

Cross-national Changes in Time-use: some Sociological (Hi)stories

Re-examined.

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Abstract

The paper addresses some macro-sociological questions about changes in broad categories of time-use. The focus is on large-scale cross-national time trends from developed countries in paid and unpaid work, and leisure. Reference is made to some well-known sociological and historical accounts of such change, and to the fact that time-use diary data has only relatively recently become available for analysing trends over time. The data used are drawn from a comparative cross-time data archive held by the Institute for Social and Economic Research at Essex University, comprising successive time-use diary surveys from a range of industrialized countries collected from the 1960s to the 1990s. The time use evidence suggests relative stability in the balance between work and leisure time over the period covered by the analyses. Some alternative explanations are advanced for why there seems to be a gap between this evidence and, on the one hand, the burgeoning literature in both academic and popular media addressing the 'time famine' and, on the other, people's professed experience of what is happening to their time.

Keywords: Changes in time-use; paid work; leisure; time famine

NON-TECHNICAL SUMMARY

Contrary to the popular “time famine” perception, evidence from the historical record of time diary surveys shows that there has been a slight increase in women’s leisure time over the period from the 1960s to the 1990s, while for men there has been only a slight decrease. Why is there this discrepancy?

We have several hypotheses. Firstly, it may be suggested that different sub-groups of the population have different experiences, which are not reflected in overall trends: perhaps it is just the old privileged “leisure class” that has become less leisurely. A second, and related, explanation for the gap between peoples’ perceptions and the time use evidence relates to the individual’s life-course trajectory: we may *actually* get busier as we get older – but this does not mean that the society as a whole is getting busier. A third source of a perception of increased of time pressure may arise from the widening range of activities we undertake, and perhaps increasing numbers of “simultaneous activities” that we undertake. There may be also an increase in the segmentation of time; perhaps people now enjoy more leisure activities, but for shorter durations of time. It could be that, even though leisure time as a category has increased slightly, the time that is spent in it has come to feel more intensive in character, and consequently more pressured.

According to these latter hypotheses, the lack of accord between the time use evidence and the pervasive sense of an increasingly harried experience of time pressure, may arise, at least in part, from changes in the *nature* of the time we experience. These issues may all be explored through further careful analysis of the time diary evidence.

Introduction

A number of widely referred to sociological arguments have been constructed about long-term changes in time-use in modern industrialized societies; for example those relating to increases in work time (both paid and unpaid) (e.g. Vanek 1974; Sahlins 1974; Hochschild 1996) and changes in the amount and distribution of leisure (e.g. Veblen 1967; Linder 1970; Bourdieu 1984). Given the importance of some of these debates for the understanding of the dynamics of both class and gender relations, it is perhaps surprising that, until relatively recently, there has only been a small amount of genuine cross-time, cross-national data available. The aim of this research therefore is to address some macro-sociological questions about changes in broad categories of time-use, with the focus on large-scale cross-national time trends from developed countries in paid and unpaid work, and leisure.

We have recently argued for the value of time use data in throwing light on both macro- and micro-level sociological phenomena (see Gershuny and Sullivan 1998). Indeed, some influential sociological arguments have been at least partly established through the use of such data (e.g. Young and Willmott 1973; Berk 1985). In the following sections of this paper we outline some of the major contributions, well-known in the sociological literature, which relate to the changing division of activities between the main categories of paid work, unpaid work and leisure. These are followed by the empirical analyses, which show the actual changes in time use which occurred in selected industrialized countries over the period from the 1960s through to the 1990s.

The data used in these analyses are drawn from a comparative cross-time data archive held by the Institute for Social and Economic Research at Essex University. This archive comprises successive time-use diary surveys from a range of industrialized countries, which were collected from the 1960s to the 1990s. There were of course considerable variations in the mode of collection of these data (in the period over which the information was collected; the number of simultaneous activities recorded; and the ancillary information such as where the activity took place; who it was done with; and whether it was enjoyable or not). In the construction of the cross-national archive these surveys have been standardised to a common format¹, with a single range of activities, so that they form a unique record of change in the use of time in different countries from the 1960s to the 1990s.²

Changes in the Use of Time: Some Well-Known (Hi)stories

1. Changes in work and leisure time: the Leisure Society versus the Overworked American?

We begin this debate in favour of an increasing burden of work with reference to the work of Sahlins, who showed from a number of contemporary agriculturally-based societies that overall work time (as opposed to leisure time) increases with agricultural development (Sahlins 1974; also Minga-Klevanna 1980). Research by economic historians investigating hours of work in industrial and pre-industrial societies supported the idea that the process of industrialization has led to an increase in hours

of work (Wilensky 1961). Becker (1965; see also Linder 1970) provided a rational choice explanation for the increasing allocation of time to paid work in terms of the increased satisfaction to be gained by combining reduced leisure time with goods and services purchased from the higher incomes derived from longer working hours. Cross-sectional observations from large-scale social surveys about the working hours of better qualified (and hence more highly paid) workers also suggested that as qualification levels rise, so do hours of work. In 'The Overworked American', Juliet Schor claimed that there were big increases in the number of hours worked in the USA from the 1970s through to the 1980s (Schor 1992). From analyses of national labour force statistics in the USA she concluded that there has been an 'unexpected decline' in the amount of leisure time both at work and in the home – a phenomenon which applied to the majority of workers across industries and occupations. Arlie Hochschild refers to the same phenomenon in the title of her new book, 'The Time Bind', in which she describes a process whereby, as hours of paid work increase (the first shift), time at home becomes increasingly more harried and segmented (the second shift), which in turn produces the need for a third shift directed at managing the negative emotions produced by the curtailing of the second shift (Hochschild 1996).

With respect to non-paid work, (a topic which we return to in more detail in the section below), the findings of Vanek showed continuity in domestic work times for women over a period of time which saw the development of many domestic labour-saving devices (Vanek 1974; Schwartz-Cowan 1976). These findings received wide publicity, and played a role in support of the developing view of the 'dual burden' carried by employed women (see also Meissner et al. 1975).

Another body of literature was simultaneously extending the idea of the ‘time famine’ to the nature and quality of leisure time. In the 1970s authors such as Linder in: ‘The Harried Leisure Class’ (Linder 1970) , but also Hirsch in ‘The Social Limits to Growth’ (Hirsch 1977), addressed a shift with economic development towards an increasingly cluttered and stressful leisure time. These ideas made their contribution to the anti-growth literature of this period.

In contrast to this view, the idea of the ‘leisure society’, where an overall increase in leisure time as a result of economic growth means that more people can participate in the fruits of growth has also had a strong hold on the imagination. Perhaps the first example of this line of argument can be found in John Stuart Mill’s ‘Principles of Political Economy’ (1848), where he looks forward to a time (not too far in the future) when the economy of developed societies might approach a ‘steady state’ in which all human wants are met, and working time is reduced - Marx in ‘Capital’ (1906) clearly also envisages such a possibility. Veblen’s ‘The Theory of the Leisure Class’ (1967), although centrally concerned with the distribution of leisure between classes, implies that the originally ‘aristocratic’ affectation of conspicuous idleness would be increasingly emulated by other social strata as the result of growth in economic productivity. This strand of thought extends through Bertrand Russell’s essay ‘In praise of idleness’ (Russell 1960), via Keynes ‘On the economic prospects for our grandchildren’ (where the process of leisure growth is firmly linked to the combined effects of technical change and ‘saturation of demand’ – Keynes 1983), Dumazedier ‘Towards a Society of Leisure’ (Dumazedier 1977) to Bourdieu , who sees the fruits of affluence manifested in the form of time spent in ‘distinctive’ leisure pursuits

(Bourdieu 1984). In more visionary versions of this story, also to be found in many literary manifestations of utopias, this is a world in which economic growth and increases in technological sophistication lead to a society where most work is performed by machines.

On simple measures of hours worked per week this point of view gained empirical support in the 1960s/70s as it became clear that over most developed economies paid work time for men had in fact been *decreasing*. From the later 1970s and through the 1980s, however, there was apparent evidence of a steady increase in both the USA and UK, and the concept of the overworked American has taken stronger hold.

2. Changes in unpaid work: the Dual Burden versus the Symmetrical Family³?

This section addresses some of the arguments that have been made concerning changes in unpaid work over time (since the availability of leisure time reflects both the paid and the unpaid burden of work). At an early stage the ‘technological optimism’ point of view, referred to above in the context of increases in leisure time, suggested that the diffusion of domestic technology in the period before and after the Second World War would reduce women’s burden in the home, leading to quicker and easier cleaning, food preparation and clothes care.

However, the significance of Vanek’s 1974 thesis (as it is commonly interpreted) was that the nature and quality of domestic work changes with the development of technology; women end up doing as much domestic labour because the frequency and

standards demanded of individual tasks rises. The implication for change in overall workloads is clear; with more women moving into paid employment, and their domestic work time not falling commensurately, there is inevitably an overall increase in women's work loads. This observation made an important early contribution to the growth of feminist literature on the dual burden of work experienced by mothers in employment. A central tenet of some of this literature is that any decrease in women's overall domestic work load has been relatively negligible, both over time and in respect of differential employment status, where it by far fails to compensate for increases in time in paid employment. The corollary of this is that any increase in men's domestic work time (which is in any case very much lower) has been negligible, both over time and in response to their partner's employment status.

It is of course still easily possible to demonstrate the overall imbalance in the amount of domestic work contributed by male partners, and the dual burden carried by women in paid employment, but what has been generally lacking from the debate is large-scale data on *change*, which is also able to take into account trends in the structural characteristics of populations relating to family circumstances and employment.

There are, for example, difficulties with Vanek's interpretation on these grounds since her 1930s data included a high proportion of middle-class urban women with paid domestic help, which may have contributed to a misleading picture of historical change through the understatement of actual levels of household work.

Where time-use diary data able to take account of structural changes in employment and family patterns has been used, the results have appeared to indicate that time devoted to domestic labour in the USA and the UK was indeed relatively constant

from the 1920s through to around 1960. But in the UK at least, this apparent constancy reflected two counterbalancing processes; a decline for working-class women due to the diffusion of 'labour-saving' appliances, and an increase for middle-class women reflecting the decline in paid domestic service. From around the end of the 1950s housework time declined for all groups, so that by the 1980s women did substantially less routine domestic work (cooking and cleaning) than women in the 1960s.

Changes in the Use of Time: a Multi-National Cross-Time analysis

In order to analyse shifts in time use patterns over time, it is helpful empirically to distinguish between 'structural' and 'behavioral' changes. The first of these relates to changes that may be accounted for in terms of the structural characteristics of populations. For example, over the period 1960-1990 there has been a considerable rise in the proportion of women in employment. Other things being equal, this would be reflected in a rising trend in a graph showing changes in the amount of women's time devoted to employment. Similarly, the use of time is strongly dependent on household structures; for example, mothers of young children are less likely to be in full-time employment, and more likely to be spending time in unpaid domestic labour. Therefore changes in household composition over time will also have an effect at the macro-level on the amount of time devoted to both paid and unpaid labour. However, underlying these sorts of changes, which may be thought of as reflecting structural changes in the composition of populations, there may be more fundamental trends associated with changes in the behaviour of specific groups -- of people *within*

particular structural categories -- over time. For example, a reduction in the number of hours worked per week may indicate that a choice is being made in the trade-off between work and leisure, in which money income is foregone in order to increase the amount of time spent in leisure. Similarly, there is increasing evidence to suggest that men in industrialized countries are taking on a slightly larger share than previously of unpaid work around the home. These sorts of changes represent real changes in behaviour in relation to time use, and are not simply the result of changes in population composition.

It is possible in analyses to distinguish between these types of effect, if the relevant structural changes can be identified and controlled for. In the regression analyses which follow, an attempt is made to control for broad structural changes in population composition associated with household structure and employment patterns. The analyses below show the effect of changes over time in broad categories of time-use when controlling for the effects of family structure and employment status for each survey.

A sub-set of countries from northern Europe and North America were selected for this analysis on the basis only of their data continuity and quality (a list of the specific surveys used is shown in Table Ia). The first panel of Table Ib shows the total of the number of cases in the original surveys. Although they are all large in terms of sample numbers, the surveys from the different countries are of rather different sizes (having in total, for example, four times as many cases in Finland as in Denmark). Accordingly we have reweighted the cases to give a similar representation to each country in the aggregated dataset (second panel of Table Ib: the samples when

weighted are representative of the national populations aged 20-59 at the survey date). One consequence of this weighting procedure is that the significance estimates reported in Tables II and III below are extremely conservative.

Table II shows overall trends for (paid and unpaid) work, leisure time and personal care (including sleep). It sets out the coefficients for simple OLS regression equations relating the four categories of time-use to various age and family status, employment and national characteristics (as controls for structural variation), and to the historical time period. The regression coefficients for the period variables thus indicate historical trends. This analysis has the characteristic that the coefficients for the four categories of time-use can be straightforwardly summed together. For example men in the sample had, controlling for all the other variables in the analysis, decreased their paid work by 21 minutes per day by the 1972-82 period as compared with the period 1961-71 (the reference period), but had correspondingly *increased* their unpaid work by a similar amount, giving virtually no change to the total for work (paid and unpaid) over the period.

Referring to Table II, then, there is a distinction immediately evident in the patterns of change in overall work time (i.e. summing paid and unpaid work) for men and women. While there was a slight rise (of just under 20 minutes per day) in the amount of time men spent working (the coefficients for both paid and unpaid work are statistically significant at the .005 level), for women there was a somewhat more pronounced decline (of nearer 25 minutes). Since women's overall work time tended to start at a higher level than that for men, there is some evidence here for a convergence in overall work times (i.e. taking paid and unpaid work together).

Corresponding to these changes in overall work times (since one is defined as the inverse of the other), leisure time has increased for women and decreased slightly less for men (both significant at the .05 level).

The preliminary conclusions are not supportive of the idea of a 'time famine' (alternatively referred to as the 'time bind' or 'time deficit') in modern industrialized societies. This finding is not new in studies based on time use diary data (see, for example, Gershuny 1986; 1995). Robinson has recently addressed the same issue in his discussion of the way time is spent in the USA. He shows that there has been an increase in free time for both men and women, but makes the point that, significantly, this fact is not reflected in peoples' *estimations* of the way in which their time has changed (Robinson 1997). There seems to be a gap between the time use evidence, and people's professed experience in combination with a burgeoning of literature on the 'time famine'. In the discussion of the concluding section below we advance some possible hypotheses as to why this might be so.

The overall time spent 'working' serves as a useful concept for thinking about work as opposed to leisure time, but of course conflates the important distinction between paid and unpaid forms of work. In respect of paid work there is for women, having controlled for structural variation, a very small (statistically insignificant) increase in paid work time over the period; but for men there is a strongly statistically significant decline (a reduction of 24 minutes per day in comparison to the reference period).

The same basic story is told in other analyses of time-use data focusing on specific countries (Robinson 1997 in the USA; Gershuny and Jones 1987 in the UK); for men at least time spent in paid work has decreased over the period covered by the data.

However, for unpaid work, a much more substantial differential in trends by sex is evident. Taking all unpaid work together (including: routine domestic work such as cooking, cleaning and clothes care⁴; shopping; travel; ‘odd-jobs’ and care of children), there is a clear reduction in the time that women spent in unpaid work over the first part of the period (between the 1960s to the 1970s). This trend is halted (even somewhat reversed) during the second part of the period (from the 1970s onwards) - though as we show below this cessation is in fact the sum of two contrary monotonic trends in different aspects of unpaid work. Men’s overall unpaid work time, by contrast, shows a substantial upward trend (20 minutes increase between the first pair of periods, 22 minutes between the second) – though from a much lower initial level of unpaid work than for women.

A breakdown of unpaid work into the four elements of routine domestic work; shopping and associated travel; ‘odd-jobs’ (including gardening and pet care), and childcare shows some further gender differentials (Table III). With respect to routine or core domestic work time (i.e. cooking, cleaning and clothes care), there is, after controlling for the structural variables, a consistent *increase* in men’s time, amounting to eighteen minutes per day. Contrasting with this, is a quite vertiginous *decline*, of an hour per day over the period, in the time spent in these activities for women (though of course, from a much higher initial level). This finding is not a new one in the diary-based literature time use, having been referred to before by Gershuny 1983; Gromno and Lingsom 1986; Gershuny et al. 1994; Niemi 1995 and Robinson 1997 among others. However, in general discussions of the division of domestic labour more attention has, perhaps rightly, been given to the continuing disparity of

performance of these tasks by men and women, even when both are in full-time employment.

The increase in men's participation in routine domestic activities illustrated above is in accord with the previously noted overall increase in men's unpaid work time. But for women, it remains to be explained why a slight overall *increase* in unpaid work over the later part of the period is found, given that the trend for routine domestic work is so strongly negative. The answer to this lies of course in the time spent in the other main elements of unpaid work: shopping/travel, odd jobs, and childcare, which has increased markedly and consistently for women (as well as for men).

Although previous studies based on time use data have shown the decline in routine domestic work for women and the increase for men, the increase in other elements of unpaid labour has not been widely remarked upon. Firstly, the time spent in shopping and travel activities since the 1960s has increased for both women and men (significant, between the first and third period, at the .05 level). It is perhaps surprising that this finding has not received more attention, since the trends that have led to this increase are well known: there has been a growth over the period covered by the analysis both in the possession of and in the use of cars for shopping, leisure activities and for ferrying children. In addition, the increasing externalization of costs by business, for example through the growing propensity to locate on cheaper, out-of-town sites in shopping malls, means that the time spent both traveling and shopping has risen. Rather larger in scale, but similarly to be explained in terms of the growth of 'self servicing' over this period (Gershuny 1978), is the growth in time devoted to odd jobs. Both women's *and* men's time spent in these activities has increased,

which suggests that there are behavioural differences to be explained between changes in this element of unpaid work (which were in any case always distributed somewhat more equally between men and women) and those of the routine (and routinely gendered) domestic tasks such as cooking, cleaning and clothes care.

The same point can be made for childcare activities. The amount of time devoted to this aspect of unpaid work has also increased for women and, less strongly, for men (in both cases significant over the period as a whole at the .005 level). This supports Robinson's recent conclusion from USA data (Robinson 1997) that the time spent in childcare has increased for women (men were not reported on). Again, this result has been observed before from time use diary data (see Gershuny 1990), but its implications in respect of other research, in this case on parenting and childcare, have not so far been directly addressed. In particular, the fact that the empirical observation of increasing amounts of time devoted to childcare runs contrary to current concerns about the neglect of children evident both in the media and in much quoted academic works such as that of Hochschild (1996) and Hewlett (1991, emotively entitled 'When the Bough Breaks') needs emphasizing. There are various arguments which might be made which could explain increases in childcare time without contradicting the idea that children receive less of our attention. The most obvious of these – that there are more children in families – is clearly not borne out by information on fertility rates and household structures. There is little evidence either for a decline in the substitution of other relatives in childcare; in fact the increased numbers of grandparents would suggest at least the existence of a wider potential pool of support. Likewise little is known about the comparative relative costs of childminders, since a substantial part of that market is unlicensed. In any event, what we observe from the

analyses is an increase in the time devoted to childcare at a *population* level, which is consistent between countries with different policies and regulations on childminding.

So at the very least we can argue that *part* of the strongly upward trend from the 1960s will reflect a real growth in child-related activities: for example, parents participating actively in their children's homework is certainly more characteristic of the 1990s than it was of the 1960s. Another part of the change is likely to be accounted for by changes in the way in which activities are perceived and recorded. In the 1950s parents certainly will have spent time in various activities in the company of their older children. But the implied change in the reporting of these activities suggests real changes in the salience of childcare over the last three decades. Before parents had been introduced to the expectation that they ought to be devoting 'quality time' to the development of their children's full potential, these activities were likely to have been reported in the diary by reference to the activity itself (e.g. 'went to football with son'), whereas a more recent diary might self-consciously record 'took son to football'. The former activity is more likely to be classified as 'attendance at sporting event' whereas the latter might perhaps be properly referred to as a 'childcare-related activity'.

It should be noted that the trends for unpaid work that are shown here do not vary substantively between different family and employment groups. However, for one particular group there *is* an important difference in the findings for overall work and leisure time. While there was an overall statistically significant decrease in overall work time for women (as reported above), there is no change in overall work time for part-time employed women with small children. Women in this category are likely to

be under the greatest pressure of time, through having to combine childcare with a job. The decrease in paid work time for this group over time is balanced by a stronger increase in unpaid work, composed of increases in the time spent in shopping/travel and childcare. The outcome of this is that there is no overall increase in leisure time for this particularly pressured group.

In the discussion below we return to the issue of changes in the nature and meaning of different activities, with reference to the discrepancies between what a combination of ‘received wisdom’ and some well-known sociological arguments tell us about our use of time, and the evidence from time use diary data. It should be stressed that the analyses reported here control for both employment and family status, so the trends which we have shown can not be accounted for in terms of changes over time in these structural factors.

It should also be noted that the regression models estimated in Tables II and III take no account of possible interactions between the variables. In principle the effects of family or employment status, or of historical period, could vary between countries. However more complex regression models involving such interaction terms (not presented here: though see Gershuny and Sullivan (forthcoming) for a discussion of trends in individual countries), in fact reveal just the same trends as those described above.

Discussion and Conclusions

The previous section has described changes in time use on a multi-national basis, while controlling for changes in the structural factors of employment and family status over the same period. To summarize the main trends, the time use evidence shows that there has if anything been a slight increase in women's leisure time over the period covered by the analyses (accounted for by decreases in both paid and domestic work time), while for men there has been only a slight decrease (accounted for by an increase in domestic rather than paid work time). With respect to the distribution of domestic work, the main changes are accounted for by a decrease in the time devoted to routine domestic work by women and a corresponding increase for men.

Shopping/travel and childcare take up increasing amounts of time for both sexes.

One of the main questions raised by this research is that there seems to be a gap between the time use evidence, which suggests relative stability in the balance between work and leisure time over the period covered by the analyses (the 1960s through to the 1990s), and people's professed experience of what is happening to their time. This occurs in combination with a burgeoning literature in both academic and popular media addressing the 'time famine'. It appears that some influential and intuitively convincing arguments about our time and what is happening to it are based on something other than what time use data are telling us. Why is there this discrepancy? Why are most people convinced that they are 'running out of time'? Why is there a popular feeling that our children are receiving less and less of our time? Are these simply 'moral panics' with no substance?

Several hypotheses might be advanced to explain the discrepancy (for an earlier list of possible explanations see Gershuny 1992). Firstly, it might be suggested that different sub-groups of the population have different experiences, which are not reflected in overall trends. The above analyses, for example, although they take account of changes in employment status, do not control for social class or occupational effects. One possible argument is that, although accounts of the time famine tend to assert that it is an across-the-board phenomenon, its main manifestation is in fact a condition associated with relatively specific groups; for example, professional dual-earner couples with dependent children, such as (many of) those that Hochschild writes about (Hochschild 1996). Her claim that only less busy people bother to respond to time diaries, thus biasing the estimates of work time derived from such instruments downwards, is certainly not borne out by methodological analyses of non-response; if anything, the opposite appears to be the case (Robinson 1997). Consequently, we may be witnessing among the proponents of the time famine a bias reflecting the social status of those groups who are studied (or those who write about them). This interpretation is further strengthened by the work of Jacobs and Gerson, who address Schor's and Hochschild's findings directly. They argue that the squeeze on time is less general and more varied than such research implies, and that there is in fact in the USA a growing bifurcation of working time among different population groups. For some groups, in particular among dual-earner couples and single parents, time is much more pressured, and this perception is heightened by on-going conflicts between work and private life (Jacobs and Gerson 1998).

A second, and related, explanation for the gap between peoples' perceptions and the time use evidence relates to the trajectory of individual life-courses. As we become

older our commitments tend to increase (our paid work time, our family responsibilities etc.) so that when we think about our own lack of time, we are actually making a comparison with earlier stages of our own lives, while the true comparison would be with comparable stages of the life-course of older generations. This explanation is of course compatible with the first, in that individuals in the groups studied, and those who write about them, also experience the same phenomenon.

Both the above hypotheses relate to changes that would be identifiable from conventional macro-level analyses of time use diary data of the type presented here: sub-groups can be analysed separately to identify differentials (as in, for example, Jacobs and Gerson 1998); and life-course changes could be identified either through the cross-sectional examination of time-use in different stages of the life course, or, preferably through longitudinal data on the same individuals over time (if and when such data exists).

However, a possible third source of an increased perception of pressure may arise from changes in the *patterns* or *nature* of time use, which are not recorded in the overall trends shown in the figures above. This hypothesis asks whether something is happening to the nature of our time which is not reflected in most analyses of time-use, and suggests that we should be considering how we think about time, not least in respect of the meaning of different activities. An example of changes in patterns of time use would be to find an increase over time in the number of activities engaged in simultaneously (see Sullivan 1997), which would have the effect of producing a feeling of greater time pressure, and would not be reflected in the overall trends shown here which are based on analysis of the main activity only. It has been shown

(Sullivan op. cit.) that the bulk of multiple activities for women include domestic tasks, and that childcare activities rank highly among these. Since this latter activity is one which has increased in terms of time, there may be some indirect evidence for thinking of this as a possible contributing factor.

Another change in the nature of time use may relate to an increase in the segmentation and organization of time; which we might express in Hochschild's terms as increasing 'Taylorization' (although she describes this as a response within the family to the growing pressure of work hours: Hochschild 1996). Although the analyses presented here are not based upon information on the *sequencing* of time-use, we might expect to see this sort of pressure manifested in time use diaries in terms of shorter durations of activities, especially perhaps of leisure activities - a process that Linder has referred to as an increase in 'successive consumption'. This would have the effect of making the time spent in particular activities seem more fragmented, and consequently more pressured. For instance, Gershuny and Jones (1987) find evidence that in the UK weekly rates of participation in particular categories of leisure activity have increased, while the total time per week spent in them has decreased - suggesting that people enjoy more leisure activities, but for shorter durations of time (see also Sullivan 1997 for a description of the fragmentation of women's time). Again, these hypotheses are compatible with the first and second identified above; population sub-groups may vary in respect of both multiple activities and fragmentation of time, and these effects may increase over the lifecourse (particularly, as the evidence shows, when there are children in the household).

Finally, the nature of the broad categories of activities addressed here, and the feelings associated with them, may be changing over time. For example, it has also been argued that leisure activities, as well as becoming more fragmented, are at the same time becoming more intensive, involving higher amounts of effort and expenditure (see Linder 1970). If the overall increase in leisure time for women⁵ in our original reference group (full-time employed with older children in the household) is broken down into 'indoor leisure' (generally involving more passive activities such as watching TV, reading and chatting) and 'outdoor leisure' (involving activities such as eating out, cinema, sports etc.) then the more pronounced increase has occurred in the latter category. It could therefore be that, even though leisure time as a category has increased slightly, the time that is spent in it has come to feel more intensive in character, and consequently more pressured.

According to these latter hypotheses, the lack of accord between the time use evidence as presented here (and elsewhere) and the sense and documentation of an increasingly harried experience of the pressure of time may arise, at least in part, from changes in the *nature* of the time we experience. In order to investigate these kinds of changes, it would be necessary to develop analyses which move beyond the more conventional macro-level approach to look in more detail at other facets of our time, such as its sequencing, its fragmentation and the feelings associated with specific activities.

Some possibilities for these kinds of analysis are illustrated in Gershuny and Sullivan 1998. It seems, though, that both analysts of macro-level changes in time use and the proponents of the 'time famine' who uncritically assume that we all have increasingly less leisure should be aware that analysis of the use of time requires a focus on the patterns, nature and meanings of our changing time.

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¹ It has been shown from methodological research on the archive that the data collection methodology in fact makes little difference to the broad picture of changes in time use that emerges (Gershuny 1995).

² Refer to Gershuny (forthcoming) for further details about the multinational data archive; more information can also be found on the web site: www.iser.essex.ac.uk/mtus

³ Apologies are due here to Young and Willmott for the misuse of their title in this way, since they made a strong contribution within the same text to the thesis of the 'dual burden' (Young and Willmott 1973).

⁴ Clothes care refers to the washing and ironing of clothes.

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Table I: Time-use diary survey dates and numbers of cases

a) Surveys

	1961-71	1972-81	1982-
Canada	1971	1981	1986; 1992
Denmark	1964		1987
Finland		1979	1987
Netherlands		1975; 1980	1985
UK	1961	1975	1985; 1995
USA	1965	1975	1985

b) Numbers of Cases

Unweighted Cases

Weighted Cases

	1961-71	1972-81	1982-	Total	1961-71	1972-81	1982-	Total
Canada	1828	1845	8138	11811	667	667	667	2000
Denmark	2365		2389	4754	1000		1000	2000
Finland		8309	10277	18586		1000	1000	2000
Netherlands		3121	2348	5469		1000	1000	2000
UK	1702	1901	1996	5599	667	667	667	2000
USA	1790	1753	2268	5811	667	667	667	2000
Total	7685	16929	27416	52030	3000	4000	5000	12000

**Table II: Minutes per day in four broad time-use categories:
OLS regression coefficients for women and men**

WOMEN	Paid	Unpaid	Leisure	Personal	Total
Aged<40, no kids	45 **	-64 **	3	16 **	0
Kids 0-5	-21 **	104 **	-73 **	-10 *	0
Kids 6-15	2	42 **	-35 **	-8 *	0
Older no kids (ref)					
Full time empl.	289 **	-140 **	-127	-22 **	0
Part-time empl.	151 **	-72 **	-73 **	-6	0
Non/unemployed (ref)					
Canada	24 **	-5	-20 *	0	0
Denmark	17 *	-58 **	76 **	-34 **	0
Netherlands	-20 *	5	11	4	0
UK	9	-3	-24 **	19 **	0
USA	21 *	29 **	-62 **	11 *	0
Finland (ref)					
1961-1971 (ref)					
1972-1981	13 *	-37 **	14 *	10 *	0
1982-	11	-34 **	15 *	7 *	0
(Constant)	15	361 **	508 **	556 **	1440
Adj R Square	.41	.35	.17	.05	
MEN	Paid	Unpaid	Leisure	Personal	Total
Aged<40, no kids	28 **	-32 **	-1	5	0
Kids 0-5	25 **	24 **	-46 **	-2	0
Kids 6-15	17 *	5	-21 **	-1	0
Older no kids (ref)					
Full time empl.	282 **	-62 **	-169 **	-52 **	0
Part-time empl.	129 *	-33 **	-88 **	-8	0
Non/unemployed (ref)					
Canada	14	12 *	-15	-11 *	0
Denmark	35 **	-55 **	57 **	-37 **	0
Netherlands	3	-15 **	13	-1	0
UK	24 *	-18 **	-33 **	26 **	0
USA	57 **	11 *	-67 **	-1	0
Finland (ref)					
1961-1971 (ref)					
1972-1981	-21 *	20 **	-1	3	0
1982-	-24 **	42 **	-15 *	-3	0
(Constant)	101	154 **	608 **	577 **	1440
Adj R Square	.17	.11	.14	.06	

** significant at .005 * significant at .05

Table III: Minutes per day in four unpaid work time-use categories: OLS regression coefficients for women and men

WOMEN	Core domestic	Childcare	Shopping etc	Odd jobs	Total
Aged<40, no kids	-56 **	2	-1	-8 **	-64
Kids 0-5	15 **	94 **	3	-9 **	104
Kids 6-15	21 **	21 **	5 *	-5 *	42
Older no kids (ref)					
Full time empl.	-101 **	-16 **	-15 **	-8 **	-140
Part-time empl.	-50 **	-12 **	-6 *	-4	-72
Un/non-employed (ref)					
Canada	-31 **	15 **	15 **	-5 *	-5
Denmark	-3	-25 **	-19 **	-11 **	-58
Netherlands	-9	3	7 *	4	5
UK	-1	-5	3	-0	-3
USA	-10*	10 **	24 **	6 *	29
Finland (ref)					
1961-1971 (ref)					
1972-1981	-46 **	2	3	4 *	-37
1982-	-61 **	11 **	6 *	10 **	-34
(Constant)	277 **	10 **	47	27	361
Adj R Square	.29	.35	.06	.03	
MEN	Core domestic	Childcare	Shopping etc	Odd jobs	Total
Aged<40, no kids	-13 **	-1	-2	-16 **	-32
Kids 0-5	-4 *	31 **	2	-5	24
Kids 6-15	-6 **	7 **	2	2	5
Older no kids (ref)					
Full time empl.	-28 **	-4 **	-17 **	-13 **	-62
Part-time empl.	-16 **	-4	-6	-7	-33
Un/non-employed (ref)					
Canada	4	6 **	13 **	-11 **	12
Denmark	-3	-4 *	-20 **	-29 **	-55
Netherlands	-5	4 **	-6 *	-8 *	-15
UK	-6 *	-1	-13 **	2	-18
USA	3	3 *	16 **	-10 **	11
Finland (ref)					
1961-1971 (ref)					
1972-1981	8 **	4 **	2	6 *	20
1982-	18 **	7 **	4 *	14 **	42
(Constant)	52 **	-0	47 **	55 **	154
Adj R Square	.06	.16	.06	.04	