phenomenology is concerned with the everyday embodiment—in Moores' (2014) terms, our "habitation," "at-homeness," or indwelling—by reflecting on the subtle changes that are often overlooked, they reflect the changes in people's home habits and changes in cognitive processes. Attending class on Zoom on a regular basis while staying at home influences people's perception of spatiality in their daily lives. As Richardson (2010) points out, "tools are not conceived as merely perceptual attachments or extensions, but rather our corporeal schemata dilate to make room for instrumentality" (p. 1). From this perspective, technologies are not only passively perceived in digital communication; but also more importantly, they play active roles in people's daily engagement with themselves and others. Thus, technology becomes an attachment and functions as a membrane like our skin that senses the world and "elemental vibes" around us and constitutes our new experience.

METHODOLOGY

Digital ethnography has become a response to digital, mobile and networked media in daily life (Richard & Keogh, 2017). There is no one-size-fits-all method for studying digital ethnography, but rather it is an adaptive methodology that infuses innovative, transdisciplinary, and cross-cultural contexts. This research includes methods of media walkthroughs, semi-structured interviews, and autoethnography to capture comprehensively the nuanced dynamics of users' Zoom class experience, the stay-at-home impact, and the researcher's reflexivity.

The media walkthrough, as Light et al. (2018) argue, "establishes a foundational corpus of data upon which can be built a more detailed analysis of an app's intended purpose, embedded cultural meanings and implied ideal users and uses" (p. 881). It is useful to apply the media walkthrough to gain first-hand knowledge of the affordance. A media walkthrough involves direct engagement with the user interface and examination of its technological framework and cultural connotation so as to analyze how it guides the user's use process and affects their experience (Light et al., 2018). This method requires observation and documentation of the software' screenshots in a step-by-step manner. To examine features and flows of activity also involves the review of the software's updates and its operating requirements. In addition, "the walkthrough also helps

to reveal how users resist and repurpose the technology to achieve their intended use." Light et al. (2018) explain:

Once an app's intended use is established, user-developed practices, services and artifacts provide a sense of how individuals resist these intentions. The walkthrough method is versatile and provides foundational analysis of an app, which can be combined with content analysis or interviews to gain further insights into users' application and appropriation of app technology to suit their own purposes. (p. 897)

As Burrell (2009) suggests, it is imperative while doing ethnographic fieldwork to "seek entry points rather than sites" (p. 190) because that provides insights on how users first encounter new technologies. The application of the media walkthrough approach serves as a legitimate entrance for carefully analyzing the affordances of apps that can reflect cultural values. This provides a shared platform for users and developers to "exchange meanings that shape our daily practices. Ethnographic interviewing, as a conversational entry point, is critical for understanding how technologies are part of people's daily lives. Interviews with informants provide opportunities to have concrete and "thick" descriptions of their regular practice with Zoom classes. The five informants in this study include three of my classmates and two of my professors in the Spring 2020 semester.

Given the circumstances of people's different schedules, the interview session was determined weekly and each session lasted from thirty minutes to an hour. The first interview round started on March 30, 2020, and questions primarily concentrated on initial response and adjustment to the Zoom class experience. Later, questions focused on how they use various features on Zoom to have class, what problems they have encountered during Zoom meetings, what functions they like about Zoom, and how they use Zoom for class meetings or hangouts with friends. The last Zoom interview round was on April 30, 2020. The transcription work was completed using the oTranscribe service and the "dictate" feature in the Microsoft Word processor. Earlier interview sessions usually provided insights for later discussion about users' Zoom class experience.

Autoethnography, also known as self-ethnography, is a common research approach for collecting first-hand information and examining socio-cultural context from researchers' own experience. In the case of the COVID-19 quarantine, it has been difficult for researchers to observe and document informants' daily life beyond the screen. According to Chang (2016), autoethnography is researcher-friendly. She explains:

This inquiry method allows researchers easy access to the primary data source from the beginning because the source is the researchers themselves. In addition, auto-ethnographers are privileged with a holistic and intimate perspective on their familiar data. This initial familiarity gives auto-ethnographers an edge over other researchers in data collection and in-depth data analysis/interpretation. (p. 52)

Autoethnography has allowed me to have a self-reflection on my personal Zoom class experience by extending the fieldwork to my daily life. Being a sixth informant in my study and keeping an autoethnographic journal has helped me increase the reflexivity in my ethnographic work. However, there are some pitfalls related to conducting autoethnography that may affect the data analysis. First and foremost, over-relying on personal memory and narrative could be problematic when overemphasizing narratives from a personal stance. The validity of the data is questionable because the single channel of data collection lacks the measurement for checks and balances (Chang, 2016). Another concern stems from a false notion that "confidentiality does not apply to self-narrative studies because researchers use their autobiographical stories" (p. 55). Playing the multilayered role of researcher, author, and informant, an autoethnographer may also be tempted to claim full authorship and responsibility for their narratives without hesitation (Chang, 2016). Thus, adhering to the research ethics of confidentiality as significant for the autoethnographer as it is when treating other human subjects. Instead of conducting a single field autoethnography, treating the personal and reflective narrative as an individual informant helps to address the researcher's observation and engagement with the field environment and prevents interfering with the reliability and validity of the collected data.

RESEARCH RESULTS

The first interview session revealed that Zoom class challenges the stability of many people who are accustomed to synchronized classes. Challenges include occupational issues, multitasking assignments, accessibility to reliable Internet, and having a difficult time speaking to a screen. These issues became primary obstacles for the adjustment to a new communication channel at the initial stage, although some informants thought those were normal problems. In fact, most difficult situations improve over time, and most informants adapted to new learning and teaching environments in a short time.

When it comes to the first-time-user experience of Zoom, one informant commented, "I love Zoom now. I use it all the time. It is very easy and userfriendly. So, I adjusted to that pretty easily. It seems like everybody else did too" (Anonymous informant #1). The affordance of the Zoom interface, in this case, becomes an advantage for users because they are able to adjust it quickly. Since Zoom also became many people's only option to work and study from home, it offers an option for dark/night mode for users to cope with long screen time exposure. Another informant, a student, uses this shift between dark and light modes to cue themselves to differentiate between the day class and night class. Thus, the presence of Zoom has a new purpose of indicating time for users through their engagement: "[T]ime is neither a real process nor an actual succession that I could limit myself simply to recording. It is born of my relation with things" (Merleau-Ponty, 2012, p. 434).

By recognizing their bodies' power of controlling their perception of temporality, Zoom users can actively take affordance of an app into their body rhythm, which serves their sense of time. Another user, a teacher, provided the biggest flexibility to her students by making the Zoom class meeting completely optional. She explained, "Requiring a synchronous teaching is a bad idea. Many people don't have their sense of stability right now. When I switch my stuff into online now, I took out big assignments, especially for my undergraduate classes, and I switch everything into multiple engagements on Canvas throughout the week rather than one thing at a time" (Anonymous informant #2). Zoom class not only challenges people's time management at home but also gives people a new sense of time during this "weird" experience.

As for my personal initial adjustment, time and space are strongly tied together for my motivation for working and studying. "The body has a 'situational spatiality' that is oriented toward actual or possible tasks" (Merleau-Ponty, 2012, p. 102). Such a situational spatiality which has been the key to my adjustment. One feature that I have frequently used is the "virtual background," which is embedded in Zoom and allows users to set up different pictures and short videos as alternatives to their real room environments. I have applied multiple virtual background settings to prepare for my meetings and give myself a sense of occasion for different classes while staying at the same place.

During the middle session of interviews, many informants started to focus on their emotional reactions during Zoom class and also began to turn off their video images more frequently during meetings. When they treated Zoom meetings as if they were taking a standard class on campus, they transferred these senses and emotions familiar from on-campus classes into this new class setting. As one informant remembered, "I don't know exactly when [I started to turn off my video during class]. I can show up, but I don't want to show my face" (Anonymous informant #3). Such a phenomenon recalls how some "lurking"

ethnographers hide themselves behind the screen and observe people's discussions. However, most informants regarded "lurking" as a comfortable way to attend class when they didn't like their images during video meetings. My virtual wallpaper helped me block all the background noises at my space that I did not intend to show to my peers during the class. Even though I was physically staying in the same space, having Zoom class gave me a sense of traveling to another space where the purpose of the class, rather than the medium of communication, dominated. The presence of my classmates and professors brought my sensation back to the classroom settings even though I was staying at home. My kinesthetic habits adapted to being directly attached to my laptop screen and the virtual class sessions. These classes, though virtual, successfully returned to their original flavor through Zoom meetings.

Regarding the last session of the interview, most informants claimed that although they could deal with Zoom class, they preferred to have face-to-face classes. One informant mentioned, "Zoom class is okay, but it is not as effective as real meeting class. I feel I can definitely learn better from the face-to-face class. I don't feel like I am always there when I have Zoom meetings. It's just different" (Anonymous informant #4). I personally struggled the most with the after-effect of being on a screen for a long time. Since most of my classes were at night during Spring 2020, it was difficult for me to go to sleep or keep work on my laptop after logging off the Zoom session. My biological rhythm and productivity were affected by those extra hours of screen time whereas in the past, I usually could easily focus on my work while using a laptop almost at any time of day. Sensing is a "living communication with the world that makes it present to us as the familiar place of our life" (Merleau-Ponty, 2012, p. 153). With Zoom meetings as a new norm in our daily lives, this software and its technological architectures have become essential parts of my daily routine for communicating with my class, family, and friends. During my research period, Zoom had several updates. Except for necessary fixes for security concerns and mandatory software maintenance, Zoom offered more interactive cues such as "fast" and "slow" to prepare the host to have a better-quality and engaging meeting.

CONCLUSION

This study examines the situational temporality and spatiality during people's regular Zoom class experiences and finds that the Zoom class not only changes people's daily communication but also challenges their sense of time and space. Thus, focusing only on affordance design is inadequate for helping people cope with new communicative channels during the quarantine. It becomes essential to

understand the everyday embodiment of people's perception and experience and to take these elements into account when studying body-technology relations. The active engagement with technologies and the good use of their features are beneficial to users for synthesizing their body rhythms to the changing environments. It is not hard to imagine that people's habits during the Zoom class experience may still play a part in their face-to-face meetings after the pandemic.

FUTURE RESEARCH

For future studies, researchers can select a larger and more representative sample for their digital ethnographic study. For example, I learned of some Facebook groups from my digital fieldwork that are valuable such as the "Higher ed and the coronavirus" and "Teaching during COVID-19" groups. People can focus on either educators or students and examine their adjustment and coping strategies in a more specific manner rather than using exploratory analysis on a large scale by concentrating on multiple groups of population. Emerging fields in digital ethnography such as a discussion on how home technology affects people's perception of what distinguishes between public and private spheres constitute the policymaking and agreement between users and technology providers. Phenomenologically speaking, freedom indicates "autochthonous sense of the world that is constituted in the exchange between the world and our embodied existence" (Merleau-Ponty, 2012, p. 466). This aspect of freedom is worthy for future researchers to develop further with regard to home technology.

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