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Temporal digital control: Theorizing the use of digital technologies to provide a temporal autonomous space

REFEREED FINAL DRAFT

Time & Society

Abstract

Screen time once referred to television. Nowadays, it includes various screen sizes that are Internet-enabled devices, and the pervasive smartphone. Regardless of what kind of screen is used nowadays, screen time comprises much of life itself. Being online and offline is now fairly blurred because of the ubiquitousness of technologies, Wi-Fi and screens. This paper puts forth the notion of 'temporal digital control' to explain the choice of when and why smartphones and other portable digital devices are used in today's cultural milieu, and it theorizes the 'why' of contemporary smartphone use is so prominent suggesting it enables temporal digital control in an autonomous space. Coupled with the engrossment of such use, the article elaborates how gazing at a digital device comprises a temporal connection, alongside a disconnection from real life, and a possible inauthenticity that could affect well-being. Recently published literature on 'waiting' is included to help theorise why actors choose to use digital technologies while waiting. Being preoccupied, or busy, or doing something with one's smartphone while waiting creates a sense of alleged status, importance, or connection in the form of digital temporal control. An array of vignettes are provided to demonstrate agentic disengagement with the present in preference for moving into a temporal autonomous space of 'perceived' digital control. When gazing at and using a digital device, users are arguably disengaging with the temporal present, disconnecting with others who may be beside them, in preference to the creation of temporal (and digital) autonomous spaces.

Regardless of what the user is doing on their smartphone or device, the use of technologies can provide a temporal autonomous space of digital control.

The place of the smartphone in the present

The spaces of where we live, think, engage, consume, produce, wait and act on the world is linked with how we use our time and our sense of time. In today's media-infused contemporary world, our digital interactions also contribute to the temporalities we experience in what Fuchs (2014) called digital prosumption labour. The rise of the ubiquitous smartphone provides a personalized, mediatized, digital device for information, entertainment, communication, distraction, connection, and disconnection, made available via social media. Our everyday subjectivities – in the form of choices, decisions, thoughts, and actions comprise our ways of being in the present. To pass the time pre-internet, individuals might have read a book or a magazine or a newspaper, so engaging with one's digital device is somewhat similar and it is still a choice. However, the printed book is not individualized, dynamic, on-demand or 'new media' as such. For some of us who know what life was like pre-internet, we may reminisce about our previous analogue lives where we were not always available, where we did not rely on our smartphones so much, and where spending time with others did not involve a small screen. Nonetheless, in the networked society (Hassan, 2007, 2013), both our leisure and labour are increasingly personalized, digitized and mediatized: one key factor in these practices is the smartphone.

The contemporary mobile phone is 'smart'; it is designed to cater to particular interests, needs, wants, and preferences. This article theorizes why users might choose to check their smartphone, when they might do so, and what affordances the device may provide. In acknowledgement of our seemingly 'over-use', and the number of occasions per day a smartphone

is checked, it does not focus on *what* users are doing, rather, the paper focuses on *theorizing why*. Smartphone users are not only using devices while waiting, but *at other times*, they are choosing to gain autonomy via their device so they can avoid things, situations and people, and engage temporally (and digitally) with what they do prefer.

In 2012, the word 'phubbing' was coined by an Australian advertising agency in association with the Macquarie Dictionary to describe the phenomenon of ignoring someone in preference for checking a smartphone - a reality in contemporary society (Phubbing, n.d.). The essay goes further to draw on notions of temporality to suggest that the use of smartphones and other digital devices may provide a sense of digital temporal control for the individual. I argue that when one picks up and gazes at their device, they are choosing to disengage with the *actual* present, seeking a preferred space of subjective, digital temporal control, going beyond a superficial, bespoke explanation of ignoring companions. I give examples of agentic disengagement with the present in preference for moving into temporal autonomous space of 'perceived' digital control.

First, I point out some seminal literature in the field related to *waiting* and its nexus with personal digital devices. I then introduce Clancy's (2014) concept of *temporal autonomous spaces* and extend it, arguing for the case of digital temporal control, providing vignettes to illustrate digital device usage in spaces that seemingly seek autonomy. This discussion is followed by problematizing the concept of smartphone 'over-use' or addiction and (in)authenticity. I conclude with future research directions for consideration and exploration.

Waiting and the digital device

Scholars have explored the concept of 'waiting' (Hage, 2009), including why we wait (Bailey, 2018), waiting as a state of being between phases (Lahad, 2012), different types of waiting (Liang,

2017; Klingemann et al., 2018; Hage, 2009), and issues of power relating to waiting (Bailey, 2018; Farman, 2018). A subjective experience of waiting has been aligned with being 'stuck' (Hage, 2009), powerlessness (Farman, 2018), having prolonged liminality and uncertainty (Lahad, 2012), and having little control or agency (Minnegal, 2009). Others have highlighted how choosing to do other things while waiting (multi-tasking) enables the wait to feel shorter (Liang, 2017; Bailey, 2018). Whilst studies such as Klingemann et al's (2018) acknowledged that waiting can be stressful, they claimed it can also be pleasurable, Bissell's (2007) research also pointed to the potential and emergent possibilities of waiting while journeying.

In a study of Swedish business travellers, Gustafson (2012) pointed to how and when some used travel time as working time, but rather preferred to shorten travel time to spend *quality* time with their families. He also pointed to the 'boundaryless' working conditions and the blur between work and leisure, highlighting how mobile technologies often enabled travel time to be used as working time. In Gustafson's small, qualitative study, several interviewees agreed that checking email while travelling for work reduced "feelings of stress when being away from the office. It gives a *sense of control* and also reduces the amount of work to be done on return" (211, emphasis mine). This is supported by Urry's (2006) earlier theorisation of how new technologies "provide new access to activities that become possible and appealing to those on the move" (306).

Duke and Montag (2017) suggested some potential conditioning principles for why smartphones are used giving an example of a bus station. When waiting for a bus, boredom would be anticipated so in the pre-smartphone era, activities would be undertaken to distract or entertain. This may include chatting to others, reading a newspaper or magazine, or smoking a cigarette. In the smartphone era, they suggested while waiting at the bus station, the automatic learned behaviour is to now use smartphones to alleviate boredom, and enable time to be used in an

autonomous way, giving users a *sense of control*. Waiting and boredom are linked as being negative – consequently, and to a tempered point, entertainment or distraction is sought to avoid boredom. Due to the acceleration of society and the instantaneous nature of the internet, digital actors have come to expect immediacy and instantaneity – and, tolerance for waiting has arguably decreased. The acceleration of time and society appears to have decreased our wait time. The wait for things such as food, services, and attention has decreased because social media and Wi-Fi enables much gratification on-demand. Farman (2018) pointed out that waiting is hated because it is inefficient, non-autonomous (we cannot control it, we are powerless), and a waste of time. Some people cannot endure 'waiting'. Some do not want to be seen sitting by themselves, waiting, listening and 'being', so to avoid this sense of being alone, unimportant, or bored, they pick up and check their smartphone. They do not want to be seen as unimportant through not having anyone to talk to; they do not want to sit and do nothing, have no stimulation, nor do they want to miss out on what else might be going on that can be accessed digitally. For some, their value, status and existence are tied up in the interactions with their small smartphone screen.

The use of a digital device provides an individual with leisurely personal interest, choice, focus, appeal (or for work), through a temporal autonomous space of digital control. Through exacerbated and perpetuated use of digital devices, users have more screen time which can become compulsively used. Users become dependent on devices because they are getting value, worth, reward and engagement. In a sense, this kind of use could be considered as 'My Time' in terms of being all about the individual. The late Professor Ben Agger introduced the notion of iTime (2011) as a way to explain how we are always connected and have no disconnection from others or work. While once technologies were considered to help 'free up' time or enable 'downtime', Agger's theorization of constant digital connection was lamenting the loss of 'pre-internet boundaries' such

as public and private, day and night, work and leisure, space and time. As Agger (2011) pointed out, those who have grown up with the internet do not have a comparison with their life before the internet, suggesting iTime may not share similar temporalities between generations.

There appears to be at least three kinds of smartphone or digital device use when waiting. The first is negative, for some, as it seems they are very dependent, are over-using their smartphones, are not experiencing the 'moment', and are disconnected from the present. Yet, there is little to no research to confirm this. Research into mindfulness suggests there are benefits for increasing attentiveness and regulating emotion (Trousselard et al, 2019), and possible improvements in health management, such as asthma (Rosenkranz et al, 2019). The mindfulness movement proclaims the importance of living in the moment, of being present in the present, of thinking about one thing at one time, and of focusing on all that one temporal moment may provide in one construction of time. In a bid to check on what is happening elsewhere with other people in different time zones and in different forms of the 'present', smartphone users may not be fully engaging in the (temporal) moment provided. Coleman (2018) pointed to the temporality provided by digital media claiming it was "non-linear, messy, complex and multi-faceted" (605). The moment is shaped by digital distraction but does not necessarily enhance humanity's existence. However, this presupposes or assumes that being in 'real life' is always or is necessarily superior to being in the virtual life, which is a problematic assumption.

The second kind of use suggests an agentic use of digital devices in a bid to fill the time they have and to use it effectively, whether for leisure (Urry, 1994), for communication, for interest, or in a bid to 'catch up' on something. This could also occur when attending a work meeting, being frustrated by the irrelevance, and therefore, 'going online' to effectively use their time to attend to issues of greater temporal priority.

The third kind of digital device use suggests a deployment of technology to create a particular image in a public setting, for example, 1) that the individual is not alone because they are engaging with others online, 2), that the individual must be important and/or busy because they have commitments to attend to which are more important than those in the present, and 3), in accessing their digital temporal space, they have more autonomy, compared to what they are experiencing in their actual, real life. Each of these kinds of uses could be deemed to be the creation of a temporal autonomous space, in preference for a particular temporal priority, of which I now introduce and then theorise further by discussing its nexus with the digital device.

Temporal autonomous spaces

In 2014, Craig A. Clancy introduced the notion of *temporal autonomous spaces (TAS)* within this journal. He drew on Heidegger's *Being and Time* (1980) and discussed the politics of temporality and time. Clancy claimed:

Ultimately, the primary purpose of a politics of time becomes the creation of the conditions where different and varied temporalities can be experienced and perceived. Time, at least here, becomes one's own time – a personal and sovereign creative control. (2014:30, emphasis in original)

A *temporal autonomous space* is where one invests in an activity because their subjective sense of time means the way they spend *resourced* time enables more *freed* time. Time is a resource so in a temporal autonomous space, people are able to take control with a greater sense of *freed* time, equating to personal and sovereign creative control. Hence, the way they spend time brings about an ongoing priority in a particular area or focus.

The chosen screen time – whatever form it takes - might be passive or active or idle, but it involves some choice, and some autonomy – some temporal control. Users are 'alone together' (Turkle, 2011) but they are using a digital device to create a temporal autonomous space, where they have an individualized, mediatized space disconnected from others in real life, but connected to others virtually. Individuals gazing at personal smartphones can create and live in their own temporal space.

Within the *temporal autonomous space*, political statements are made, including who is in power, and who has power over (Waltz, 2017). The person who is waiting is deemed to be less important than the person who is being waited for and they are dependent on the person they are waiting for (Bailey, 2018). Consider being in a waiting room of a doctor's office, and from the waiting room, the doctor can be seen in his or her office looking at a screen with no-one else in their consultation room. As the 'waiter', the individual is positioned as less important than the doctor *and* whatever the doctor is doing as they are engaged with their screen (see also Waltz, 2017).

When in the city, surrounded by thousands of people jostling for space, and affronted by noise pollution, it is no wonder some individuals disconnect from the noise through using ear buds or head phones. The use of ear buds and other headphones 'control' subjective space as they are then able to disengage with unwanted noises. This enables the auditory sense a temporal autonomous space in addition to the visual sense. In the 1980s on long road trips, the author remembers having a portable cassette player and headphones where she listened to stories and songs while travelling. The author remembers enjoying the disengagement from her car companions (immediate family) while being connected to what she was interested in. The ways one travels and the modalities of travel – distinct social practices - are shaped by the entanglement

of technologies and human agency (Urry, 2006). Years later, the author blogged once about walking along an ocean beach and observing dolphins jumping in and out of the waves just a few metres offshore. At the same time, another unknown man walked by but was listening to headphones and he was looking downwards at the sand, seemingly not 'in' the present that she was in, even though they were beside each other. In the space of digital temporal control, users are connected and constantly engaged via multiple stimuli which are constituted by multimodal, dynamic messages, seemingly in contrast to occupying the space of the 'actual' present - breathing, sensing, noting, and *being*.

Digital temporal control

The natural, real or constructed world cannot be controlled like what can possibly be created and manipulated on a personalised, digital device. In the temporal, digital space, the user can create and explore their own constructed world, their 'virtual' reality, their choices, preferences, allies, enemies, and their journey. Everything they see is or can be tailored to them. They engage with 'preferred others' through digital device usage. These subjective experiences become the space of digital temporal control, meaning the user returns to view their small smartphone screen and live outside the real (actual) space, transcending reality to create their own temporal autonomous space. For example, during a work meeting, one might constantly use a smartphone (or another device) to chat via digital messaging to someone else who is not there beside them at the work meeting. That person is in their temporal autonomous space, but arguably disengaged with their co-workers. At the same meeting, another person is frustrated by the 'talk' that is going on and so searches online shopping sites for something of interest in a bid to have some digital temporal control. Choosing how one creates and inhabits their own digital temporal spaces affords agency and

independence. The individualized smartphone enables users to transcend their (mundane) reality and obtain meaning, reward and value in their temporal autonomous (digital) space. When users believe their time is being wasted by others, a digital device can provide them with a sense of agency to use their time in a way that they prefer, or in a way that they temporally prioritise. For instance, picture the waiting area for obtaining and renewing driver's licences. This is a space where the 'wait' is known to be unknown. One person is sitting alone hunched over their smartphone. Another person enters the waiting room, sits down on the opposite side of the room, and takes out their smartphone from their handbag. A couple enters the room and sit down beside each other, but then promptly move to view the smartphone they are carrying in their dominant hands in front of their face. Each individual is using their smartphone in a way to pass the time, to ensure their time is not wasted, but poignantly, it suggests a preference for digital interaction. In times gone past, we may have read a magazine or newspaper, or talked to the person beside us. However, this digital temporal usage may also be a way of making the most of their time through attending to automated tasks or communicating with others that the devices (and Wi-Fi) can preferentially provide.

When engaging with a smartphone, the user can choose what to view, who they interact with, and what they are doing. The user can choose to disengage with the reality which they cannot control (though I acknowledge individuals are not always 'out of control' in their actual environment). Consider an a la carte restaurant, and one person is waiting for their companion to arrive for dinner, so consequently view their smartphone in order to have some virtual company. In this situation, the individual is not wishing to appear alone. They may be uncomfortable with the public image of appearing alone, and so use the digital device to appear busy, preoccupied, or important (compared to being alone and waiting, arguably a state of disempowerment). At the table

next door, two people are eating what they have ordered, but are not talking or looking at each other; they are each looking at their smartphones. They prefer to create a space of digital temporal control rather than 'be' with the other person 'in real life', and they may be actually 'phubbing' each other.

Temporal control gives one an individual sense of power, of control, and agency, and though it may not be *actual*, their perception is shaped by personalised smartphone use. Digital temporal control is unique to the individual as different and varied temporalities can be experienced (Clancy, 2014). Picture a beautiful, sunny day where a person walks down the street, but instead of looking about and experiencing all that their senses enable, they choose to engage with and view their smartphone screen, preferring digital temporal control. The person also has headphones on which means they are unable to engage their auditory sense with the range of sounds in the environment. It would appear the person is not living in the moment as per what a mindfulness approach would recommend. However, the person is inhabiting a temporal autonomous space via digital media that they have chosen. The usage is engrossing as the focus is individualized and the preferences or choices are personalized. Users choose their own focus, expenditure of time, entertainment, and their ways of being engrossed – in a high state of autonomy. The engrossing and engaging nature of using a smartphone is perpetuated because the user has digital temporal control in an autonomous space.

The choices made to use a smartphone are reflective of the choices made in our everyday lives in a bid to obtain some temporal control. When one does not have control over life through everyday pressures, constraints, disadvantage, incapacity, etc., when one uses their smartphone, they are engrossed because autonomous choice becomes reality in the form of digital temporal

control. Time becomes one's own (Clancy, 2014). Digital temporal control exacerbates and perpetuates ongoing use of devices or smartphones.

Rebecca Coleman (2018) pointed out that digital media provides an 'always-on' temporality (600), yet she suggests the kinds of temporalities produced are not always the same kinds of 'presents' for individuals (see also, Moran, 2015), as time is experienced subjectively (Bailey, 2018). Consider the following scenario where two people – unknown to each other - walk into the ground floor of an elevator and one selects the seventh floor, the other the eleventh. An awkward silence commences. One person pulls out their smartphone to alleviate the awkwardness. This person chooses to gaze at their device to gain autonomy over the temporal discomfort. The other person leaves their smartphone in their pocket, standing in the elevator and waiting for the destination. The two individuals are in the same space, yet one has created an autonomous space of digital temporal control, and the other is choosing to live in and experience the moment without their smartphone. These are two different 'presents' and temporalities for the individuals, shaped by their use and (non)use of technologies.

Digital temporal control can help negotiate a daily commute via public transport (see Urry, 2006), a tiresome wait, a polluted, noisy environment, and other unwanted things that cause individuals to seek out alternatives. Consider the individuals waiting at a train station, each gazing at a small device. Via a smartphone (or other digital device), users can go to their own space and place and choose how they use time, pass time, spend time, or waste time. It may seem one is connecting (to others) via a smartphone, but if so, it is very likely they are also disengaging with the *actual* present, where one may not have control over what is occurring (i.e., they cannot control the noise or when the train arrives, or leaves, or how many people are on the platform), a user obtains some digital, temporal control because when engaging with their smartphone, they control

their 'waiting time' with sensorial experiences of their own choice. The autonomy obtained in this temporal space can become an ongoing priority, and the use self-perpetuating. Hence, whenever one is waiting for someone or something, the self-perpetuating practice is picking up and looking at their smartphone. The attraction and manipulation of social media, gaming and gambling can be a consideration here, especially given the rise of so-called 'smartphone addiction' (Duke and Montag 2017) or problematic smartphone use (Balta et al, 2019).

Each of these real-life vignettes provide examples of smartphone users seeking out digital temporal control via their device. They are able to temporally prioritise what they want to do via they digital device. These are everyday examples that are not difficult to observe in developed locations with access to the internet. These examples are not necessarily problematic, nor are they presented to suggest over-use. Many of the examples suggest a choice of how to pass the time while waiting and the smartphone provides particular advantages. In each of these examples, it is possible the use of the smartphone is preferable and has more value than being in the present and not using the smartphone, that is, being and interacting with others. The smartphone viewer believes their time is more usefully spent, or more enjoyably spent in their space of digital temporal control. A level of comfort can be obtained in knowing what the smartphone provides – it is the 'known', and it can be controlled to a certain degree. It also projects to others that they are busy or unavailable because they are preoccupied with what is more important on the smartphone. This preoccupation with one's smartphone creates a sense of importance; what the smartphone user does has more value than being in the present and *not* gazing at their smartphone – going beyond the 'phubbing' definition. Users can be alone (with their digital device) yet *not* appear to be lonely as they are interacting with others. Users gain temporal control on a digital device because when one disengages with reality and the present, there is an acknowledgement that just 'being' in the

moment is something that cannot be controlled. Perhaps this is at odds with a mindfulness approach that emphasises the acceptance of our experiences, whether positive or not (Shapiro, Thakur and de Sousa, 2014).

Recently, I observed a group of young people sitting together on blankets in the park. Each were looking at their individual smartphone. Some screens and conversation were shared. Some, however, were messaging each other via their smartphones instead of talking to each other. Questions surround the effects of disengagement with the present in preference to an autonomous, temporal space comprising digital connection. How is the individual and society (in turn) affected if the comfort of the temporal (digital) autonomous space is continuously preferred and privileged over the actual present? How much of the actual present is unnoticed or marred through choosing to be temporally elsewhere? When does the preferred temporal autonomous space impose on authenticity and subsequent wellbeing? When does smartphone usage become rude or unsustainable? During work meetings, one can be present in person, but be absent from the discussion due to preferred engagement with their laptop or tablet. They can be productive with the work they are reading or doing, and can appear to be taking notes from the meeting. But, they are disengaged, while appearing to be connected. However, they are not present in the present, despite their bodily presence. Though they are sitting beside colleagues, they are inhabiting a personalised temporal autonomous space of digital control.

Considerations for smartphone users from the literature

Since the introduction of the iconic iPhone, the up-take of smartphones throughout the world is significant. To compensate, digital detoxing and 'fasting' from the internet (see Tiidenberg et al, 2017) are becoming popular. A number of apps are now available to help monitor smartphone and

decrease or limit internet usage. However, in this cultural and social milieu of the developed world, it is unrealistic to completely disconnect. More and more services and facilities are becoming automated or digitized and dependence on the internet continues to increase. Wi-Fi, mobile technologies, digital devices, push notifications, and data roaming means it is possible to be online all the time (Coleman, 2018). In spite of this, the rise of the digital wellness movement aims to provide solutions to technological addiction. Functions such as weekly (or daily) reports on screen time, prompts to take a break from digital engagement, and notifications encouraging users to 'leave the phone and live in the moment' are increasing in popularity alongside apps enabling meditation (e.g., Calm, Smiling Mind). Short-course online programs and podcasts claiming to help one 'digitally declutter' or break the dependence on one's smartphone have arisen in a bid to counter the productivity that savvy tech use was once a signifier. Other services provide 'solutions' through promoting apps to 'help' parents connect with their children to encourage reflection, mindfulness, and reward positive behaviours. In early 2019, Apple removed certain competing apps from their iOS Apple Store that helped smartphone users limit screen time: Apple had developed and released their own screen monitoring app (Nicas, 2019). What users can do is consider how best to live in the temporal space, be it a mediated one or not, recognizing the limitations of technological solutionism (see Morozov, 2014).

Another way to conceptualize the experience of digital engagement with the smartphone might be to align it with 'flow' (Csikszentmihalyi, 1990). Flow constitutes being fully absorbed in an activity of focused concentration, where time and space is seemingly lost, that brings about achievement, enjoyment and serenity. Flow appears to be highly desirable, especially in its temporal present. Engrossing, all-consuming focus on the smartphone might be an example of flow, especially when one loses a sense of time. However, Mihaly Csikszentmihalyi (1990)

himself stated some enjoyable activities may become addictive. Some researchers have examined the heavy or over-use of internet-enabled devices, its alignment with flow, and its' possible nexus with internet addiction (Stavropoulos et al, 2018; Johnson & Keane, 2017).

Experiencing the moment, rather than mediatizing or digitizing the moment appears to have merit. There are benefits in being in the moment, focusing on one thing, in just simply *being*, and focused on one's senses. For example, choosing to leave one's smartphone in their pocket or handbag rather than bringing it out during a meeting can demonstrate respect for the other person in whose company one is. While digital communication can be both inauthentic and authentic, inauthentic face-to-face communication is also possible. We need to find out whether authentic face-to-face communication is more probable where there are no digital devices. The increased use of the smartphone is aligned with user-driven, on-demand services which are immediately expected. If the digital, temporal space becomes more appealing to individuals (than the alternative), then that would suggest more and more users will prefer digitized mediation via the small screen, and further seek extended periods of digital, temporal control. More of this use will bring about complicity as individuals socially accept these practices (Bissell, 2007; Lahad, 2012).

Summarising the argument

I am theorising the use of digital devices such as smartphones enable users to seek and obtain digital temporal control via a temporal autonomous space. This can occur while waiting, or can occur at other times as a means to pass the time, waste time, indulge one's senses, or engage with preferred others virtually. Obtaining digital temporal control via a smartphone (or another digital device) can provide a personalised, mediatised temporal autonomous space. Smartphone use in this autonomous space may provide a disconnection from others with whom they are beside.

Smartphone use may provide a sense of digital temporal control because of the uniquely individualised possibilities of what can be created in a temporal, digital autonomous space. Smartphone use possibly is increased and exacerbated by the autonomy and individualised engagement it can provide.

Authentic connections and future research directions

Having presented my theorisation, I now turn to explaining some gaps in the argument and areas for further research. Scholars such as Blitz (2014) and Turkle (2011) argue that, for some, technology has *become* the world; some have a propensity to therefore forget about being together with other people in unmediated ways and their own essential free will with respect to technology (Frischmann and Selinger, 2018). Gazing at a small screen instead of being 'in the moment' raises concerns about wellbeing and sociability (Agger, 2007, 2011). Questions surround the authenticity of the self in its digital connection to others in the space afforded by the smartphone (Tiidenberg et al, 2017). Many claim accessing the internet and the immediacy of what can be found there is affecting our ability and capacity to think *and* to think deeply (Carr, 2010; Frischmann and Selinger, 2018). For example, if we spend all our waking moments attached in a sense to a device, we are not necessarily allowing our brains to process, reflect, have space, be bored, make connections and be creative. Few take the time to think about the effects of digital intrusion and the non-neutrality of these technologies (Lanier, 2018; Carr, 2010).

All of this so far leads us to consider and problematize whether it really is better to focus on being in the actual present rather than the digitally temporal one, and whether these temporal spaces are authentic ones, or are they spaces producing negative, destructive behaviours? Furthermore, should the digital, temporal space be considered a poor choice? When Clancy (2014)

spoke about an authentic temporal orientation, perhaps the phenomenon of disengagement or distraction from the *actual* is what Agger (2011) described as the "manically connected eternal present" (128) that "immerses people so deep in everyday life that they don't question their strange participation in the electronic grids of power and capital" (128)? A 'connection' is authentic for those who have always participated in it. However, Tiidenberg et al. (2017) claimed, "We have a true self that becomes less authentic when mediated through networked technologies The grand narrative of authenticity stubbornly clings to an online/offline divide, despite the fact that most people's daily experiences traverse digitally mediated and unmediated settings" (n.p.). If one is inauthentic in a digital temporal space, what affects does that have?

Clancy (2014) claimed that temporal authenticity is fundamentally essential and, in 'reality', it is a universal need, albeit, an individual's temporal perspective and authenticity within the present is "inextricably connected to psychological well-being" (36). According to Heidegger, "he [sic] who exists inauthentically is constantly losing time and never 'has' any" (Heidegger, 1980: 463). Thus, if one is inauthentic in their ontological sense of temporality and being, their resoluteness (Heidegger, 1980) is compromised, as Heidegger linked authenticity with resoluteness (Clancy, 2014). Therefore, authentic temporalizing is an extension of resolute temporalizing (resoluteness). It remains to be seen whether authenticity is compromised when seeking digital temporal control - can actors be authentic because they choose to disengage with the actual reality, and create their own, fabricated, preferred digital temporality?

Some claim that as we become more dependent on digital devices, our ability to remember, think for ourselves, and critique is lessened, as well as our sense of humanity (Carr, 2010; Frischmann and Selinger, 2018). Concerns that users are becoming addicted to the internet or to their devices inform the research literature (e.g. Van Rooij et al, 2018; Montag and Reuter, 2017).

Whether it is gaming, gambling, accessing pornography, or seeking out constant attention and affirmation, moral panics surround the use of digital devices, especially for children and young people. Compulsive, obsessive use can be explained by the ongoing, consistent bombardment of notifications. As users continue their smartphone interactions, the use is exacerbated. While the author is theorizing the compulsive usage of the smartphone, it is not benign. Ethicists such as Tristan Harris (2016) argue there comes a responsibility to educate families about how to negotiate the design of the technology itself, entitled 'behaviour design', which perpetuates addictive, dependent behaviours (Schull, 2012; Carr, 2010). Lanier (2018), and Frischmann and Selinger (2018) have separately suggested the problem is that we are in a loop effect whereby individual digital device use creates dependency and addiction, some believing they are like portable slot machines (Schull, 2012), offering a rapid reinforcement reward system (Eyal, 2015) provided via social media (see also Vaidhyanathan, 2018). While some suggest we need to rethink technological design (Schull, 2012) and apps (Harris, 2016), it has also been recommended that social media companies be regulated and be subject to a legal 'duty of care' (House of Commons Science and Technology Committee, 2019). From Jason Farman's international research on 'waiting', he concluded:

Waiting pulls us into the present unlike any other experience of time. In waiting, we realize that this moment is meaningful as it exists, not as some step toward a future moment. Waiting is present tense, and its meanings are full of the potential to transform the ways we see the world. Each moment is its own experience and its own fulfillment. (2018: 234)

The creation of autonomous temporal spaces through digital temporal control enables autonomy and independence beyond what is provided in an analogue and uncontrollable sense. Having said that, it must be acknowledged that individuals are not necessarily out of control in their actual

environment. When using smartphones, it cannot be said that the user is always feeling out of control. Some non-use of smartphones suggest users are in control of their reality. Some agentic use of smartphones may not be obtaining any form of control temporally, digitally or elsewhere. Furthermore, for some users, digital devices may not provide a temporal autonomous space for digital temporal control. Smartphone use may be a problematic bind in the form of over-use, over-dependence. Smartphone use may be out of control. Research needs to explore the motivation for smartphone use and identify the kinds of experiences that prompt and seek out further use.

I have previously argued that more qualitative research should be conducted in this area surrounding internet addiction, over-use, or problematic use (Johnson, 2015). The constant affirmation and attention users receive can become addictive-like. Obtaining significant 'likes' of posts or photos provides a sensorial response similar to dopamine. Seeking and demanding attention from others online can become an ongoing obsession. Heavy gamers are receiving rewards through progress, achievement and collaboration. Much research is being conducted into online gaming and online gambling, especially surrounding notions of addiction (e.g. Van Rooij et al, 2018; Stavropoulos et al, 2018). Examining the use of smartphones alongside notions of flow, compulsive over-use, and the mediated, authentic self are all future research directions. While time is believed to be a social practice (Moran, 2015), the 'multiplicity of times' that characterize individual, subjective experiences also warrants further investigation. I reiterate Hand and Gorea's (2018) assertion that we need to know whether in terms of the "substantial transformation of the self" (678) due to mediatization and temporal datafication, will individuals "engage in selfreflection and transformation" (678)? Smartphone use – be it habitual, over-obsessive, compulsive, or addictive-like (see Johnson, 2009) – warrants extensive, in-depth research, including how digital

culture affects our sense of time and impinges on our capacity to experience the present (Agger, 2007; 2011; Coleman, 2018).

Some workplaces ban the use of mobile technologies during meetings, which means while waiting for a meeting to start, colleagues have to interact with each other, by engaging in small talk, such as asking about family and wellbeing. If devices are being gazed at prior to a meeting, the development of and a collegial atmosphere is fairly limited. Researching the value of informal, social banter appears useful, alongside whether banning devices in workplace meetings increases the wellbeing of workers. In contrast, if research demonstrates that employees' engagement with devices during meetings is highly productive and preferential, there is a problem with how we are conducting our meetings, if they are deemed a 'waste of time', and only good for completing other digital tasks of temporal priority.

Conclusion

When people (of various ages) engage with and focus only on their smartphone, observers may wonder why they are not seemingly in the present. Perhaps smartphone use can provide individuals with a temporal autonomous space. In a world that cannot always be controlled, a digital device may provide an agentic individual with digital temporal control. They can inhabit an individual space beside others but not be with others in real life. Using a digital device can be a way to pass the time, to disengage with reality and connect with a world where a temporal autonomous space can be accessed. The obtainment of digital temporal control may exacerbate and perpetuate ongoing (and obsessional) use of smartphones and other digital devices.

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References

Agger B (2007) Time robbers, time rebels: Limits to fast capital. In R Hassan and RE Purser (Eds.) 24/7: *Time and temporality in the network society* (pp. 219–234). Stanford, CA: Stanford Business Books.

Agger B (2011) iTime: Labor and life in a smartphone era. Time & Society 20(1): 119-136.

Bailey C (2018) Waiting in organisations, *Time & Society*, OnlineFirst, 1-26, DOI: 10.1177/961463X18794587.

Balta S, Jonason P, Denes A, Emirtekin E, Tosuntas SB, Kircaburun K and Griffiths MD (2019). Dark personality traits and problematic smartphone use: The mediating role of fearful attachment. *Personality and Individual Differences*, 149: 214-219.

Bissell D (2007) Animating suspension: Waiting for mobilities. *Mobilities*, 2(2): 277-298, DOI: 10.1080/17450100701381581

Blitz M (2014) Understanding Heidegger on technology. *The New Atlantis: A Journal of Technology & Society, Winter*, 63-80.

Carr N (2010) *The shallows: What the internet is doing to our brains.* W. W. Norton & Company: New York, NY.

Clancy CA (2014) The politics of temporality: Autonomy, temporal spaces and resoluteness. *Time* & *Society* 23(1): 28-48.

Coleman R (2018) Theorizing the present: Digital media, pre-emergence and infra-structures of feeling. *Cultural Studies* (32)4: 600-622.

Csikszentmihalyi M (1990) Flow: The psychology of optimal experience. New York, NY: Harper & Row.

Duke E and Montag C (2017) Smartphone addiction and beyond: Initial insights on an emerging research topic and its relationship to internet addiction (chapter 21, pp. 359-372) In Montag C and Reuter M (Eds.) *Internet addiction: Neuroscientific approaches and therapeutical implications including smartphone addiction* (2nd ed), Springer, Switzerland.

Eyal N (2015) *Hooked: How to build habit-forming products*. Self-published. Available at: https://www.nirandfar.com/hooked

Farman J (2018) *Delayed response: The art of waiting from the ancient to the instant world.* Yale University Press: New Haven and London.

Frischmann B and Selinger E (2018) *Re-engineering humanity*. Cambridge, UK: Cambridge University Press.

Fuchs C (2014) Digital prosumption labour on social media in the context of the capitalist regime of time. *Time & Society* 23(1): 97-123.

Gustafson P (2012) Travel time and working time: What business travelers do when they travel, and why. *Time & Society* 21(2): 203-222.

Hage G (2009) Waiting (Ed.). Melbourne: Melbourne University Press.

Hand M and Gorea M (2018) Digital traces and personal analytics: iTime, self-tracking and the temporalities of practice. *International Journal of Communication* 12: 666-682. Available at https://ijoc.org/index.php/ijoc/article/view/6020

Harris T (2016) "How technology hijacks people's minds – from a magician and Google's design ethicist". Available at http://www.tristanharris.com/essays/ (date accessed 9 January, 2019).

Hassan R (2007) Network time. In R Hassan and RE Purser (Eds.), 24/7: Time and temporality in the network society (pp. 37-61). Stanford, CA: Stanford Business Books.

Hassan R (2013) Networked time and the "common ruin of the contending classes". *TripleC:* Communication, Capitalism and Critique 11(2): 359-374.

Heidegger M (1980/1927) Being and time. Oxford, UK: Blackwell.

House of Commons Science and Technology Committee (2019) *Impact of social media and screen-use on young people's health*. Parliament, UK. Report available at https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/news-parliament-2017/impact-of-social-media-young-people-report-published-17-19/ (date accessed 13/2/19).

Johnson N F (2009) The multiplicities of internet addiction: The misrecognition of leisure and learning. Surrey, UK: Ashgate.

Johnson N F (2015) Arguing the need for qualitative exploration in the field of emerging digital pathologies. *Studia Psychologica*, *15*(2), 123-137.

Johnson N F and Keane H (2017) Internet addiction? Temporality and life online in the networked society, *Time & Society*, 26(3), 267-285.

Klingemann H, Schuermann A, Laederach K, et al (2018) Public art and public space – Waiting stress and waiting pleasure. *Time & Society*, in press. DOI: 10.1177/0961463X1556701.

Lahad K (2012) Singlehood, waiting, and the sociology of time. *Sociological Forum* 28(1): 163-186.

Lanier J (2018) *Ten arguments for deleting your social media accounts right now*. New York, NY: Henry Holt and Company.

Liang C-C (2017) Enjoyable queuing and waiting time. *Time & Society*, in press. DOI: 10.1177/0961463X17702164

Minnegal M (2009) The time is right: Waiting, reciprocity and sociality. In: Hage G (ed) *Waiting*. Melbourne: Melbourne University Press, pp. 89-96.

Montag C and Reuter M (2017) *Internet addiction: Neuroscientific approaches and therapeutical implications including smartphone addiction* (2nd ed). Switzerland: Springer.

Moran C (2015) Time as a social practice. *Time & Society* 24(3): 283-303.

Morozov E (2014) To save everything, click here! The folly of technological solutionism. New York, NY: Public Affairs.

Nicas J (2019, April 27) Apple cracks down on apps that fight iPhone addiction. *The New York Times*. Retrieved from http://www.nytimes.com, available from https://tinyurl.com/y3desdkm (date accessed May 6, 2019).

Phubbing (n.d.) In *English Oxford Living Dictionaries*. Retrieved from https://en.oxforddictionaries.com/definition/phubbing

Rosenkranz M, Busse W, Mumford J and Davidson R (2019) Mindfulness-Based Stress Reduction training improves disease control and reduces reactivity in affective neurocircuitry in asthmatic individuals. *Brain, Behavior, and Immunity, 76* (Supplement), page e30, Available at: https://doi.org/10.1016/j.bbi.2018.11.267

Schull ND (2012) *Addiction by design: Machine gambling in Las Vegas*. Princeton, NJ: Princeton University Press.

Shapiro S, Thakur S and de Sousa S (2014) Mindfulness for health care professionals and therapists in training (chapter 14), in Baer RA (Ed.) *Mindfulness-based treatment approaches* (2nd ed), pp. 319-345, Available at https://doi.org/10.1016/B978-0-12-416031-6.00014-1

Stavropoulos V, Griffiths MD, Burleigh TL, Kuss DJ, Doh YY and Gomez R (2018) Flow on the internet: A longitudinal study of internet addiction symptoms during adolescence. *Behaviour & Information Technology* 37(2): 159-172.

Tiidenberg K, Markham A, Pereira G, Rehder M, Dremljuga R, Sommer JK, and Dougherty M (2017) "I'm an Addict" and other sensemaking devices: A discourse analysis of self-reflections on lived experience of social media. Proceedings of the 8th International conference on Social Media & Society (article no. 21). Toronto, ON, Canada. Available at http://dx.doi.org/10.1145/3097286.3097307.

Trousselard M, Ramdani C, Charles V and Francois V (2019) Towards a refined model of mindfulness related to consciousness: A systematic review of ERPs findings. *Neurophysiologie Clinique*, OnlineFirst at https://doi.org/10.1016/j.neucli.2019.07.011

Turkle S (2011) *Alone together: Why we expect more from technology and less from each other.*New York, NY: Basic Books.

Urry J (1994) Time, leisure and social identity. *Time & Society 3*(2): 131-149.

Urry J (2006) Travelling times. European Journal of Communication 21(3): 357-372.

Vaidhyanathan S (2018) Anti-social media: How Facebook disconnects us and undermines democracy. New York, NY: Oxford University Press.

Van Rooij, AJ, Ferguson, CJ, Carras, MC, Kardefelt-Winther, D, Shi, J, Aarseth, E, Bean, AM et al (2018) A weak scientific basis for gaming disorder: Let us err on the side of caution. *Journal of Behavioral Addictions* 7(1): 1-9, DOI: 10.1556/2006.7.2018.19

Waltz M (2017) Waiting on others: Gender in the medical waiting room. *Sociological Forum* 32(4): 816-830.