

“Why are you always on your phone?” The use of smartphones to manage work and domestic responsibilities

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Abstract

This article examines the intersection of two contemporary phenomena: the “crisis” in managing domestic responsibilities and paid work, and the rise in ubiquity of smartphones. We conceptualize the problem of work and domestic responsibilities as one of insufficient resources, not one of “work/life balance.” Given this, do smartphones provide a solution to these insufficient resources? We summarize the findings of a Canadian study and find that smartphones do assist participants in managing domestic responsibilities while at work, but they do not up-end the privileging of paid work over domestic responsibilities. We find also that smartphones are importing workplace organizational practices into the home, just as industrialization brought Fordist organizational practices into the domestic sphere. We conclude that these findings imply differential effects for men and women that could perpetuate a gendered division of domestic labour.

Introduction: Smartphones and work

We sit at the cusp of two significant changes, one social and the other technological. On the social front, we are collectively having more difficulty managing the demands of paid work and domestic life. The workload of paid work and domestic labour has reached what some scholars are calling a “crisis” (Bezanson & Luxton, 2006). On the technology front, technology is becoming a more powerful and more intimate daily companion, which promises a solution to this labour squeeze. The mobile phone – itself a relatively new technology – has already shifted how we stay connected to both work and home. As if that weren’t enough, we are now replacing mobile phones with smartphones, which make email and “apps” always available. This paper sits at the intersection of these two phenomena. Mobile computing is already very much a part of our increasingly busy lives, yet we know very little about how these mini-computers help (or hinder) our ability to navigate paid work and domestic responsibilities.

There is a deep need for new research in this area, as we are seeing robust growth in smartphone usage, as well as a prevalent perception of time poverty. According to data from 2012, there are about 26 million mobile phone subscribers in Canada (Canadian Wireless Telecommunications Association, 2012). Of those, 48% are smartphone users, translating to 12.5 million Canadians, or 40% of the entire population now carrying smartphones (Quorus Consulting Group, 2012). Similarly, in the United States, Pew Internet and American Life recently reported (2012) that 46% of all American adults have a smartphone, which roughly corresponds to 110 million Americans (US Census

Bureau, 2010). Other studies found the rest of the Western world is not far behind: 40% of British mobile phone subscribers and 40% of Spanish subscribers use smartphones (ComScore Inc., 2011). This is not a trivial technological change; today's smartphone has the same computing power as a laptop manufactured as recently as 2006.¹ Through its size and inherent mobility, the smartphone is bringing digital technology into closer contact with everyday social life. 12.5 million Canadians are carrying around a miniature computer as part of their daily routine.

Over the past two decades, scholars report both qualitative and quantitative increases in working time and intensity (Hochschild, 1997; Schor, 1991; Statistics Canada, 1998).² Not all workers are working longer hours, but there is evidence that highly skilled workers are working extremely long hours (Fisher & Robinson, 2009; Robinson & Martin, 2009). From academics to bankers to web site developers, scholars report a pervasive pattern of intense working hours, often exceeding the normative 40-hour work week (Blair-Loy, 2004; Menzies & Newson, 2007; Tapia, 2006). The popular press also connects smartphones to interruptions and cancelled vacations, to constant availability to

¹ The BlackBerry Bold 9900, released in 2011, has a 1.2 GHz processor, which would have been the processor speed of the Dell Latitude D420, which was released in 2006. The iPhone 4S has an estimated speed of 800 MHz. Granted, processor speed is not the only measure of computing power. In particular, smartphones are hampered by a lack of reliable network access or slow network speeds. However, the BlackBerry Bold's processor, given good network access and battery life, can perform as quickly as the Dell Latitude D420 on mundane tasks, such as checking one's email – a central function we examine in this paper.

² Others argue that we are not working more hours but simply engaging in more simultaneous activities (Fisher & Robinson, 2009; Robinson & Martin, 2009).

work, and to families struggling to carve out time (Belkin, 2007; Belson, 2007; Author, 2008a)

Smartphones facilitate the “mixing” of paid work with domestic life that was introduced by earlier forms of mobile technology. This is not necessarily a bad thing. With smartphones, individuals can potentially increase their paid and unpaid “productivity” by weaving in slices of work while with family, making it possible to perform paid and unpaid activities at the same time. No longer must fathers (and mothers) miss dance recitals because they are waiting to hear from an important client. But this simultaneity is not without problems. Home slips into the workplace through the smartphone, just as work slips into the home, but work and domestic responsibilities are not afforded equal importance. As we show in this paper, domestic responsibilities are symbolically placed lower in priority than work responsibilities. While individuals can now “produce” paid and unpaid work at same time, they still must put paid work first.

This paper is separated into three parts. First, we introduce “social reproduction” as a conceptual solution to the inadequacy of the term “work/life balance.” Social reproduction conceptualizes paid and unpaid work as equally important in reproducing ourselves over generations (Bezanson& Luxton, 2006). Second, we review some of the literature on mobile technology and work/life balance in the international context, and conclude that the effects of mobile technology on work/life balance are indeterminate, depending primarily on existing patterns of social organization and the context of its use. Finally, we review our findings from an empirical, qualitative study with Canadian

smartphone users. We find that these smartphone users have indeed gained more flexibility in when and where they do paid work, thereby lengthening the time they can spend with their families. But we also show that this flexibility comes at a price. They must become better at conducting work and family business at the same time, and they must visibly demonstrate that a commitment to home does not compromise their commitment to work. We conclude by showing how workplace practices of organizing time are seeping into the home, and we consider the implications of this move for balancing the demands of employment and social reproduction.

Social Reproduction, Work/Life Balance and Smartphones

Scholarship on the conflict between domestic responsibilities and paid work often hinges on the assumption that work and “life” can somehow be “balanced.” We consider the “crisis” of work/life balance not to be one of “balance” so much as one of insufficient resources. The literature on work/life balance (Duxbury & Higgins, 2001, 2008, 2009; Rantanen, Kinnunen, Mauno, & Tillemann, 2011) fails to explain the “crisis” families experience because it conceptualizes the “problem” as an inability to create an optimal “balance” between paid and unpaid work. If only social actors find the right “mix” of work and life demands, the crisis will be solved. But what happens when the resources required are scarce, making this optimal mix unattainable? When the demands of paid work are added to the demands of domestic work, scarce resources are certainly part of the problem.

Social reproduction conceptualizes both paid and unpaid work as inputs into overall economic production. The “problem” isn’t how to “balance” work and life, but insufficient (paid and unpaid) resources to reproduce social life. Using this lens, the “crisis” can be understood as a lack of resources, and not of “balance” of existing resources.

Social reproduction as a concept comes from literature in feminist political economy and views economic production requiring both domestic and non-domestic resources (Elson, 1988). It refers to the variety of processes and activities that support people and social systems on a daily and generational basis (Bezanson & Luxton, 2006). Paid work is understood here as but one part of a larger labour process; the unpaid work of social reproduction is also “productive” though it does not earn a wage. Social reproduction complements paid work in that it provides support for paid-work activities. It includes child and elder care, doing laundry, cooking, scheduling vacations, volunteering at schools, and organizing community barbeques – all of which allow us to return to paid work refreshed. This concept allows us to understand paid and unpaid work as related forms of human provisioning (Picchio, 1992). Social reproduction is largely invisible because it remains largely hidden from traditional economic accounts, despite being critical for economic growth and prosperity (Waring, 1988).

In Canada, the socio-economic context in which social reproduction takes place has changed dramatically under neoliberalism, which has eroded traditional state supports for social reproduction, including caregiving for the

elderly and disabled, various forms of childcare and state-supported sport activities (Bezanson & Luxton, 2006; Vosko, 2006). Canadians employ various strategies in the process of negotiating these demands. Often, households rely on the unpaid labour of women in families to perform social reproduction work – a trend Bezanson and Luxton (Bezanson & Luxton, 2006) call *refamilialization*, or through the *commodification* of household labour - turning to the formal market economy for household services (Arat-Koc, 2006; Pupo & Duffy, 2007). Regardless of the type of coping strategy, however, Canadians are increasingly feeling “squeezed” between the responsibilities of paid work and home life, as it has now become more difficult for people to manage the demands of employment and social reproduction.

In summary, demands on families have risen, while at the same time, resources have shrunk. It is unsurprising we are increasingly aware of conflicts between work and home.

Mobile Technology And Its Effect on Work and Family

Conceivably, technology could moderate the problem of social reproduction – as it has for economic productivity more broadly.³ Do smartphones help or hinder our efforts to meet the demands of work and home? In general, mobile technology presents *indeterminate* effects on our ability to produce both paid and unpaid work. In short, past research has found mobile

³ Robert Solow’s famous “Solow Residual” ascribed as much as a 10% economic productivity gain directly to technology. If social reproduction is thought of in the same way as macroeconomic production, it’s possible that smartphone technology could have a positive impact on domestic productivity.

technology presents the *promise* to help workers produce paid work and family activities, but it does not always deliver on that promise.

Perrons et al (2005) find that mobile technologies present a paradox for users. On the one hand, mobile devices allow for an extension of traditional temporal and spatial boundaries that defined paid work, and thus offer more “flexible” work arrangements for families. On the other hand, however, they facilitate longer and more intense working hours, making it more difficult for families to carry out the needs of social reproduction and unpaid caring labour. Increased mobile phone use has also been linked to “negative spillover” or an inability to manage domestic and workplace roles (Chesley, 2006). Wajcman et al (2008) found that mobile phones helped individuals strengthen their personal connections to family, but only for those who had control over *when* the mobile phone invaded their personal time. Similarly, Christensen’s (2009) study of families in Denmark concluded that communication via mobile phones fostered continuous intimate communication between family members. In this way, family members were “bound” together, regardless of distance. Ling’s (2008) study in the Norwegian context also found that family members used their mobile phones to strengthen family ties and reinforce social cohesion with intimates. Clearly, the mobile phone offers the ability to connect families who may be otherwise disconnected during working time. But it is unclear if mobile technology actually assists workers in balancing work and family responsibilities.

Mobile technology perforates the boundary between home and work, challenging traditional divisions between public and private, work and leisure,

and space and time (Agger, 2007). This blurring has brought forth both negative and positive outcomes. In the negative camp, Duxbury and Smart document profound changes such as routine after-hours work and the mixing of private and working-time activities (Duxbury & Smart, 2011). Gregg (2011) also documented negative effects in her study of contemporary work practices, which included constant connectedness and higher expectations for paid-work productivity. Having constant access to work makes constant work possible (Fenner & Renn, 2010). These negative consequences are often obscured in “official” workplace discourses about the liberating aspects of mobile technology (Author & Author, 2006).

But on the other hand, Gregg also found positive outcomes of increased mobile technology. Participants greatly prized the ability to work while around family. Julsrud (2005) found this same pattern but noted it came at a cost: mobile phones offered more flexibility to workers but at the same time heightened “expected availability.” He argues that it is the mobility of the devices that implies a sharply increased availability for white-collar knowledge workers. In the Canadian context, Author (2008b) found a similar pattern among interactive advertising workers who are avid users of mobile technology. Many workers in this study reported after-hours communication, primarily through email. These workers experienced a burden of “ubiquitous availability,” on the one hand, but on the other, they also had the ability to be available for work while around their families. As one worker put it, “I’m glad to be home and if I have to work, I can at least work at home and have my family around me” (Author, 2008b).

These positive and negative aspects of mobile technology present a paradox. Mobile phones offer flexibility in both spatial and temporal working norms for users. Work can travel and work hours are flexible. But at the same time, they set the stage for increased availability to work. This is the kind of paradox Arnold (2003) asserts is inherent to mobile technology. He argues its “Janus face” simultaneously offers both a promise and a promise denied. This irony of the mobile phone is that it is both liberating and enslaving. You are free to leave the office, but you are never free to be unreachable. You can be with your family, but you must work when you are around them.

The smartphone has the potential to reconfigure the organization of activities at both work and home. The new computing power of the smartphone offers its users more than simply voice and text. Email, calendaring and an ever increasing number of “apps” present the possibility of using technology to manage both paid work and the unpaid work of social reproduction. These relatively new tools have yet to be studied in detail. It remains unclear whether the smartphone assists users in balancing the demands of paid employment and social reproduction. Does the smartphone, improve our ability to deliver results in the workplace and in the home? In the following sections, we discuss how difficult these competing demands have become.

Method

This paper evolved out of the findings from a study conducted in Toronto, Ontario in 2011. The main question guiding this study was: What is the impact of

the smartphone on work/family balance? The research team sought to understand the work-related and family dynamics involved in the day-to-day lives of smartphone users working in professional and non-professional occupations⁴. Creating a deeper and richer picture of the dynamics involved in particular settings has been a key strength of qualitative research methods (Goodwin and Horowitz 2002). Thus, the research team employed complementary qualitative research techniques: face-to-face interviews and observational note taking.

The research team conducted twenty-nine semi-structured, face-to-face interviews either in the homes, workplaces or “interspace” (Hulme & Truch, 2005) of participants who were recruited for the study through social media and word of mouth. All participants were white-collar workers: 12 lawyers, 3 other professionals (e.g., college professors) or 14 non-professional white-collar workers (e.g., software developers). Below is a table summarizing our sample along key variables.

Table 1: Gender frequency

Men	Women
19	10

Table 2: Age Frequency

20 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 60	61+
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⁴ In this paper, “professional” refers to participants whose job required a formal process of accreditation. The professionals in this study consisted of lawyers associated with a Toronto law firm. “Non-professionals” in this study were employees working in a variety of occupations.

1	2	8	2	6	6	4	0	0
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Table 3: Marital Status Frequency

	Single	Engaged	Common Law	Married	Divorced	Widowed
Marital Status	5	3	3	18	0	0

Table 4: Device Frequency

iPhone	BlackBerry	Android
8	20	1

We employed “ethnographic interviewing” (Spradley, 1979) to gain detailed perspectives of the participants, as this method allows for capturing the “depth of detail” that may not be achieved through other methods (Hermanowicz, 2002). The ethnographic interview is typically conducted during traditional ethnography, but in this case, we adapted the method to be tightly focused around the topic of smartphone use and work/family balance. This adaptation (McCracken, 1988) is a common practice allowing for the collection of symbolic data in the participants’ surroundings. This *in situ* method gathers insight through both the interview and the short, but focused, immersion in context.

Interviews lasted between one to two-and-a-half hours, were digitally recorded and later transcribed. Researchers used qualitative data analysis techniques including the “conceptually clustered matrix” to identify dominant themes (Miles & Huberman, 1994). The interview transcriptions were then coded using NVivo software.

What role does the smartphone play in the lives of users as they try to meet the demands of both employment and social reproduction? In the following section, we discuss the findings from the study.

Findings

Our research confirms that smartphones, like mobile phones before them, present a paradox to their users (Arnold, 2003; Perrons et al., 2005). On the one hand, participants metaphorically “bring” their families with them to work through the smartphone, thereby breaking down the firm division between work and home. At first glance, this appears to affirm participants’ freedom to engage with their family members during working time, thus suggesting an increase in flexibility and autonomy for workers. On the other hand, however, many of these participants are also expected to be available for work-related communication via their smartphones during off-work/family hours such as evenings and weekends. In this way, many participants are not free to leave work *at* work or declare their private time as *exclusively* dedicated to activities that are not work-related. In this sense, social reproduction was compromised. The smartphone’s built-in calendaring and email capability played a role in what kinds of paid work was expected in off-hours. Instead of being available only by voice or text, these participants were now able to check their email and consult and adjust their calendars. This added to the breadth of work-related tasks they were able to do without consulting a computer.

The ways in which participants communicate with family members via their smartphones while at work, as well as how work-related communication was managed during non-work hours, reveal important clues about the contemporary workplace and the strategies that users employ to manage the demands of employment and social reproduction. Our findings, detailed below, suggest that the *nature* of contact between family members and colleagues symbolically situates family and social reproductive activities below work responsibilities. We find that given explicit, self-imposed or perceived “rules” around appropriate or acceptable terms of personal communication while at work, many participants engage in communication with family members only under specific conditions and through specific smartphone channels that allow for discreet communication. At the same time, many participants were expected to be available for work-related communication during off-work/family hours such as evenings and weekends. The findings suggest that regardless of the change in working norms such as the increased flexibility in working time and location, the symbolic hierarchy of work over home life remains intact for our participants.

“Don’t Call Me at Work”: Managing Family Communication on the Job

Many participants in the study praised the smartphone’s ability to connect them with family members during the workday. However, many of these same participants actively restrict or otherwise “manage” communication with family while at work. These participants often use concerted strategies to contain home-related communication during working time, such as screening calls, and using

discreet smartphone channels such as text messaging when they do communicate with family members. The smartphone's computing capabilities allowed these participants to obscure their family contact while at work.

Interviews suggest that there are varying degrees of acceptance of smartphone communication with family at the workplace. And, interestingly, our data suggest that acceptance of personal communication often depends on the *form* of smartphone communication itself. For example, while many participants viewed text messaging as an acceptable form of personal communication while at work, they also found phone calls to be inappropriate. When asked what would happen if he received a personal phone call at from his wife while at work, one participant replied:

(She) wouldn't call me at work. She would always message me. It's funny because when you think about it, if you do get a call from your wife, because you can be discreet you can do it, but the thought of being in a work situation and you've got a call from home. That's not acceptable. - *Manager, Telecommunications* -

When asked to elaborate on why a personal call from his wife would not be acceptable, this participant replied:

I mean if it's an emergency then people understand but if you're doing this stuff at work then people disapprove of it but when home life bleeds into work life you'd get this disapproving look or "that person's always on the phone" or whatever...

For this participant, communication with his wife during the workday had to be carried out via text messaging, a more "discreet" smartphone channel. The

smartphone's full keyboard greatly facilitated texting as compared to an older style mobile phone. According to this manager's wife, voice-to-voice communication on the phone would require an emergency, in which case she would send a text message with "emergency" to indicate that a voice phone call really was necessary. Only in this case, would the participant actively phone his wife while at work.

Another participant who described himself as being "reasonably" in control of his working life also restricts communication with his wife while at work. When asked how he would respond if his wife called his smartphone, this participant replied:

I answer it or not, depending on what I'm doing. If I'm in a meeting or having a conversation with you, even if it's her, I don't answer it... I excuse myself from you and return the call or listen to the voicemail to figure out why did she call me three times in the last five minutes? What is going on? So I'm reasonably in control of my life, both here and at work, and we can manage that stuff without being rude to you and answering that phone every time it rings. -
Journalist -

Despite his self-declared autonomy at work, this participant actively restricts phone calls from his wife out of fear that personal communication while on the job appears "rude." Another participant, a salesman, explained that he would take personal phone calls at work, if he is not busy, but importantly, he suggested *how* he would take the call: "95% of the time I'll leave the office. I'll go into the hallway or go somewhere else" though he later points out, "I could stay at my desk if I wanted to." This participant is not directly required to avoid family contact at work, but he seeks to prop up a metaphorical division between the two

while at work. Other participants mirrored this same approach, often by keeping personal conversations very short, or resorting to surreptitious texting.

Another participant was responsible for caring for her elderly father, which is a key component of social reproduction. Her father would often call her at work on her smartphone. She would frequently ignore his phone calls and he would express frustration, in voice mails he left for her, that she did not answer her phone. She repeatedly attempted to explain to him that his phoning her was not acceptable while she was at work. Eventually, she resorted to filming her open-concept workplace (with her smartphone) to show her father her lack of relative privacy. Her father was very surprised and began texting her while she was at work. She considered this to be a good outcome.

This story illustrates a few symbolically important clues about the contemporary workplace. First, there is a physical redesign of many contemporary workplaces that deny workers private moments to speak aloud on the phone. This suggests that more overt displays of company devotion are elicited and required when one's daily experience at work is constantly "on display" in the open-concept workplace. Second, this story shows how workers are deploying new technology to keep home *at* home. This participant filmed her workplace to demonstrate to her father definitively how disruptive his "presence" was in her workplace when he called her. In this way, he came to realize his presence was fully on display in her workplace, and he became more inconspicuous by text messaging. For this participant, the smartphone held the *potential* of being more productive vis-à-vis social reproduction, but she instead

used the smartphone *to contain* home-related communication. In this way, social reproduction's "spillover" is often controlled within the workplace, sometimes using the smartphone's capability itself.

“Plugged in and Always On”: Blurring the Boundaries Between Work and Home

Consistent with other research (Arnold 2003; Perrons et al 2005; Duxbury & Smart, 2011; Author, 2008b), we find that the smartphone facilitates an extension of the workday into the user's home. Many participants were expected to be available for work-related communication during official "non-work"/family hours such as evenings, weekends, and even vacations. Of this group, many experienced some degree of work-related communication during non-work hours or at least *anticipated* that they would need to be available "after hours" in case they were needed for work-related communication.

A few participants described their smartphone as "intrusive," as it facilitated a continuation of work into the home during off-work hours. However, many of these participants also acknowledged the greater efficiency it afforded. For example, participants could "quickly" check and respond to incoming emails during the evening, and this was much more easily achieved with a smartphone than with a laptop computer. In this respect, participants made use of the specific functionality of the device to cope with the overwork they experience from their jobs, which is confirmed by other findings in both Canada (Duxbury & Higgins, 2009) and Australia (Gregg, 2011). For many participants, this endless checking of emails, whether out of anticipation or demand, was a completely normalized

part of their “after-hours” activities. In this way participants felt continuously connected to work, regardless of whether or not they were at home. Not all participants actively “checked” their work email after hours, but even for those who did not, there was an implicit expectation that they would be “available” at any time for a work-related issue. A manager of a non-for-profit housing authority, for example, was implicitly “on call” all the time, but unlike for a physician, there was no “call schedule” or compensation for taking a call. His was an implicit assumption that he would be reachable if anything should happen. His smartphone became the embodied symbol of this implicit expectation.

For many participants, this “anticipatory availability” contributed to an “always-on” feeling whereby they remained conscious of both the presence and activity of the smartphone well beyond the “working day.” For some, this heightened state of awareness of the phone contributed to what they described as a “phantom blink” or “phantom vibration” – the perception of phone activity where there was actually none. Participants directly attributed these experiences to the ongoing anticipation of work-related smartphone communication, regardless of time and location.

This “always-on” experience has implications for participants’ ability to engage in social reproduction activities. As our participants’ experiences suggest, family members may be physically together at home, but not exclusively *available* to one another given the actual or anticipated work-related communication that occurs. This necessarily compromises their ability to complete social reproduction activities. One participant, for whom his smartphone

represented a trade-off between working longer hours at the office and more time at home, told us:

Well, my kids...have made that comment -- why are you always on your phone? (They) don't understand I'm taking two hours out of, I'm cutting my day short by two hours to pick them up, feed them and take them to whatever practice or event. So I have to make up that two hours. - *College Professor* -

This participant used his smartphone to keep in touch with work, while also being physically present to support his children. The quality of his support for his children was necessarily compromised, but at least he was able to be “absently present.”

“You Might be Wondering Why I’m Standing Here Naked”: When Home Confronts Work

One participant’s story is particularly telling of the difficulty that some smartphone users face when trying to engage in work-related communication while at home. As a senior manager in a large telecommunications company, this participant was required to be available during non-working hours to advise his subordinates and in case of an “emergency.” He related a detailed story of too many demands – both paid and unpaid – confronting him at the exact same time:

I remember specifically one night I came home and the dog had peed on the floor and I didn't have time to make dinner so I had [take out]. So trying to think about cleaning up the dog pee, have [take out] ready, one of the kids is crying, trying to handle a conference call... I was trying to sneak away while they were eating to handle the conference call and then [his 5-year-old daughter] comes in and she's standing there while I'm talking on the conference call and she's standing there naked. And she looks up at me and she goes “You might be wondering why I'm naked,” and she says it loud enough for everyone on the phone even [the senior

vice president's] saying, "Is that your daughter?" And so there was a long pause and they go "Aren't you going to ask her why she's naked?" So I go "Why are you naked?" She goes, "My vagina is itchy and I need to take a shower" so I'm like "Do you need help to take a shower?" and she goes "No I can do it myself I'm just telling you." - *Senior Manager, Telecommunications* –

This participant's story illustrates the difficulty that some participants face when work seeps into their homes. In this particular incident, the participant was responsible for a number of activities at home, yet was also required to participate in a work-related conference call at the same time. His wife was away on business, requiring that he care for his children and household on his own. The requirement that he also participate in a conference call presupposed that he would be exempt from these familial responsibilities. Yet, his daughter's disruption of the conference call illustrates quite clearly, that work cannot necessarily occupy a primary place in the home. The symbolic silence that home has in the workplace is threatened when work takes place in the home.

Using Workplace technology to manage social reproduction

Interestingly, participants were also starting to use their smartphone's productivity features to manage social reproduction. Some participants used voice phone calls to contact family members throughout the day, usually to organize various social reproductive activities, such as purchasing groceries or planning children's events. However, texting and BlackBerry Messenger conversations with spouses was extremely common. The quick text, dashed off to one's spouse while between meetings, was routine. Participants were even beginning to use the electronic calendaring options to organize social and family

events. One young lawyer told us he had “trained” his father to start using electronic calendar invitations to organize family dinners, while another couple told us how they sent each other digital invitations titled as “pick up kids” and “hockey practice.”

In this sense, the smartphone delivers on its promise to assist in productivity in general, and social reproduction in particular. When family members are readily reached and domestic duties readily dealt with, the overall burden of social reproduction is alleviated. Unfortunately, what is considered “normal” or acceptable social reproduction is increasingly difficult to achieve (Hochschild, 1997). Analogously, new technology deployed in the workplace has increased workplace productivity, but in turn is concomitant with increased *expectations* of productivity.

Discussion

Our findings suggest that smartphones promise a way to manage the demands of social reproduction, but that this is also a promised denied in some ways. Although families can now use smartphones to better manage the household demands alongside paid work, the new technology alone does not solve the problem of insufficient resources. The hierarchy of paid work over home life remains a defining feature of the contemporary workplace and the

culture⁵ of smartphone use often promotes, either explicitly or implicitly, this hierarchy.

Our data suggest that the communication behaviours of participants via their smartphones situate family below work life. Individuals surreptitiously perform social reproduction while at work (through texting for example). At first glance, this may appear to be a positive change. But we argue that the smartphone's uniquely discreet functionality actually reinforces the supremacy of paid work over social reproduction. Smartphones, much more than previous technologies, make it much easier to contain the demands of social reproduction while in the office. Behaviours we uncovered still clearly demonstrated the perceived need to obscure performing social reproduction while at work. Specifically, there are more discreet communication options than ever before, but it is still not considered acceptable to display their use in front of coworkers. For example, smartphone users can use their smartphone to take a voice phone call from home, but feel the need to step into the hall. Our participants were more available to family throughout the day, but their primary, visible concern was that of paid work. Worse, the smartphone brings paid work into the home. As the spatial and temporal boundaries of the contemporary workplace extend into many households, so too does this supremacy of paid work. For our participants, this meant having to continuously manage the demands of employment and

⁵ By culture, we are referring to the norms, behaviours, values and beliefs of smartphone users.

social reproduction in a way that did not threaten their commitment to work, whether they were at work or at home.

In a context where paid work continues to take precedence over social reproduction, scarce resources are devoted to paid activities first, and domestic duties second. The ability of workers to communicate with family members during working time suggests that social actors are better able to meet the demands of social reproduction, but in practice, household members all pay the price in terms of divided attention and poorer quality interactions. For instance, one participant preferred to speak to his daughter while working but resorted to text messaging her instead. Smartphones allow people to conduct more tasks simultaneously, but this does not increase the resources dedicated to social reproduction. In short, smartphones increase both paid and unpaid “productivity,” but paid work continues to take precedence, leaving social reproduction of poor quality.

Interestingly, software developers have taken an interest in this need for increased productivity in social reproduction. Several new apps offer couples a means of staying connected throughout the workday, enabling shared “to do” lists, and photo sharing and messaging (Eldon, 2012; Lawler, 2012). The “Cozi” software is designed for Web and smartphones. It includes a “family calendar” that is shared among family members, as well as shared shopping lists, and to-do lists. The software claims to allow you to say “Bye bye chaos! Hello *coordinated*” (COZI, 2012, emphasis in original). The family calendar is not an entirely new invention, but what is new is the networked and mobile capabilities that COZI offers. Software like this treats social reproduction as a series of tasks

to be completed within a given time frame, which is similar to project-based work in the contemporary workplace. But social reproduction, unlike most paid work is “constant, repetitive, and unrelenting” (Mattingly & Bianchi, 2003). Smartphones may facilitate coordination among family members, thereby improving the productivity of social reproduction, but they will never change this unrelenting character. Moreover, tools like COZI may be targeted specifically toward women. COZI’s Web site proudly declares its smartphone app was named the No. 1 “app for moms” by two Web sites aimed at women. The promise of the smartphone is similar to the promise of other domestic technology. Technologies such as the washing machine promised to reduce the burden of domestic labour but ironically served to elevate normative standards of cleanliness (Cohen, 1983; Schor, 1991). The same dynamic may be at play with the use of smartphones for domestic tasks.

Conclusion

In the decades since women’s paid employment has become normalized, families have collectively grappled with the need to bring work home, and home to work. This study demonstrates that smartphone technology can assist in that process, but cannot resolve the underlying tension between home and work, which is essentially this: more work takes more time. Employers assume the needs of social reproduction are being met by someone else or are compromised for the benefit of employment. Our participants’ communication with their families while at work demonstrates that home continues to be of secondary importance

to employers, yet at the same time, work is increasingly present in the domestic sphere. Workers now must struggle with containing work and home while in both of these places.

In the absence of clear policies regarding work-related use of smartphones during so-called “non-work” hours, employees will likely continue to find it difficult to manage the demands of employment and the needs of social reproduction. When home intrudes on work, the disruption is notable to all those present. When work intrudes on home, the disruption is just as felt by those present, but this is a private context. Those present materially rely on the paid work to maintain the household. It should be unsurprising then, that when work comes home, those present begrudge but allow its presence.

Our findings have significant implications for the study of gender and work. Although smartphones do improve access to family members while at work, there was some initial evidence to suggest that women continued to shoulder the burden of social reproduction by using their smartphones for particular tasks, such as scheduling of play dates and initiating grocery store shopping lists. More research on this particular topic needs to be done to understand if there is in fact a gendered pattern of smartphone usage and if this gendered pattern perpetuates rather than up-ends traditional domestic gendered division of labour.

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