Towards a Better Accounting of the Roles of Body, Things and Habits in Consumption

Harold Wilhite
University of Oslo

This paper explores a theory of strong and weak habits and its implications for renewing sustainable consumption research and policy agendas. An argument is made that the strength of a habit is related not only to the degree of repetition of a performance or task, but also to the particular nature of the socio-cultural and material contexts associated with the habit. The concept 'distributed agency' is applied to the task of distinguishing the sources of agency in habit formation and change. Social learning theory is introduced as a source of new thinking on how energy-intensive consumption habits can be changed.

Introduction

Policy is informed by theory, whether explicitly or implicitly. In the domain of sustainable energy consumption, the dominant theory poses consumption as consisting of reflexive, individual consumers who make consumption happen through rational and purposive decision making. The sustainable energy policy framework is oriented to changing consumer's minds and attitudes through various forms for information and price incentives. We now have 40 years of post-oil shock evidence of the failures of this policy agenda to deliver reductions in OECD household energy consumption. The clock has timed out on the usefulness of this individualist-rationalist theoretical framework. A robust theory of consumption and change is desperately needed in light of climate change and other environmental consequences of energy use. Recent work grounded in social practice theory shows promise in reinvigorating the research and policy agendas for transforming energy consumption. However, from a policy perspective, much conceptual work remains to be done in clarifying the constituents of a practice, how practices become habits, and how the strength of habits varies. I will discuss these distinctions, shape a theory of strong and weak habits and exemplify its applications in sustainable energy policy. I will apply the concept 'distributed agency' to this task, which I

introduced in Wilhite (2008b) and developed in Wilhite (2009). Distributed agency draws attention to the sources and sites of agency in consumption habits.

The chapter is organized as follows. I will first briefly introduce practice theory and its applications to understanding consumption. I will discuss what makes a practice, distinguish a practice from a habit and sketch out a theory of strong and weak habits. I will round off the chapter with a discussion of the ways policy can take advantage of a theory of habits, drawing on social learning theory, which also has its roots in a practice approach.

Practices, habits and bodies

Much of the attention in consumption theory has been given to subjectivity, cognition and reflexivity. In the words of Jean Lave, this focus has distanced theory from experience and divided 'the mind from the world' (1993:8). Social practice theorists attempt to bridge this division. As Seyfang et al. (2010:8) writes, from a practice perspective:

> Individuals…are no longer either passive dupes beholden to broader social structures, or free and sovereign agents revealing their preferences through market decisions, but instead become knowledgeable and skilled 'carriers' of practice who at once follow the rules, norms and regulations that hold practice together, but also, through their active and always localised performance of practices, improvise and creatively reproduce and transform them.

Practice theory gives primary importance to what Bourdieu called practical knowledge (1998), closely related to his concept of habitus, a field of predispositions for action which is created and perpetuated through repeated performances in a given social and cultural space (1977). Habitus and practical knowledge can be embodied (Merleau-Ponty 1962 and Mauss 1934) or embedded in rules or procedures governing actions (Stevens and McKechnie 2005). According to practice theorists, practical knowledge (predispositions for action) are strongly determinative in the way a given practice is performed, but other forms of knowledge may be brought to bear. Reckwitz writes that 'mental activities', 'things and their use' 'states of emotion' and 'motivational knowledge' are also deployed in practices (2002:249, cited in Warde 2005).

A habit is a particular form for practice which also draws its strength from the habitus. Charles Camic defined habit as a pre-disposition for acting without the engagement of reflexive knowledge (1986:1044). Since practices can deploy 'mental activities' the distinguishing characteristic between a practice and a habit is that habits do not deploy cognition or reflexivity. To my knowledge, little has been written about the distinction between practice and habit and its implications

for the relative strength or stability of practices and habits. I intend to explore this distinction between practices and habits, and further to claim that habits themselves vary in strength. I will precede this with a discussion of the essential element in both practice and habit, embedded knowledge. I will point to two sites or sources of embodied knowledge, body and artifact. The former has been widely recognized and thoroughly analyzed as a contributor to habit, but the latter is largely underdeveloped by practice and habit theorists.

Only a fraction of the social science of body has been dedicated to the understanding of embodied knowledge and its agency in practices. The bulk of the work on body has treated the body as an instrument, or mirror of socio-political forces. As Warnier writes, 'whereas Mauss, Schilder, and to a great extent Merleau-Ponty, had insisted on motion, motor habits, movements and dynamics, "the body" of the years 1980 to 2000 has become very much a static body, displayed, manipulated, gendered, but certainly not the "incarnated subject" dear to Merleau-Ponty' (2001:8; a point supported by Jackson 1981and Halliburton 2003). Much of the work on body has been grounded in the governmentality theories of Foucault, who emphasized 'the micro- and macro-political forces through which the (human) body is, among other things, gendered, sexed, pacified, and excited' (Bennett 2004:348). Anne Stoler's (1995) study of race and sexuality in Africa is an example of an analysis of body in the tradition of Foucault (1977). Stoler shows how ideas about race and sexuality among Africans were transfigured in colonial discourses, changing the ways Africans dressed, moved and expressed sexual desire. In her analysis and others in the same genre, bodies are not conceived as of repositories of embodied knowledge which mediate action but rather as instruments which use material culture to reflect changes in body-related discourses (Warner 2001). This contrasts with Mauss' theory of embodiment, in which bodies become knowledgeable and influence action.

Embodiment results from two distinct but related forms for learning: one form is through exposure to other bodies and their performances in the same socio-cultural context (what Mauss refers to as enculturation); the other through purposive training, such as in learning sports or learning a craft. Enculturation and training result in 'embodied agency' or in bodies which 'intend' certain situations (Crossley 2007:83). Strong embodiment results in strong habits, but it is important to account for the contribution to the habit of the objects with which the body engages. Eating utensils, keyboards and footballs are also bearers of embedded knowledge. I claim that neither theorists of body, habit or practice have made a full accounting of the agency in materially embedded knowledge. The theory that the material world is agentive has been central to at least three domains of social science: the social science of technology (SST), archeology and material culture. Anthropologist Madeleine Akrich, working within the SST tradition, theorizes that the knowledge embedded by designers in technologies has a scripting effect on human action.

Designers embed "their vision of (or prediction about) the world in the technical content of the new object." She called this a "script" or a "scenario"… "a framework of action together with the actors and the space in which they are supposed to act (2000:208)." According to Akrich, this embedded knowledge has both an enabling and limiting effect on human actions. In archaeology, theories abound on the importance to understanding the social world of materially embedded knowledge. Archeologist Marci Dobres writes about 'the dynamic, ongoing, and socially constituted nature of sociotechnical activities. In this sense, we prefer to think of technology as a verb of action and interaction, rather than a noun of possession' (1999:3). Anthropologists Appadurai (1986) and Kopytoff (1986), working in the material culture tradition write, respectively, about the social and cultural biographies of things, demonstrating how things take on different uses and meanings in differing socio-cultural settings, and thereby influence actions differently in their different social incarnations. Material culturalist Alfred Gell (1998) formulated a theory of human-art interaction which visualized a two-way influence. He wrote that art works, once created, embody complex 'intentionalities' which act on observers.

If we take account of these perspectives on both embodied and material agency, we can say that agency in habits is distributed between body and objects. However, we must not forget that embodiment and material scripts result from exposure to the social world. Should there be a change in socio-cultural context of a habit, either over time in the same place or due to a displacement of the habit to a different place, the new socio-cultural context can be agentive in changing or reforming the habit. Thus we can say that body, object and social context are each agentive in consumption habits; or, that agency in consumption habits is distributed among body, material context and social context (Wilhite 2008b).[1]

Strong and weak habits

The strength of embedded knowledge is reinforced through repetition. Body movements such as those associated with walking and eating are learned early in life through near infinite repetition. 'Enculturation', as Mauss called socio-cultural learning, results in strong habits. The military expends many hours of training on recruits in order that they unlearn their walking habits, and relearn the standard military version of walking. Body techniques learned through purposive training (such as marching, swimming and typing) can become strong habits, depending

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1   The idea of distributed agency has been employed by others in similar ways; for example, 'distributed cognition' in learning theory, which proposes cognition and knowledge are not confined to an individual, rather, they are distributed across objects, individuals and tools in the environment (Hutchins 1995); and 'distributed mind' by Gell (1998) which captures the interaction of observer and object in the art experience.

of course on the intensity of the training. A bodily action performed infrequently is unlikely to result in strong embodiment. An infrequent bicycle commute, the preparation of a certain meal a few times a year, or the use of a perfume or cream on rare occasions will not likely lead to the formation practical knowledge nor to habituation.

The nature and complexity of the material context for the habit will also affect its strength. Body techniques which involve few objects and are performed in uniform environments tend to be strong habits. For example, typing involves a standard keyboard. Once typing is mastered, it would take a significant disruption, such as a coffee spill or a fire alarm to disturb the movement of fingers on the keyboard and to invoke a cognitive response. The usual medium faced by a swimmer is also relatively uniform and stable. In a swimming pool with protected lanes, lap after lap can be accomplished without a conscious thought as to how to negotiate movements.

Bodily performances associated with team sports and dance depend on practical knowledge; however, when other players or performers are involved, there is the need to coordinate and communicate with other bodies. One of the goals of training is to make this coordination instinctive. Nonetheless, there are likely to be moments when successful coordination with team members relies on cognitive choices and verbal communication. Warnier (2001:9) refers to this extra level of complexity of body interaction in team sports as 'sociomotricity'. Despite the added social complexity, strong embodiment is essential to the making of a successful dancer or sportsperson. However, these socially mediated movements are not strong habits due to the periodic engagement of the reflexive mind.

Sport and dance are highly regulated activities where the rules are fixed. In everyday life, social contexts vary, yet in certain relatively stable environments such as the home or office, performances can become habituated. Warnier describes regularized settings for performances as 'domesticated environments', from which uncertainty has been removed. When I am eating at home alone or with family, the techniques of eating (choice of cutlery, transport of food from plate to mouth, and so on) are strong habits. However, a change in the setting for the action can weaken it or break it up altogether. Dining at a restaurant or participating in a wedding feast, each with different cutlery and different rules of etiquette, challenges embodied knowledge, demanding the application of considerable thought to the imbibing of food.

Turning things around, over time, habits such as those related to eating, dress, cosmetics and cleanliness can take on social significance and this can reinforce their strength. Some strong habits can take the form of ritual, in which reflexive choice is completely eliminated from practice. Examples of habits which have

taken on near-ritual strength are those associated with creating a home aesthetic using light and heat in Norway, bathing habits in Japan and car dependent dating habits in the USA (Wilhite et al 2001). Of course the strength of these habits vary according to place, but also in relation to social variables such as class and age. A theory of habit must account for this social and cultural variability.

Another important material contribution to the strength of a habit is the size of the physical space in which the habit is performed. Harvey (2010) argues that tight spaces mean tighter scripts for action. The bounded space of the home contributes to the strength of home consumption habits. Showering and bathing are examples of habits which are performed frequently in small spaces and which involve few material accessories. In the bath or shower cabinet, everything is close at hand, including flowing water, clothes, soaps and shampoos. In the absence of interruption, daily showering is strong habit. However, it is not likely to be as strong as body techniques performed in more uniform material environments such as swimming or typing. The likelihood of interruption in the form of an empty shampoo bottle, dropping the soap, or running out of hot water weakens the habit. Other home energy-related activities such as cleaning clothes, preparing food, attending to the comfort levels in the house (heating and cooling) are practices which are formed frequently within the bounded space of the home and can become strong habits. When the arena extends beyond the home, material contexts diversify and this can weaken habits. A daily commute from home to work using a single means of transport from door to door might result in a strong habit. A commute which involves differing transport means, such walking or biking to a railway station, taking a train, changing to a metro and a walk to the office is a weak habit. The likelihood of the need for cognitive intervention along this chain of actions is high.

How do habits change?

To recapitulate, the variables which contribute to a habit's strength can be related to socio-cultural learning and the strength social norms; the frequency of performance; the numbers and kinds of material objects involved; and the nature and size of the space in which the habit is performed. A change in any of these can lead to a change in the strength of the habit. A social change such as in family cycle, job or neighborhood makes habits vulnerable to change. A move to a new house subjects many consumption habits to scrutiny (Wilk and Wilhite 1986). Some habits will be reestablished in the new home, but others are changed to accommodate the new home's material lay out. A change in the number of bedrooms can lead to the moving together or separation of siblings, the conversion of a bedroom to an office or to the purchase of a dishwasher or a bigger refrigerator in a kitchen which accommodates them. This in turn can lead to a change in dishwashing and eating practices. A move to an entirely different socio-cultural context can engender

more dramatic changes. My research on changing consumption in India revealed that Indians working abroad but maintaining a residence in India (work migrants) often brought both new habits and devices from their country of work back to their residences in India (Wilhite 2008a). In accordance with Akrich's theory of technology scripts, a change in the objects used in habits can lead to a weakening or change. For example, the change from a 5 gear to a 24 gear bicycle technology can lead to new routes and the use of the bicycle for totally different purposes. New bicycling based transport and exercizing habits can develop as a result.

Two technologies which bear with them problematic scripts from a sustainable energy perspective are refrigerating technologies, namely the refrigerator and the air conditioner. These two technologies have had a profound restructuring effect on home consumption habits in North America, Europe and more recently in Asia and Latina America. The refrigerator and freezer have lead to changed diets, different shopping practices, and new ways of cooking (from the use of raw ingredients to an increased use of frozen or prepared foods)(Garnett 2007). There is a longstanding food ideology in South India which associates the storing of prepared foods with the accumulation of substances which cause laziness and stupidity. This ideology contributed to a lack of enthusiasm for the refrigerator when it became widely available in India in the 1960s. Those who purchased the first generation of refrigerators were more interested in their space saving properties (eliminating the need for storage rooms and cabinets for raw foods like eggs and vegetables) than in their capacity to store cooked foods and reheat them for consumption at later meals. However, as refrigerators have been purchased and taken into use, their potential to save food preparation time is affecting food preparation and eating habits. Many women still adhere to the traditional food ideals and insist on cooking food from scratch for each meal. However, generational differences are beginning to emerge. Many young women now routinely make food in bulk, store uneaten portions and reheat them for later meals.

Another profound change in home habits is being driven by refrigerated air. The advent of the air conditioner and has been instrumental in changing cooling habits in the USA, Japan, Australia and more recently in India, China and other developing countries (Cooper 1998; Wilhite et al. 1997; Wilhite 2008a; Wilhite 2009; Strengers 2008). Cooper writes that neighborhood interaction was reduced in North America after the introduction of air conditioning as porches were shut off and doors and windows closed. People spend less time in gardens, and in fact gardens change from places of rest, relaxation and eating to aesthetic objects to be looked at from within the closed windows of the house. In middle class Indian neighborhoods, front porches, formerly gathering points for casual conversation with neighbors and passers-by, are hardly used by households who have installed air conditioning. These changes in the physical geometry of family and social interaction set the stage for the formation of new habits in many domains of home consumption.

Implications of a theory of habit for sustainable consumption policy

Habit(s) are largely unaddressed and unaffected by sustainable consumption policy. The most important implication of the argument in this chapter is that if sustainable consumption policy is to achieve its aims of significant reductions in energy use, it must acknowledge and address habit. The second point is that habits have differing levels of intransigence. Policies intended to reduce the energy intensity of consumption need to account for this. Paraphrasing a statement by Shove and Wilhite, changing strong habits will not happen by changing the color of an energy label or tampering with energy prices (2001). If policy is to make a dent in the strong habits which have developed around automobility in the USA, home lighting in Norway and air conditioning in Japan, to name a few examples, strong interventions and a long term perspective will be essential. Reduced automobile use in the USA will not be accomplished without the building of comprehensive alternative infrastructures for other forms for transport; home lighting will not be reduced in Norway without the continued phasing out of incandescent lighting technologies; air conditioning will not be reduced in Japan without a reinvention of building designs and structures capable of exploiting natural cooling techniques.

Air conditioning is definitively a domain in which weak policy interventions have been directed at strong habits. Policy makers have either passively accepted or actively encouraged air conditioned comfort as the future of home cooling comfort. The focus of sustainable energy policy has then been placed on improving the technical efficiency of air conditioning technology. This is true even for regions of the world yet to be air conditioned, such as southern Europe, where heat pumps and efficient air conditioners are being promoted in places with virtually no air conditioning. Given the alarming increases in energy use attributable to air conditioning, promoting efficient air conditioners will add energy load in places that do not yet have air conditioning and will only take a fraction off of the top of a swelling energy demand which is locked into the transformation from buildings designed for natural cooling to buildings designed for air conditioning. In my view, a radical policy shift is needed in which the imagined future of building comfort is reinvented and the policy thinking turned on its head. The focus should be on reinforcing the retention of building designs which can cool naturally and cooling habits which do not involve mechanical cooling. In many parts of the world where air conditioning has not yet penetrated, such as Southern Europe and parts of Asia and Latin America, this would imply retaining and reinforcing existing building designs which incorporate the use of porous materials, natural ventilation, thick walls, slant roofs and so on. We also need a better understanding of natural cooling habits: for example, how people regulate drafts and shading, how they dress, and how they move activities from room to room corresponding to changing outdoor

temperatures and time of day. This sets up a rich agenda for research and policies dedicated to reinforce and diffuse the contributors to natural cooling.

This is an ambitious goal which could only be accomplished through a comprehensive effort over the long term. After all, the air conditioning of places like the southern USA and Japan were the result of long term public and commercial projects involving the provision of strong economic incentives favoring air conditioning (in the cases of California in the 1950s, a homeowner was not eligible for a bank loan if the house was not set up for air conditioning, see Cooper 1998); and demonstrations of various kinds. Cooper shows how air conditioned movie theaters and department stores were used as commercial experiments intended to expose people to the advantages of air conditioning. A strong sustainability policy could draw on similar tactics to promote natural cooling, including strong economic incentives for building designs and urban infrastructures which are amenable to natural cooling. In North America, Europe, Oceana and Japan, the low-energy house and smart houses are examples of advanced technologies whose 'scripts' can potentially affect a number of strong energy habits, including those involving heating and cooling (Goodchild and Walshaw 2011). However, it will be important to make it possible for life in these technically advanced houses to be comfortable, convenient and provide a basis for living in accordance with accepted social norms and cultural practices.

I propose that social learning theory, which draws on the same theoretical principles as social practice theory is a source of new thinking for the development of change incentives. Jean Lave is one of the principal contributors to social learning theory. Paraphrasing Lave, learning is not conceived of as the filling of the cognitive vessel (mind), but rather as a process which involves the acquisition of practical knowledge through a combination of cognitive processes and bodily processes (1993). Learning through participation in practices such as sporting activities is an example of social learning. The learning of a sport requires learning the rules, but also participating in exercises and rehearsals in order build up tacit skills. Another form for social learning is purposive learning through apprenticeship, involving exposure to and participation in practices along with guidance and feedback.

Social learning also has something to say about where people seek information when they are facing a major purchase decision such as for wall insulation, a heat pump or even grander, such as the purchase of a low energy home. When people face major purchase decisions, many rely more on the experiences of their peers than on product information or sales pitches. This is confirmed in a study which is just getting underway in Norway, one of the objectives of which is to examine how and why people decide to buy and install heat pumps in their homes. Initial findings show that an important source of information for potential purchasers is people in family or social networks who have made, or looked into similar purchases. People

take advantage of the experiences of others in getting an overview over prices, exploring the choice of entrepreneur, assessing the quality of the product and getting feedback on its performance. It was found that this form for learning was more important in the making of purchase decisions than the advice of experts, such as ENOVA, the Norwegian Energy Directorate, or that of heat pump consultants and energy companies (Winther and Bouly de Lesdain forthcoming).

Insights from social learning argue for the use of demonstrations, used extensively in the USA in the 1970s and 1980s in the wake of the oil shocks, but abandoned in the wave of free-market energy ideology from the 1990s. California is a state in which great strides were made in home weatherization after demonstration homes were set up in neighborhoods in cities such as Davis. People were able to observe and experience first hand how life in a low energy house could be comfortable, practical and yet have much lower energy expenses than the house they were living in. Demonstrations of alternative transport systems can also be useful, such as car free zones (Topp and Phorah 1994) and bicycle-friendly infrastructures. Demonstrations can also be relevant for accelerating the momentum building up behind collective, or collaborative consumption, such as car and laundry sharing; as well as exchange networks for clothing, sports equipment, books and baby-related equipment (Levine 2009; Botsman and Rogers 2011). In 2011, *Time Magazine* named collaborative consumption as one of the 10 new ideas that would save the world. The state of California has recently reinstated demonstration projects in its policy portfolio, with promising results (Electrical News 2012). However, the ideology and practices associated with individual ownership have led to strongly entrenched ownership-based consumption habits in the USA, Asia and Europe. Public support to the demonstration of new sharing initiatives can be essential in getting them off the ground (Wilhite 1997; Attali and Wilhite 2001).

There is a potential for encouraging changes in habits using web-based and energy billing information which draw on the principles of social learning. An example is the provision of households with a benchmark by which they can compare and assess their levels of energy use with other households living in similar dwellings. Observing that one's own household energy consumption is higher than that of others living in similar house can be a stimulus to digging into household habits, assessing the energy consequences, and making a change, whether it be the way energy is managed (i.e. thermostats) or a new purchase (energy efficient fridge or wall insulation) (Wilhite et al. 1999; Fisher 2007).

Finally, people are more open for change in periods of transition to a new home. A move often initiates a flurry of projects involving the organization of the home's spatial layout, the purchase of new appliances and changes in practices in the new home (Wilk and Wilhite 1985; Wilhite and Ling 1992). Another period of reflection begins when people are preparing to have a child, or towards the end of the family

cycle when children move out of the home. Sustainable policy should give more attention to households in transition, providing information and incentives for low-energy solutions.

In conclusion, a more robust theory habit offers new insights on stability and change in consumption. It acknowledges the co-presence of subjects and objects in the world and gives attention to the field of opportunities and obstacles which are formed in their interrelationship. It enables a new theoretical foundation for policy, drawing on social practice and social learning theory. This article has only scratched the surface of possibilities for theoretical and policy development based on this reframing of consumption. There is an urgent need for more work on the theory of habit and on policies directed at changing them.

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