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24/7 society – the new timing of work?

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Introduction

Public debate on societal rhythms, in particular working hours, has been dominated by a (fear) scenario about a “24/7 society”. Factors such as the services- and information-driven economy, deregulation of opening hours and changes in the rhythms of consumer culture have been expected to disrupt “normal” working time regimes. Previously, the industrial time regime was a central determinant of the daily and weekly rhythms. In working-time research in the last two or three decades, attention has been paid to the growing prevalence of unsocial work hours. Unsocial or atypical (or non-standard) work hours refer to times of day or days of the week during which most people do not work. The concept of unsocial work hours is based on the idea of limited time periods during which social interaction is possible. If work hours fall outside of these periods, it is more difficult to maintain social contacts.

The term “24/7 society” is part of the vernacular and occasionally encountered in academic writing as well. The specific meaning of the concept is yet to be defined. Post-industrial 24/7 society implicitly refers to a breakdown in the clearly defined time regimes of the industrial era. Over time, these regimes have become institutionalised, unspoken practices and routines. Such established practices include the 9-to-5 work day and the five-day work week. In addition to these institutions of working time, the industrial production system has also created the institutions of leisure time: free evenings, weekends and annual holiday.

In principle “24/7” includes two elements of change. The “24” hours part refers to the change in the daily rhythm: in the context of industrial working hours, it means that daytime work can now be done through the night. The “7” days part refers to the weekly rhythm and implicitly suggests that the special nature of weekdays (see Zerubavel 1989) is disappearing. This means that in the weekday cycle, the days are increasingly less defined by work time (weekdays), consumption time or leisure time (the weekend).

The so-called 24-hour economy is challenging human adaptability to temporal changes from both the biological perspective (Costa & Sartori 2007; Härmä & Kecklund 2010) and the social perspective (Fagan et al. 2012). With regard to biological rhythms, there has been a lot of discussion about changes in the length and timing of sleep periods. A 24-hour, online society moves the sleep period away from its natural place. In terms of social rhythms, simultaneity is important, in other words, the synchronisation of time facilitates social interaction. It has been assumed that a 24/7 society reduces “shared” social time.

In this article, we examine if the post-industrial, services-dominated economy has changed work and leisure time practices, and, if so, what the possible implications for individuals and families are.
Time structures and well-being

Well-being related to time structures – a concept known as time affluence – includes not only a quantitative dimension but also qualitative and experiential dimensions (Bittman & Wajcman 2000; Epstein & Kalleberg 2001; Southerton & Tomlinson, 2005; Thompson & Bunderson 2001). In addition to the chronometric dimension (the adequacy of time), the chronological dimension (having time at the right time), time autonomy (control) and synchronisation (suitable timing) are also important. Having a sufficient amount of good-quality time off work is a prerequisite of time affluence (Reisch 2001).

The social and synchronisation dimensions of time are important aspects in terms of time use and well-being among couples and families. It is thought that couples seek to coordinate their time so as to have as much meaningful time together as possible (Sullivan 1996). Traditionally this has meant evenings and weekends, when people are off work and couples and families are free to spend time together (Ruppanner & Treas 2015).

Industrialised working time culture and consistent working hours are yielding to more fragmented working hours and more individually organised daily paths. Members of modern society have to cope with several overlapping time schedules that define the rhythms of social life and form the time structure. The rise of an information society, communication technologies and information-intensive work is strongly affecting time structures and time perceptions. The information society is predicted to break the industrial divisions between work and non-work (i.e. being at home, leisure time), and their defined sites. In the optimistic visions of the information society, this is seen as an emancipation from the restrictions of the industrial society. Critical tones would emphasise the disintegrating impact of the erosion of old, shared time rhythms, as well as the stressing demands of modern just-in-time availability (even 24 hours a day and across different time zones), as an extreme consequence of new global networking and the information society (Adam 1995; Castells 2011; Sennett 2011).

Thus, links between working time, and social relationships and interaction emerge in a new way in European, post-industrial, information-intensive societies. Unsocial working hours have not been a particular problem in industrial work and the associated male breadwinner model. Debate in this area has gathered pace with the increase in women’s employment and the way in which the unsocial work hours of women working in service industries – especially on Saturdays and Sundays – have changed families’ time structures (Kümmerling & Lehndorff, 2007; Ruppanner & Treas 2015).

However, it seems clear that the consequences of post-industrial working time for individuals and families are many and not straightforward. On the one hand, more individual working time has the potential to provide an opportunity to choose the length and rhythm of one’s working time (time sovereignty), while on the other hand risks are also associated with it, particularly for work and private life, and for the time and energy available for family and social life (Jacobs & Gerson 2001; Warren 2010; Strazdins et al. 2004).

In summary, the aforementioned flexibilization and deregulation – the shift from 9-to-5 economy, to 24-hour society – imply the weakening of socio-temporal structures that, in the absence of fixed institutional temporalities, make the potential for coordinating practices between social actors increasingly problematic. A clear example is the growth of new patterns of eating and the decline of the “family meal” (Warde 1999).
Working all hours

The regulation of working hours has become more relaxed. Work hours are increasingly often determined on the basis of local and individual agreements. The growing prevalence of unsocial work hours is influenced by the growth of service industries and extended service hours. This often means working hours that differ from daytime work, especially in the evenings. Evening work and night work mean that the individual worker’s daily time rhythm differs from the general time rhythm of society. Unsocial working times can bring new possibilities, such as a “working time mosaic” (Sennett 2011), as well as new risks that associate with the erosion of collectively shared rhythms (Jacobs & Gerson 2001; Presser 2003).

Most of the studies on the effect of unsocial working hours on family life have concentrated on the negative consequences for the everyday life of families and for social relations (Strazdins et al. 2004). Studies have shown that unsocial hours associate with difficulties in work–family interaction (Beutell, 2010; Voydanoff 2004). Shift work in particular makes the work–family interface difficult because most societal institutions, such as schools, are based on daytime work. For example evening shifts possibly reduce the time spent with children.

Family life requires time shared together. Strazdins and colleagues (2004) emphasize that the lack of shared “face-time” explains the negative consequences of unsocial hours for families. One possible outcome is the increased risk of divorce. Besides this risk, unsocial working hours can also offer possibilities for the work–family interface. The way work is located in a day, a week and a season has an impact on how childcare, household work and the division of unpaid work is organized (Liu et al. 2011; Täht 2011; Tammelin et al. 2017). It is important to note that working time autonomy protects family life from the negative consequences of long and unsocial working hours (Hughes & Parkes 2007).

Lost weekend?

Weekend work is relatively common across Europe. According to the 2010 European Working Conditions Survey (EWCS), approximately 50% of European workers work at least one Saturday per month. One in four said they work on Sundays at least once a month (Eurofound 2012).

The weekend is an institution that intertwines a strong religious tradition (Durkheim 1912; Sorokin 1943; Zerubavel 1981) with regular time off work, as negotiated and regularised during the industrial period (Garhammer 2002). The sociocultural weekly rhythm helps us integrate into the social fabric of the family, the community and society (Zerubavel 1989). The weekend concludes the (working) week with a period of rest and recovery.

Jiri Zuzanek (2014) has studied changes in the time structure of Sundays and the emotional connotations associated with Sundays over a period of two decades. During that time, the weekdays and weekend rhythm remained an important determinant of behaviour, but it has
changed slightly. Sundays have become busier, and the way time use on Sundays is structured has moved closer to the weekday structure.

Sharon Wheeler (2014) has reviewed time use among the English middle class based on interview data and found that the weekend has not been lost to work. Saturdays and Sundays continue to differ experientially from weekdays. A significant change has taken place in shared time and childcare in families. Previously, children’s weekends involved more homework and organised activities. Parents’ time is linked to children’s activities. They assist with homework, and supervise and transport children. Dedicated, planned family time is concentrated on weekends. Wheeler notes that weekends have become more child-centric for the middle class.

Weekend work and its effects on other time use and social relationships have been studied in certain time use surveys. Weekend work is an interesting research topic because it is often considered unpleasant and particularly problematic from the point of view of social relationships (Presser 2003; Ruggiero 2005). Atypical work hours are always problematic, but weekend work especially eats into the potential social hours during which other family members are at home. The shift of work hours to weekends can also be problematic from the point of view of health. Although weekend work does not necessarily jeopardise the daily rhythm, it can affect opportunities for getting adequate rest (Fritz et al. 2010; Wirtz et al. 2010).

Michael Bittman (1998) has proposed a thesis on what he calls the "lost long weekend". Bittman (2005) shows how individuals who work on Sundays lose opportunities for rest, family time and communality. As a result of problems in time synchronisation and scheduling, Sunday workers cannot compensate for the loss of social contacts on weekdays.

Australian time use researchers Lyn Craig and Judith Brown (2014; 2015) have analysed the effect of weekend work from the point of view of leisure time and family time. Their analyses, which were based on time use datasets, showed that weekend work resulted in limited social contact with others. Sunday workers experienced a loss of social time with the family, a loss of rest and recovery opportunities and a loss of opportunities to participate in organised community activities. Both Saturday work and Sunday work increased the amount of time spent alone without face-to-face contact with others. Craig and Brown repeated Michael Bittman’s finding that the lost opportunities for social interaction during weekends are not replaced during the week. According to their findings, Sunday work in particular increased the amount of solitary time during the week as well.

Jennifer Hook (2012) has studied the effect of weekend work among fathers of children under the age of 15 based on the amount of time they spend with their children obtained from British time use surveys. Weekend work is very common among British fathers. Almost 45% of the surveyed fathers worked Saturdays or Sundays. Depending on their socio-economic status and the day of the week, they typically worked 4–6 hours on Saturdays or Sundays. Weekend work significantly reduced the amount of time spent with children, families and spouses. This survey also showed that the lost opportunities for family time on weekends were not replaced during the week.

There are quantitative and experiential gender differences in perceptions of leisure time (Warren 2010). Women report time shortage more frequently than men (Anttila, Oinas & Nätti 2009). Research suggests that the higher reporting prevalence of time shortage among women is explained by gender differences in the quality of leisure time (Mattingly & Bianchi
It has been proposed that women's leisure time is less free than men's leisure time (Deem 1988).

The time pressures of free time may also increase in 24/7 society. In modern Western societies, two paradoxes have been encountered with regard to the relationship between work and leisure time. A historical review of time use surveys in many countries reveals the first paradox: there are well-documented and consistent research data about an increase in perceived time stress starting from the mid-1900s and a simultaneous, equally proven and significant long-term increase in the amount of leisure time and family time (Bittman 1998; Gershuny 2000; Goodin et al. 2005). The second paradox concerns consumption. A significant increase in productivity has improved material well-being and the availability of goods. However, consumption takes up time (Schor 1992) and it has become more laborious (Glorieux et al. 2008). The weekend contains leisure time reserves that can be used for consumption (Glorieux et al. 2008). It can be assumed that more service work and more consumption time are now allocated to weekends. Our weekend leisure may become less leisurely (Gershuny 2000, 46–50).

The weekend is an institution of leisure time that carries expectations about time spent together. On the other hand, a significant amount of unpaid housework and care work takes place at the weekend. The distribution of leisure time and housework in households at weekends poses an interesting question. The distribution between women and men has been explained by relative power resources and time available, as well as by attitudes related to gender roles (Bittman et al. 2003; Gershuny 2000). Power resources and time available for housework are determined by paid work. Men’s lower participation in childcare and housework could be explained by their greater involvement in paid work. In this case, the weekend, which is often time spent free from paid work, is more evenly distributed between genders in terms of housework and childcare. This assumption is confirmed by empirical research findings. In families with young children, the distribution of housework between genders is more even at weekends, mainly as a result of men spending more time on housework on weekends compared with weekdays (Craig & Mullan 2010; Yeung et al. 2001). Generally speaking, the fathers and mothers of young families concentrate their housework duties on weekends (Craig 2007).

The empirical evidence of 24/7 society

Unsocial work hours in Europe

In the next chapters we explore the prevalence and trends in unsocial working hours in Europe. The analysis is based on the different waves of the EWCS. We compared the prevalence of unsocial working hours in selected European countries, which represent different institutional regimes in Europe.

In the EWCS, employed respondents were asked how many times in a month they worked at night (22.00–05.00), in evenings (18.00–22.00), on Saturdays and on Sundays.
Figure 1 shows that especially working during weekends is rather common in Europe. Approximately half of the European wage-earners reported that they worked at least one Saturday per month and one quarter worked on Sundays. Weekend work is more common than unsocial hours in the evenings or nights. In the selected countries weekend work is more common in the UK and in Spain, whereas in Finland and Sweden (representing the Nordic working time regime), the prevalence of night and weekend work is high. This is probably related to the high proportion of work in the process industry that utilizes 24/7 production times.

![Unsocial working hours in Europe in 2015 (*evening work in 2010). EWCS.](image)

The differences in the prevalence of unsocial hours between the selected countries remain when the analysis is conducted by gender. In the Nordic countries women’s evening and night work is also relatively common: in Finland and Sweden the level of women’s evening and night work is at the same level as that of men in the UK and Germany, and even higher compared than that of men in Spain.

**Time use evidence of 24/7 society**

Another, more precise picture of the changing time rhythms can be drawn by using time use data from different decades. Next we explore how the daily and weekly rhythms of work have changed in Finland over the period 1987–2010. Here Finland represents an example of a new information economy, characterized by a high level of education, a high proportion of employment in knowledge-intensive industries and a high level of ICT use.
Time use surveys based on time diaries provide accurate information on time use and are a highly useful tool when evaluating societal changes over time. In the survey diary, the respondent writes down his or her main and secondary activity in ten-minute sequences over the course of the day. The Finnish TUS is updated every ten years. In the analysis we use the three latest surveys: 1987/1988 (ca.15,000 diary days), 1999/2000 (ca.10,500 diary days) and 2009/2010 (ca. 7,500 diary days). This makes it particularly suitable for the investigation of social changes and trends.

Figure 2 presents how work time was located around the 24-hour period in the 1980s, 1990s and 2010s. In practice, this tempogram shows the proportion of respondents who marked in the diary that they did paid work at a certain clock time. The changes in timing of work are surprisingly modest. The majority of Finnish employees work between 7 a.m. and 5 p.m. Evening work became more common in the 1999–2000 survey, evidently due to economic growth, but then declined again to the same level as it was during the first survey (1987–1988). This could be explained by an increasing trend in (evening) overtime hours in good economic situations.

![Figure 2. The timing of work from 1988 to 2010 (workdays, Monday to Friday; wage- earners)](image)

The static work time profiles presented in the figure could possibly overrun variation between different workers groups. Therefore we made more accurate analysis on work time profiles of different socio-economic groups. However, the profiles were similar – for example for upper level white-collar workers – and the results supported the findings from the EWCSs: unsocial hours have decreased during recent decades and this progression is similar for both genders.


**Weekend work**

We continue the analysis by describing how the forms of time use have changed in the period from 1987 to 2010 analysing weekend work (Table 1), based on a time series of time use datasets. Time use in the studied period is presented in minutes for each main category of time use on Saturdays, Sundays and weekdays. We have restricted the analysis to the employed population since we assumed that work time is a central determinant of the weekly rhythm.

The annual distributions of time use show that the weekend is still a special period, distinct from weekdays. Weekend time is spent resting, free of work, and socialising. Working hours anchor the weekday rhythm, and changes in the ratio of time use between weekdays and weekend happen slowly.

The majority of work time falls on weekdays. On average, the employed population works one hour on Sundays, approximately 90 minutes on Saturdays and approximately six hours on weekdays. The time use data series shows that work time has decreased both on weekdays and on Sundays since 2000. The biggest relative decrease in work time is in Sunday work, which has reduced from 81 to 57 minutes. There were no significant changes in commuting time.

There has been a notable levelling-off between genders in the amount of time spent in paid work, especially on weekends. This is mainly due to the reduction of weekend work among the male population. Over the 20-year period, the amount of Saturday and Sunday work among men has reduced by over 40 minutes. Surprisingly, the amount of time spent in paid work by women has remained the same despite extended opening hours in the service sector.
Table 1. Time use (minutes / 24 h period) and time stress by weekday and study year (employed people).

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The average minutes do not signify the prevalence of weekend work. Instead, it can be examined based on how often a weekend time use day has been indicated as a workday (Figure 3). The proportion of weekend work was at the same levels in 2010 as in the 1980s. Among the employed population, less than one in five weekend days are workdays. In the year 2000 survey data, Saturday and Sunday work was more common, probably due to the good economic situation around that time. The changes in the time spent in paid work also reflect economic situations: the highest levels were found in the 1999–2000 datasets.
This shows that, contrary to what has been suggested by predictions about a 24/7 society, work has not begun to dominate the weekend. A similar finding is provided by the EWCS, which asked gainfully employed populations in 1995, 2000, 2005 and 2010 whether they had worked on weekends in the preceding month. In the 1995–2010 period, the proportion of people who had worked on weekends has decreased by approximately 7%.

**Conclusion**

The 24/7 thesis suggests that both our daily and weekly rhythms are changing. We did not find empirical evidence that implicates considerable changes in the work time rhythms. The temporal patterns of workdays have only changed modestly and the prevalence of unsocial hours does not show any major increase.

With regard to the change in weekly rhythms, the thesis of 24/7 society implicitly predicts that the special nature of weekdays is disappearing and that the special nature of weekends is increasingly less determined by collectively shared rhythms of work, consumption or leisure time. Our findings show that despite the deregulation of working hours and opening hours, the weekend is still, in most cases, time that is spent free from paid work. Work has not taken over the weekend. According to our findings, the time structure of weekends has not begun to resemble weekdays to any significant degree. Both days of the weekend continue to be special. Sundays and Saturdays both have their own special characteristics. Saturdays are maintenance days, and Sundays are rest days.

Modern Western consumer society is characterised by the scarcity of time. It is predicted that leisure time consumption will increase, and the weekend offers time reserves for
consumption. Service opening hours are used as ways to generate consumption and respond to demand. Despite extended opening hours, work has not moved to evenings, nights or to weekends to any significant degree. However, 24/7 society may creep silently into our lives. Digital technologies, for example, surely increase the perception of being always online and blurs the limits between work and leisure.

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