# Habits and Their Creatures<sup>1</sup>

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Much of the consumption that matters for environmental sustainability is habitual, recurrent and ordinary. Like it or not, strategies designed to steer behaviour in proenvironmental directions have to grapple with this habitual aspect. Most attempts to do so treat habit as an obstacle to change, and as a type of behaviour that is automatic, frequent and set within a stable context. In analyses like these habits are behaviours that people pick up, have and occasionally lose. In this paper I explore the relevance and value of turning this topic around and of approaching it from the habit's point of view. If we persist with this way of thinking, and if we assume that rather than acquiring habits we are acquired by them, familiar questions appear in a very different light and new ones arise. How do habits locate suitable carriers? How do habits, viewed as practices that require recurrent, consistent reproduction, relate to other less demanding pursuits? How is the rhythm of society defined by the sum total of habits? Can policy makers do anything to help sustainable habits capture large swathes of the population and edge other more damaging habits out of the way? In this paper I push such questions to the limit. From the vantage point afforded by this thought experiment I comment on the policy implications of conventional and practice-centric methods of conceptualising habit.

### Introduction

Many of the most environmentally significant forms of domestic consumption are of the ordinary variety (Gronow and Warde 2001). Despite accounting for the majority of home energy use, patterns of heating, cooling, laundering and bathing/showering are rarely topics of explicit debate or deliberate decision-making. This is something of a problem for policy makers seeking to promote pro-environmental behaviour by means of price and persuasion. As Prendergast et al. point out,

"Despite the common assumptions of economics in many circumstances, people, it turns out, often aren't actually all that "rational" in their behaviours and decisions. They don't conduct some sort of complicated cost-benefit analysis when faced with a choice.

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In fact, they are just as likely to do what they have always done, what impulse tells them to do or what their neighbours or friends generally do" (2008, 6)

In this analysis, norms and habits constitute a behavioural realm that lies tantalisingly beyond the reach of instruments predicated on rational choice. Taking a broader view, habits are frequently thought to constitute obstacles to change, limiting the impact of otherwise effective policy measures (Darnton 2010). When framed in this way, the policy challenge is that of helping people unlock or break habits: freeing them to choose more sustainable ways of life and drawing their behaviour back into the zone of (anticipated) policy influence. The difficulty of course is that in lying outside the field of rational choice, habits are uniquely resistant to familiar forms of policy intervention.

Concepts of habit have an ambivalent status within mainstream accounts of sustainable consumption, simultaneously affirming and challenging foundational assumptions about how people come to do what they do. On the one hand, the realm of habit is in effect defined in relation, and in opposition, to the more manageable territory of decision-making and choice. On the other hand, the very existence of habit, even as an exception, points to the salience of practical consciousness, shared convention, situation, history and context, all of which are marginalised in more classically rational theories of action. Most interpretations of what sets habit apart refer to features like those of automaticity; frequency and stable context (Darnton 2010). Habits consequently figure as behaviours that do not command much conscious attention; that happen often and that do not change, in part because relevant aspects of the surrounding environment are also unchanging.

In this paper I take a different approach inspired not by the psychology or economics of behavioural change but by social theories of practice. Rather than thinking of habits – whether good or bad – as something that people pick up, have and occasionally lose, I explore the relevance and value of turning the topic around and of approaching it from the habit's point of view. Instead of defining habit as a sub-set of behaviour, characterised by distinctive driving or stabilising forces, I take habits to be practices that are recurrently and relatively consistently reproduced.

There is no one clearly defined theory of practice, but there is a growing literature organised around a handful of shared understandings. One is that social practices, like football (Reckwitz 2002), Nordic Walking (Shove and Pantzar 2005) or showering on a daily basis (Hand, Shove et al. 2005) have to be consistently reproduced if they are to persist and survive. This means that they need to capture recruits willing and able to keep them alive (Shove and Pantzar 2007). It therefore makes sense to think of people as creatures – in the sense of slaves – of the habit-demanding practices to which they are host. The idea that we are, to different degrees, held in thrall by predatory practices is not as implausible as it might at

first appear. After all, such a view is entirely in keeping with Reckwitz's observation that "In practice theory, agents are body/minds who 'carry' and 'carry out' social practices. Thus, the social world is first and foremost populated by diverse social practices which are carried by agents." (Reckwitz 2002, 256). Being captured by a habit is not a necessarily unpleasant experience. Habits may offer carriers various benefits, simplifying daily life, bracketing out decisions and providing a measure of comfort, stability and order. Be that as it may, the purpose of this discussion is not to detail the qualities of habit from the perspective of the host, but to consider questions that arise if we assume that rather than acquiring habitual practices we are acquired by them. For example:

- How do certain practices come to demand recurrent, habitual, reproduction?
- How do such practices locate and capture suitable carriers?
- What are the characteristics of habit-demanding practices?
- How do habit-demanding practices structure daily life and associated patterns of consumption?

These are not issues around which more familiar debates about the strength of habits or their status as a type of behaviour revolve, nor do they relate to established schools of thought in public policy. They are nonetheless useful points of reference for this paper, the aim of which is to explore matters of habit from a practice-centric point of view.

In taking this project on I begin by commenting on the relation between habit, routine and practice. This allows me to home in on a handful of insights, derived from theories of practice, in terms of which the rest of the discussion is framed. In the second section I suggest that the analytic distinction between practice-asperformance and practice-as-entity is useful in teasing out the levels at which recurrence and regularity are reproduced. This sets the scene for a slightly more detailed account of when and how these features might become part of the proper conduct of a practice. In the third section I reflect on the benefits of becoming habitual, again taking the practice's point of view. As indicated here, habit-demanding and non-habit-demanding practices compete for suitably committed carriers or hosts, the availability of which depends on the relative status and positioning of coexisting practices. By implication, sociotemporal rhythms and the persistence of shared habits are the collective outcome of encounters and competitions between variously demanding practices. In the fourth and final part I take stock of what a practice-based analysis of habit brings to the table and identify forms of policy intervention capable of promoting "good" habits and of limiting those that underpin unsustainable forms of consumption.

## Habit, routine and practice

First, some definitions. I am going to use the term "habits" to refer to practices that are recurrently and consistently reproduced by suitably committed practitioners (people who enact the practice). By implication, all habits are practices, but not all practices demand habitual reproduction. So far so good, but is habit, then, a quality or a characteristic of a practice? Do habits constitute a type of practice? And if so, how are we to deal with the fact that the same practice, for example, taking a shower, might be a frequent event for some practitioner-showerers, but not for others? (Hand, Shove et al. 2005). One solution is to treat habit as a mode of enactment.

A practice becomes habitual when it is routinely and consistently reproduced. In this context, the term "routine" represents and describes the *regularity* with which a practice is enacted. To say that a practice is routinely enacted, i.e. that it is habitual, is to say something about the timing and frequency of its performance. The idea of "a routine" is something else. For present purposes, "a routine" like a morning routine, or the Wednesday routine, has to do with the way in which multiple practices are ordered and scheduled. Those who have a routine are consequently those for whom identifiable time slots are recurrently filled with similar sets or sequences of practice. In taking this approach I emphasise the time and timing of practice and, later in the paper, consider the implications of such timing for the ways in which practices interact.

In the account provided so far the means by which a practice becomes habitual (meaning that it is regularly reproduced) seem fairly arbitrary – some people shower on a daily basis, others do not. However, this overlooks the possibility that recurrent performance might be a necessary part of what constitutes proper enactment. At this point the story gets a bit more complicated. Up to now I have thought of habits as practices that happen to be recurrently enacted, but in some cases this habit-aspect (i.e. recurrent timing) might be central to the practice itself. I have more to say about this in the next section but before moving on, it is important to comment on the related question of faithful or consistent reproduction. As indicated above, practices that are habitually enacted are relatively unchanging, despite repeated performance. Since consistency and recurrent reproduction do not always go together there is also more to say about how habit-like practices are faithfully reenacted over time.

Not all practices have habit-like tendencies, meaning that not all require or seek regular, consistent performance. But if we are to think about the *making of habit*, here understood as the emergence and persistence of practices that make such demands, we need to think about two related questions. How do certain

practices come to depend on recurrent reproduction? And how is it that cohorts of practitioners fall in with these demands?

# Recruitment and recurrent reproduction – performance and entity

In tackling these questions it is useful to distinguish between practice-asperformance and practice-as-entity. As Reckwitz explains, a practice exists as a "block" or "a pattern which can be filled out by a multitude of single and often unique actions" (Reckwitz 2002, 250). In this sense, a practice-as-an-entity exists between different moments of enactment (Shove, Watson et al. 2007). At the same time, practices exist as performances. It is through performance, through the immediacy of doing, that the "pattern" provided by the practice-as-an-entity is filled out, maintained and transformed. This analytic distinction allows us to see that while performances of a practice can become habitual for certain practitioners, this does not mean that the practice-as-entity *is*, of necessity, a habit in the sense that proper performance demands and depends on regular re-enactment.

In short, practices-as-performances are commonly enacted in various ways, some more habitual (persistent and recurrent) than others. That said, certain practices-as-entities are evidently more demanding of their carriers than others, and to varying degrees, some do entail or imply frequent enactment. More broadly, the temporal demands associated with the proper performance of a practice vary widely. Some only demand irregular or brief moments of attention. Many persist (as entities) perfectly well for long periods without recurrent enactment: seasonal or weather dependent arrangements are often like this. Others command near constant attention. In distinguishing between these forms the basic question is whether the time and timing of performance is in some sense embedded in the *elements* of which a practice is composed.

If practices-as-entities demand recurrent performance, on what is this requirement based? Does this necessity reside within the practice, and if so, where and how are these features of frequency and timing located? Reckwitz claims that a practice is "a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, knowhow, states of emotion and motivational knowledge"(2002: 249). This sentence provides some useful clues. In theory, elements like those of understanding, knowhow, motivational knowledge and meaning are potentially capable of harbouring temporal injunctions.

Kaufmann's study of couples and their laundry provides some insight into how this works (Kaufmann 1998). A number of the people he interviewed talked about feeling impelled to do the ironing or the washing. Drawing on these experiences Kaufmann writes about the sense of compulsion and the injunction to perform. When the pile of ironing grows so high, or when Wednesday evening comes around again, there are people for whom ironing-as-a-practice absolutely demands and habitually gets attention. For these individuals, the meaning of an appropriate performance, ironing properly, is inseparable from ironing regularly.

However, this aspect of meaning is not all that is required. For ironing to be effectively and habitually reproduced, other elements need to be in place including materials (clothes, iron, electricity) and relevant levels and forms of competence. More abstractly, recurrent reproduction supposes that the elements of habit-like practices are themselves recurrently and reliably in place.

This is crucial in that the continuity associated with habit depends on the possibility of consistent as well as recurrent reproduction. With many practices, repeat performance is transformative. For example, for any one practitioner, skill and know-how typically increase with experience. With respect to practices-asentities, there are again many instances in which recurrent performance is itself a source of change. The recent history of snowboarding illustrates this point. As Franke and Shah's (2003) study of consumer-user innovation demonstrates, new tricks and techniques are always being developed. As a result, the contours of snowboarding are continually evolving. For the most devoted practitioners, and for those at the cutting edge of such pursuits, habit (in the sense of faithful reproduction) barely exists: innovation is all. In other situations the elements of a practice remain untouched by successive instances of enactment.

It is clearly important to distinguish between practices that are recurrently but *un*faithfully performed (i.e. that are evolving all the time) and those that are recurrent but consistently or faithfully performed. As defined above, habits belong in this latter category. This suggests that habitually enacted practices are ones in which constituent elements of meaning, materiality and competence are themselves relatively stable. For one reason or another there is no competitive drive for "improved" performance, and little or no scope for building competence in ways that transform the contours of the practice-as-entity. With habits like those of taking a daily shower, one enactment is really very much like the next and little transformation goes on. In other words, where practices are recurrently and faithfully reproduced, the elements of proper performance are established, settled and provisionally in place.

These few comments help build up a picture of what habit formation might entail, from the point of view of a practice. If practices are to move into habit-terrain,

that is if they are to capture the resources and attention of carriers not once but time and time again, they probably need to associate recurrent enactment with the very meaning of performance. They also need to ensure (in so far as practices can ensure anything!) that all the elements required for their ongoing enactment (the materials, competences and meanings) are readily and consistently available. Equally important they need to find ways of edging rival habit-demanding practices out of the way.

### Habit and relations between practices

It is to some extent true that time spent reproducing one practice cannot be devoted to another (Pred 1981). It is also true that habit-demanding practices are distinctly hungry in that they require repeated performance. The precise nature of the demands they make depends on the duration of any one performance and on the frequency with which practices need to be enacted in order to meet internal standards of proper accomplishment. But in general, if habit-demanding practices are to survive they have to be capable of persistently and consistently colonising slots of time and other resources. This requirement puts them in quite specific forms of competition with other practices, some of which also make habit-like-demands, others of which do not. As noted above, not all practices aspire to habit-status but given that the number of potentially capable and committed carriers is inherently limited, there is some advantage in being regularly reproduced within an overall ecology of practice.

For any one practice, becoming a habit (i.e. making habit-demands of carriers) is likely to involve displacing or reconfiguring others. Equally, for any one practitioner, being captured by a habit-demanding practice is likely to involve submitting to a (new) temporal pattern. At a minimum, time needs to be allocated, not once, but on a regular basis. This probably requires re-jigging other parts of the day, for example, rushing or abandoning other previously significant pursuits. The extent of change depends on exactly what the incoming habit-demanding practice requires in terms of duration, repetition and consistency. Although the detail is sure to vary from case to case the more general point is that since there are only so many hours in a day, recruitment and defection to more and less demanding practices go hand in hand.

At the level of practice-as-performance, habits break when previously committed carriers persistently fail to re-enact the practice in question. In some situations the fact that a habit, i.e. a recurrent pattern of doing, is broken does not necessarily mean that the carrier is no longer a practitioner. Many practices can be continued but on a more infrequent or erratic basis. There are, however, cases in

which the regularity of performance is itself essential. In these situations erratic or inconsistent enactment is in effect a form of abandonment and/or defection.

For a practice-as-entity, losing habit-demanding status does not spell instant demise, but it does imply a repositioning in the temporal ordering of daily life. Home laundering is a good example. Not so long ago it was normal to set aside the best part of a day and do all the week's washing on a Monday. Laundering remains an established practice, but the details of performance and timing have changed, as has the relation between washing clothes and other habit-demanding practices. In many households today, laundering involves a series of relatively brief episodes of attention – sorting, loading, drying, ironing – often spread across a number of days (Shove 2003). For some people, these moments remain thoroughly habitual, but for others the timing is much more erratic. In this case the elements of laundering have changed (automatic washing machines have become normal, newly demanding interpretations of freshness have taken hold) in ways that matter for how the practice is positioned in relation to a host of other also changing practices, and for the kinds of temporal injunction involved.

Stepping back from this one example and changing scale, we might think about the extent to which shared sociotemporal rhythms are defined by widespread or dominant practices that demand recurrent reproduction. At one extreme we might imagine a society in which daily life is governed by endlessly repeating sequences, as in some kind of monastic regime. In situations like these and in others in which habit-like-practices capture many people at once, their reproduction *generates* shared temporal rhythms. It is harder to imagine an equally extreme world in which there is little or no repetition, and few if any injunctions to re-enact. Even so, it is clear that understanding the character of shared temporal orders is in essence a matter of understanding how sequences and sets of practices (some rarely enacted, others habitually reproduced) fit together.

The details of exactly *when* practices-that-need-recurrent-reproduction are routinely enacted is also key. It is so in that habitual arrangements like those that in aggregate constitute morning rush hours or rhythms of sleeping and waking, watching TV or using the internet set the scene in which future habit-demanding practices might take hold. These shared rhythms are, in turn, important for the supply, or scarcity, of hosts capable of carrying habit-demanding practices and for where suitable carriers might be found. There is more to say about how practices are sequenced and scheduled and about how temporal demands evolve, but it is already clear that habits (practices that are recurrently and consistently reproduced) are not made and broken at will.

It is also obvious that habitual practices-as-entities structure each other in real time, and over the longer run. There are various ways in which this works. If new

habits are to take hold, they have to find recruits who are not already locked into existing patterns and sequences of practice. To understand the dynamics of habit we therefore need to figure out how certain practices constitute what Pred (1977) describes as "dominant" projects, capable of commanding significant resources of time and attention and thereby limiting the range of other possible practices by which individuals might be caught. We also need to consider the forms of compulsion on which habits depend, and the types of "stickyness" that ensue. For example, going to work or to school, taking a daily shower or doing yoga in the morning might be similarly recurrent, but significantly different with respect to the forms of capture involved, and hence the potential for defection. This is complicated in that for certain practices, levels of commitment are themselves dynamic: this is so when recurrent participation engenders further obligation, or when people become self-governing subjects disciplined by the demands of the practices they carry.

More prosaically, habits structure each other and the potential for future development by structuring the definition and allocation of relevant elements. If habits are to endure, carriers need ready and consistent access to requisite materials, meanings and forms of competence. On this point it is important to recognise that the necessarily uneven distribution of such elements is itself a consequence and an outcome of previous habits and practices.

These few paragraphs give a sense of the characteristics of habit-demanding practices. They also provide some insight into how habitual practices (as entities) develop, and how they structure each other by structuring the distribution of requisite elements and the availability of suitable hosts or carriers. From this it is clear that the potential for future capture and defection is, to some, degree defined by existing commitments themselves born of practices past.

## Habits of analysis and policy intervention

In this final section I revisit some of the themes around which the more familiar literature on habit tends to revolve. This is useful as a means of comparing practice-based and other interpretations of habit, and in figuring out what different approaches mean for those wanting to steer patterns of ordinary consumption in a more sustainable direction.

In the introduction I noted that distinctions between habitual and intentional behaviour are important in organising and ordering academic enquiry and in determining strategies for policy intervention. For Nicholas Stern, an economist, "Individuals and firms behave habitually and in response to social customs and expectations. This leads to 'path dependency', which limits their responses to policies designed to raise efficiency" (Stern Report, 2006, 381). In Stern's analysis,

as in many others, habits gum up the otherwise smooth operation of policies and incentives designed with reference to a calculative model of individual behaviour. From the practice-centric point of view, this distinction is not one that makes much sense. After all, the crucial issue – for any one practice-as-entity - is that suitable cohorts of carriers have in fact been captured and that they are (for whatever stated reason) willing and able to keep the practice alive. In addition and in any event, seemingly rational and seemingly norm-governed actions/practices might be of the habit-demanding type but equally, they might not. In sum, there is nothing about the analytic split between rational choice and "norm" governing that helps in understanding how people and resources are recurrently captured.

What then of the contrast between automaticity and deliberation? This second persistent theme is important for those who define habits as unreflexive actions and who argue that change only comes about when automatic behaviours are flipped into the realm of overt consciousness (Wilk 2002). However, the presence or absence of deliberation is of little relevance for whether practices are recurrently and faithfully reproduced or for how carriers are captured. As a result there is no reason to suppose that people can be released from the grip of habitual practices by consciousness raising or by bringing taken-for-granted arrangements into view.

A third theme, again important in writing about habit, has to do with questions of strength. As Hal Wilhite puts it, "The weaker the habit, the more vulnerable it is to change" (Wilhite 2011). What does this mean from a practice-perspective? There are different possible interpretations of strength and weakness depending on whether we focus on practice-as-performance or practice-as-entity. For any one carrier, strength of habit probably equates to degree of commitment. Accordingly, practices that are habit-demanding would be "strong" when they command unwavering devotion. If we change the point of reference and consider the strength of a practice-as-entity, this quality would probably relate to the number and extent of carriers that are so committed. Hence a practice-demanding habit would be "strong" (as an entity) if it were widely reproduced and consistently enacted.

However, various examples of practice-collapse suggest that strength (in terms of being widespread and embedded) does not guarantee longevity or persistence. Consider the rapid decline of commuter cycling. In the early 1950s in the UK, around 40% of journeys to work were by bike. In less than twenty years this dropped to just a few percent (Pooley and Turnbull 2000). For a while, cycling to work qualified as a strong habit-demanding practice that was locked into a whole set of social and institutional arrangements. As things turned out, this interdependence proved to be a source of weakness, not of strength. During the 1960s and 70s, the entire cycle-based regime caved in as automobility took hold. One by one, hundreds and thousands of previously committed cyclists abandoned this mode of travel and in so doing reinforced the dominance of the car. From the perspective sketched here,

there is no reason to suppose that habit-demanding practices change any slower than other types of practice, or that they are necessarily more durable. Rather, the need for recurrent performance in a landscape in which other practices are on the move is, if anything, an especially demanding condition to sustain.

So far it seems that issues which dominate and in a sense define the more established literature on habits bear little or no relation to processes that matter from a practice-centric point of view. This is something of a problem in that policy strategies to promote more sustainable consumption reflect, and are inspired by the mainstream agenda. Where does this leave a practice-based analysis of habit? What might policy makers do with the idea that people are captured by practices, and that some of these practices make strong demands in terms of regular, habit-like reproduction? More directly, are there ways of intervening so as to stifle "bad" practices and promote "good" ones?

I finish with a handful of practical suggestions. One is to recognise that not all habits are problematic. In policy discussions of sustainable consumption, habits generally figure as something to be broken in order to permit choice. But certain habitually enacted practices are already relatively benign. The challenge is thus not one of overcoming habit but of developing strategies capable of promoting and sustaining the recurrent reproduction of low impact arrangements, and of undermining those that are much more resource intensive. What might this entail?

As described above, habit-demanding practices (whether good or bad) are those in which recurrence and frequent enactment has become an aspect of proper performance: doing well means doing often. Making and breaking habits consequently depends on either building or shattering this sort of temporal association. In the past, policy initiatives like those designed to instil habits of personal hygiene (Geels 2005) have emphasised the need for regularity, equally, others have focussed on abstinence, for instance in relation to drinking or the consumption of unhealthy food. Whilst typically shy of specifying exactly when or how practices should be enacted, contemporary policy making depends on many such assumptions. For example, estimates of future water or energy demand necessarily embody understandings about what constitutes a "normal" standard of living and about the *regular* and *recurrent* enactment the practices of which such standards are composed. In this sense, policy has a hand in reproducing versions of normality, and of normally recurrent consumption and practice.

If habit-demanding practices are to retain this status, the elements of which they are comprised (materials, meaning, competence) must be readily and reliably available. In policy terms, damaging or extracting one or more of these elements represents a very practical means of habit de-formation. This is more familiar territory. For example, laws that ban the use of certain objects simply remove them

from the field of practice. Less obvious, but no less significant, past and present investment in infrastructure, business regulation and economic policy are surely relevant for the availability and circulation of the many elements on which more and less sustainable habits depend. In these ways policy has a direct bearing on the dynamics of habit.

Third, and on a rather more systemic scale, the infrastructures and institutions that sustain the habitual reproduction of certain practices (and not others) also structure patterns of present and future access. This is important in that such arrangements configure cohorts of actual and potential carriers and their chances of being captured by one habit or another. In so far as governments have a hand in processes that are important for the distribution of relevant elements, they also have a hand in facilitating and limiting the number of people that a habit might catch and the social groups from which they might be drawn.

In conclusion, policy makers are actively involved in making and shaping the conditions in which we become the creatures of habit. This suggests that there might well be scope for intervening such that more sustainable habits capture larger sections of the population, and such that other less sustainable ones are edged out of the way. Developing such a programme depends on a fairly radical turnaround in how habits are conceptualised and in how habit-changing agendas are framed. It may not happen any time soon but there is a chance that policy makers and the advisers and researchers on whom they depend may yet be "caught" by new habits of thought, and perhaps captivated by some of the ideas that I have outlined here.

#### References

- Darnton, A. 2010. EVO502: Unlocking Habits / Reconfiguring Routines. Final Report to DEFRA.
- Franke, N. and S. Shah 2003. How communities support innovative activities: an exploration of assistance and sharing among end-users. *Research Policy* 32(1), 157-178.
- Geels, F. 2005. Co-evolution of technology and society: The transition in water supply and personal hygiene in the Netherlands (1850-1930): A case study in multi-level perspective. *Technology in Society* 27(3), 363-397.
- Gronow, J. and A. Warde 2001. Ordinary consumption. New York, Routledge.
- Hand, M., Shove, E. et al. 2005. Explaining showering: a discussion of the material, conventional, and temporal dimensions of practice. *Sociological Research Online* 10 (2).
- Kaufmann, J.-C. 1998. *Dirty Linen: Couples and their laundry*. London, Middlesex University Press.
- Pooley, C. and Turnbull, J. 2000. Modal choice and modal change: the journey to work in Britain since 1890. *Journal of Transport Geography* 8, 11-24.
- Pred, A. 1977. The Choreography of Existence: Comments on Hagerstrand's Time-Geography and Its Usefulness. *Economic Geography* 53(2), 207-221.
- Pred, A. 1981. Social Reproduction and the Time-Geography of Everyday Life. *Geografiska Annaler. Series B. Human Geography* 63(1), 5-22.

- Prendergast, J., Foley B., Menne V. and A. Isaac. 2008. *Creatures of Habit: the Art of Behavioural Change*. Available online at <a href="https://www.smf.co.uk/assets/files/publications/SMF\_Creatures\_of\_Habit.pdf">www.smf.co.uk/assets/files/publications/SMF\_Creatures\_of\_Habit.pdf</a> (last accessed 13 April 2012)
- Reckwitz, A. 2002. Toward a Theory of Social Practices: A Development in Culturalist Theorizing. *European Journal of Social Theory* 5(2), 243-263.
- Shove, E. 2003. *Comfort, cleanliness and convenience : the social organization of normality.* Oxford, Berg.
- Shove, E. and M. Pantzar 2005. Consumers, producers and practices: understanding the invention and reinvention of Nordic Walking." *Journal of Consumer Culture* 5(1), 43-64.
- Shove, E. and M. Pantzar 2007. Recruitment and Reproduction: the careers and carriers of digital photography and floorball. *Human Affairs* 17, 154-167.
- Shove, E., Watson, M. et al. 2007. The Design of Everyday Life. Oxford; New York, Berg.
- Wilhite, H. 2011. Towards a better accounting of the roles of body, things and routines in consumption. Social Science and Sustainable Consumption, Helsinki.
- Wilk, R. 2002. Consumption, human needs, and global environmental change. *Global Environmental Change* 12(1), 5-13.