A case study of the postindustrial timescape and its impact on the domestic sphere

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ABSTRACT. This article investigates the postindustrial temporal landscape, or ‘timescape’, through a case study industry: Internet advertising. The theoretical portion of this article finds that the expansion of digital information communication technologies (ICTs) has radically transformed time keeping into ‘calculation’ in many of today’s workplaces. Additionally, globalized production has also rendered many locally constructed symbols of time less relevant. The author contrasts these events to the domestic time, which is constructed through contextual events and symbols, thereby making the postindustrial timescape further estranged from the domestic than even the Fordist timescape. The empirical portion of this article summarizes qualitative findings of time reckoning among Internet advertising workers. Time is not constructed out of local, material experiences but through digital means. This estranges domestic time even further, which has unintended but differential gendered effects. The implications of these findings include the emergence of a new sense of precarity, one based on ‘productivity’ of time spend on work. Additionally, a potentially new ‘glass ceiling’ could be emerging, based on the increased levels of home-based paid work. Women’s domestic responsibilities may make it relatively more difficult for them to advance when home-based paid work is expected. KEY WORDS • labour • information communication technologies • qualitative methods • time • work
Introduction

The postindustrial transformation has shattered many of the foundational elements of the Fordist era. One key site of such transformation is the temporal dimension. Social actors reckon time through shared systems of symbols which are intersubjectively constructed and interpreted by all actors involved (Zerubavel, 1979; Adam et al., 2002). These symbols are being reconfigured in many postindustrial workplaces. Intangible, atomized temporal symbols, such as reminders from electronic calendars, are replacing tangible, collectively experienced symbols such as the factory whistle. At the same time, a once uniform Fordist working time regime has given way to a fragmented temporality of work (Glennie and Thrift, 1996; Lee and Liebenau, 2002; Neary and Rikowski, 2002). Managerial methods of organizing time compete with or complement other forms of time reckoning, such as that of the domestic sphere (Adam et al., 2002). Working time norms have changed in the post-Fordist context (Schor, 1991; Robinson and Godbey, 1997) but these changes vary by the social context and the perceptions of the social actors involved (Kaufman-Scarborough and Linquist, 1999; Hochschild, 1997; Robinson and Godbey, 1997; Gershuny, 2002). How are these temporal reconfigurations manifest in the domestic sphere? What are the implications for such downstream temporal effects?

Time poverty has gendered effects because of how domestic labour is allocated. Women’s ability to have both quality and quantity of free time is compromised by paid work in ways that men’s free time is not (Warren, 2003). Domestic time reckoning is constructed primarily out of domestic labour, or ‘the indispensable labour that converts the wages of the paid worker into the means of subsistence for the entire household’ (Luxton, 1980: 14). Such labour structures domestic time reckoning. Workplace time reckoning can have domestic effects as it constrains how much time an individual can spend on such tasks. This also affects a worker’s family, as it shapes how much time each individual member of the household can devote to domestic tasks. In this way, workplace time-reckoning systems play a role in the allocation of household duties, something that is frequently structured along gender lines, and has adverse gendered effects.

The so called ‘new economy’ is a potential site of analysis of the temporal changes in postindustrial production. In this article, I provide an illustrative example of a case-study industry: Internet advertising. Internet advertising provides a unique opportunity for studying postindustrial time reckoning for several reasons. First, these workers are emblematic of the ‘new economy;’ they not only create new technologies but they are also avid users of them. They perform what Lazzarato (1997) calls ‘immaterial labour,’ in that they both construct consumer demand by synthesizing trends to create (digital) experiences, as well as use computerized processes and tools to perform their labour. These workers also labour under a unique time regime: their employers bill clients for each
hour of work. How these workers negotiate the time norms of their postindustrial workplaces provides some insight into how workplace and domestic time is changing.

This article is organized into three parts. I first review key shifts in capitalism that have reconfigured the postindustrial temporal landscape, or what Adam (1998) calls a ‘timescape’. I then compare it to the relatively static ‘timescape’ of the domestic sphere, and argue that domestic effects of workplace time reckoning are borne primarily by women. I summarize qualitative empirical observations of a postindustrial ‘timescape’ among Internet advertising workers. The political economy of this kind of work presents conflict with the domestic sense of time. Workers report significant difficulty negotiating the home/work divide due in part to the way their employers reckon time. Their globalized work schedule and extensive use of digital technologies renders only so called ‘billable hours’ as valuable, making it exceedingly difficult for them to firm up divisions between home and work. Women and men experience this conflict differently.

Postindustrial Time: The Need for A New Approach

The reconfiguration of time and space suggests that managerial practices around time are worthy of renewed scholarly attention. Methods of rationalizing, organizing and reorganizing time are part of the larger modernist project of rationalizing social life. Postmodernity has upended the predictable organization of space and flow of time (Harvey, 1989), calling for new understandings of how rationalizing forces affect time reckoning in the postindustrial context (Adam, 1993). Two major developments in late-stage capitalism deeply affect time reckoning in the workplace. First, globalized production presents a confounding development; multiple time zones must now be considered in even local production schedules. Second, large-scale adoption of information and communication technologies (ICTs) has transformed the ways in which time is rendered visible in workplaces.

Under industrial capitalism, working time was book-ended by socially meaningful signals such as ‘meal time’, ‘quitting time’, or even ‘banana time’ (Roy, 1959). These symbols were frequently the site of struggle. Marx, for example, decries the ‘tricks’ capital played to ‘steal’ from ‘meal time’ (Marx and Engels, 1977:354–5). Manipulating time in early industrialization was as simple as moving the hands on the clock on the factory wall. Moving the hands of the clock served to squeeze a few minutes out of ‘meal time’ in favour of working time. The contextually relevant signal of ‘meal time’ became the object of what Marx calls ‘petty pilferings’, wherein capitalists attempted to obscure or erase these contextual symbols to lengthen the working day.

Globalization has unquestionably had a significant impact on the organization
of labour (Laxer, 1995; Boswell and Stevis, 2001). One of the key transformations is its attenuation of contextually relevant events through what Castells (1996) calls ‘timeless time’. Timeless time is hyper-responsive to global events, yet remains relatively unaffected by local events. There is no factory clock in timeless time, but many clocks from all over the world, all of which affect the how workers and managers reckon time. This affects the first three aspects of Adam’s (1998) notion of the ‘timescape’: the time, timing and tempo of work are all affected. Globalized production affects the time of work: start times and end times correspond to other time zones. Timing, or the synchronization of work, must allow for collaboration across multiple time zones. And the tempo must adhere to the beat of the always-on, 24/7 drum of global production. In this context, the locally determined ‘quitting time’ is less important than the globally relevant ‘total customer responsiveness’ (Peters, 1987). Globalized production, therefore, has shifted ‘working time’ from a routinized timescape to an unpredictable, fragmented, and always changing timescape.

The second key development in late-stage capitalism – the adoption of ICTs – has deeply transformed Adam’s (1998) fourth dimension of the timescape: ‘temporality’, or the ‘time in things’ (Adam, 2000: 11). Temporality is the phenomenological analysis of time, which endeavours to understand the unique historical imprint embedded within processes or objects in a particular place in time. The temporality of work in a factory, for example, renders time as static, homogeneous phenomenon by the punching of the time clock. Prior to industrialization, Thompson (1967) noted a ‘characteristic irregularity’ of agrarian production. After industrialization, the uniform, unchanging ‘clock time’ became the norm. Labour is organized in very different ways in spring planting and autumn harvest, and both seasons produce different products. In an industrial timescape, labour is organized the same way in spring and in fall, and goods produced are the same in all seasons. The temporal experience is uniform all year long. With industrialization, ‘time is now currency: it is not passed but spent’ (Thompson, 1967: 61).

In the 40 years since Thompson wrote, workplace time-keeping methods and temporality have changed. Time keeping is no longer a mechanistic phenomenon to a largely computerized one: the time clock has given way to digital time sheets. Quartz technology, introduced in the 1970s, made mechanical, moving-parts watches largely a thing of the past. Even so called ‘analogue’ watches, which use hour and minute hands, are today largely powered by non-mechanical means (Fédération de l’industrie horlogère Suisse FH, 2007). Digital watch production was largely enabled by the mass production of microelectronic chips. Indeed, some of the early American producers of digital watches included Texas Instruments and Intel Corporation. These microelectronic companies typically understood these new devices as ‘calculators’ rather than watches (Glasmeier, 2000).
Today, time keeping is becoming more akin to ‘calculation’ than to the analogue phenomenon of the hour hand’s movement. When time keeping is performed by tiny computers, time becomes ‘digital’ or exhibits what Negroponte (1995) calls ‘co-mingling bits’, or small units of information. Time can now be ordered, reordered, and combined instantaneously with other data, such as production numbers or revenue figures. Digital technology allows time keeping to be embedded easily into a wide array of microelectronic devices, such as mobile phones and MP3 players. Indeed, these devices have largely replaced watches as consumers’ primary time-keeping devices. Watchmakers have noted this change in their marketing strategies. Seiko Corporation USA president Les Perry recently told jewelers’ magazine *JCK*, ‘none of us who are serious about the watch business say we sell time. We sell image, style, and functions other than time telling’ (Shuster, 2007).

Innovation in digital time-keeping devices has temporal effects; technology renders time as a ‘calculator’ renders time – it is a countable, knowable phenomenon. This in itself is an extraordinary thing; the human mind cannot consistently discern hours and minutes (Csikszentmihalyi, 1990). Digital technologies also allow time to be ‘mashed up’ with other digital files. Measurements of time are effortlessly combined with other pieces of information, such as number of keystrokes typed, number of PowerPoint slides completed, and so on. A document created using a computer will also automatically have ‘time stamps’ embedded within it, marking when it was created, when and how many times it was edited, and by whom. Postindustrial time is infinitely countable and easily combined with quantitative indicators of ‘productivity’.

Specialized software programs now allow managers to instantly know how much time has been spent on any given task. TimeControl is a software program that workers use to keep records of their time use. Such programs are designed to treat time as it would any entry in an accounting ledger; time can be calculated, reconciled and fundamentally *controlled* in ways that were previously possible but simply too time consuming. Wes Boislard, a manager at Standard Life Insurance Company told a computer magazine that TimeControl saves the company enormous amounts of calculation labour:

If we didn’t have TimeControl, we’d have to make sure all of the time sheets were received from every employee and approved. Doing it manually would take days and the quality of information wouldn’t be as high. The time that would have been spent entering information is now spent on other responsibilities. (Hilson, 2002: 23)

TimeControl relies on workers to enter their time, thereby eliminating the need for a clipboard and a stopwatch; workers provide this information themselves. Tools like TimeControl are hyper-Taylorist in that they eliminate much of the tedious time calculations that Taylor would complete when measuring efficiency.
This adoption of digital time keeping, coupled with globalized production, creates a postindustrial timescape that is even further estranged from the naturally emergent temporality of agricultural production. This is what Adam (1998) refers to as ‘de-temporalization’ or the separation of objects from the forward-moving, naturally emergent temporality. In agricultural production, time is reckoned using the seasons and the sun, which also govern how crops grow and die, and how work is organized. In a globalized context, time can be reckoned ‘unnaturally’, wherein time is reckoned by a clock in a distant land, irrespective of season or local position of the sun. Postindustrial time is also combined immediately with production data. Digital technologies create ‘digital time’, which, like ‘clock time’, is an abstract representation of time, but is also a representation of workers’ contribution to the firm’s profit. In this way, ‘digital time’ both abstracts time and reveals surplus value, and further obscures the material reality of the capitalist labour process. The postindustrial temporal experience, therefore, is one in which time is a profoundly abstract phenomenon that has little to do with workers’ contextually constructed material experience.

Domestic Implications of the Postindustrial Timescape

When time is estranged from its material context, it has implications for the domestic sphere, which is firmly rooted in the material experience. At home, time is reckoned through the naturally emergent, regular, rhythmic cycle of rest and rejuvenation. Regular intervals of feasting, resting and working constructed the earliest human systems of reckoning time, connecting time to material conditions (Aveni, 1995; Holford-Strevens, 2007). Organisms from bees to oysters to mice demonstrate temporally consistent cycles based on material needs to eat, rest and relax (Aveni, 1995; Duffield et al., 2009).

The domestic sphere is organized around the labour required to provide these meals and rest. Domestic labour includes all the work that prepares members of the household for engaging in paid work (Luxton, 1980), including preparing meals, planning family gatherings, and generally providing rest and rejuvenation. It differs from paid caring work in that it is on call, 24 hours a day, and derives from relationships. In the domestic sphere ‘caring for’ for someone comes from ‘caring about’ them (James, 1992). These domestic tasks in turn structure the system of reckoning time in the domestic context.

Domestic labour has a significantly different timescape than that of paid work. Members of households navigate domestic life with rituals constructed out of the daily, weekly, and seasonal rhythms of domestic tasks. ‘Dinner time’, ‘summer vacation’, and ‘bedtime’ organize domestic life in parcels of tasks such as cooking meals, preparing family gatherings, and putting children to bed. These locally constructed events are still symbolically significant temporal
milestones. Industrial production and domestic production are linked inasmuch as domestic labour becomes more intensive when industrial production fails to provide adequate rest (Elson, 1988). As globalized production erased the significance of local events, the domestic timescape becomes further estranged from the industrial timescape. Postindustrial time is more global and more akin to calculation and is therefore further removed from the contextually determined rhythm of domestic life.

It is primarily women who must negotiate this estrangement because they are disproportionately responsible for domestic labour. When workers work in a globalized context, they face increasing difficulty in synchronizing with the domestic sphere’s materially determined temporal rhythm. Increases in paid work do not lead to a decrease in women’s labour at home; women simply tend to work more hours (Warren, 2003). While both men and women devote time to maintaining the home (Robinson and Godbey, 1997), the work women perform at home is often ‘constant, repetitive, and unrelenting’ (Mattingly and Bianchi, 2003: 1002). Globalized production weakens the importance of local events, and, by extension, exacerbates the existing tension between home and work duties. The trend toward globalized production no doubt plays a role in recent American research, which finds that both men and women are working more hours at paid work (Jacobs and Gerson, 2004). But these effects differ by gender; women not only have less free time than men, but the free time they do have is of poorer quality, in part because they attempt to combine domestic labour with increasing hours of paid work (Mattingly and Bianchi, 2003). More hours of paid work will result in rushed, domestic labour for women. The gap between domestic time and those of capitalist workplaces leads Adam (1993) to remark that women’s time is not money.

In the remainder of this article, I summarize the findings from a qualitative study of this key moment in time reckoning. Workers in Internet advertising are of particular interest because they use digital time sheets to record hours of work. How does this industry’s time reckoning relate to the domestic sphere’s? What, if any, implications for gender are immanent to this form of time reckoning?

### About Internet Advertising

Few organizations possess all the in-house expertise required to build, complex, multi-page websites from scratch. They frequently turn to firms specializing in building websites, which are typically called ‘interactive agencies’. Forrester Research defines interactive agencies as those which produce commercial or marketing-focused websites with full-time staff dedicated to designing and building websites (Manning, 2005). These agencies trace their roots to companies that built the first commercial websites in the mid 1990s. Such firms began as tech-
nology firms, but as online advertising expanded throughout the 1990s and the early 2000s, many firms either merged with or were created out of advertising agencies (Zeff and Aronson, 1999). Such firms employ designers who design the aesthetics, copywriters who write the text, information architects (sometimes called ‘interaction designers’) who design the interactivity and site maps, account services who manage client relations, project managers, strategists and researchers who discern trends in online behaviour, and technology developers who write code. Internet-based advertising is growing quickly. Recent estimates forecast that global online advertising spending will grow to US$50.3 billion in 2011, up from 21.7 billion in 2007 (Walsh, 2008). This will represent anywhere from 7.5 per cent of total advertising spending to 16 per cent of total advertising worldwide (Mediapost News, 2008; Walsh, 2008).

Other researchers have found evidence of gendered experiences in both Internet-based work and advertising work. Alvesson (1998), for example, finds that female advertising workers are frequently the subject of sexualized jokes. He attributes this gendered experience to male creative workers’ needs to reassert masculinity and hierarchy because they work in traditionally ‘feminine’ roles of design. Tapia’s (2006) research into dot-com companies finds a pattern of long hours and a hyper-masculine working environment. She argues that the culture of ‘one upmanship’ frequently leads to all-night working sessions, punctuated by violent video gaming. This kind of workplace mirrors Turkle’s (1984) description of computing hacking culture, in which she describes the practice of ‘sport death’, which is the intense, all-night work cycle common among computing enthusiasts. Perrons (2003) similarly found a culture of long hours in her study of British new-media workers, one which often presented confounding work/home conflicts. In her study, women new-media workers were more likely to report difficulty in negotiating the home/work divide. Similarly, Gill (2002) found European women new-media workers earned less money and were more likely to work from home than men. Yet, both Gill and Perrons noted that gender inequality was difficult to discern among these workers who were embedded in and subscribed to a supposed ‘postfeminist’ discourse about their work.

In the fall of 2005, I began a qualitative investigation of working-time experiences among workers of these web agencies. All of these workers were full-time employees of agencies which devoted at least 75 per cent of their staff to building websites. This project included ethnographic, in-home interviews, using a convenience sample. As a former interactive agency worker, I had extensive contacts in the industry. I used email, social networking sites, and face-to-face word-of-mouth to recruit 20 interactive agency workers, most of whom lived and worked in the Greater Toronto Area, but others who lived in other cities in Canada and the United States. These workers spanned several job categories including creative (design); account management (client relations); project management; research and strategy; and technology.¹
I conducted a total of 20 interviews at workers’ homes, and at cafés and restaurants. These interviews were recorded, transcribed, and thematically coded. I also struck up casual conversations in bars, at parties, and in the neighbourhoods frequented by interactive agency workers. I kept field notes summarizing symbolic data including symbols of work within workers’ homes, and technological artefacts of time keeping. In accordance with the established ethics criteria of my university, I ensured anonymity by creating code names for each worker, which are used in this article. I anonymized their company names and other identifying information.

Like many ethnographic researchers, I have discovered it is difficult to discern ‘the end’ of this study (Esterberg, 2002; Bryman and Teevan, 2005). I continue to engage in dialogue with these web workers and their temporal experiences both at work and home. This can only further establish what Lincoln and Guba (1985) call ‘credibility’, which entails returning to participants for feedback. This process is a qualitative test of validity.

Web work is technology work. Workers are typically equipped with laptop computers continuously connected to the web. The tools they use are typically web-based digital programs, as are the products they produce. Time itself is a digital artefact in this context, revealed through spreadsheets, web-based tracking tools, and innumerable digital time-keeping devices. This digitization of time makes possible for workers’ activities to be known in intimate detail.

**Time Reckoning in Interactive Agencies**

Typically, an interactive agency lands a contract with a client for a given amount of work, which is usually allotted into a finite number of hours. Agency workers sell their labour power to the agency, which in turn sells their labour power to a client. Agency workers are usually paid a salary, not an hourly wage. Hours they work outside of working hours are not often compensated by overtime pay, although some agencies provide ‘lieu time’, which is paid time off in recognition of previous overtime. Lieu time is often a result of private negotiations and rarely part of written policy.

In agency parlance, workers are ‘resources’ that are ‘allocated’ to ‘projects’. The time a client ultimately pays for is called ‘billable hours’. Because such a large proportion of workers’ labour time is accounted for under a project, their labour time is understood not as a function of an employment relationship between the worker and the agency, but as a function of a project budget. In this sense, employment in interactive agencies is deeply precarious. Employment is contingent upon client relationships and, in this sense, it is similar to that of temporary agencies, where workers’ labour power is sold directly to client firms (Vosko, 2000).
These workers are required to keep detailed records of the time they spend working. They typically use web-based software programs, like TimeControl, which are designed for tracking time on client work. Some workers record less than one hour against particular projects, while others used a minimum of one hour. One respondent told me that in a former job, he had a virtual ‘stop watch’ on his computer desktop which he used to record time down to the exact second. These workers design web-based applications, so the tools have special significance to them. One worker explained that the system does not allow him to record less than eight hours. The tracking system compels him to provide an account for eight hours in symbolically significant ways. He noted the system does not allow him to record less than eight hours, and if he attempts to, it turns the text red. He found this ‘funny’ because it was symbolically significant:

*Sam Ladner:* Is this how you designed your interactions? When you do something red, what does that mean?
*Andrew:* Well, yeah . . . red is like an error message, I definitely associate the two. It needs your attention.
*Sam Ladner:* It needs your attention.
*Andrew:* Something needs to be fixed. If something goes red, you need to fix it. I guess.
*Sam Ladner:* So you’re six hours, fix it.
*Andrew:* Yeah, make it eight. Somehow (Laughs).

This worker’s experience is typical. Workers rarely, if ever, work less than eight hours in a day, but routinely work more than eight. Fewer than eight hours would amount to only what Marx and Engels (1977) call ‘socially necessary labour’, while the full eight (or more) guarantees the extraction of surplus value. These digital tools reinforce and facilitate this extraction. As builders of digital products, these workers have a deep appreciation for the symbolic language of technology. Less than eight hours is symbolically represented as something that ‘needs to be fixed,’ while more than eight hours results in no special symbolic language.

**Time decontextualized**

These workers’ naturally emergent experience of time frequently contrasts with the abstract ‘calculation’ of time revealed by the digital tools to track it. Most workers frequently ‘lose track of time’ as they work, while their computers and software continuously ‘count’ time. Workers experience periods of emergent, pleasurable ‘flow-like’ states where time is unknowable as their digital time-keeping devices continually calculate how much time they spend on any particular task. These workers almost uniformly ‘tell the time’ through digital clocks embedded in the lower-right hand corner of their computer screens and
through their electronic calendars. Few use watches. Almost all workers I spoke to made specific references to Microsoft Outlook, which is an integrated email, calendar, and to-do list software program. Outlook allows workers to send meeting requests to other workers, which automatically embeds the meeting time in those other workers’ calendars. By default, Outlook is programmed to create a pop-up window alert 15 minutes before a scheduled meeting begins.

Workers often lose track of time while enmeshed in a task. But they are reminded of the time by meeting reminders that pop up automatically. As one worker described it, she rarely thought about the time until her computer told her to: ‘Uhm, I really only check it when I have meetings or Outlook, I’ll open that, a meeting pop-up. That’s kind of when I’ll be conscious of, oh okay, it’s 11:00 o’clock’ (Angie). In this context, digital devices are continuously calculating time. Workers know they have 15 minutes until a meeting because their computers tell them so. They are rarely able to discern this 15-minute warning without the aid of digital devices. Moreover, these warnings are delivered to each individual worker through their computer screens. The collective practice of ‘punching out’ or hearing the end-of-day whistle does not exist for these workers.

Time in these agencies is also affected by globalized production. Local time is often less important than the client’s time zone. It is common for workers to work in ‘virtual teams’ or to collaborate on projects directly with workers in other locations. Workers who are in the client’s time zone often determined the timing of meetings or deadlines, while workers in other time zones adjust their schedules. They use an array of technologies to enable this work, including conference telephone calls, instant messenger, and email to accommodate the distributed space. Regular business travel is common, even for relatively junior workers. In this sense, timing in interactive agencies work reflects Castells’s (1996) ‘timeless time’. Time in these agencies is not tied to local events, such as ‘dinner time’ or ‘rush hour’ or ‘summer vacation’. Rather, time is determined by the demands of globalized production.

The need to synchronize work across time zones frequently extends the working day for many workers, but often on an irregular schedule. If workers on a single team are working toward a deadline, all workers comply with that time, regardless of time zone. One worker explained the experience he had at a former job in which he had a two-hour time difference with his production team: ‘Yes. So you know and talking back and forth . . . you know my day would be ending at 7:00 but of course it’s only 5:00 [where my production team is] so it would tend to go on until about 9:00 or 10:00 until that team . . . was done’ (Derrick). Time reckoning in the interactive agency is a product of this globalized production, as well as the political economy of so-called ‘billable hours’.
‘Productive’ time

The most basic characteristic of any time record is whether that time earns money from a client or not. So called ‘billable’ time is time that a client pays for. In this sense, time in these agencies is closely linked to the overall profit of the firm. Tracking time is ostensibly a way to track employee effort, to bill clients, and to control costs. But this is its mere appearance; its essential character is to make time knowable in new, precise way. These workers know precisely how much time they have left in a project budget because electronic spreadsheets have calculated the remaining number of hours. As one worker explained, the project manager’s responsibility is to calculate the time remaining in the project budget and communicate the required work intensity to the team:

[Project managers are] in charge of the hours they put on a project. That’s the big problem is like you can have 80 per cent of your project gone with 50 per cent of it only complete and they will look at an art director and say you’ve got to do this faster. You’ve got to do this faster and now you think that you’re 50 per cent through and what you thought you needed 50 hours for, you now have to do it in 20. (Jessica)

Analogue clocks and watches allow for such calculations, but digital time-keeping devices can calculate time budgets much more easily and quickly. Such calculations are usually completed weekly, and shared in regular meetings.

The ideal business condition for an agency is one in which 100 per cent of its employees’ labour time is sold to a client. The ideal agency worker is fully ‘billable’ is, where 100 per cent of their labour time is sold – at a premium – to a client. This is desirable because it presents a workplace self that contributes the maximum profit possible to the agency. At a minimum, eight hours of billable work implies that workers do not rest or eat during working hours; it is unsurprising that in practice, most workers do not achieve full billability. Workers are frequently given targets for billability, which often form part of annual performance reviews. During her review one worker explains she was presented with a printed report. I asked her what that report told her: ‘It would tell you how much you are billable. Like, you’re only 67 per cent billable and you’re supposed to get that up to 70’ (Stephanie). There is no discernable difference between 67 and 70 per cent billability; it could be as little as 15 minutes a day spent on client work. Neither the worker nor the client could cognitively appreciate this amount of time without the aid of a clock or their digital time-keeping devices. To calculate this time at the end of a quarter requires the time-tracking system. A Taylorist stopwatch and clipboard could theoretically discern the difference between 67 and 70 per cent, but it would take significantly more resources to tally these numbers regularly. Digital time-keeping devices produce this tally relatively easily.
Invisible at work: meals and breaks

Time in interactive agencies is bound up with profit, but not with the ways in which workers actually spend their time. In this way, time becomes estranged from material experience. Time records often do not include material events such as rest and meals, even though such needs are obviously essential. In any given day, workers frequently ‘bill’ or record eight continuous hours of work (or more) to a client account, but there are no categories for ‘lunch’ or ‘coffee break’, which these workers often take. This gap between time records and actual experience becomes apparent at agency-sponsored social events such as company breakfasts, catered lunches, or beer afternoons. Such events correspond to web work as discursively constructed as ‘fun’ or ‘cool’ (Gill, 2002). Some workers routinely record all of their working time, including breaks, as ‘billable’. Workers expressed particular confusion about what to ‘do’ with time they spent on these social events because theoretically, they were to be 100 per cent billable. One worker described the confusion surrounding records of various social events:

Andrew: There are a lot of events of Friday where we finish at four, and then we all kind of hang out. And it’s kind of like social time . . . Yeah . . . and so for an hour and you know, coffee and fresh bread and fresh fruit, and so ah . . . afterwards I said, where do I put this?

Sam Ladner: To who?

Andrew: Ah, just to Sue who sits right across from me.

Andrew’s covert approach to this discussion is telling. His agency’s time-reckoning system presents this ‘social time’ as a problem: how can Andrew present an appropriately billable self when he records his time as ‘social’? Andrew perpetuates the legitimacy of the agency’s time records by concealing his non-billable time instead of directly confronting its inaccuracy. This type of concealment was not uncommon. Another worker also had covert discussions about social events: ‘Well mostly about “how do I fudge stuff?” Like, “What did you do with that hour? Where did you hide it?” I actually used those terms’ (Stephanie).

Social events and regular meals and breaks are necessary components of daily life in agencies. Yet the time-reckoning systems such as TimeControl do not recognize these material needs. When time is divorced from local events, particularly those that involve meals, the labour that goes into creating these events becomes invisible as well. At work, this implies the work done by support staff is not recognized. Indeed, these agencies had a very small number of ‘non-billable’ staff such as receptionists and administrative assistants. These workers brought in no revenue directly, and were at the bottom of the social hierarchy because of it. This fact has implications for the recognition of domestic labour. Domestically contextual events such as ‘dinner time’ or ‘bath time’ are given
even less recognition in this form of time reckoning. Workers frequently carried paid work into their homes, creating tension with their families.

**Invisible at home: domestic labour**

Many of these workers frequently work outside regular business hours. Workers often work on commuter trains, in their home offices, on weekends, weeknights, and even in the morning before work. Some have rooms in their homes dedicated to paid work, but others, particularly those with smaller homes or apartments, bring work laptops into shared family space. These workers are avid users of mobile technology, which further allows the work to invade the home, rendering contextually constructed temporal cues often irrelevant. Bringing work into the home often means implicitly bringing their agency’s time-reckoning system into their home, allowing billable hours to crowd out other ways to reckon time while at home. For example, ‘dinner time’, ‘vacation’ and ‘bed time’ are contextually relevant indicators of time within the domestic sphere. Yet these workers’ always-on, responsive and ‘billable’ self often comes into the home, producing a clash between domestic time events and workplace demands.

In one home I visited, a worker’s company laptop sat on the kitchen countertop and played music while he prepared dinner. It also chimed when a work email arrived, causing him immediately to throw his dishtowel over his shoulder, peer into the screen and become ‘not present’ when work ‘arrived’ in his kitchen. Dinner continued to cook on the stove while he ‘checked’ on a work-related problem. It was interesting to note that this male worker typically shares domestic labour with his female partner, but she herself does not check work email while at home. She considers his checking of email borderline acceptable, while other work such as editing designs is not.

Paid work frequently comes into family rest and relaxation. One respondent noted that the laptop was a frequent participant in family entertainment:

*Researcher:* Your laptop? Is it here?
*Jennifer:* Yes. It’s in the family room.
*Researcher:* In the family room. Why is it in the family room?
*Jennifer:* Because I sat last night and watched hockey, watched hockey and worked.

The presence of a laptop and its associated paid work in shared family space leads to home/work conflicts. Respondents had a variety of ways of working around family members, but there are ambiguous boundaries of what constituted ‘work’. Some respondents noted their families accuse them of ‘not being present’ when the laptop is open, while others suggest it is the content of the laptop that mattered. One respondent told me that as she watches television with her family, they often inspect her screen to see if all she is doing is email, which
is often considered grudgingly acceptable. Other applications, such as Microsoft Word or design applications indicate more serious work and are often considered unacceptable in the home.

Sometimes work even follows them to vacations and family events. One respondent described a work-related phone call while she was attending a wedding. As a bridesmaid, she had duties to attend to while at the wedding. This work was complicated when her boss needed to know the location of a file on the company server:

Deirdra: I was . . . I had already got my makeup done and I was writing my speech and my cell phone rang.
Researcher: Oh you were in the bridal party?
Deirdra: Yeah. I mean the wedding wasn’t in progress but I was out of town though for it. It’s strange because only certain people in the company have company cell phones yet they always want to know your cell phone number so they can call you all the time . . .

These continual intrusions collided with contextually determined ways of reckoning time. Deirdra had to balance her agency’s globalized timescape with her contextually determined time of ‘vacation’ or even ‘time to get married’. Her contextual, material experience is crowded out when the abstract, temporal ideal of ‘full billability’ enters a domestic scene.

Three workers I interviewed had children at home. All were men. Both women and men feel the impact of paid work in their domestic lives with their partners. Yet men and women feel this impact differently. The male workers I interviewed construct their own long hours of paid work as necessary for the benefit of the family, while they perceive their wives as primarily responsible for domestic labour. Women workers, by contrast, constructed their long hours as a source of conflict with their partners and there was no sense of ‘necessity’ that women’s paid work earns for the betterment of the family.

In one home I visited, the interactive agency worker and his wife and child shared dinner with me. This worker’s partner cares for their child at home full time, while he is the breadwinner in the paid workforce. He explained that he recently fell ill and required a few weeks at home while recovering. Because he is the sole breadwinner, he continued to ‘telework’ in the living room. He showed me the pre-eminent place on the living room coffee table that is reserved for his work laptop, next to various remote controls and his son’s toys. In this sense, the entire family symbolically rallied around his paid work. During his convalescence, he relied on his wife to nurse him, prepare meals for him, and care for their son. His partner’s nursing work was not recognized in his timesheets, yet it was critical labour for the agency. This worker’s story indicates that the workplace timescape often intrudes into the domestic sphere, where billable work sits atop the hierarchy, even within a worker’s home.
Women workers do not construct their partners not as ‘supportive’. As one woman worker described, when her working hours became excessive, her husband became ‘fed up’. She was unavailable for preparing and eating meals with him. She describes the difficulty in balancing domestic meal times with her agency’s timescape:

I was working I’d say until 10:00 o’clock every night and I did that for like three years and I got tired. I got really tired and my husband was like fed up. We didn’t have a dog then but it was pretty horrible in that sense. My professional life was pretty good, though, like I was doing good stuff but my family life was not doing so well. (Tamara)

Tamara’s domestic sphere is directly compromised by her hours spent at the agency. She did not describe her paid work as a ‘necessary sacrifice’ for the family, even though she was the sole breadwinner in her household.

Another female worker who is married but does not have children expressed difficulty synchronizing her working schedule with her husband’s. I asked her husband how he feels about her long hours:

Researcher: How does it feel when you get that phone call, saying that she’s going to be late?
Stephanie’s husband, Jim: It’s problematic. I don’t like it at all.

He went on to explain that he is concerned about her taking public transit home late at night alone. For this couple, the woman’s long hours are understood as putting her at risk, and not as her ‘earning a living’ or being a breadwinner. Her long hours of paid work are not something the husband is to ‘support’ for the benefit of the family, but rather as something that places the woman at risk.

One man made no mention whatsoever of difficulty balancing home and work, despite his working round the clock to synchronize with other time zones and having two young children (and a wife) at home. Another worker described the stress of long hours has a deep impact on his private life, putting the burden of domestic labour on his wife’s shoulders. Notice how Derrick’s hours are understood as something his wife came to resent but certainly not something that placed him ‘at risk’:

. . . on the weekends and they were going into the office on the weekends and I just had a little boy at that point so he was just born basically and I started this job and it was starting to have an effect on my marriage. Nothing too major but certainly if it prolonged for any long period of time then it was going to definitely have a detriment to my marriage.

Derrick went on to describe exactly how his paid work came to be a source of difficulty in the domestic sphere. His description reveals his implicit understanding of his paid work and gender roles:
That’s what I think was the biggest thing with my wife is when I was able to come home, then all I did was talk about work, how difficult it was or or what’s been going on at work . . . you know your partner is there to assist you and obviously be with you for that tough time at work and share your work experiences and discuss work at all times I think there is a line though that how much and how often you do do that.

The unspoken and subtle gendered effects of long hours are embedded in this description. Derrick constructs his wife’s role as one of ‘assisting’ him with his long hours. The fine line he must walk is how long his work can be allowed to dominate household conversation, while for Stephanie, it is how much her husband can tolerate her lack of safety while working overtime. For Tamara’s husband, the ‘line’ was how long she can negotiate him being ‘fed up’. At home, Derrick’s wife supports his paid work through performing all the domestic labour for him and their son while he engages in paid work. Occasionally, this happened while he and his wife were physically together. He tries very hard ‘not to be the Dad on the cell phone’ when he takes his son to the park. But he noted that he has a freedom to engage in paid work when he is with his wife: ‘I have and I really do try to put [the cell phone] away when I’m with him. If I’m kind of around with my wife and him and just walking then I’ll sneak a few calls in or check my e-mails but when I’m with him I really try to put it away’. The presence of Derrick’s wife allows him to engage in paid work, while she assumes the labour of watching their son.

Most of these respondents were young workers without children and some without partners. As one junior worker explained, long hours of paid work were not currently an issue for him. But he expected that as he grows older, he expects more demands from domestic labour: ‘For now, it doesn’t bother me . . . But I would never want to [work these hours] where if I have kids for example, then it’s like “Oh, Dad’s working late again” . . . that sort of thing. I wouldn’t want to be in that position’ (Andrew). It’s unclear how Andrew will negotiate this potential conflict, whether he expects to have a wife who assumes the primary burden for domestic labour.

Conclusion: Digital Time Keeping, ‘Productivity’ and Precarity

Doucet (1995) rightly points out that notions of ‘equality’ vis-à-vis domestic labour is difficult to define. Is equality a function of ‘time spent’ on domestic tasks? Doucet rejects the assertion that ‘gender difference’ necessarily results in inequality; rather, she looks for particular patterns of ‘disadvantage’, which differ not just by gender, but by class and race. The manner in which time is reckoned in these agencies suggests potential disadvantages for women, particularly those with children.
Interactive agencies’ globalized production schedules and use of ICTs reveal time as a function of ‘productivity’ and not of contextually determined cues. The result is an intensely commodified form of labour; ‘billable’ time is constructed as valuable while ‘non-billable’ time – as well as domestic labour – remains relatively invisible in these time discourses. Workers who fail to produce sufficient ‘billable’ hours are at risk of losing their jobs.

Being immediately revealed as ‘non-productive’ presents implications for precarious work. The digital time-reckoning systems of agencies reveal workers as failing to have their labour ‘doubly commodified’. Workers must sell their labour not once but twice to be deemed as worthy or successful. Non-billable, administrative work must be done, yet workers often struggle to claim this time as legitimate working time. And, as in the industrial timescape, these workers’ partners further underwrite the cost of running the business. Either workers simply do not do the domestic labour, or their partners are recruited to shoulder more of the burden. As this article has shown, men and women negotiate this choice differently. Women’s roles as ‘wives’ and ‘mothers’ shape how they understand this choice, while men’s roles as ‘husbands’ and ‘fathers’ shape it, but in ways that may not result in compromised advancement at work.

Recent Canadian research finds that home-based ‘catch-up’ work is on the rise. Almost 16 per cent of Canadians performed unpaid ‘catch-up work’ at home in 2007, up from 14 per cent in 2005 (Statistics Canada, 2005, 2008). If workplace time regimes are now constructed to require catch-up work, it will significantly affect women’s ability to advance in the workplace. Paid work that is not completed at the workplace can now easily come home through laptops and BlackBerry devices. The noticeable presence of these workplace technologies in these workers’ homes speaks to how permeable the home/work boundary has become. And of course, this permeability presents distinctly gendered implications. When women are primarily responsible for domestic labour, yet paid work now includes regulars home-based work, are women less able to advance in the workplace because of this conflict? Are we seeing a new ‘glass ceiling’ based on women’s relative difficulty in engaging in regular, catch-up work?

This study also underscores the need to investigate further the temporal and social impact of digital technologies. Do programs like TimeControl represent an entirely new way of governing workers? If so, how can and do workers resist this kind of governance? The same digital technologies are now used not only to track time, but also to track exercise regimes, caloric intake, and personal finances. Mint.com, for example, is a personal finance website which invites users to enter voluntarily their saving and consumption, and quickly analyzes minute changes in spending patterns. Ediets.com similarly analyzes food and exercise data which people voluntarily enter, charting changes in calories consumed and expended, as well as weight. Such analysis transforms the temporal...
experience of saving or gaining weigh from long-term planning into short-term, frequent ‘adjustments’.

For the workers in this study, their time use has become the subject of minute tracking. Their temporal experience at work has changed, with downstream effects in their domestic lives. Future research ought to attend to the effects of such digital technologies, particularly in contexts such as workplaces. This new kind of time, which immediately reveals a worker’s ‘productivity’, requires a new political economy of working time that explores the implications of the ‘mashing-up’ of ‘production’ and time records, as well as its differential gendered effects.

Notes

1. This study did not include freelance workers or ‘contractors’ because of the confounding definition of what constituted a web contract worker. As Gill (2002) reports, many such workers defy categorization. Moreover, such contractors use differing time-tracking systems, while these agencies had remarkably similar systems. For analytically clarity, therefore, contractors were excluded.

2. Interactive agencies also often hire ‘contractors’, who are independent, self-employed workers who bill by the hour. While many of the workers I interviewed are familiar with the contractor model, I did not interview contractors, only full-time employees. Note also that the term ‘contractors’ does not include temporary employees who are paid a salary, but independent workers who invoice the company for the total number of hours worked.

3. I did not interview any ‘non-billable’ administrative staff in this study, in part because there are so few of them. In addition, the substantive subject of the study was workers who produced websites. As a result, no non-billable workers were interviewed.

References


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