# TEMPORAL RHYTHMS AS OUTCOMES OF SOCIAL PRACTICES

# A Speculative Discussion

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In this article we argue that rush hours, hot spots and experiences of time squeeze are temporal manifestations of relations between practices. In describing these relations we explore the relevance of a range of metaphors, including those of organic, self-sustaining networks. In contrast to time-use studies, which suggest that social rhythms follow from interaction between individuals, we argue that temporal rhythms are usefully characterised as outcomes of processes in which practices figure as "living" rather than as stable entities. Although illustrated with reference to empirical studies of daily life in Finland, this is in essence a speculative paper designed to provoke debate about how webs of social practice constitute the temporalities of contemporary society.

Keywords: everyday life, practice theory, rhythm analysis, self-sustaining networks, time-use studies

The heartbeat of all known forms of society can be characterised by the rhythms of day and night, and by those of eating, breathing and sleeping (Foster & Kreitzman 2004; Koukkari & Sothern 2006). Just as the heartbeat is a sign of life in the human body, so the rhythms of living and consuming are vital signs of social life (Sorokin & Merton 1937; Zerubavel 1981; Hall 1983; McNeil 1995; Miller 2004). Just as the human heart rate varies with physical exercise so daily rhythms adjust to changes in wider society.

In this article we suggest that the origin and repetitiveness of such rhythms, whether of a heart or of everyday life, have more to do with the historical evolution of endogenous – bodily and daily – processes than with external rules or regulations. In short, we explore the proposition that forms of integration, sequence and synchronicity between so-

cial practices define, constitute and reproduce the rhythmic ordering of daily life. In taking these ideas forward we suggest that social theories of practice as developed by Foucault (1994[1966]), Schatzki (2002, 2009) and Warde (2005) can be used in understanding the temporal texture of everyday life, and how it changes. As such they provide a critical resource for rhythm analysis of the type that Lefebvre proposed (2004[1992]).\*

First some words on what we mean by social practice. In what follows we assume that daily practices like walking or cooking represent recognisable, relatively enduring entities that exist as sets of norms, conventions, ways of doing, know-how and necessary material arrays (Schatzki 2002; Foucault 1994[1966]). In other words, practices figure as something that actual and potential practitioners

can participate in or from which they can withdraw. Equally, they also exist only so long as practitioners keep them alive, and it is through recurrent performance that the contours of individual practices are formed and transformed.

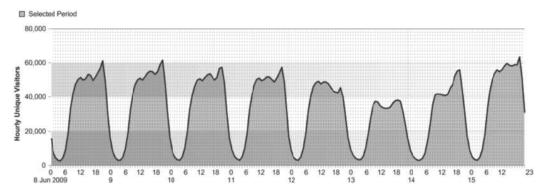
In the current discourse there seem to be two opposing views about the site and focus of social practices (Schatzki 2002: xii). Firstly, theories of arrangement (actor networks, apparatus, assemblage) espoused by, for example, Foucault, Latour and Callon suggest that arrangements of entities are among the principal compositional features of social life. In contrast, theories of practice and agency focus more on the conditions of actions and performances (e.g. Bourdieu). In linking these traditions, Schatzki seeks to analyse performances and networks both of practices and of relevant material elements (2002, 2009). In what follows, we also concentrate on networks of practice and on relations between practices distributed across time and space. In the nineteenth century Gabriel Tarde proposed a similarly comprehensive, web-like view of practices, a position also adopted by representatives of activity theory including Vygotsky and Engeström. Such a position differs from that which informs detailed ethnographic studies of situated practice (Suchman 1987; Lave & Wenger 1991; Orlikowski 2002) in that it focuses on processes beyond those of local enactment and reproduction. It also departs - even more obviously - from familiar accounts of the cognitive, technological, cultural or institutional drivers of behaviour in that it takes social practices to be the central unit of enquiry, consequently concentrating on how networked practices condition the sequential order and synchronicities of everyday life, and on how links between practices either stabilise or destabilise these constellations. In taking these links to be emergent, generative and creative, such an approach has certain affinities with the notion of "social choreography" (Klien 2007), a concept that positions efforts to steer and order social change as forms of creative and aesthetic intervention (Pantzar 1989; James 2007; Thrift 2008), rather than as deterministic exercises in social engineering. This makes sense, given the view that constellations of practice

(or, as Foucault would say, dispositifs, assemblages) in turn, influence, condition and enable the renewal of ideas, knowledge and material objects. In sum, and in brief, the central proposition is that social order, including social rhythms, and individuality result from practices, and that the choreography of everyday life and the source of changed behaviour lie, at least to some extent, in the development of interdependent practices (Borch 2005; Latour & Lepinay 2009; Schatzki 2009).

What do these statements imply for an understanding of temporal order, or for the capacity to analyse and characterise the rhythm and pace of social life? What happens if we try to weave theories of practice into the work of rhythm analysis as defined by Lefebvre (2004[1992])? This is a central question to which we return having first dipped into an assortment of empirical resources, metaphors and anecdotal examples, the conjunction of which promises to enrich discussion of the temporal ordering of social life.

# **Evidence of Societal Rhythm**

The fact that on weekdays most people are awake at 7 a.m., and asleep again by 11 p.m. (European Commission 2004), reminds us that societal rhythms consist of millions of fragments, moments and episodes of private, but at the same time collective and often interdependent practices. As Henri Lefebvre observes, such rhythms are simultaneously internal and social: "In one day in the modern world, everybody does more or less the same things at more or less the same times, but each person is really alone in doing it" (Lefebvre 2004[1992]: 75). Although centrally preoccupied with the allocation of minutes and hours, time-use studies do not usually enquire into the forms of mutual coordination involved, or into this relation between individual and collective patterns of time. Instead, empirical studies of time use tend to focus on the duration of practices (Szalai 1972; Gershuny 2000) rather than on the combinations and sequences of which everyday life is constituted (Ellegård 1999; Michelson 2005; Southerton 2003, 2006). Quantifying average amounts of time devoted to housework, childcare, leisure and paid



Ill. 1: Hourly visitors of a major chatline in Finland from Monday 8.6.2009 to Sunday 15.6.2009. Source: Microsoft 2009, Helsinki, unpublished.

employment provides an indication of the changing practice-time profile of society and of developments that relate, for instance, to women's role in the labour market or the outsourcing of child care. However, averages of this type do not reveal potentially important variations in how days are organised and scheduled, in the frequency of episodes, or in how they overlap through strategies like those of multitasking (Ellegård 1999; Ellegård & Vilhelmson 2004; Michelson 2005).

Other forms of data collection and analysis provide more direct evidence of rhythmic order. For example, Ill. 1 depicts the weekly rhythm of participation in a major chatline in Finland. In this data set the quietest, least "peaky" day was Saturday, 13 June 2009, with Saturday evening being exceptionally "quiet".

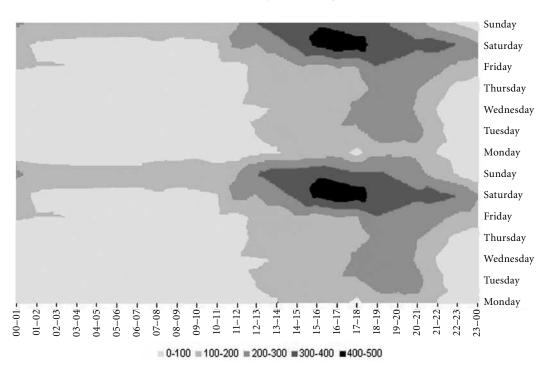
Similarly, a study conducted in 2008 by Taloustutkimus, a Finnish market-research company, shows that a great number of people spend time with friends on Saturday evenings (the darkest section). Ill. 2, a "heat camera" image based on this research, provides a graphic representation of time-use data collected from 4,000 people in 15 minute episodes across a two-week period.

Other market studies underline the "special" character of Saturday evenings in Finland. For example, there are far fewer visits to online travel agencies (Fritidsresor), online gambling sites (Veikkaus), and online banking services (Nordea Bank) on Saturday evenings than there are on Sundays. It is interesting

to note, in passing, that these insights suggest that despite the potential for using the Internet anytime and anywhere, such practices seem to be slotted into an already established weekly and diurnal rhythm (Maryanski & Turner 1992).

There is nothing new and nothing distinctly Finnish about the significance of Saturday nights. As Zerubavel (1981) described in his study of time in hospital life, shift workers valued a Saturday night off much more highly than, say, a Monday or a Thursday. Saturday nights permit social interaction precisely because people are not usually engaged in other competing practices - it is possible to organise social activities and synchronise meetings on this night because this is time implicitly reserved for such pursuits. This works in different ways, for example, Saturday evenings are "free" in part because they are not hours in which shops, schools and workplaces are open. Equally, bonds of family and friendship colonise and are in a sense reproduced through a sort of network-like mycelium that flourishes in this temporal slot and that consequently constrains and orders what goes on within it.

Saturday evening appears to be distinct on a number of counts. To date, less is known about the patterning of other days of the week, or about how seasonal and annual patterns unfold. However, relevant sources of potentially revealing data are beginning to accumulate. More advanced information system (GPS, GIS, RFID) and an increase in digital, and even real-time data, will allow researchers to



Ill. 2: Spending time with friends (n=4,000). Source: Taloustutkimus 2008, unpublished.

interpret the rhythms of everyday life in new ways (Galloway 2004; Miller 2004). Today a large number of people are voluntarily offering data about their current movements and preferences, for example, on Facebook or Twitter. At the same time, business organisations are collecting new types of information under the guise of "customer relationship management" (CRM) or through "data mining" (Zwick & Knott 2009). The results of this "data explosion" have yet to be exploited on any scale or used to address the question of how individual rhythms combine to form the rhythm or pulse of a nation, how forms of deviance and irregularity take hold, and exactly how different periodicities (daily, weekly, annual) intersect. As represented here, the issue is not whether individual deviations can be explained by disturbances in the societal rhythm, or whether societal rhythms and their arrhythmias are consequences of the intertwining of individual rhythms. Rather, the challenge is to show how these patterns constitute each other.

In the next few paragraphs we identify different

metaphors, models and categories in terms of which such an exercise might be organised.

# Metaphors, Models and Categories

Dale Southerton (2006) uses Fine's (1996) five dimensions of social time to characterise the ways in which individuals organise and manage the intersection of practices in time and space. These dimensions include the concept of duration, which refers to the amount of time devoted to specific activities. Tempo characterises the extent of time-space compression and the intensification of activities and experiences. Sequence has to do with the order in which activities are conducted. Synchronisation describes the ways in which the trajectories of different individuals and activities mesh together. Finally, periodicity refers to the frequency and repetition of event and activities. As indicated above, this is a framework that is useful in making sense of how individuals organise and experience time. However, it does not show how collective rhythms arise.

In seeking to capture these emergent forms, Lefeb-

vre argues for an analysis of social-temporal patterning that takes account of melody, harmony and rhythm. In his words, "[a]ll of these three depend on an understanding of time – *melody* being a sequence of notes in temporal succession, *harmony* relaying on notes sounding at the same time, and *rhythm* being the placement of notes and their relative lengths" (Lefebvre 2004[1992]: xi). Lefebvre's reference to "life as a concert" introduces a vocabulary in terms of which one might develop explanations and analyses of the temporal and spatial clustering of social practice (cf. Meyer 2008).

This terminology comes close to that developed by chronobiologists who view the human body as a highly complex rhythm-based organ. According to Koukkari and Sothern, "[a]ll known variables of life, be they levels of potassium ion in a cell, stages of sleep, or the opening of flowers, have either directly or indirectly been found to display rhythms" (2006: 1). Koukkari and Sothern contend that the rhythmic nature of life influences the very existence of organisms, commencing before conception and extending beyond death. This is in keeping with a growing body of literature on biological (molecular) clocks, some of which suggests that natural rhythms are based on selfsustaining networks. For example, circadian periods of about (circa) a day (dies) are present even when organisms are isolated from environmental 24-hour cycles. The seemingly autonomous role of the biological clock is explained in terms of feedback effects, hence:

The central circadian clock is in itself a defined molecular entity, but instead of gears, springs, cogs, and balance beams that are engineered and arranged to make a mechanical clock function properly, the central circadian clock consists of positive and negative feedback loops where clock genes are turned on or off by the cycling proteins that they encode. The entire process is sequential, with built-in delays and molecular receptors, producing a *self-sustaining network* that has a circadian rhythm. (Koukkari & Sothern 2006: 173–174)

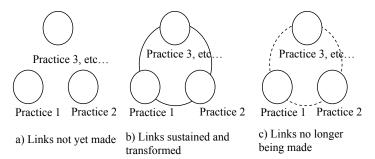
These authors go on to consider the possibility that, at the level of the individual, deviation from biologi-

cal rhythms signifies a pathological state, which can cause health problems if it continues for a long time. In support of this position they note that diabetes and obesity correlate with disturbances in the sleep rhythm (Koukkari & Sothern 2006). In extending these ideas to the social realm, Koukkari and Sothern suggest that behavioural rhythms like those of sleeping or grooming might also be viewed as self-sustaining networks.

Southerton attributes experiences of time pressure and rhythmic patterns to the ways in which people interact. Lefebvre writes in more general terms about emerging and cumulative rhythms. Meanwhile, Koukkari and Sothern imply that temporal orders are the result of specific forms of feedback. Can these various perspectives be adapted and bent to the task of showing how temporal rhythms are formed by networks of practices? Following Southerton and Fine, it might be possible to show how practices (viewed here as instances of performance) are sequenced and how moments of performance are linked to the performances and practices of others (hence to issues of synchronicity and harmony). Linking Lefebvre with Koukkari and Sothern it might be possible to identify feedback circuits through which rhythmic patterns are maintained and transformed. Methodologically, this approach requires us to consider two related questions: a) What kinds of links exist between practices? b) How do emerging rhythms and collective temporal orders feed back into and configure individual practices? As we shall see, further issues then arise about how to characterise the manner and intensity of interpractice relations.

#### **Links between Practices**

Reckwitz (2002) defines a practice as a "type" of behaving and understanding that appears at different locales and at different points of time and that is carried out by different bodies and minds. He also suggests that practices consist of interconnected elements, hence his conclusion that "[a] practice forms so to speak a 'block' whose existence necessarily depends on the existence and specific interconnectedness of these elements, and which cannot be reduced to any



Ill. 3: Making and breaking links between practices.

one of these single elements" (Reckwitz 2002: 250). Just as elements – such as materials, images, forms of competence and know-how – constitute the building blocks of individual practices, so individual practices arguably constitute the building blocks of systems or networks of practice. Ill. 3 shows this possibility.

As this simple illustration suggests, ongoing relations between practices (which have implications for temporal orders of all sorts) depend on the ways in which multiple practices co-constitute each other as illustrated in scenario b, this being one in which links are reproduced and transformed.

There are many possible forms of linkage. We comment briefly on a few simple cases in which practices are positively or negatively related to each other. In so doing we refer to ecological/biological metaphors (Pantzar 1989; Pantzar & Sundell-Nieminen 2003), starting with the suggestion that practices "cooperate" with each other.

#### Cooperative Relationships

In a cooperative relationship, practices feed off each other. They are positively correlated, and at least one practice benefits another. In biology, the relationship is typically based on mutual success. In *epiphytic cooperation* the existence of practice Y is based on the existence of practice X, but practice X is not related to the existence of practice Y. The "master practice" (X) is not suffering from the epiphyte.

How easy is it to find examples of cooperative relationships between practices? One example might be breakfast: an arrangement often consisting of several interdependent practices. Ethnographic research for a Finnish publisher reveals that for many people,

reading a morning paper and drinking coffee complement each other (Sanomat, unpublished, 2005). More than that, the positive relationship between reading a morning paper and drinking coffee seems to be conditioned by the existence of a suitable kitchen table. If the table is too small it is hard

to combine drinking coffee with reading the paper.

Another example might be phoning and driving. Unpublished statistics (2009) from the telecommunication company Elisa Communication show that telephone calling peaks at the time when people are travelling home from work. This might suggest that mobile phoning and car driving somehow "cooperate", but since both practices also "live separately" this could be an instance of "epiphytic cooperation" (meaning asymmetric cooperation). In other words, driving a car could increase the likelihood of using the phone, but not vice versa. From a different point of view, we might also consider phoning and car driving to be competing pursuits in that both demand the driver's attention - an interpretation shared by those regulators who have banned phoning in a car without the use of a hands free device in some countries.

As this case implies, certain activities are more readily combined with others. In this regard it is interesting to notice that time-use researchers refer to the potential for "contamination" as when housework entails multiple simultaneous activities (Michelson 2005), when child minding and watching television routinely co-exist (Jacobs & Gerson 2004: 30) or when cozy Friday evenings in Sweden consist of watching television alongside specific forms of eating and drinking (Brembeck 2009: 2).

As others have argued, key sites like living rooms and offices are home, or host, to specific forms of inter-practice collaboration (de Wit et al. 2002). More abstractly, concepts of lifestyle capture what Grant McCracken (1988) refers to as "Diderot unities", the idea here being that if one element of the person's life changes, that has consequences for

other aspects too. At this general level, the notion of inter-practice cooperation is useful in understanding what we might think of as "radical" innovation (Tushman & Anderson 1986) in the realm of everyday life. Emerging "dominant practices" when re-configuring the entire social-temporal landscape possibly create new selection environments that favour the emergence of new rhythmic patterns. The establishment of "prime time" television might be one such example in that this gives new structure to the coordination of many different activities over the course of an evening. In this as in other situations it is difficult to separate a discussion of cooperation from one of competition.

# Competitive Relationships

The more (intense) practice A is, the less (intense) is practice B. A parasitic relationship is a special case; a non-symmetric competitive relationship, where A's existence is based on the existence of B, which suffers in the relationship. Practice A cannot survive without the other (B), but practice B can.

The idea that practices compete for time makes sense up to a point, but as Wajcman (2008: 67), Shove (2009) and Schatzki (2009) observe, time is in a sense made by, through and in the course of practice. In what follows we set this observation aside in order to explore the proposition that practices compete across a zero-sum terrain of available time (for individual performances) (Pred 1981). The commonsense observation that time-hungry practices are especially demanding is supported by studies that report a negative correlation between time spent watching TV and many other activities like gardening, participating in sports etc. (e.g. Caroli et al. 2004).

On closer inspection, the colonisation of leisure time by television viewing arguably represents an intriguing combination of both dominance (competition) and flexibility (cooperation). If we look beyond the averages we find considerable individual variation in television viewing (Robinson & Godbey 1997). In addition, watching television is one of the first activities people say they would give up if they had to. As indicated above, watching television often takes place alongside activities like childcare,

socialising and eating (Michelson 2005). This suggests that rather than competing with these other practices, television's success has to do with the fact that it can fit in with them. This maybe explains why a large-scale nationally representative survey by Kaiser Foundation found that the amount of television viewing in the United States has been unaffected by the dramatic increase in the use of other media (Rideout, Foehr & Roberts 2010).

In thinking about such situations it is important to recognise that practices are not simply competing against each other, they also compete for relatively scarce resources, including those of time. Put another way, the detail of the competition depends on the specific qualities and demands of different practices. This leads to the slightly more subtle conclusion that competition (or cooperation) between practices relates to the scarcity (or abundance) of what Reckwitz identifies as the constituent elements of practices, for instance skills and material objects.

# Prey-Predator Relationships

This insight is also relevant in relation to a further variant of inter-practice inter-dependency, namely the prey-predator relationship. This scenario points to a more complicated picture of interdependence between practices. In biological terms, the prey-predator relationship is one in which the existence of practice B (predator) is positively related (cooperation) to the existence of practice A (prey), but the existence of practice A is negatively (competition) related to the existence of another practice (B). As the number of prey-practices increases, the predator population increases, and this leads to a decrease in the prey population.

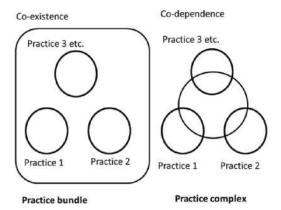
What is important in the prey-predator interaction between two practices is the fact that this sort of interdependence may lead to oscillation. One example might be the fashion system in which members of group A attempt to innovate while members of group B imitate. When a newly fashionable practice becomes "too popular" or too widely imitated, some new practice is required to enable or reproduce differentiation and distinction between these populations. The prey-predator relationship typically

generates rhythmic patterns, some of which might apply to the existence and circulation of "elements" as well as to practices themselves. For example, we might imagine situations in which the skills of doing practice A increase by doing B, but at the same time doing A erodes or damages the skills required for doing B. There is more that could be said here but for the time being it is enough to notice that in contrast to "simple" forms of cooperation or competition, the prey-predator relationship points to the possible existence of complicated hybrid dynamics characterised by (endogenous) rhythmic oscillation.

### Bundles and Complexes

Before coming to a conclusion we comment briefly on the strength and character of links between practices, whether these be forged through competition, collaboration or more complex patterns of interdependence. These are relevant in that sticky or fragile relationships are potentially important for the persistent or dynamic character of societal rhythms. In distinguishing between "bundles" of co-existence and stickier "complexes" of co-dependence we give a taste of what this kind of analysis might involve.

The difference between bundles and complexes of practice has to do with the intensity and character of the links involved. Practices that form a "bundle" are minimally interrelated, for example through being co-located in a kitchen, an office or some other spatial or temporal "container" — in these cases



Ill. 4: Co-existing and co-dependent practices.

practices have a separate existence, the only shared aspect being that of time and/or space. By contrast, practices that form a complex generate properties/qualities which are not attributable to any one component. The term "practice complex" consequently refers to practice constellations that are hard or impossible to separate because different practices are "functionally" (or mentally) integrated.

With these ideas in place it is possible to imagine scenarios in which the loose links of a bundle turn into forms of co-dependence that characterise a complex. Equally, the co-dependent components of a complex might, in time, lose their separate identities and fuse together to form a single practice. For example, a hundred years ago, driving a car required "multitasking" involving the careful and novel coordination of separate practices (steering, navigating, braking etc.). Today these elements have cohered such that driving is considered to be a practice in its own right. The fact that learner drivers acquire relevant forms of competence a bit at a time points to the possibility of disaggregation. However, the learning process is designed to weld these into a single, seamless process such that novices become "drivers".

As the terminology of "complex" indicates, there are many possible forms of co-constitution. The observation that the practices that comprise a "complex" exist only in relation to each other opens the way for more extensive discussion of how such relations are constituted. In taking this forward, it may be useful to appropriate or borrow concepts developed in complexity studies (Zeleny 1996; Boden 2000) and ecological systems thinking (Kaufmann 1988; Khalil & Boulding 1996). For example, one might imagine identifying and analysing chain reactions between practices in terms of autocatalytic feedback cycles animated by concatenations of positive influences, such that one item in the chain catalyses another. For example, if practice A increases the probability that practice B will emerge and persist, and practice B stands in the same relation to practice A, the two practices mutually enhance each other's rates of replication. Speculative thought experiments of this kind raise all sorts of problems and questions about the media of "feedback", the nature of selection and replication, the specification of units (practices, complexes, elements) and so forth.

Even so, there is some merit in thinking about what such "circuits" of feedback and reproduction might involve, how they might be identified and studied, and how they constitute the intersecting rhythms of society.

#### **Circuits of Reproduction**

As a first step we return to the idea that practices involve the ongoing integration of elements. In thinking about how practices co-depend it would make sense to think about the elements of which they are made. For example, are the skills or forms of competence that a practice requires shared with other practices, or are they relatively unique? Are practices united by a common dependence on specific skills or technologies, or are they kept apart, or kept in competition with each other by virtue of the specific "demands" or requirements they make? Since elements are in turn reproduced in and through practice, these observations hint at a first "circuit" of reproduction, namely that which characterises the mutually constitutive relation between practices and elements.

Moving on, we can view practices as the constituent parts of bundles or complexes, defined and held in place by a second "circuit" of reproduction, namely that which characterises the mutually constitutive relations (for instance of competition, cooperation or more elaborate forms) between practices and complexes of practice. Again borrowing from complexity science, a self-generative/self-modifying practice complex would be one in which co-dependent practices participate in their own regeneration.

The repeated reformulation of relations between practices might result in a relatively stable arrangement, for instance taking the form of established lifestyles and traditions (Pantzar & Shove 2010), or it might result in fossilisation or decay (Shove & Pantzar 2006). Either way, the central point is that systems of practices are reproduced and/or transformed through recurrent relations that are, in turn, of consequence for individual practices and for the elements of which these are composed.

Finally, and to bring this account full circle, prac-

tice complexes participate in the regeneration and reproduction of the elements (images, materialities, forms of competence) of which individual practices are composed.

# **Concluding Comments**

In this deliberately speculative article we have explored the suggestion that the rhythms of everyday life reflect the patterning of social practices and the dynamic relations of which these web-like patterns are made. By implication, the pulse of society, like the heartbeat of an individual, is the tangible trace of multiple, intersecting circuits of reproduction. In employing terms like these we have toyed with different models and metaphors and played around with concepts and snippets of empirical data taken out of context. The result, better viewed as a collection of notes and observations than a fully formed conceptual framework, is designed to inspire and generate further debate within the fields of time-use studies and on the part of those interested in how social practices emerge, persist and disappear.

As is obvious, we have provided no more than a fuzzy sketch of what it might take to analyse and explain changing temporal rhythms. It is one thing to suggest that rhythm generating processes exist and reinforce/undermine each other across very different scales (microscopic vs macroscopic order), and another to provide methodological advice on how these might be specified and studied. Lefebvre, who also suggests that analysing the rhythms of everyday life requires fragments of data from different sources, is equally vague when it comes to describing how such data might be mobilised. In his words, a rhythm analyst has to learn to "listen" "to a house, a street, a town, as an audience listens to a symphony ... he must recognize representations by their curves, phases, periods, and recurrences ... he receives data from all the sciences" (Lefebvre 2004[1992]: 25). By folding theories of practice into this frame, our contribution is to give this "listening" a bit of order - at a minimum suggesting that rhythm analysts should pay special attention to forms of feedback and "resonance" of the types described above. In this way it might be possible to show how certain "microscopic"

rhythms accumulate to form "macroscopic" trends, as happens when almost all the citizens of Finland head off to bed at the same time.

Our account also suggests that daily regularities of the kind revealed in aggregate time-use data - including patterns in going to sleep, eating, mobile phoning or socialising - are not merely social or cultural constructs in the sense of being arbitrary or negotiable. Rather, they are better understood as the outcomes of different practices, and of different forms of inter-practice integration. As historians are well aware, interdependencies between practices can lead to forms of path-dependence such that practice constellations are sensitive both to their origins (that is, their historical developments) and to the emergent seemingly "structural" features that hold them in place. An understanding of how elements, practices and bundles/complexes of practice intersect has the potential to keep both these dimensions in view at the same time.

We finish with a note on power. Theorists of every-day life such as de Certeau (1984[1980]) and Leveb-vre (1991[1947], 2004[1992]) viewed the realm of everyday practice as a kind of antithesis to more formal centres of power. This positive interpretation is potentially compromised by our own account of the rhythms and routines of everyday life as outcomes of interlocking circuits of reproduction. Although not the theme of this paper, we conclude by recognising that seemingly neutral "circuits" of reproduction are skewed and slanted by patterns of inequality, these being patterns that are in turn perpetuated through the dominance and marginalisation of specific practices and practice complexes.

#### Note

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