

Department of Sociology



On-Line Papers - Copyright

This online paper may be cited or briefly quoted in line with the usual academic conventions. You may also download them for your own personal use. This paper must not be published elsewhere (e.g. to mailing lists, bulletin boards etc.) without the author's explicit permission.

Please note that if you copy this paper you must:

- include this copyright note
- not use the paper for commercial purposes or gain in any way
- you should observe the conventions of academic citation in a version of the following form:

Elizabeth Shove and Alan Warde, 'Inconspicuous consumption: the sociology of consumption and the environment', published by the Department of Sociology, Lancaster University, Lancaster LA1 4YN, UK, at

http://www.comp.lancs.ac.uk/sociology/papers/Shove-Warde-Inconspicuous-Consumption.pdf

Publication Details

This web page was last revised on 5th December 2003; the paper was previously published at http://www.comp.lancs.ac.uk/sociology/soc001aw.html in 1998

Inconspicuous consumption: the sociology of consumption and the environment

Elizabeth Shove (Science Studies)

Alan Warde (Department of Sociology, University of Manchester)

Revised October 1998

Abstract

Over the past 15 years or so the sociology of consumption has made real progress in identifying and dissecting a series of mechanisms which maintain and expand demand for goods and services. However, few sociologists of consumption have taken account of the environmental impact of practices they describe. In addressing the question 'why do people consume as they do and what are the environmental consequences of escalating demand?', we begin by reviewing the characteristics and environmental implications of five mechanisms of consumption isolated by analysts of consumer culture. We then consider how satisfactorily these mechanisms account for behaviour in some key areas of environmentally significant consumption, focusing especially on those associated with increasing demand for energy,



water and other natural resources. This suggests, amongst other things, that the sociology of consumption is not especially well equipped to deal with environmentally critical forms of 'inconspicuous' consumption nor with equally crucial developments in domestic infrastructures supporting the creeping evolution of normal standards of daily material life. Closer interaction between the sociology of consumption and the sociology of science and technology might narrow the gap between understandings of escalating consumption framed in terms of the visible and glamorous ingredients of consumer culture and those which focus on more mundane and largely invisible - but environmentally central - features of daily life.

1 Introduction: consumption and the environment

This paper asks two questions; in what ways can the sociology of consumption inform the analysis of environmental problems?; and what can environmental issues tell us about sociological understandings of consumption? This allows us both to examine some applications of the sociology of consumption to an area of contemporary political concern and to examine some of the characteristics and lacunae in the sociology of consumption. It is generally agreed by most concerned with environmental problems that the absolute levels of consumption in the western world are unsustainable. If one defining feature of globalisation is the universal spread of consumer culture, as suggested by Sklair (1991), then the environmental consequences of the new international division of labour are likely to be dire. The threat of the exhaustion of natural resources has been a theme in the general critique of consumer societies for about three decades (see Packard, 19XX; Schudson, 1984). Extrapolation of levels of consumption typical of the west to populations of non-western societies paint scenarios of vast environmental damage caused by exponential expansion of transportation by car, energy use and waste disposal (eg Redclift, 1996). However, with a few exceptions, scholars working within in the sociology of consumption have not paid the issue much detailed or empirical attention. In this paper we argue that the existing analytic apparatus of the sociology of consumption is able to throw some light on the social processes which increase rates of consumption, but because of its current primary focus on the ways in which consumption acts as a means of communication between individuals, it omits from its consideration many environmentally sensitive practices. For their part, environmentalists concerned with consumer behaviour have mostly looked to individuals to reform their habits by adopting practices consistent with green values. In this paper we try to identify gaps in the sociology of consumption which, when filled, might suggest more plausible policies with some impact on absolute levels of consumption.

The paper begins by reviewing briefly the development of the sociology of consumption. It then isolates a number of explanatory mechanisms purporting to explain how much and what kinds items are likely to be consumed. We then inquire how well these mechanisms account for a selection of key areas of environmentally significant consumption, focusing especially on those associated with increasing demand for energy and other natural resources. Their inability to offer anything resembling a comprehensive account leads us to speculate about why this is so and what kind of explanation and concepts would need to be added in order to understand such environmentally sensitive consumption practices. In the final part of the paper we reflect on these insights and their implications both for the sociology of consumption and for environmental research and policy.

2 The Sociology of Consumption

The sociology of consumption has no history. Or, at least, the intellectual authorities of the past to whom contemporary scholars refer certainly did not think of themselves as contributing to a sociology of consumption. Hence, despite its current prominence, there is no unified line of intellectual development to which to appeal. In the traditions of sociological theory the topic of consumption was addressed in several ways, though usually as an aside. It was examined, mostly empirically, in the context of social deprivation, through the study of poverty, its social consequences and the policies required to alleviate distress. It was confronted as part of the study of social stratification, Weber's analysis of status groups and Veblen's of conspicuous consumption are concerned with processes of social classification and the demonstration of prestige. Simmel explored fashion and taste as aspects of the anatomy of modernity. The Frankfurt School made the other main contribution through its



concerns with the spread of mass culture and the impact of commodification on cultural standards, social relations and the individual psyche. Consumption remained a minor theme of sociological investigation for thirty years after the Second World War, occasionally considered in the context of 'the affluent society', sometimes in terms of the manipulative capacities of mass media and advertising and, most notably by Packard, in terms of waste.

Probably three landmark intellectual developments led to the explosion of interest in recent years. First was the rediscovery of the role of consumption practices in the process of social differentiation and its refinement in sociological thought, with Bourdieu's (1984) analysis of distinction generating a wealth of critique and further empirical investigation into the relationship between social position and lifestyle. Second was exploration around the concept of collective consumption, associated particularly with Castells (1977 [1972]), which drew attention to the need to understand the role of the state, and its relation to capital, in the process of physical, material and social reproduction. The subsequent privatisation programmes of western governments have required these matters to be explored ever more urgently, though often in different directions. Third was the emergence of cultural studies and of innovative multi-disciplinary approaches to analysing the use and meanings of goods and artefacts in everyday life. Involving historical, ethnographic, literary and semiotic analysis, cultural studies enhanced understanding of the experiential, aesthetic and emotional - rather than the utilitarian - aspects of consumption. From these three sources has emerged a vast, complex (and often confused and contradictory) sociological literature on consumption, the largest part of which is focused on the third theme, the operation of consumer culture and its relationship to postmodernism (for sound surveys see Lury, 1996; Slater 1997).

The concepts of 'consumer culture' and 'consumer society' are central to unlocking some of the mysteries of contemporary societies. If we now inhabit a social world where consumption has replaced work as people's central life interest (Moorhouse, 1983; Offe, 1985) then we might expect sustained and comprehensive analysis of the origins and consequences of such a transformation. The entrenchment of a 'work and spend' orientation (Cross, 1993), the ubiquity of 'the consumer attitude' (Bauman, 1990), the emergence of 'lifestyle' as a project (Featherstone, 1991), the intensification of promotional culture (Wernick, 1991), and the pervasiveness in the west of 'the culture of contentment' (Galbraith, 1993) all offer description and diagnosis of current circumstances wherein consumption plays a major, defining role. All suggest different mechanisms which drive or motivate people to maintain or increase their levels of consumption.

Miller (1995:67) observes that 'Much, though not all, of the consumer behaviour work on consumer materialism and consumer culture has adopted a critical perspective'. Indeed, for at least 200 years there has been widespread ambivalence about consumption since it is associated with notions of luxury, excess, hedonism and other attributes antithetical to more legitimate ascetic protestant virtues. Modern consumer culture has been admonished for many reasons, because, for instance: large sections of the population of the world are excluded; material prosperity fails to bring happiness; the sacrifices entailed for producers are unacceptable; materialism compromises spiritual values; mass culture is vulgar. But little of the critical opprobrium has been directed towards its negative environmental consequences. With a few exceptions (e.g. Gabriel & Lang, 1995), sociologists of consumption have made almost no reference to the environmental impact of rapidly expanding levels of consumption.

Hence, we examine some of the ways in which mechanisms driving consumer demand have direct and indirect environmental consequences. In particular, we wanted to investigate the dual role of such mechanisms, first in determining what consumers choose, and second, in prompting ever escalating demand for goods and services. It seemed appropriate, in other words, to ask why people consume as they do and as much as they do, especially when this is known to put unsustainable strains on the environment.

Prima facie this question might be answered by re-examining mechanisms already isolated by analysts of consumer culture in their explanations of how demand for consumer goods is sustained and accelerated. Developing this approach, the next section reviews the characteristics and environmental implications of five such mechanisms.



3 Five mechanisms supporting escalating levels of consumption

A good deal of ink has been spilt discussing the process of emulation whereby lower classes seek to imitate the practices of their superiors, implying that there will be no cessation of demand for particular goods until the lower class has the same possessions as the higher. Once it is acknowledged that in such a system the higher class will constantly be seeking new items to mark its social status, then perpetual demand for new products appears inevitable (see Hirsch, 1978, on positional goods). Fresh desires replace previous ones, novel items replace established ones. This is not a cycle of replacing that which is worn out, but one of inevitable obsolescence, driven by a mechanism of invidious social comparison. This traditional sociological explanation of consumer behaviour has been criticised extensively, for its weak specification, because there is eveidence of 'trickle-up' as well as down, and because of the now contested presupposition that consumers share the same hierarchical evaluation of possessions and activities (see Fine & Leopold, 1993 and McCracken, 1988 for more sustained critique of this position). The other most widely canvassed explanation of these processes in the sociological heritage is probably the power and influence of capital, with its adjutant advertising and marketing agencies, which bewitch the general public by creating those false needs which the producer is, lo and behold, equipped to supply. This position has also been challenged for being one-sided, monological and capable of recognising neither the active discriminatory capacities of consumers, nor the complexity of the processes involved in the reproduction of consumer society.

Arguably, the major progress in the sociology of consumption in the past 15 years has arisen from identifying and dissecting a series of mechanisms, other than producers' search for profit and social processes of status competition, which maintain and expand demand for goods and services.

The emergent secondary literature seeking to synthesise speculation and research on the consumer culture offers a number of ways of classifying these mechanisms in operation. One of the most transparent is by Gabriel and Lang (1995) who list and discuss the ways that social scientists and (to a lesser degree) activists in the field of consumer advocacy, have conceived of the consumer. 'The Consumer' is introduced in nine different guises, as Chooser, Communicator, Explorer, Identity-seeker, 'Hedonist or Artist?', Victim, Rebel, Activist and Citizen. The writings and arguments of key contributors to a social theory of consumerism are addressed. Each is presented as placing particular emphasis on one or other model or feature of the process of doing consumption. So, the ideas of Simmel, Veblen, Douglas, McCracken and Baudrillard are made to stand for the understanding of the consumer as communicator, while the work of Erikson, Giddens, Bauman, Featherstone and Lasch, along with social psychological investigations of shopping and the meaning of objects provides the basis for a presentation of the consumer as identity-seeker. This catalogue is oriented around the question of why people select given items. Sometimes, of course, the basis of this selection also has implications for the rate of consumption, and the escalation of demand over time.

We have chosen to categorise the literature in terms of this second question, focusing more on the dynamics of escalation than on the specific processes of selecting one rather than another commodity. Our classification is not intended to be definitive or comprehensive, but we think there is some merit in grouping sociological accounts of how people are induced to consume in the escalating quantities that characterise western societies in terms of five mechanisms: (a more sophisticated account of) social comparison; the creation of self-identity; mental stimulation and novelty; aesthetic matching; and specialisation within daily life

Social comparison

Earlier accounts of the function of consumption in social discrimination suggested that there was a fixed, legitimated and widely-known hierarchy of possessions and practices which indicated a household's position on a ladder of prestige. Recent reflections have questioned whether this remains the case. Bourdieu detects a constant struggle over the legitimacy of class cultures, with groups competing to establish their own preferences as superior because this is a way of validating cultural capital which is valuable in conflict of positions of social



power. Others believe that culture is now so differentiated that pluralism has supplanted any hierarchical system of judgement. Of course people still compare their own cultural practices with others around them (both those with whom they identify with and with those who are considered to belong to other cultures) but the comparison is no longer invidious. Cultural preferences continue to demarcate social group boundaries, but in a harmless way, being no more than playful expressions of difference of taste. Which of these two accounts better describes the current condition is a matter of continuing debate. Both, however, accept that the accumulation and display of possessions is important, and both would suggest that cultural consumption is increasingly important.

As a mechanism for expanding levels of material consumption the processes identified have no definitive or self evident environmental consequences. To the extent that people now consume the signs and symbols of an aestheticised everyday life as much as they devour material objects, then the environmental effect might be neutral or even positive. However, there is no real evidence that the process of social comparison is any less resource intensive than before. Moreover there appears to be a recent trend toward engagement with as wide a variety as possible of goods, practices and experiences.

Peterson & Kern (1996), working within a tradition of American sociology of culture, argue that there has been a tendency over the last 15 years in the USA for persons with highbrow cultural tastes in music to also claim to like an increasing number of middle- and low-brow genres too. This condition they call 'omnivorousness'. Peterson and Kern interpret the trend as one whereby omnivorousness replaces snobbishness, a status system which was more hierarchical and more closed, in which an elite liked only exclusive forms of culture and either did not recognise or appreciate other less exalted forms. Peterson and Kern offer a perhaps generous interpretation of omnivorousness: it is not 'liking everything indiscriminately', but 'an openness to appreciating everything' (1996: 904). The consequences of this trend are likely to be very significant for the volume of consumption. If to experience variety means to have seen everywhere, eaten everything, heard as many types of music as possible, in order to obtain the veneer of knowledge (and preferably hands-on experience) of all potentially discussable cultural items, the impact could be considerable. The omnivore will require not just recordings of opera but also of jazz and reggae, not only a season ticket for the theatre but also for the local professional soccer team's matches, not simply a kitchen cupboard containing native aromatics but the spices required for all the cuisines of the world. It will mean a preparedness to throw away items that are not pleasing, acceptable, compatible or storable, etc. While sometimes applying the ideological injunction to variety may entail merely the substitution of one new item for another equivalent, it mostly seems like a mechanism for increasing the absolute volume of items encountered.

Creation of self-identity (Identity)

Many social theorists like Beck (1992), Giddens (1991) and Bauman (1988) maintain that people define themselves through the messages they transmit to others through the goods and practices that they possess and display. They manipulate and manage appearances and thereby create and sustain a 'self-identity'. In a world where there is an increasing number of commodities available to act as props in this process, identity becomes more than ever a matter of the personal selection of self-image. Increasingly, individuals are obliged to choose their identities' (Warde, 1994:878). Consumption then becomes more than just the pursuit of use-values or a claim to social prestige for it is also deeply associated with the sense of self and personality. An answer to the question: "what sort of person is s/he?" is now likely to be answered in terms of lifestyle or form of visible attachment to a group rather than in terms of personal virtues or characteristics. This being the case, it has been suggested (e.g. Bauman) that consumer choice may become a major source of personal anxiety, since the individual is now responsible for his or her choices, so for his or her mistakes. Such developments in the understanding of consumption as a form of communication are linked to the more general social process of individualisation. The process is manifest in practices surrounding the 'promotion of self' (Wernick, 1991), the perpetual recreation of self (Featherstone, 1991), and day-dreaming about consumption (Campbell, 1987).

This 'production model of the self' (Munro, 1996) implies that the acquisition of goods and services has become central to personal psychological well-being. It is no longer just that



certain special objects give people a sense of security and satisfaction, which social psychologists have often observed (e.g. Dittmar, 1992; Csikszentmihalyi & Rochberg-Halton, 1981). Rather, it implies that attempts at personal self-development and self-growth - a major human purpose according to many contemporary guides to the art of living - increasingly entail constant consumption. To the extent that people can, relatively freely, re-design their selves by purchasing new outfits and forming new associations - a part of what Bauman and others have described as an emergent neo-tribalism - then a high level of demand for new, or rather different, goods is likely to pertain.

The power of this explanation of consumption has of late typically been exaggerated. As Campbell (1995) observes consumption involves much more than social communication. Warde (1996) has argued that other sources of identity, particularly of identification with national, ethnic, occupational and kin groups remain strong without being dependent upon shared patterns of commercial consumption and that the production view of the self also overemphasises the role of cultural products (particularly media outputs and icons of fashion) at the expense of the variety of practices which create and sustain social relations of kinship. friendship and association. Nevertheless there is a substantial residue of truth to the view that in a modern urban society people are known through their presented selves self and that this involves concentrated attention to details supported by vigorous bouts of shopping. Again the consequence is not necessarily the encouragement of extensive production. The symbolically significant is essentially arbitrary, since meaning can be derived from many languages. Personal identity might be expressed through a disciplined asceticism, through a rejection of glossy material culture (as in the culture of grunge, or the behaviour of the significant minority of the British population who are averse to shopping, see Lunt & Livingstone, 1992), or through adoption of green consciousness and commitment. But arguably, at present a majority of the citizens of western societies are impelled to constant extensive consumption as part of a continuous process of identity formation.

Mental stimulation (Novelty)

Some social-psychological accounts of consumption (e.g. Scitowsky, 1976; Lane, 1991; Csikszentmihalyi, 1993) explain that people seek new products and new pleasures because they are stimulating; to play new games, try out new items, explore new material objects, learn new tastes, all these are ways of averting boredom. The ubiquity of concepts of the new in advertising messages is testament to the extent to which commodities are considered appealing because they are different from what went before. If coveting new products means that old ones are either retained and replaced when worn out or discarded before they wear out, then the quantity of items in production and services available might be expected to expand for ever. The current cultural imperative described by Baudrillard as the obligation to experience everything is a mechanism of the former kind, the fashion system is just one powerful example of the latter. If people will neither forego interesting entertainment and equipment, nor mend and make do, nor be content to repeat already known pleasures and satisfactions, then wants become infinite. A somewhat under-explored process of this kind is the eulogisation of variety discussed above.

While some accounts re-affirm the power of stimulation as a mechanism promoting consumption, others have seen it as potentially exhaustible. Hirschman (1982), for instance, suggests that the desire for consumer durables is terminable, precisely because people find them capable of delivering only a low level of contentment much inferior to the pleasures of social participation. Material objects inherently bear the seeds of disappointment, being useful but not pleasurable. Another counter-tendency is for people to ascribe particular value to older items. Antiques, the preservation of heirlooms, the retention of items perhaps given as gifts which sustain memories, nostalgia for simple or natural implements are cases where novelty and recent vintage is not held in high regard. Furthermore there is no particular reason to think that durability could not become a positively valued aspect; McCracken (1988:31-43), for example, notes the kudos of 'patina' in early modern times wherein something having been used well by relevant others was a sign of the quality of silverware. Certainly some items are currently sold on the suggestion that durability guarantees quality, though no doubt many more are produced in anticipation of their imminent obsolescence.



The Diderot Effect (Matching)

McCracken (1988:118-130) recalls an essay by the Enlightenment philosopher Diderot 'Regrets on parting with my old dressing gown'. Diderot was given a new red dressing gown as a present. Because it made other items in his study seem shabby, Diderot gradually replaced his desk, his curtains and other elements of the previous clutter so that they might complement his scarlet robe. In the end the room was transformed, but Diderot reports finding the effect discomforting. The effect has a radical form, wherein a new item renders all others very quickly unacceptable, and a 'rolling' form, whereby people steadily replace items as each new acquisition requires alteration to another. As McCracken observes (1988: 127), in both modes, 'the Diderot effect has clear "ratchet" implications for consumer expenditure. It helps to move the standard of consumption upward and prevent backward movement.'

Clearly the Diderot effect, that items should match one another, would constitute a mechanism requiring constant and never-ending replacement of items, for as soon as one new item is added to the collection others are likely to become disconsonant. Moreover, the mechanisms might come to apply not just to say the contents of a room, but to the entirety of a person's possessions. At least one of the many interpretations of the term lifestyle is that people are impelled to sustain coherence across all fields of behaviour (Thus for Bourdieu this would include everything from possessions to bodily demeanour). Not only should the dressing gown match the armchair, but it should also be symbolically consistent with automobile, vacations and concert-going. If shifts in any one of these requires modification to the others then demands are likely to be exponential. Featherstone's (1991:26-7) description of the postmodern consumer suggests a further ratcheting of the process when he argues that now people no longer seek a single identity or image, but several for different moods, and to the extent that all are equally stylish someone might acquire several matching sets of everything.

In addition it is possible to imagine that the Diderot effect could be appropriated in support of less wasteful consumer practices, by restoring value to durability, by encouraging the matching of those items whose production and distribution is not a threat to sustainability, and so forth. In some minor way the movement for green consumerism, with its exhortation to buy locally produced and organic foods, to use ranges of environmentally-friendly domestic items like re-cycled paper and non-toxic detergents might be seen to encourage Diderot unities in defence of sustainability. Voluntary simplicity as a widely adopted and coherent style of life would make for a much more radical restriction of demand.

Specialisation within daily life

Featherstone (1991) reflects upon the tendency for the same individual to seek to present him or herself in two or more ways, as bohemian and conventional, as romantic and formal. He sees this as a feature of postmodernism expressed and sustained through the manipulation of imagery and style. However, there is another more material and practical level at which a mechanism encouraging specialisation and pluralisation operates with similar consequences for the proliferation of items which a person might acquire. This is associated with social differentiation and with the fitting of practices to a diverse range of social situations. As the number of activities in which one might participate increases, so producers widen the range of specialised products targeted at different groups of practitioners. For example, we can now buy running shoes, training shoes, squash shoes and tennis shoes, whereas the previous generation just bought plimsolls. Once upon a time people went rambling in their old clothes, but they now have specially designed equipment bearing the branded symbols of corporations. The paraphernalia required to be a successful social participant at Ascot, Henley, the White City, the opera and the rock concert, as well as to be an employee, a supporter of a football team and a dabbler in d-i-y is enormously varied and costly, often requiring a gallery of items that are largely or potentially alike in terms of function but which are in fact quite precisely specialised, so much so that they are no longer interchangeable. It is probably true that informalisation has relaxed rules about what it is appropriate to wear on what occasions, thereby moderating the effect to some degree. But the constant invention of new activities, or more often the separation of once similar activities into demarcated and specialised fields each requiring singular accoutrements, is a powerful social and commercial impetus to expanded consumption.



Comment

These five mechanisms all have the potential to increase the level and volume of consumption in society. Taken together they probably are doing precisely that. There are, of course, counter-tendencies and as we have noted the extent and nature of expanding demand is often contingent, as are its associated environmental consequences. Even so, it seems reasonable to suggest that the sociology of consumption really does help us to understand processes which deplete natural resources, encourage unsustainable lifestyles and generally have rather negative environmental impacts.

These are, of course, not the only relevant mechanisms to have been identified. The fashion cycle, variously interpreted, is one obvious additional mechanism. Psychological and psychoanalytic models of desire supply others. Ceremonial behaviour, celebratory ritual and gift-giving suggest a further set of social mechanisms which impel continuous and predictable excesses of consumption. Indeed, it would be beneficial to isolate and catalogue comprehensively the many mechanisms identified by scholars to account for consumer behaviour. This is partly because they are often poorly or insufficiently specified (illustrated by McCracken's (1988) useful elaboration on Simmel's trickle-down effect to explain fashion). We need to find ways of further specifying, and operationalising where viable, mechanisms in order to determine in which fields, and with what frequency they come into play and what are their social and environmental consequences.

The ideas and explanations described above have been developed with reference to concerns about the relationship between consumption, identity and distinction. Reasonably enough, it has made sense to focus on particular possessions and items which serve to illustrate and exemplify the processes in question. However, what happens if we appropriate ideas from the sociology of consumption and apply them to forms of consumption which are important in terms of the environment? Does the sociology of consumption allow us to make sense of, say, energy consumption and what does it have to offer with respect to the racking up of environmentally damaging practices?

The next section of the paper considers some specific examples in terms of the mechanisms described above. A speculative exercise, it allows us first to explore their limits and relevance in grappling with environmentally significant practices and, second, to consider whether there is anything distinctive about these practices which requires a substantially different set of explanations.

4 Explaining environmentally sensitive domestic consumption

As a thought experiment we isolated a number of fields of domestic consumption and imagined how the five mechanisms might be applied to explain behaviour. We considered: overall levels of energy and water consumption; the purchase and use of domestic appliances, in the kitchen and the rest of the home; and for comparative purposes considered possessions more generally including automobiles and clothing. We selected these items somewhat arbitrarily, though we were conscious of accumulated evidence about domestic energy consumption. Many of the items depend on energy consumption: fridges, fan heaters, fluorescent lights etc. In other words, it is the outputs and services which energy makes possible that should be the focus of attention, not the consumption of energy itself. Although levels of domestic energy consumption vary widely in Western societies (Lutzenhiser, 1993) the distribution of end-uses appears to follow a fairly consistent pattern: space heating or cooling generally accounts for the largest proportion, followed by fridges and freezers, lighting (which is very rarely monitored), and other appliances such as washing machines, cookers, dishwashers, televisions (Lebot et al. 1997).

We wondered to what extent these items and the practices associated with them could be explained in terms of social comparison, self-identity, matching, etc.. A brief resume of our unsystematic reflections is presented in Figure 1. Many of these 'judgments' can be challenged in detail, but a number of points emerge to sustain some general conjectures. Inspection of the figure allows us to identify a number of facets of these particular practices with a bearing on sustainable consumption. Other consequences of specialisation and issues of use, innovation, provision and conservation become apparent, suggesting alternative perspectives on consumption practice.



Figure 1 about here

Specialisation and applications

The specialisation within daily life is clearly related to domestic practices. Electrical energy is put to an increasingly diverse range of uses, steadily transforming what were once exclusively manual operations (like brushing teeth and carving meat). Although there are limits to what washing machines, cookers and fridges are expected to do, the range of functions and facilities still increases from year to year. At times even the boundary conditions change, making it possible to develop new combinations of once separate appliances such as the fridge-freezer or the washer-drier. While this makes a difference to the range and scope of appliances on the market, we need to go further if we are to consider the practical consequences of such developments for direct energy consumption. While specialisation also transforms the packaging of domestic activity (new roles appear and old ones vanish with the arrival of a dishwasher), it is difficult to see how specialisation affects the frequency with which machines are actually used. Different questions arise when the focus is on use rather than acquisition or display.

Differences between acquisition and use

Compare, for instance, the combination of responses with respect to the acquisition of fridges, freezers, washing machines as objects in their own right, and the corresponding lines which represent their use. The general pattern is one in which the five mechanisms are more appropriate for understanding acquisition than use. While use may not be such an important issue for the analysis of possessions, it is clearly crucial in terms of the continuing demands made of energy and water resources. Sociologists of consumption have taken note of the effort invested in learning to consume, and in the further layers of differentiation associated with more and less "proper" use of gadgets, objects or services, but there is rather less understanding of the conventions and habits which influence the ways in which central heating systems are used, or the frequency with which washing machines whirr. The notion of the "unwashed" suggests that keeping clean is, or at least can be, a point of social comparison. But once past the threshold of visible grime, it is impossible to tell how often people take a shower for the signs of such activity are literally washed away. This, then, is a form of consumption for which there is nothing to show other than a damp towel, and an emptier bottle of shampoo or shower gel. Despite the day to day invisibility of these practices it is clear that standards of cleanliness have changed: "the invention of the washing machine has meant more washing, of the vacuum cleaner, more cleaning" (Kyrk in Forty, 1986: 211). Yet the specific translation of social expectations regarding cleanliness (which clearly can be the subject of social comparison, identity, etc.) into the daily, but distinctly invisible, consumption of energy and water remains both obscure and hard to describe. The lack of attention paid to consumption in the sense of routinised use is not simply due to the private nature of the activities in question.

So, the actual use of energy consuming items and services is relatively unexplored. Although technical researchers go to considerable lengths to record domestic energy consumption, they are generally concerned with the end result, not the process. This leaves a real gap in our understanding of environmentally significant forms and practices of consumption.

The transition from the novel to the normal

Of the columns in our figure one of the more difficult to complete related to novelty. It is hard to imagine what the novelty of water consumption might currently refer to. But it is not so long ago that plumbed in baths were a luxury. Although installed in middle class homes from the 1880s, "they remained virtually unknown in working class houses until the 1920s" (Forty, 1986: 166). The evolution of the toilet, its positioning, design and relation to the sewerage system is even more complex and again "Class differences as regards toilets were considerable" (Muthesius, 1982: 60). The histories of domestic gas and electricity supply, and the struggle between the two are clearly wrapped up in the parallel histories of dependent devices and systems (like electric lights or gas cookers and fridges), the interests and priorities of competing supply industries, and the manufacturing of demand (Cowan, 1985; Forty, 1986; Rybczynbski, 1986). So there is a sense in which we might say that novelty was



once crucial, but is no longer. Instead, lack of access to a washing machine or a central heating system, when so many other people have them, may be an indication of deprivation, an important aspect of social comparison and self-esteem. The instructive point is the appreciation of the collective dynamics of consumption, and the points at which novelty is a consideration. Taking a longer term perspective, we should perhaps pay more attention to the process of items becoming normal than to the moment of novelty.

Alternative strategies for provision

In theory at least, there are environmental advantages in pooling resources and sharing facilities. The idea of equipping each household with its own washing machine clearly represents one of the more energy and resource intensive responses to the challenge of cleaning a nation's clothes. Comparison of the lines in the matrix relating to the acquisition and use of a washing machine or the use of a laundry suggests that each constitutes a different, and probably changing, form of consumption (Roberts, 1991), Going along to a communal laundry might variously represent the social highlight of the week (e.g. the social life of the wash house in the 1840s (Muthesius, 1986)), or a mindless and essentially solitary chore (sitting on uncomfortable chairs and staring at other people's clothes spinning round). On the other hand, having clean and ironed shirts delivered to the door might well be the height of luxury. Understanding the mechanisms of consumption might also tell us something about the factors which influence the relative significance of alternative strategies, one compared with another, as well as about the distinctive qualities of each. That would involve paying attention to notions of convenience as they influence different ways of doing more or less the same thing, comparing not only the different dynamics of consumption associated with each, but also the environmental consequences of one or another solution.

Mechanisms and 'green' consumption

The five mechanisms are more relevant to the acquisition and display of some types of items like clothes and household fittings but also to at least some energy saving devices. It is relatively easy to think of ways in which they might actively encourage forms of "green" consumption. For instance, social comparison could prompt the installation of solar panels (Dard, 1986), identities are readily attached to vegetarianism, people might well go out of their way to select coherently appropriate softwood furniture and so on. Providing there are alternatives to choose between, there is no reason why the mechanisms should not favour types of consumption which embody less energy or which make less demand on natural resources. But not all types of environmentally beneficial consumption fit this pattern. Installing cavity wall insulation represents the single most effective environmental measure a householder can take (Energy Efficiency Office, 1991; Shove, 1991). But because no one can tell whether your walls are insulated or not, this particular consumer act slips the net of mechanisms concerned with inter-personal communication. Buying double glazing "works" rather better in consumer terms, but is of course much less effective environmentally.

Mechanisms like the Diderot effect or social comparison might also increase the rate at which these same "green" objects become obsolescent. The social and physical durability of objects is of real significance. It matters little how "green" the settee is if it is discarded and replaced after only two years. This demonstrates the dual role of the mechanisms; they refer both to the selection between alternatives and to the "churn" rate, that is the rate at which things are replaced, demolished, and thrown away. In addition, other social processes influence the actual operation of the mechanisms. That settee, green or not, is likely to have a longer life - perhaps even deserving restoration and repair - if given as a wedding present than if picked up in a bargain basement on a wet Saturday afternoon. In this as in other cases, the mode of acquisition appears to modify the thing itself and thus its social durability (Appadurai, 1986; McCracken, 1988). In this area, providing we retain the distinction between the selection of more and less environmentally friendly goods and the rate at which they are replaced, the language of mechanisms really does help.

5 Environment and consumption

To summarise, the forms of consumption for which these mechanisms make most sense share a number of characteristics. First, they tend to revolve around seemingly individual



choice and selection. It is in this context that we might locate the green consumer, one who seeks out the most environmentally friendly alternatives on offer or who looks for less harmful ways of meeting their own private needs. Second, the mechanisms are especially relevant when it comes to the analysis of objects (especially visible objects or processes) or even events which are relatively discrete and which can be reviewed and considered as items or experiences in their own right. Third, they are primarily relevant to those aspects which are part of a process of social communication, of indicating to others something about one's social standing or personal identity.

Applying these mechanisms, we can consider the demands and dynamics which favour the consumption and production of goods and services in terms of their longevity and whether they are resource and energy intensive. Moreover, we can begin to identify and explore tendencies and counter tendencies in the ratcheting up, and sometimes the down, of consumption levels.

However, the figure suggests that these ready-made mechanisms do not capture some of the most important features of environmentally significant consumption. They do not fit areas of inconspicuous consumption, like the utilities, very well, and they are not especially helpful in terms of understanding the use of appliances, the role of lighting and central heating, or creeping standards of cleanliness. So what is missing?

One clue is that many of the "no" and "maybe" responses relate to issues which are boringly normal, invisible and enmeshed in a network of related practices and habits. Despite these qualities, such features change, often rapidly, with instant and wide ranging environmental consequences. What is needed is a way of analysing the origins of change in mundane routines. The matrix identifies some missing ingredients, or at least ingredients which are only weakly represented, in the sociology of consumption.

The first is the need to take greater account of infrastructure both in relation to urban planning and the role of utilities in the development of power lines, water mains etc., and in terms of the design and organisation of key arenas like kitchens and bathrooms. In other words we need to know more about the processes and decisions, often commercial, which frame the options and possibilities within which people in turn make choices. The distribution of railway networks, petrol stations, and roads make different forms of transport more and less possible, just as the histories of past choices structure current possibilities within a household. What if there is no shower, or if the heating system runs on oil or if the toilet consumes 7 or 11 or 15 gallons of water with every flush? In these circumstances changing patterns of energy or water consumption are likely to involve altering an established infrastructure of taken for granted hardware. Tampering with taps, shower heads, boilers, etc. is rarely seen as a discrete process of "consumption", for these elements are component parts of that complicated interlocking system which people generally think of as their house.

Such notions are far from entirely absent from the sociological literature which has shown some concern for the social consequences of socio-technical systems. The differentiation of socio-technical systems, to which people become attached and which themselves tend to expect, and even compel, individuals to consume in particular ways has been noticed. For example. Schwartz Cowan (1983) has demonstrated very effectively how the development of infra-structural systems has the effect of locking households, and particularly women into certain ways of reproducing themselves on a daily basis. She considers eight technological systems, namely the systems that supply us with food, clothing, health care, transportation, water, gas, electricity and petroleum products (1983:71), which have, through becoming industrialised, played a part in altering the nature of domestic labour in American households. Her principal focus was to explain why it was still the case that women legitimately claimed that their work was never done despite technological innovation which should have reduced the burden of housework. However, in passing she did have much to say about the use of products and their technological infra-structures, among which was the fact that new technical systems altered expected levels of performance (as when washing machines raise expectations about how often clothes should be cleaned). These technological systems usually require consumption in their own right, but also encourage the further acquisition and use of associated products. So households consume water and electricity, but only when both are available are they likely to own washing machines, dishwashers and showers. What is



interesting is that although these technological systems structure patterns of daily life and related consumption practices, and although they represent major items of consumption in their own right, recent sociologists of consumption have paid them relatively little attention.

Second, it is important to come to terms with the bunching together of expectations and choices. What is missing is a way of capturing the gradual and collective development of a sense of comfort and well-being, or of tracking shifting standards of cleanliness. We need to understand the evolution of the broad, ordinary sense of what is and is not normal. This is likely to require investigation of the rippling of unintended consequences, the spread of central heating, for example, leading to the decline of hot water bottles and bed socks, whilst also making possible new forms and styles of indoor clothing (Wilhite and Lutzenhiser 1997). While mechanisms like novelty and specialisation give us some purchase on these processes, their cumulative effect remains elusive.

Attention to the development of normal standards directs attention to another distinct mechanism which ratchets up consumption. Some of the ordinary examples considered in the matrix suggest the need for a complementary, but more defensive view of consumption, one focusing less on confidence and overt display and more on 'just-in-case' scenarios. The freezer, for instance, needs to be this big just in case all the family show up at Christmas. Similarly, the spare bedroom is needed for those rare occasions when someone comes to stay. Turned the other way around, the need to cope with all social eventualities might be seen as a variant of conspicuous consumption: those who drive enormous cars imply that they need a vehicle this big because any day now they might have to take all their friends and all their luggage to somewhere important - even if that day is not today. As a protective strategy, over-sizing has to be understood in terms of the management of social risk, the cost of failure and the sheer fear of being unable to cope. Developing this idea, Wilhite and Lutzenhiser (1997) suggest that in catering for the extreme, consumers re-define what is normal: expectations of peak load become ordinary and bit by bit new peaks appear.

Third, the history of energy consumption highlights the way in which activities have been redefined and managed, also showing how consumers trade between time and resources (whether those be natural resources, or the resources of other people's time), as they develop alternative ways of coping with different aspects of everyday life (Schipper, 1989). The notion of convenience is, for instance, critical. The flip of a switch takes the place of time and effort once spent on chopping logs and clearing out the ashes. And that flip also switches the location and management of energy production and consumption. More than that, it alters the balance of time available for other forms of consumption. Thinking along these lines generates some big questions about the relationship between resource intensity and the management of time. Whose effort and resources are re-distributed in the cause of convenience and what is the net environmental effect?

This list of only weakly articulated aspects of environmental impacts of consumption revolves around three core issues: infrastructure, interdependence, and the creeping evolution of normal standards. Perhaps these missing themes need reconceptualising. We are, after all, talking about invisible practices and shifts in socio-technical networks which are simply not, or at least not simply, the subject of social comparison. This is the realm of inconspicuous consumption, a realm ignored by studies of consumer culture which are enthralled by the significance of immediate visual clues in the communication of social meanings.

Conclusion

We have suggested that while the sociology of consumption has developed in promising ways in the last decade, most of the progress has been with respect to the analysis of consumer culture in its aesthetic dimensions (i.e. issues of style and taste). One such line of progress has been an improved and more precise understanding of some of the social mechanisms which lie behind decisions about what to consume and which also impel people to consume ever increasing quantities of goods and services. We have also learned to appreciate the complexity and environmental significance of the use to which goods and services are put. Consumption comprises a set of practices which permit people to express self-identity, mark attachment to social groups, accumulate resources, exhibit social distinction, ensure participation in social activities, and more besides. However, these processes bear primarily



on the way that individuals select among the vast array of alternative items made available in the form of commodities and their symbolic communicative potential.

Examination of the consumption of what used to be described in British industrial statistics as 'the utilities' reveals a type of commodity which dances scarcely at all to the tunes of consumer culture. Only at best obliquely and indirectly does the purchase or use of water, coal, gas or electricity confer self-identity, mark attachment to social groups or exhibit social distinction. Yet a sizeable proportion of household income is devoted to these items and together they contribute to the most pressing of the world's environmental problems.

The analysis presented here leads to the conclusion that the most environmentally problematic aspects of consumption are largely beyond the remit of current sociological approaches. Cisterns, freezers, fans and cavity walls do not feature prominently on the research agenda. Taking these particular spheres of consumption seriously shifts attention away from an intellectual obsession with the glamorous aspects of consumption towards its more routine, pragmatic, practical, symbolically neutral, socially determined, collectively imposed, jointly experienced, non-individualised elements.

Consideration of mechanisms isolated in the analysis of consumer culture may generate some important conclusions with respect to sustainability. Yet reflection on the characteristics of energy and water consumption implies that new and different approaches are also required, perhaps linking the sociology of consumption to the sociology of science and technology. A distinction is suggested between a world of relatively individualised consumer behaviour involving the selection of discrete and visible commodities and a muddier world of embedded, inter-dependent practices and habits explicable in terms of background notions such as comfort, convenience, security and normality (a reason for scepticism regarding Miller's (1995: 34-38) faith in the heroism of the housewife).

Such a distinction might improve the understanding of environmentally significant consumption and provide a platform for an assessment of possibilities and strategies for promoting sustainability, making better use of resources, and racking down levels of demand. In some cases, for example, those which are comprehensible in terms of the five mechanisms, it is possible that environmentally friendly actions and practices, including the restriction of consumption, might acquire their own symbolic significance. High status frugality is a real possibility, as is the valuing of durability and even repair and maintenance. On the face of it there is no reason why some of these mechanisms should not promote green consumption whilst also slowing the escalation of social and physical obsolescence.

But for forms of consumption which are more deeply embedded in infrastructures and sociotechnical systems, the achievement of energy and resource efficiency is likely to have rather more to do with the way in which collective services are managed and handled, and with systemic shifts in routine habits and practices. Far from being visible or deliberately selected, these developments are largely unseen by those they most affect and by those whose environmental "choices" they so strongly influence. Which is not to say that there are no alternatives, only that they lie outside the rather narrow realm of individualised green consumerism. One way forward might be to scour the conceptual remnants of earlier analyses of collective consumption. Another could be to apply the concept of systems of provision (Fine & Leopold, 1993) to the utilities and to domestic machines. Whichever, there is a profound disjuncture between our means of understanding, on the one hand, the escalating consumption of the glamorous items of an aestheticised consumer culture and, on the other, the many inconspicuous products and services associated with daily living.

References

Appadurai A (1986) The Social Life of Things: commodities in cultural perspective Cambridge: Cambridge University Press

Bauman, Z (1988) Freedom Milton Keynes: Open University Press.

Bauman Z (1990) Thinking Sociologically Oxford: Blackwell

Beck U (1992) Risk Society: towards a new modernity London: Sage



Bourdieu P (1984) Distinction: a social critique of the judgement of taste London: Routledge and Kegan Paul

Campbell C (1987) The Romantic Ethic and the Spirit of Modern Consumerism Oxford: Blackwell

Campbell C (1995) 'The sociology of consumption' in Miller D (ed) Acknowledging Consumption: a review of new studies London: Routledge 96-126

Castells M (1977[1972]) The Urban Question: a marxist approach, London: Edward Arnold

Cowan R S (1983) More Work for Mother: the ironies of household technology from the open hearth to the microwave New York: Basic Books

Cowan R S (1985) 'How the refrigerator got its hum' in Mackenzie, D., and Wajcman, J (eds.) The Social Shaping of Technology Milton Keynes: Open University Press

Cross G (1993) Time and Money: the making of consumer culture London: Routledge

Cziksentmihalyi M (1992) Flow: the psychology of happiness London: Rider

Cziksentmihaltyi M & Rochberg-Halton E (1981) The Meaning of Things: domestic symbols and the self Cambridge: Cambridge University Press

Dard P (1986) Quand l'energie se domestique Paris: Plan Construction et Architecture

Dittmar H (1992) The Social Psychology of Material Possessions: to have is to be Brighton: Harvester Wheatsheaf

Energy Efficiency Office (1991) Insulating Your Home 2 Dd8240826 ENGY JO546NJ, HMSO

Featherstone M (1991) Consumer Culture and Postmodernism, London: Sage

Fine B and Leopold E (1993) The World of Consumption London: Routledge

Forty, A., 1986, Objects of Desire: Design and Society Since 1750, London: Thames and Hudson

Gabriel Y & Lang T (1995) The Unmangeable Consumer: contemporary consumption and its fragmentation London: Sage

Galbraith J K (1993) The Culture of Contentment, Harmondsworth: Penguin

Giddens A (1991) Modernity and Self-identity Cambridge: Polity

Hirsch F (1978) Social Limits to Growth London: Routledge & Kegan Paul

Hirschman A (1982) Shifting Involvements: private interest and public action Oxford: Blackwell

Lane R E (1991) The Market Experience Cambridge: Cambridge University Press

Lebot, B., Lopes, C., Waide, P., and Sidler, O. (1997) 'Lessons Learnt from European Metering Campaigns of Electrical End Uses in the Residential Sector', Proceedings of the European Council for an Energy Efficient Economy Summer Study.

Lunt P & Livingstone S (1992) Mass Consumption and Personal Identity Milton Keynes: Open University Press

Lury C (1996) Consumer Culture Cambridge: Polity

Lutzenhiser, L. (1993) 'Social and Behavioural Aspects of Energy Use', Annual Review of Energy and the Environment, 18, 247-89

McCracken G (1988) Culture and Consumption: new approaches to the symbolic character of consumer goods and activities, Bloomington: Indiana University Press

Miller D (ed) (1995) Acknowledging Consumption: a review of new studies, London: Routledge.



Moorhouse, H. (1983): 'American automobiles and workers' dreams', Sociological Review, 31(3), 403-426.

Munro R (1996) 'The consumption view of self: extension, exchange and identity' in S.Edgell, K.Hetherington & A.Warde (eds.), Consumption Matters, Sociological Review Monograph Series A, 248-73.

Muthesius S (1982) The English Terraced House New Haven: Yale

Offe C (1985) 'The future of work' in C.Offe, Disorganized Capitalism, Cambridge, Polity Packard V (19XX) The Waste Makers

Peterson R & Kern R (1996) Changing highbrow taste: from snob to omnivore, American Sociological Review, 61, 900-907

Redclift M (1996) Wasted: counting the costs of global consumption London: Earthscan

Roberts, M., (1991) Living in a Man-Made World London, Routledge

Rybczynski W (1986) Home: a short history of an idea, Harmondsworth: Penguin Books

Schipper, L., Bartlett, S., Hawk, D., and Vine, E. (1989) 'Linking Life-styles and Energy Use: A Matter of Time', Annual Review of Energy 14, 273-320

Scitowsky T (1976) The Joyless Economy: an inquiry into human satisfaction and consumer dissatisfaction Oxford: Oxford University Press

Shove, E. (1991) Filling the Gap: The Social and Economic Structure of Cavity Wall Insulation, Institute of Advanced Architectural Studies, University of York

Sklair L (1991) Sociology of the Global System London: Harvester

Slater D (1997) Consumer Culture and Modernity Cambridge: Polity

Warde A (1994) 'Consumption, identity-formation and uncertainty', Sociology, 28(4), 877-898.

Warde A (1996) 'Afterword: the future of the sociology of consumption', in S.Edgell, K.Hetherington & A.Warde (eds.), Consumption Matters, Sociological Review Monograph Series A, 302-12.

Wernick A (1991) Promotional Culture: advertising, ideology and symbolic expression London: Sage

Wilhite H and Lutzenhiser L (1997) 'Social Loading and Sustainable Consumption', European Council for an Energy Efficient Economy Summer Study



Figure 1
Mechanisms

Environmentally	1.	2.	3.	4.	5.
significant consumption	Social comparison	Identity	Novelty	Match-ing	Specialisation
Total energy consumption	no	no	no	no	maybe
Total water consumption	no	no	no	no	maybe
Space heating	yes	no	not now	no	No
Lighting - selecting light bulbs	no	no	not now	no	Yes
Lighting - creating an atmosphere	yes	yes	no	yes	Yes
Washing machines as objects	maybe	no	not now	no	Yes
Washing machines in use	no	maybe	no	no	No
Sending washing to a laundry	maybe	maybe	not now	no	maybe
Having a shower or bath	no	maybe	no	no	Yes
Cookers as objects	maybe	maybe	no	maybe	Yes
Cooking as a practice	yes	yes	maybe	no	Yes
Fridges and freezers as objects	no	no	not now	maybe	Yes
Fridges and freezers in use	no	no	no	no	no
Cleaning, in general	yes	yes	no	no	Yes
The kitchen as a whole	yes	yes	maybe	yes	yes
Possessions in general	yes	yes	yes	yes	yes



Clothing	yes	yes	yes	yes	Yes
Cavity wall insulation	no	no	no	no	No
Double glazing	yes	maybe	not now	not now	no