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Identity, Times and Work

Ann Westenholz

ABSTRACT. The aim of this article is to analyse the construction of time as perceived by a group of IT workers. It is argued that two stories about working time have been socially constructed during the 19th and 20th centuries, not as an epochal phenomenon but as a multi-times phenomenon: a clock time story and a task-time story. A quantitative method is used in analysing the IT workers, which breaks with the traditional conception within research that a social constructivist approach requires qualitative data and methods. The analysis reveals that these IT workers do not represent an homogeneous group. Rather, four distinct groups are identifiable: Blurred Timers, Invaded Clock Timers, Clock Timers, and Task Timers – with Blurred Timers being the largest group and Task Timers the smallest. Employment status and union membership have a direct and significant impact on these time identities whereas gender, age, educational level, and challenge of the work do not have any direct or significant correlation with these time identities. Finally, the time identities are put into perspective and compared to recent research on gender and industrial relations. **KEY WORDS** • clock time stories • IT workers • quantitative methods • social construction • task-time stories • time identities

Introduction

In recent years a series of empirical studies of working hours has focused on time as an objective, external phenomenon to which workers, employers, the state, and the family react according to their specific perspectives. This research raises a range of important questions, such as, who or what is in control of

working hours? Do the length and flexibility of working hours create conflicts between the interests of workers and employers? What are the social driving forces creating specific needs for the span of working hours and flexibility.¹

In this study the analytical point of departure for understanding time differs from the above perspective, in that I see 'time' or 'times' as social constructions, in keeping with such scholars as Thompson (1967), Roediger and Foner (1989), Glennie and Thrift (1996), Blyton et al. (1998), Zuccheromaglio and Talamo (2000), Adler and Adler (2001), Yakura (2001), and finally Whipp et al. (2002). My point of departure is that working hours are negotiated in society – not only the amount of time or the flexibility of time, but the fundamental meaning of time in work practice. Industrial disputes about time must be understood as institutional disputes that take place within socially constructed understandings of time – understandings that are continuously subject to negotiations.

I argue that two grant stories about time have been advocated simultaneously during the 19th and 20th centuries. One of these stories is about the workers' desire to minimize and control their working hours: *the clock time story*. The other story is about workers wanting to recapture their working hours with the purpose of doing meaningful tasks: *the task-time story*. These stories position the individual 'in practice', in that they are tied to certain 'subject positions', even as the stories call into existence the individuals as subjects acting in certain ways. I call these subject positions the identities of the individuals (Westenholz, 2004b; see also Hall, 1996). As in this article I focus on the boundaries that different time stories establish between individuals and their surroundings, the focus is on *time identities*. These time identities are socially constructed phenomena that simultaneously help people feel secure and enable them to act. Time identities are not, however, static. In practice they are socially negotiated, and in the process the delineation between the individual and its environment changes (Westenholz, 2004b).

I analyse a group of IT workers' understanding of time. Empirical analyses founded in the social constructivist paradigm tend to apply qualitative methods that are suitable for investigating processes and problems of discipline for illuminating negotiations of meaning, but this is not the perspective of this study. Instead I apply survey data and quantitative methods such as the processing of statistical data. I consider 'time' to be an endogenous variable, the emergence of which I try to understand on the basis of certain exogenous variables. I do not analyse the social construction process itself, but my approach will enable me to point to certain variables that can be assumed to describe specific situations of social constructions. My approach to the quantitative methods is inductive rather than deductive. I am searching for correlations rather than testing particular hypotheses. (For the mixing of quantitative and qualitative research designs, see Creswell (1994) and Bryman (2001).)

My contribution to the understandings of time as a socially constructed

phenomenon is threefold. First, I argue that two stories about working time were simultaneously socially constructed in the 19th and 20th centuries. Second, based on empirical data on a group of IT workers I analyse how they construct meaning in relation to working time. Third, by applying a quantitative method, I break with the traditional belief that a social constructivist approach demands qualitative data and methods. The quantitative method enables me to discuss the correlation between specific situations and diverse understandings of time.

Single Time and Multi-times

Time as an epochal phenomenon

This section represents a review of various arguments for the social construction of time being an epochal phenomenon and for a particular understanding of time being developed in a specific historical epoch. The argument has thus been that *task time* was dominant in the period before the rise of industrialization and capitalism. Later, during the era of industrialization and capitalism, *clock time* replaced task time. And in the age of post-industrialism and capitalism, clock time is changing into *network time*. In the following paragraphs I briefly elaborate on the understanding of time as an epochal phenomenon and subsequently criticize this perception, arguing that several times are often at play simultaneously.

In a historical study of American labour and the working day, Roediger and Foner (1989) describe how the understanding of time changed along with industrialization and capitalism, thereby transforming peasant society. In peasant society the seasons of nature determined work, and the work unit was composed of the tasks performed – the number of fields ploughed or the number of rows planted – in short, the *task-time period*. With the growing employment of workers, including agricultural workers, employers became increasingly interested in the amount of work that could be performed within a certain period. In the beginning objectives were impressionistic but with the emergence of capitalism and the market, employers developed a clearer understanding of the importance of the *clock time* that workers spent on routinized tasks. Over the years the labour movement and the workers adopted the employers' definition of 'the worker' and hence the importance of clock time for worker identity, and workers learned to struggle on the premises constructed by the employers. Thus the struggle over 'working hours' became institutionalized. The construction of clock time as a decisive dimension of work introduced the distinction between work time ('owned' by the employer) and leisure time (the worker's 'own' time), and the struggle for less work also became the struggle for greater leisure time. Working hours came to represent the space in which often meaningless

and routinized activities were performed, while leisure time represented the space for unfolding consumption and meaningful activities (see also Thompson, 1967).

In relation to this development, Supiot (2001) says that even two decades ago it was possible to speak of a kind of homogenized time which – with variations and exceptions – formed ‘normal working hours’ as defined by labour laws and by agreements. ‘Normal working hours’ were defined as the number of daily hours one would work (between 8 am and 5 pm); a standard of 40 hours a week distributed over five days from Monday to Friday, with the weekend off; a standard working year of a specific number of working hours, including standard holidays such as Christmas, Easter, and summer vacation; a standard working life during which one would undergo training in the early years, work for a number of years, and subsequently retire having reached the age of 60–5.

Over the past few decades many researchers have analysed the increase in flexible work organization and flexible working hours. These analyses describe how employers express an increasing need for the flexible organizing of working hours in such forms as the part-time, compressed working week and time banks; how workers express a growing need for flexible working hours as family structures change and women enter the job market; and how governments express an increasing need for flexible working hours arrangements for regulating the size of the workforce to resolve unemployment and other problems related to the development of the welfare state. It is argued that these developments have created a pressure to understand exactly what has so far been perceived as ‘normal working hours’. The boundary between working hours and leisure time has become blurred, in that leisure time has invaded working hours (through, for example, more holidays, maternity leave, employer-paid training courses), and that working hours have invaded leisure time (e.g. on-call services, intermitted part-time work) (Supiot 2001: 79–84). Some writers argue that this development is not caused by technology but by social forces. According to Perlow’s (2001) study of three software companies in China, India and Hungary, individuals – all doing the same kind of work – are driven to very different hours of work by very different work environments. According to this author, the most important factor in determining workplace schedules is management.

Hassan (2003) has further studied this development by focusing on the temporal dimension of knowledge production. He argues that with the dissemination of clock time during the industrial revolution, the production of knowledge was shaped by the temporality of the clock. In the new knowledge epoch, he argues, a new temporality of *network time* has emerged through which knowledge production is refracted. He describes network time as digitally compressed clock time which is ‘beginning to displace, neutralize, sublimate and otherwise upset other temporal relationships in our work, home and leisure environments’ (p. 235). Interconnectedness, generalized acceleration and

asynchronous networks are coupled with network time – a time in which human beings rapidly become accustomed to living in a constant present. Lee and Liebenau (2002) argue in a similar vein that a rigid time discipline is appropriate for managing workers who are performing conventional monochronic manufacturing tasks – that is, performing one task at a time. But a different ‘virtual-time discipline’ emerges when tasks can be described as polychronic, that is, when several tasks are being performed simultaneously. The conventional time discipline is based on clock time, whereas the understanding of time discipline within virtual work teams involving different professions, organizations, and nations requires a social concept of time.

From ‘one time’ at a time to ‘multi-times’ at a time

Thompson (1967), Roediger and Foner (1989), Perlow (2001), Supiot (2001), Lee and Liebenau (2002) and Hassan (2003), have all contributed to an illustration of ‘time’ as an endogenous phenomenon. However, the analyses are based on the assumption that only one time predominates in a given historical era – a perspective that is open to criticism. There is a risk in characterizing a particular historical epoch one-dimensionally. First, flexible network-based work organizations are not phenomena exclusive to modern-day industrialization and capitalism, but are forms of organization that existed in early years of industrialization and capitalism (Hassard, 1996: 584; Jensen and Westenholz, 2004).

Second, Glennie and Thrift (1996) argue that historical analyses demonstrate that several ‘times’ have been at play both before and after the emergence of industrialization and capitalism. They are critical of Thompson’s study of the emergence of clock time during industrialization and point out that Thompson’s findings could have occurred because he was focused solely on the sphere of industry and work and thus ignored other important earlier sources of time awareness, time competence and time discipline, such as pre-modern trade and marketing, the Church, and recreation and leisure.

Third, a diversity of time perspectives is shown in empirical studies of recent work practice. In his ethnographic study of hospital life, Zerubavel (1979) demonstrates the differing time structures between doctors and nurses. Doctors are ever-available and their flexible schedules are usually marked by the actual completion of their daily tasks in the hospital, rather than dictated by the clock. In contrast, nurses stop working when the clock marks the end of their shift. Kunda (1992) demonstrates in his study of an American high-tech organization, how most professionals do not find time and place as being restraining to their jobs. Tasks are seen as impure and crazy and as seductive and repulsive, whereas non-work is referred to as pure and sane, something to be protected: ‘maintaining a time boundary between the two is considered important and difficult

and is thought to require discipline and effort: one has to combat both the company's demands and one's own impulses, not easily distinguishable, to allocate more time to work and to the organizational self that is formed in its context' (p. 167). Kunda shows how time is continuously subject to negotiation but also that professionals distinguish between work and leisure, though the distinction is blurred.

Ylijoki and Mäntylä (2003) explore the diversity of time perspectives in academic work. They discern four core time perspectives according to which academics experience their work: scheduled time (accelerating pace of work); timeless time (transcending time through immersion in work); contracted time (short-term employment); and personal time (one's temporality and the role of work in it), and they discuss the dilemmas and tensions between them. Thompson and Bunderson (2001) further contribute to this argument by exploring how time might be studied as a 'container of meaning'. They develop a model relating meanings derived from work time and non-work time to the experience of work–non-work conflicts and argue that these conflicts are shaped not only by time's quantitative aspect but also by the extent to which work time and non-work time is identity affirming versus identity discrepant.

The above reasoning forms the basis of this study. I argue that, when focusing on industry and work life, it is possible to identify several times that have been at play simultaneously. Based on my own studies of job market developments in Denmark and the other Scandinavian countries in the 19th and 20th centuries (Westenholz, 2003), I argue that along with the story about one's clock time, has evolved a story about the importance of the content of tasks and the way in which tasks are produced. The concrete struggle between employers and employees over the control of tasks dates back to the 19th century, was intensified after the Second World War, and institutionalized through various forms of co-determination and co-management, particularly in Europe. In relation to the above discussion, I argue that the workers' struggle over tasks has been about *recapturing* working hours from employees, not to reduce or control working hours but to *regain (co-)ownership* of working hours.

A closer look at the two institutionalized struggles over 'working hours' and 'tasks', reveals two time stories central to the social construction of the identity of workers, identifiable throughout the 19th and 20th centuries and setting the agenda for industrial disputes over working clock time and working task time. These institutional disputes can be seen as being rooted in two institutional logics (Friedland and Alford, 1991) that describe symbolic and material time practices in the job market and as setting the framework for various identities and games related to work. If the game involves working around clock time, workers are constructed as being 'real human beings' outside of working hours, and it is important for them to be in control of the length and flexibility of working hours. If the game involves task time, workers are constructed as being 'real

human beings' when their tasks are performed in meaningful ways, and the most tedious and meaningless tasks are reduced to the absolute minimum.

That the game involves 'tasks' implies not that clock time stops but that it is not assigned social significance as the guiding principle of practice. Put more simply, in the game over working hours, time is bought, sold, and consumed, whereas in the game over tasks, time becomes something we live. In practice we may very well see both games played simultaneously, requiring negotiations among the players about which set of rules should prevail. The individual player may also be enrolled in both games at the same time and subsequently face individual dilemmas.

Because time is continuously negotiated, it can be analysed as a network phenomenon, not only in our 'flexible network age' but also in earlier times. The task of 'time' has always been and still is to coordinate activities among diverse actors working within the same practice. I have pointed to the contradictions that may occur when actors with the same practice draw on both a clock time and a task time. Ruptures may also crop up when actors within the same practice draw on different variants of clock time and task time. For instance, different variants of clock time may be at play when a common work practice includes individuals living on very different latitudes such that when it is day for one of them, it is night for the other one. Different variations of task time may be at play when individuals with different understandings of the nature of the task collaborate.

In the following I analyse what some IT workers say about their work-time practice and subsequently question whether or not specific situations exist that strengthen one practice rather than another.

Method

A mixed research design

There is a tendency to combine social constructivist ontology with qualitative studies. However, in keeping with Bryman (2001) and Creswell (1994), I argue for the fertility of combining elements of a qualitative and a quantitative approach (see also Westenholtz, 2004a). I combine a social constructivist understanding of time and identity with a quantitative survey analysis in which I search inductively for a correlation between time identities as the 'dependent' variable and such factors as gender, age, employment status, education, and characteristics of work and union membership as the 'independent/intermediate' variables. I am not picturing the 'independent' variable as determining the 'dependent' variable in an external cause-effect relationship, but the analysis can tell something about the situations in which specific understandings of time are constructed, to the extent that we can find significant correlation. This

article does not address the processes of such constructions, for such an approach would require quite different methods. The 'independent' variables are not deducted from specific theories and do not form part of a deductive analysis to test specific hypotheses. They are selected because they seem to be important, and in this examination they are solely part of an inductive analysis.

While working on the article I was faced with the argument of whether applying a quantitative survey analysis would imply that the perception of time elucidated in the study is *my* perception and not that of the respondents. The argument was that I am not discussing or negotiating the relevance of the questions and the concepts with the respondents. Even though I agree that the process of collecting and analysing data involved no negotiations, I had, prior to formulating the questions, spent much time in the IT field over several years, conducting ethnographic and qualitative studies of IT workers (Metz and Westenholz, 2003; Westenholz, 2004b). In this perspective the questions were formulated based on what I thought would be sensible material to ask the respondents. Furthermore, even though the respondents and I had not negotiated the relevance of the time questions, the respondents had the possibility of refraining from answering questions that they found not to make sense. However, the response rate to the time questions was 99 per cent (see Table 1). Therefore, I shall argue that the findings have not been constructed by me solely but also by the respondents. But naturally I am the co-constructor of the findings in that I asked specific questions and thus constructed focal points. Furthermore, I have applied specific categorizations of time identities and thus constructed reifications. I do not find this to be problematic inasmuch as what I have done is transparent to the reader. The same is the case, though in different ways, when applying qualitative methods: social science research is not neutral and the researcher not innocent irrespective of whether the method applied is qualitative or quantitative. Another argument is that the way in which I have collected and analysed the data is far more transparent to the reader than the opacity often characterizing qualitative analysis. This is not an argument against applying qualitative analysis, which I often use myself, but rather stressing that from a social constructivist perspective the two approaches have both advantages and disadvantages.

Data collection and population

Data were collected within the field of IT in Denmark in 2002 using an electronic questionnaire with 40 major closed questions relating to employment and working conditions.² Because there is no database that could provide us with the number of IT workers in Denmark or their location, the questionnaire was placed on the Internet, and through a number of professional groups, interest groups, companies, and networks, I was able to contact the IT workers.

In total, 339 IT workers responded to the questionnaire. It should be noted that this sample, being self-selected, may not be representative of the population of IT workers in Denmark, much less of IT workers in general. Of the total number of respondents, a little less than two-thirds were employed on a permanent basis; a little less than one-third were temporarily affiliated to a company; and less than one-tenth were both permanent employees and temporarily company-affiliated workers (sometimes permanent employees and sometimes temporary company-affiliated workers). Approximately three-quarters were men and one-quarter women. Respondents represented a wide range of ages: a little less than one-quarter were 30 years of age or younger and one-third were over 40. The remainder – a little less than half the population – were between 31 and 40 years of age. Only a small minority had less than three years of post-secondary education (short education), a little more than one-quarter had a middle-range training (three years), and a little less than two-thirds had higher education (five years or more).

Statistical program

Correlations among the variables have been analysed using DIGRAM (part of a larger statistical package, SCD). DIGRAM is first of all a program for the analysis of multi-dimensional contingency tables, and as such has been used to conduct a log-linear analysis (Kreiner, 2003).³ All background and intermediate variables are included from the beginning in the analysis of the output variable. Tests of conditional independence between a certain output variable, the intermediate variables, and the background variables have been conducted by a backward model search. To help exclude some of the variables, DIGRAM has calculated different types of statistics and flags the least significant edge/arrows between two variables to be removed. Following the suggestions by a stepwise search, a final model has been found and used for further analysis. For calculating the p value (critical level = $p \leq 0.05$), an χ^2 test statistic was applied for all variables; however, as the data consist primarily of ordinal variables in which monotonous relationships could be expected, partial γ coefficients have been examined for these variables as well (critical level = $\gamma > +/- 0.19$). Exact p values (critical level = $p \leq 0.05$) have been calculated and a repeated Monte Carlo test applied. Finally, for obtaining the results of categories across the multi-dimensional contingency tables, a stepwise analysis of category collapsibility has been used. The analysis performed by DIGRAM is an automatic stepwise procedure in which each step consists of: (a) a pairwise comparison of row categories; (b) a pairwise comparison of column categories; and (c) the creation of a new table in which the least significant row or column categories are collapsed if the Bonferroni corrected p value is larger than 0.01.

Analysis

The 'dependent' variable

The time identity of the IT workers – the 'dependent' variable – is in the study defined as a combination of their material and symbolic work-time practices.

As illustrated in Table 1, the IT workers differ significantly in their material work-time practices. Only a minority adheres to the Danish traditional norm of working 37 hours a week. Approximately 50 per cent work between 40 and 49 hours a week and almost 25 per cent work more than 50 hours a week (Item 1). Furthermore, 77 per cent are often or occasionally working over the weekend (Item 2), and 64 per cent say that they have highly or moderately fluctuating working hours over the year (Item 3). The correlation between the number of working hours and working over weekends is significant ($p = 0.001$ and $\gamma = -0.61$). The more hours the respondent works, the higher the likelihood is that he or she also works over the weekend. The correlation between fluctuations in working hours and weekend work is also significant ($p = 0.001$ and $\gamma = 0.27$): the greater the fluctuation in working hours, the more often the respondent works weekends. On the other hand, there is no correlation between the number of working hours and fluctuations in working hours over the year ($p = 0.052$ and $\gamma = 0.323$). The flexibility reflected in fluctuating working hours is not related to the quantity of working hours.

To better understand how work and time interweave, IT workers were asked to indicate the various times of day that they are available for work, outside of 'normal' working hours. Table 1 (Item 4) indicates that most of the IT workers – 69 per cent – are available in the evening. Evening availability was followed closely by weekends, mornings and when commuting to and from work, during which times more than 50 per cent of the respondents reported being available. Thirty-seven per cent reported being available during holidays and 24 per cent at night. Only 21 per cent of respondents reported not being available to the organization at any of these hours. In the following analysis, two groups of IT workers are compared: those who are and those who are not available to various degrees.⁴

Symbolic work-time practice is measured by a question asking the IT worker if it is meaningful to distinguish between leisure and work (see Table 1, Item 5). For 10 per cent of the IT workers, this is not a meaningful distinction; 40 per cent said that it is somewhat meaningful; and 50 per cent said that it was very meaningful.

The 'dependent' variable is constructed by combining the material work-time practice – measured in terms of the IT worker's availability – with the symbolic work-time practice. The institutional clock time is unequivocally at play if the IT workers find it meaningful to distinguish between leisure and work and they

TABLE 1
Dimensions in material and symbolic work-time practice

Material time dimension

1. How many hours a week are you occupied by work or other work-related activities? ($N = 337$)

	%
Less than 30 hours	5
30–9 hours	25
40–9 hours	47
50–9 hours	15
60 hours or more	8
Total	100

2. Are you spending weekends on work and other work-related activities? ($N = 337$)

	%
Often	31
Sometimes	46
Seldom or never	23
Total	100

3. Does the number of hours you spend on work and work-related activities fluctuate over the year? ($N = 338$)

	%
Significantly	22
Moderately	42
Little or not at all	37
Total	101

4. Are you available for your work via (mobile) telephone, email or such like at any of the hours mentioned below? ($N = 339$)

	%
Yes, in the evening	69
Yes, at weekends	62
Yes, in the morning	58
Yes, commuting to/from work	56
Yes, during holidays	37
Yes, during the night	24
Not available	21

Symbolic time dimension

5. Is it meaningful to you to distinguish between leisure time and work? ($N = 337$)

	%
Not meaningful	10
Somewhat meaningful	40
Very meaningful	50
Total	100

are not available for work in the morning, while commuting to and from work, in the evening, at weekends, during holidays and at night. I have labelled this type of IT worker the *Clock Timer*. The institutional task-time logic is unequivocally at play if distinguishing between leisure and work is not meaningful and if the IT worker is available to varying degrees in the hours mentioned above. I refer to this type of IT worker as the *Task Timer*. If both institutional logics are at play, distinguishing between leisure and work is only somewhat meaningful to the IT worker, in that he or she is available for work to a varying extent. This type of respondent is called the *Blurred Timer*.

Apart from these three time identities, there are others characterized by their inconsistency between symbolic and material time practice. For instance, the IT worker may find it highly meaningful to distinguish between leisure and work, but he or she is nevertheless available to work outside 'normal' working hours. This type of IT worker I have labelled the *Invaded Clock Timer*. In other situations, the IT worker finds it meaningful or somewhat meaningful to distinguish between leisure and work. Nevertheless he or she is not available for work outside 'normal' working hours. These categories of IT workers are referred to here as *Unused Task Timers* and *Unused Blurred Timers*, respectively.

Table 2 illustrates the number of IT workers in each category and reveals several noteworthy findings:

- Blurred Timers, which make up the largest group, must be assumed to draw on both institutional time logics and to mix them in practice;
- the Invaded Clock Timers group is more than twice as large as the 'pure' Clock Timers group. This difference may indicate that these IT workers are pressured to work during hours which they believe should be reserved for other types of activities;
- both 'pure' Clock Timers and 'pure' Task Timers represent only a small proportion of the IT workers in this sample, which suggests that it is not the norm to draw on one single institutional time logic;
- the presence of different time identities in the sample indicates that the single IT worker works together with other IT workers with different time identities and that they have to negotiate their time perspectives.

The subsequent analysis includes the four time identities: Clock Timers, Invaded Clock Timers, Blurred Timers and Task Timers as the 'dependent' variable. Given the small number of respondents in the Unused Task Timers and Unused Blurred Timers categories, they have not been included in this analysis.

TABLE 2
Combining material and symbolic work-time practice (N = 337)

	It is <i>not</i> meaningful to distinguish between leisure and work	It is <i>somewhat</i> meaningful to distinguish between leisure and work	It is <i>very</i> meaningful to distinguish between leisure and work
<i>Not available for work</i> in the morning, while commuting to and from work, in the evening, on weekends, during holidays, at night	Unused Task Timers 1	Unused Blurred Timers 14	Clock Timers 53
<i>Available for work to</i> <i>varying degrees</i> in the morning, while commuting to and from work, in the evening, on weekends, during vacations, at night	Task Timers 31	Blurred Timers 123	Invaded Clock Timers 115

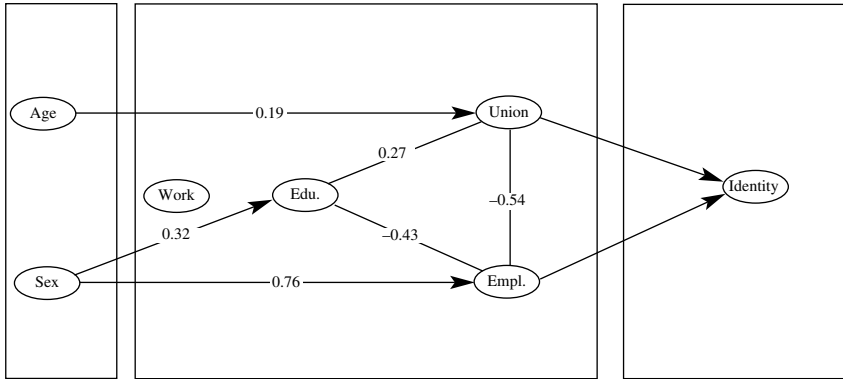
Relationships between ‘independent’ variables and the ‘dependent’ variable

Figure 1 shows the results of the DIGRAM analysis of the relationship between the ‘dependent’ variable and four ‘intermediate’ variables: employment status, education, work characteristic and union membership, and two ‘independent’ variables: gender and age.

Having completed the model search, the relationship between *employment status* and *union membership* stands as a direct and significant correlation compared to the time identities of IT workers. None of the other variables have any direct significant for the time identities.

The correlation between *time identities* and *employment status* is highly significant, with a χ^2 *p* value of 0.001. Table 3 illustrates that there are many more Clock Timers and Invaded Clock Timers who are permanently employed than temporarily employed and the opposite is true for the Task Timers: most of them are temporarily company affiliated. The Blurred Timers are split between employment situations, in that half are permanently employed and the rest are either temporarily company affiliated or temporarily company affiliated and permanently employed.

Combining the correlation between time identities and employment status



Notes:

Age: a < 31 years; b = 31–40 years; c > 40 years.

Sex: a = female; b = male

Work: I find my work challenging: a = totally agree; b = partly agree; c = partly disagree; d = totally disagree.

Education: a = short term (< 3 years); b = medium term (3 years); c = long term (5 years).

Union membership: a = yes; b = no.

Employment status: a = permanent employee; b = permanent employee as well as temporarily company-affiliated worker; and c = temporarily company-affiliated worker.

Identity: a = Clock Timer; b = Invaded Clock Timer; c = Blurred Timer; d = Task Timer

FIGURE 1
DIGRAM analysis

with union membership, the correlation remains highly significant among IT workers who are union members, whereas it disappears for those who are not union members.

The correlation between *union membership and time identity* is also highly significant with a χ^2 *p* value of 0.001. As illustrated in Table 4, most Clock Timers and Invaded-Clock Timers are members of a union, but that is not the case for the Task Timers who are equally split between union members and those who are not union members.

Combining the correlation between time identities and union membership with employment status shows that the correlation remains highly significant among IT workers who are permanently employed, but that it disappears among those who are temporarily company affiliated.

TABLE 3
Time identities and employment status

Time identities	Employment status			Total
	Permanently employed	Permanent employee as well as temporarily company-affiliated worker	Temporarily company-affiliated worker	
Clock Timers ($N = 52$)	79%	6%	15%	100%
Invaded Clock Timers ($N = 100$)	70%	2%	28%	100%
Blurred Timers ($N = 113$)	50%	11%	40%	101%
Task Timers ($N = 28$)	29%	7%	64%	100%

Note: The total number of Clock Timers, Invaded Clock Timers, Blurred Timers and Task Timers in the study is 322 (see Table 2). Since some of the respondents work under unique employment conditions, they could not be subsumed under the three employment categories of Table 3, which reduces the number of respondents in Table 3 to 293.

TABLE 4
Time identities and union membership

Time identities	Union membership		Total
	Union member	Not union member	
Clock Timers ($N = 53$)	79%	21%	100%
Invaded Clock Timers ($N = 113$)	76%	24%	100%
Blurred Timers ($N = 123$)	59%	41%	100%
Task Timers ($N = 31$)	52%	48%	100%

Note: The total number of Clock Timers, Invaded Clock Timers, Blurred Timers and Task Timers in the study is 322 (see Table 2). Two respondents did not indicate whether or not they were union members; this is why the total number of respondents in Table 4 is 320.

Discussion and Conclusion

In this article I argue that time is not an objective phenomenon, but a phenomenon of socially constructed stories. These stories tie the individual to certain subject positions in practice at the same time as the stories call into existence the individuals as subjects acting in certain ways (Hall, 1996; Westenholtz, 2004b). I call the subject positions that individuals are tied to 'identities' and, as the focus in this article is on the time dimension, the focus is on *time identities*.

Within a socially constructed paradigm, certain scholars have argued that the construction of time is understandable as an epochal phenomenon: before industrialization and the growth of capitalism, time was defined in relation to the tasks being performed. This *task time* was subject to pressure with the growth of industrialism and capitalism, at first by the employers who placed *clock time* on the agenda as a tool for controlling their workers. The workers and the labour movement absorbed clock time and hence the distinction between working hours and leisure time as one of the important elements in the construction of 'the worker'. This distinction has been important for the nature of industrial actions in the 20th century: where should the line between working hours and leisure time be drawn? With the changes in production processes – less standard tasks and more complex tasks – clock time has become incompatible with the needs of employers as well, and it is assumed that a new *network time* is emerging.

I am critical of conceptualizing the development of various 'times' in terms of historical periods, and in this article I have argued for two 'times' having been at play during the 19th and 20th centuries: a clock time *and* a task time. The task time entailed and continues to entail attempts to recapture the working hours lost, making them not only possessions of employers but also of workers. This process has been reflected in various forms of co-determination in the workplace and in the struggle over task time as a struggle over time which differs from that of minimizing or controlling working hours. These two times are rooted in two different institutional logics for understanding the importance of time. Simply put, we could say that in the institutional logic of clock time, time is bought, sold, and consumed; the worker is constructed as a 'real' human being outside of working hours; and it is important for workers to be in control of the length and flexibility of their working hours. In the institutional logic of task time, time becomes something we live, and the worker is constructed as a 'real' human being when tasks are performed in meaningful ways and the most tedious and meaningless tasks are reduced to the absolute minimum. I am arguing that in practice, we may see both games being played simultaneously and involving negotiations among the players about which of the rules is prevailing. Therefore, my argument is that 'time' has always been a network phenomenon, and that it is not a novel phenomenon that has emerged in the wake of globalization and IT development, even if the complexity and intensity of the networking have increased.

In the empirical analysis I build on these reflections upon the social construction of time. I have singled out a group of 339 IT workers as the object of the study. However, contrary to what one might expect from a study based on a social constructivist paradigm, I have not collected and analysed qualitative data, rather I have argued that a survey analysis could yield fruitful results. I see quantitative as well as qualitative data as texts to which the researcher relates.

The former texts are poorer in some respects than are the rich qualitative data, but the quantitative data are, on the other hand, more copious. I assume that quantitative data can then be utilized, which I have done among other things in a multivariable analysis.

Multi-time identities

As outlined in the following paragraphs, the analysis yields at least four notable findings: first, the IT workers in this study do not represent a homogeneous group with one unequivocal time identity. Rather, four distinct time identities emerge from this analysis: Clock Timers, Invaded Clock Timers, Blurred Timers and Task Timers. To the extent that these time identities collaborate, time becomes a subject of negotiation – *time becomes a task to be solved* – in order to coordinate IT work. Second, the empirical data contain only a few ‘pure’ Task Timers, pointing to the probability that the IT workers rarely draw on this single time logic. On the contrary, the relatively large proportion of Blurred Timers in this sample indicates that for these IT workers both institutional time logics are at play. Third, the Invaded Clock Timers are characterized by the inconsistency they exhibit between material and symbolic work practice. To varying degrees, they are available for work during periods not usually viewed as ‘normal’ working hours (early in the morning, while commuting to and from work, in the evening, at weekends, during holidays and at night), while simultaneously finding it highly meaningful to distinguish between working hours and leisure time. I assume that this inconsistency means either that they defend the clock time, but attempt to keep working hours from invading leisure time or that they will eventually emerge as Blurred Timers and thus escape the clear distinction between working hours and leisure time. Fourth, the analysis shows that gender, age, educational level, and the level of challenge in the IT workers’ job are not directly or significantly correlated with the four time identities. But employment status and union membership have direct and significant effects on one’s position of Clock Timer, Invaded Clock Timer, Blurred Timer or Task Timer. Most of the Clock Timers and Invaded Clock Timers in this study are in a situation of permanent employment combined with a union membership. The Task Timers are, on the other hand, most often temporarily company affiliated and independent of union membership. We find Blurred Timers in all combinations of employment status and union membership, but primarily among union members in permanent employment.

In the last section of the article, I shall first present my reflections on how to understand the lack of significant correlation between gender and time identities, and second what the significant effect of employment status and union membership on time identities might imply.

Time identities and gender

Greene (2003) argues that within industrial relations studies gender issues have been neglected and the gender perspectives should be much more central within these analyses. More specifically, this author calls for studies of data which include women and not just categories such as 'not men' or 'others'. It is important to include women in the analyses not only because women and men may be subject to different working conditions, but also because the genders may hold different perceptions of work. In relation to my study this means that the genders might have different time identities. Against Greene's call the result of my study may seem provoking in that gender has no significant correlation with time identities. How are we to understand the absent correlation? There are several potential answers. The first cluster of answers notices that for methodological reasons the results of the study should not be taken serious. As Greene (2003: 312) argues, researching women at work requires ethnographically informed methodologies, which can uncover hidden processes and practices of more informal networks within organizational settings. Furthermore, one could also argue that the number of respondents in the study is limited and not representative. Different questions might have revealed a difference in gender. I am not denying that applying different methods might have yielded different results. However, such arguments cannot justify failing to reflect upon what the result of this study may mean to gender research.

This leads to the second cluster of answers which attempts to take seriously the results and what they may imply. From a social-constructivist perspective I shall argue that gender is not a variable independent of a social construction, or rather, even though gender is 'objectively' omnipresent, the attribution of the significance of gender is a social phenomenon. In certain contexts the attribution is socially-constructed while this is not the case in other contexts. When the present study is not demonstrating a significant correlation between gender and time identity, the reason is that time identity is not attributed to gender within the social contexts in which IT workers are embedded. No expectations of men and women holding different perceptions of time have been constructed. Compared to Greene's call for gender analyses this does not imply that I am arguing for the irrelevance of gender analysis, but that a relevant gender research question could be: *how and when is gender socially invisible in relation to time identities?*

Time identities and industrial relations

How are we to understand that the vast majority of Clock Timers and Invaded Timers are in a situation in which they are both permanently employed and members of a union, that Task Timers are predominantly temporarily company

affiliated and Blurred Timers exist in all combinations of employment status and union membership? One way of answering this question is to see how the results comply with current research within industrial relations – a research field covering both employment status and union membership.

Industrial relations have been analysed from many different perspectives: sociology, economics, human resource management, history, psychology, law, politics and geography (Ackers and Wilkinson, 2003). In relation to this variety of approaches, the social constructivist perspective is a relatively novel approach to understanding industrial relations (see also Brotherton, 2003: 127). The consequence of the social constructivist perspective is first that time identities are not seen as essential or inherent (Metz and Westenholtz, 2003; Jensen and Westenholtz, 2004). Second, but equally important is it that the very phenomenon of ‘industrial relations’ is understood as a social construction.

Following the argument that ‘industrial relations’ is a socially constructed phenomenon, it is relevant to see Denmark as a social context in which employers and employees have a long and strong tradition for a unique interaction, which was institutionalized in the late 19th century. At that time, employers and employees signed the historical ‘September Agreement’ and institutionalized the two sides of industry attributing them identities. The agreement implied that employers have the right to manage and distribute work in the firms, and that workers have the right to join a union. By accepting the ‘September Agreement’ as the labour market constitution in Denmark, the two parties ascribed legitimacy to their identities and accepted a time distinction between working hours and leisure time. Even though the position of unions has been reduced in recent years, the job market institution in Denmark is still very strong compared to most other industrialized countries.⁵ Thus in Denmark the relation between the firm and the union is institutionalized and I assume this to contribute strongly to IT workers, who are *both* employed *and* members of unions, being constructed as Clock Timers or Invaded Clock Timers.

Breaking the combination of being employed in a firm and being a member of a union implies that you leave the traditional job market institution in Denmark, and that the social space in which time identities are constructed might be assumed to be different. The result of the study can be interpreted such as that the meaning of belonging to a union changes when you are not employed in a firm. The issue is no longer about the union representing employees in relation to employers, but about unions having changed their role and now contributing to higher qualifications among IT workers who are more or less self-employed in relation to firms (see also Benner, 2002). These IT workers have probably entered into a different social space – ‘self-employed’ – for which there is also a tradition in Denmark (Højrup, 1983), a social space in which little or no distinction is made between work and leisure time and within which task timing is the way of managing the job.

Finally, how are we to understand the existence of Blurred Timers in all combinations of employment status and union membership? One explanation could be that the two institutionalized social spaces – the social space for the two sides of industry and the social space for the self-employed – are presumably penetrable. This happens when IT workers create networks across the social spaces, such as in professional associations, and when some of the IT workers by way of career move in and out of the two social spaces. It is not preposterous to assume that these IT workers, whether or not they are permanently employed and union members, tend to mix often-conflicting perceptions of time and develop into Blurred Timers.

A conclusion of this study is then that multiple time identities are constructed in different social spaces of industrial relations and in social networks that cut across these spaces.

Notes

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1. See among others, Barber and Whitton (1995), Hamermesh (1995), Erler (1996), Fynes et al. (1996), Casey et al. (1997), Olmsted and Smith (1997), Gottlieb et al. (1998), Harvey (1999), Purcell et al. (1999), Gershuny (2000, 2001), Golden and Figart (2000), O'Reilly et al. (2000), Auer (2001), Clarkberg and Moen (2001), Golden (2001), Maume and Bellas (2001), Spiezia and Vivarelli (2001), Supiot (2001), Berg et al. (2002), and Tjzens (2003).
2. The questionnaire was jointly designed by PhD student and Research Assistant, David Metz, Assistant Professor Torben Elgaard Jensen and me.
3. Vibeke Tornhøj Christensen, a graduate student in the Department of Sociology, Copenhagen University, conducted the technical side of the statistical DIGRAM analyses.
4. Initially the IT workers' responses about their availability were divided into three categories (not available, available to some degree, and highly available), but the results did not differ significantly from those obtained when we conflated the last two categories. Thus, for reasons of simplicity, I have decided to operate with two categories: not available and available to varying degrees.
5. Thus 83 per cent of Danish workers are unionized, whereas the figure for Sweden is 81 per cent, and for Norway 57 per cent. In comparison, the unionization rate in Germany and the UK is 30 per cent and in France only 9 per cent, which is similar to the USA rate.

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ANN WESTENHOLZ is Professor of Management and Strategy at the Department of Organization and Industrial Sociology, Copenhagen Business School. Her interests are in workplace democracy in general and she has, in the past 20 years, been involved in research concerning semi-autonomous working groups, workers' representation on boards of directors, and worker-managed and worker-owned firms. Her current research interest is in relational identities within temporary and scattered work practices. ADDRESS: Department of Organization and Industrial Sociology, Copenhagen Business School, Solbjerg Plads 3, 2000 Fredriksberg, Denmark.
[email: aw.ioa@cbs.dk]