Motivating Sustainable Consumption

a review of evidence on consumer
behaviour and behavioural change

a report to the Sustainable Development Research Network

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Acknowledgements

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Abstract

Consumer behaviour is key to the impact that society has on the environment. The actions that people take and choices they make – to consume certain products and services or to live in certain ways rather than others – all have direct and indirect impacts on the environment, as well as on personal (and collective) well-being. This is why the topic of 'sustainable consumption' has become a central focus for national and international policy.

Why do we consume in the ways that we do? What factors shape and constrain our choices and actions? Why (and when) do people behave in pro-environmental or pro-social ways? And how can we encourage, motivate and facilitate more sustainable attitudes, behaviours and lifestyles?

Motivating Sustainable Consumption sets out to address these questions. It reviews the literature on consumer behaviour and behavioural change. It discusses the evidence base for different models of change. It also highlights the dilemmas and opportunities that policy-makers face in addressing unsustainable consumption patterns and encouraging more sustainable lifestyles.

Changing behaviours – and in particular motivating more sustainable behaviours – is far from straightforward. Individual behaviours are deeply embedded in social and institutional contexts. We are guided as much by what others around us say and do, and by the 'rules of the game' as we are by personal choice. We often find ourselves 'locked in' to unsustainable behaviours in spite of our own best intentions.

In these circumstances, the rhetoric of 'consumer sovereignty' and 'hands-off' governance is inaccurate and unhelpful. Policy-makers are not innocent bystanders in the negotiation of consumer choice. Policy intervenes continually in consumer behaviour both directly (through regulation and taxes eg) and more importantly through its extensive influence over the social context within which people act.

This insight offers a far more creative vista for policy innovation than has hitherto been recognised. A concerted strategy is needed to make it easy to behave more sustainably: ensuring that **incentive structures and institutional rules** favour sustainable behaviour, **enabling access** to pro-environmental choice, **engaging people** in initiatives to help themselves, and **exemplifying the desired changes** within Government's own policies and practices.

Executive Summary

Part 1   Framing the Debate

1.   Towards Evidence Based Policy

Consumer behaviour is key to the impact that society has on the environment. The actions that people take and the choices they make – to consume certain products and services rather than others or to live in certain ways - all have direct and indirect impacts on the environment, as well as on personal (and collective) well-being. This is why the topic of 'sustainable consumption' has become a central focus for national and international policy.

This report was commissioned by the Sustainable Development Research Network as a preliminary review of the research on consumer behaviour and behavioural change. These issues are becoming increasingly important in the context of emerging debates about consumption, consumer behaviour and sustainable development.

Policy development in the context of behavioural change is notoriously difficult. One of the reasons for this is the enormous variety of factors that influence behaviour. Another is the 'value laden-ness' of behavioural and lifestyle issues. At the same time, there is a widespread recognition of the need to engage in this difficult terrain and to develop 'evidence-based policies' to support behavioural change. Nowhere is this more relevant than in the domain of sustainable consumption.

2.   Consumption: the vanguard of history?

Consumption, in the words of one author (Miller 1995) represents the 'vanguard of history'. The historical and contemporary literature suggests a huge variety of different roles for consumption in modern society. These include its functional role in satisfying needs for food, housing, transport, recreation, leisure, and so on. But consumption is also implicated in processes of identity formation, social distinction and identification, meaning creation and hedonic 'dreaming'. Some authors argue that these processes are driven by evolutionary imperatives of status and sexual selection. Two key lessons flow from this literature.

The first is that material goods are important to us, not just for their functional uses, but because they play vital symbolic roles in our lives. This symbolic role of consumer goods facilitates a range of complex, deeply engrained 'social conversations' about status, identity, social cohesion, group norms and the pursuit of personal and cultural meaning. In the words of Mary Douglas (1976) 'An individual's main objective in consumption is to help create the social world and to find a credible place in it.'

The second key lesson is that, far from being able to exercise deliberative choice about what to consume and what not to consume, for much of the time people find themselves 'locked in' to unsustainable consumption patterns. Consumer 'lock-in' occurs in part through the architecture of incentive structures, institutional barriers, inequalities in access, and restricted choice. But it also flows from habits, routines, social norms and expectations and dominant cultural values.

These lessons emphasise the difficulty and complexity associated with negotiating pro-environmental behavioural change. They also highlight the need for policy to come to grips with (and to influence) the social and institutional context of consumer action, as well as attempting to affect individual behaviours (and behavioural antecedents) directly.

Part 2   Models of Consumer Behaviour

3.   The Role of Models

A key aim of this report is to provide an overview of different models of consumer behaviour and of behavioural change. Conceptual models play two important roles in understanding what motivates consumer behaviour and drives behavioural change.

In the first place, they provide heuristic frameworks for exploring and conceptualising consumer behaviour. In particular, they can help us understand the social and psychological influences on both mainstream and pro-environmental (or pro-social) consumer behaviour. For example, some models offer conceptual insights into the psychological antecedents of behaviour; others illustrate the way in which social norms are contextualised; others again highlight the impact of different value orientations on behaviour, and so on. These heuristic understandings also help us to identify points of policy intervention.

Secondly, these models can be (and have been) used as frameworks to test empirically the strength of different kinds of relationships (between values and behaviours for example) in different circumstances. This is important for several reasons, not the least of which is that it enables us to develop an empirical evidence base for particular assertions about consumer behaviour and consumer motivation. It also allows us to interrogate the strength of these relationships under specific conditions, and to explore the possibilities for behavioural change.

Models that are good for heuristic understanding are not necessarily good for empirical testing, and vice versa. A good conceptual model requires a balance between parsimony and explanatory completeness.

4.   Rational Choice

The starting point for the discussion of models of consumer behaviour is the familiar 'rational choice model' that guides much of existing policy. This model contends that

consumers make decisions by calculating the individual costs and benefits of different courses of action and choosing the option that maximises their expected net benefits. Several key assumptions underlie the model. These are that:

- individual self-interest is the appropriate framework for understanding human behaviour;
- 'rational' behaviour is the result of processes of cognitive deliberation; and that
- consumer preferences are exogenous to the model – that is to say they are taken as given without further elaboration as to their origins or antecedents.

The policy interventions that flow from this perspective are relatively straightforward. In the first place, it is argued, policy should seek to ensure that consumers have access to sufficient information to make informed choices about the available options. Secondly, it is recognised that private decisions do not always take account of social costs. Policy is therefore required to 'internalise' these external costs and make them 'visible' to private choice.

5. Against Rational Choice

Though familiar, and clearly parsimonious, the rational choice model has been extensively criticised. One central criticism is that there are cognitive limitations on our ability to take deliberative action. In fact, we use a variety of mental 'short-cuts' – habits, routines, cues, heuristics – which reduce the amount of cognitive processing needed to act and often bypass cognitive deliberation entirely. A degree of automaticity enters our behaviour, making it much more difficult to change, and undermining a key assumption of the model.

Another problem is that affective (emotional) responses confound cognitive deliberation. It is well-known in marketing theory, for example, that consumers build affective relationships with products and respond at an emotional level to decisions about what to buy and how to behave. Some evolutionary neuro-physiology even suggests that emotion 'precedes' cognition in decision contexts. Our behaviours are based more on emotional response than on conscious deliberation.

The self-interest assumption of the rational choice model has also been attacked. In fact, human behaviour consists of social, moral and altruistic behaviours as well as simply self-interested ones. To make matters worse, the assumption of individuality is also suspect. Individual deliberations clearly do play some part on our behaviour. But behaviours are usually embedded in social contexts. Social and interpersonal factors continually shape and constrain individual preference.

6. Adjusted Expectancy Value Theories

Some social psychological models attempt to conceptualise human behaviour in a more nuanced way. Rational choice theory is a form of 'expectancy value' theory. In

this kind of theory, choices are supposed to be made on the basis of the expected outcomes from a choice and the value attached to those outcomes. A range of 'adjusted' social psychological models of consumer behaviour seek to use this basic idea to go beyond assumptions of rational choice and unravel the psychological antecedents of consumer preferences.

Some theories also respond to critics by expanding on the expectancy value structure of the rational choice model in various ways. In particular, they attempt to account for the influence of other people's attitudes on individual behaviour. The most famous example of this kind of theory is Ajzen and Fishbein's 'Theory of Reasoned Action'. Ajzen's 'Theory of Planned Behaviour' extends the same model to incorporate the influence of people's perceptions about their own control over the situation.

These conceptual models are useful in understanding the structure of some intentional behaviours. But they also leave out some key aspects of consumer behaviour. In particular, they do not offer clear insights into normative (moral), affective (emotional) and cognitive (e.g. habitual) dimensions of people's behaviour.

Furthermore, the social psychological evidence suggests that some behaviours are not mediated by either attitude or intention at all. In fact the reverse correlation, in which attitudes are inferred from behaviours, is sometimes observed. This has important implications for motivating sustainable consumption, because it suggests that behaviours can be changed without necessarily changing attitudes first.

Moreover, these behaviour changes could be valuable in changing people's environmental attitudes more generally. People may recycle simply as a result of changes in municipal waste collection services, without ever having decided that 'recycling is a good thing'. But once they start recycling, some people will infer from this that they are (to some extent) 'green'. The possibility that this new attitude will 'spill over' into other behaviours is an intriguing one.

7.   Moral and Normative Conduct

Moral and normative considerations are inherent in any discussion of environmentally-significant consumer behaviour. Rational choice models eschew discussion of moral behaviour and assume that it reflects an aspect of self-interest. But incorporating moral beliefs into adjusted expectancy value models appears to improve their predictive power.

Moreover, some authors have made explicit attempts to understand the dimensions and the antecedents of moral or pro-social behaviours. For example, Schwartz's 'Norm-Activation Theory' suggests that moral behaviours are the result of a personal norm to act in a particular way. These norms arise, according to Schwartz, from an awareness of the consequences of one's actions and the ability and willingness to assume responsibility for those consequences.

The most well-known work on the moral dimensions of pro-environmental behaviours is that of Paul Stern and his colleagues. Their Value-Belief-Norm theory attempts to elucidate a chain of influence from people's value sets and beliefs to the emergence of a personal norm to act in a given way. The importance of this work is its insight into the value basis of different behaviours and behavioural intentions.

Cialdini's Focus Theory of Normative Behaviour also has important ramifications for understanding consumer behaviour. Cialdini suggests that people are continually influenced in their behaviours by social norms which prescribe or proscribe certain behavioural options. The existence of such social norms can be a powerful force both in inhibiting and in encouraging pro-environmental behaviour. At one level, pro-environmental behavioural change can be thought of as a transition in social norms.

8.   The Matter of Habit

Expectancy value models still assume that behaviour is the result of deliberative, cognitive processes. But in practice, many of our ordinary, everyday behaviours are carried out with very little conscious deliberation at all. Cognitive psychology suggests that habits, routines and automaticity play a vital role in the cognitive effort required to function effectively. This ability for efficient cognitive processing becomes increasingly important in a message-dense environment, such as the modern society in which we live.

At the same time, the process of 'routinization' of everyday behaviours makes them less visible to rational deliberation, less obvious to understand, and less accessible to policy intervention. Habitual behaviours often undermine our best intentions to change and are an important structural feature of behavioural 'lock-in'. Habit is one of the key challenges for behavioural change policy since many environmentally-significant behaviours have this routine character.

9.   Sociality and Self

Many social-psychological models assume an individual approach to human behaviour. But experience tells us that we are often constrained by what others think, say and do. Some social theories go even further than this and suggest that our behaviours, our attitudes, and even our concepts of self are (at best) socially constructed and (at worst) helplessly mired in a complex 'social logic'. Social identity theory, for example, regards key aspects of our behaviour as being motivated by a tendency towards intra-group solidarity and inter-group competition.

These kinds of theories provide a rich evidence base for the social embeddedness of environmentally significant behaviour. They also suggest that behavioural change must occur at the collective, social level. Individual change is neither feasible nor sufficient.

The relationship between self and society is mediated by the particular form that social organisation takes within a given society. Cultural theory suggests that historically there have been only four main types of social organisation: fatalist, hierarchical, individualist/entrepreneurial and egalitarian. Each of these cultural forms has a different view of nature and a different view of how social and environmental goals should be achieved.

The dominant cultural model in 21ˢᵗ Century society is individualist. But this is only one form of social organisation and there is evidence to suggest that it may not be sufficient to address the complexity of pro-environmental behavioural change.

10. Integrative Theories of Consumer Behaviour

Some models of consumer behaviour focus on internal antecedents of behaviour such as values, attitudes and intentions. Others focus more on external factors like incentives, norms and institutional constraints. Some models are good at describing internal (cognitive) aspects of individual decisions but fail to reflect the importance of contextual or situational variables and vice versa.

Making sense of behaviour inevitably requires a multi-dimensional view which incorporates both internal and external elements. In particular, as Stern has noted, a useful model has to account for:

- motivations, attitudes and values;
- contextual or situational factors;
- social influences;
- personal capabilities; and
- habits.

The report reviews a number of models that attempt this task. These include the attempt by Stern (2000) and his colleagues to construct an integrated attitude-behaviour-context (ABC) model capable of describing and predicting pro-environmental consumer behaviour, Triandis' (1977) early theory of interpersonal behaviour, and the recent work of Bagozzi and his colleagues (2002) to build a comprehensive model of consumer action.

The question of whether consumers are free to make choices about their own actions or whether they are bound by forces outside their control has provoked a long debate in the social sciences. This debate - about the relative influence of human agency and social structure – culminated in the development of Giddens' (1984) 'structuration theory' which attempts to show how agency and structure relate to each other.

Giddens work has provided the basis for a view of consumption as a set of social practices, influenced on the one hand by social norms and lifestyle choices and on the other by the institutions and structures of society. Giddens' model proposes a key distinction between 'practical' and 'discursive' consciousness. Most everyday, routine action is performed in practical consciousness. But there is evidence to suggest that

intentional or goal-oriented behaviours require elaboration in discursive consciousness. This insight is important in devising strategies to change habitual behaviour.

Part 3 Towards Behavioural Change

11. Change, Persuasion and Learning

Behavioural change is fast becoming the 'holy grail' of sustainable development policy. But understanding how, why and where behaviours change is an important pre-requisite for making progress here. Information campaigns have been widely used for achieving public interest goals. But they are known to be less effective than other forms of learning. Research suggests that learning by trial and error, observing how others behave and modelling our behaviour on what we see around us provide more effective and more promising avenues for changing behaviours than information and awareness campaigns.

Persuasion is particularly difficult in a message-dense environment. In one extreme case, a California utility spent more money on advertising the benefits of home insulation than it would have cost to install the insulation itself in the targeted homes. Effective persuasion relies on observing a number of basic principles. These include:

- understanding the target audience;
- using emotional and imaginative appeal
- immediacy and directness;
- commitments/loyalty schemes;
- use of 'retrieval cues' to catalyse the new behaviour.

The 'elaboration likelihood model' of Petty and Cacioppo (1981) suggests that lasting behavioural change relies on people consciously engaging with and elaborating on the subject matter of the persuasive message.

As the evidence from Section 9 underlines: human beings are social creatures. In spite of our best efforts at independence and individuality, we learn by example, and model our behaviours on those we see around us. 'Coping with the demands of everyday life,' argued Bandura (1977), 'would be exceedingly trying if one could arrive at solutions to problems only be actually performing possible options and suffering the consequences.' According to social learning theory, we learn most effectively from models who are attractive to us or influential for us, or from people are simply 'like us'. Sometimes we learn by counter-example. And we learn not to trust people who tell us one thing and do another.

Since many environmentally significant behaviours are routine in nature, it is vital for sustainable consumption policy to find ways of addressing and re-negotiating habitual behaviour. Like many psychological processes, habit formation has its own rules and dynamics. A vital ingredient for changing habits is to 'unfreeze' existing behaviour –

to raise the behaviour from the level of practical to discursive consciousness. This process is known to be more effective in a supportive, social environment.

12.   Policy Options and Opportunities

Looking through the lens of consumer behaviour reveals a complex and outwardly intractable policy terrain. People are attached to material consumption in a wide variety of ways, some of them functional, some symbolic. They are often locked in to unsustainable patterns through a complex mixture of factors some of them institutional, some of them social or psychological.

The rhetoric of 'consumer sovereignty' and does not help much here because it regards choice as individualistic and fails to unravel the social, psychological and institutional influences on private behaviours. Some behaviours are motivated by rational, self-interested, and individualistic concerns. But conventional responses neither do justice to the complexity of consumer behaviour nor exhaust the possibilities for policy intervention in pursuit of behavioural change.

It is clear that achieving pro-environmental behaviour change demands a more sophisticated policy approach. A concerted strategy is needed to make behaviour change easy: ensuring that **incentive structures and institutional rules** favour pro-environmental behaviour, **enabling access** to pro-environmental choice, **engaging people** in initiatives to help themselves, and **exemplifying the desired changes** within Government's own policies and practices.

A creative approach to behavioural change policy has a number of different avenues to consider. These include the influence of Government on:

- incentive structures (taxes, subsidies, penalties)
- facilitating conditions and situational factors (access to recycling, public transport etc)
- institutional context (rules, regulations, market structures)
- social and cultural context (strength of community, family stability etc)
- business practices and their impact on both consumers and employees
- helping communities to help themselves
- its own environmental and social performance.

In summary, the apparent intractability of consumer behaviour is in part a function of the policy model which has dominated conventional thinking on pro-environmental and pro-social change. But the evidence suggests that this model is inaccurate. Despite the rhetoric of modern 'hands-off' governance, policy intervenes continually in the behaviour of individuals both directly (through taxes, regulations and incentives) and (more importantly) through its extensive influence over the social and institutional context.

Governments are not just innocent bystanders in the negotiation of consumer choice. They influence and co-create the culture of consumption in a variety of ways. In

some cases, this influence proceeds through specific interventions – such as the imposition of regulatory and fiscal structures. In other cases it proceeds through the *absence* of regulations and incentives. Most often it proceeds through a combination of the ways in which Government intervenes and the ways in which it chooses not to.

As this review attempts to demonstrate, a genuine understanding of the social and institutional context of consumer action opens out a much more creative vista for policy innovation than has hitherto been recognised. Expanding on these opportunities is the new challenge for sustainable consumption policy.

PART 1: FRAMING THE DEBATE

'An individual's main objective in consumption is to help create the social world and to find a credible place in it.'
(Douglas 1976)

1   Towards Sustainable Consumption Policy

The broad aim of this report is support the development of policies that will encourage and promote pro-environmental[1] consumer behaviours. Examples of such behaviours include: the recycling of household wastes, purchase of 'sustainable' products, using energy efficient appliances, choosing green electricity tariffs, composting garden and kitchen waste, investing in 'ethical' funds, conserving water or energy, buying organic food, returning electrical goods for re-use or recycling, switching transport mode, changing travel behaviour, buying remanufactured or re-used goods, reducing material consumption, pursuing 'voluntary simplicity' and so on.

Clearly not all of these are consumer behaviours in the strict sense of purchasing behaviours. Some of them – such as energy conservation and travel – can be construed as 'consumer' behaviours in the sense of behaviours that affect resource consumption. Others, however, are more to do with household management (recycling, composting) or lifestyle choice (voluntary simplicity). Although even these latter behaviours have direct or indirect implications for resource consumption, it may ultimately be as appropriate to classify them as 'citizen' behaviours as it is to call them consumer behaviours. Nonetheless, for the purposes of this report, we shall generally use the term consumer behaviour and assume that it refers to 'the acquisition, use and disposal' of products, services, and practices (Bagozzi et al 2002).

1.1   The Challenge of Behavioural Change

Policy development in the area of behaviour and behavioural change is notoriously difficult. A part of the reason for this is that changing people's behaviour is itself difficult. Changing our own behaviour is difficult; certainly more difficult than we sometimes wish it was. A simple – and relevant – experiment will illustrate the point. Try changing the position of the waste bin in your kitchen. Better still, get someone else to change it for you. And then count how many days it is before you stop going to the wrong place to deposit your waste; and how many times you curse whoever it was suggested the experiment.

One reason for the notorious difficulty of policy in this area is the wide variety of different factors that influence behaviours and choices. Some of these factors affect behaviour and choice directly. Others affect behaviour indirectly by shaping and constraining the social and institutional context within which choice is negotiated. Some factors are more clearly amenable to policy intervention. Others appear more

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[1]   It should be noted that such behaviours do not always result in net environmental gains for a variety of well-known reasons, including rebound effects, takeback effects, and the counterveiling environmental costs of certain pro-environmental actions (such as the energy cost of recycling). Assessing the environmental impacts of specific behaviours or intentions is beyond the scope of this document. It will concentrate instead on people's pro-environmental attitudes and intentions and the relation between these and their behaviours.

elusive and are less obviously open to Government influence. Others again, it is argued, may not even be appropriate domains for external persuasion.

The assumed 'sovereignty' of consumer choice is one reason policy-makers tend to fight shy of attempting to influence personal 'lifestyle' decisions. Another is the sheer complexity involved in understanding the conflicting influences involved. The sphere of social action is almost invariably characterised by value tradeoffs and personal or interpersonal dilemmas. Negotiating these is difficult enough. Predicting the impact of specific policy interventions on them is even more problematic. The recent calls for 'evidence-based' policy (Cabinet Office 1999, 2001) must struggle here with an evidence base that has an impressively long pedigree but is vast, complex, inherently uncertain, and potentially confusing.

At the same time, there is widespread acknowledgement of the need to engage in this difficult terrain. From systemic health and educational priorities, such as obesity and truancy, to specific anti-social behaviours like car-dumping, drink-driving and fly-tipping, there is an increasing recognition of the need to identify underlying influences on such behaviours. In particular, it is now acknowledged that factors such as personal motivation, collective practice, peer pressure, habit, subjective norm, and social context play a key role, both in influencing behaviour and in determining the success or failure of policy interventions to change it. There is an emerging realisation amongst policy-makers of the need to find innovative ways for policy to support behaviour change in all of these areas (Shipworth 2000, Halpern et al 2003, Darnton 2004a&b, NCC 2003 & 2005).

1.2   The Challenge of Sustainable Consumption

Nowhere are these insights more relevant than in the domain of 'sustainable consumption'. The key role of consumer behaviour (and household consumer behaviour in particular) in driving environmental impact has long been recognised. It may have proved impossible so far to agree on a precise definition of the term sustainable consumption. But the realisation that people's choices, behaviours and lifestyles will play a vital role in achieving sustainable development is one of the (relatively few) points of agreement to have emerged from international environmental policy debates over the last decade or so (Jackson and Michaelis 2003).

The UK Government has explicitly recognised this. In July 2003, DEFRA and DTI jointly published a UK Framework for Sustainable Consumption and Production entitled *Changing Patterns* (DEFRA 2003). The document was a response to the 10-year framework of programmes launched at the World Summit on Sustainable Development in 2002 in support of 'national and regional initiatives to accelerate the shift towards sustainable consumption and production'.

One of the most important roles of the Framework document was to identify the next steps for UK policy, amongst which the Government highlighted the need to stimulate a debate on sustainable consumption. In pursuance of this goal, the Government invited the Sustainable Development Commission (SDC) and the National Consumer Council (NCC) to submit proposals for a national 'roundtable' on sustainable

consumption. The UK Round Table on Sustainable Consumption held its first meeting in June 2004 and will, it is hoped, play a key role in advancing understanding of sustainable consumption, identifying plausible visions of a sustainable lifestyle and engaging business in the sustainable consumption debate.

The present study aims to contribute to these aims. It is intended, in particular, to inform policy-makers grappling with the need to encourage pro-environmental behaviour change. The report was commissioned by the Sustainable Development Research Network as a preliminary review of different social-psychological models of consumer behaviour and behavioural change. It has been carried out at the Centre for Environmental Strategy in the University of Surrey, and draws extensively from the author's fellowship work 'Towards a social psychology of sustainable consumption', which is supported by the ESRC Sustainable Technologies Programme.

1.3   Terms of Reference for this Review

Consultations with key stakeholders, including DEFRA, DTI, SDC and NCC, led to the agreement of specific 'terms of reference' for the study. These terms of reference focused on three linked research questions, namely:

1. What does research tell us about the factors that motivate, shape and constrain the behaviour of 'mainstream' household consumers?
2. What does research tell us about the factors that motivate, shape or constrain pro-environmental household consumer behaviours?
3. What does research tell us about achieving pro-environmental change in mainstream household consumer behaviours?

A key aim of the review is to assess the scope, nature and robustness of the evidence base within each of these areas and to identify gaps within that evidence base.

1.4   The Question of Evidence

The question of what exactly constitutes a robust evidence base is clearly an important one and worth commenting on briefly at the start.[2] This issue is problematic even for research questions involving quantitative assessments of physical changes relating to environmental impacts. Political and scientific debates over the extent of an anthropogenic greenhouse effect bear witness to this. For social and behavioural issues, the problem is compounded by the subjective nature of the evidence base, the diversity of behavioural influences, the complexity of underlying motivations, and the embeddedness of both attitudes and behaviours in specific social contexts and practices.

On the plus side, there is a huge literature base on human behaviour to draw from with an impressively long historical pedigree. Some of this literature is in the form of useful conceptual syntheses which draw in their turn from wider anthropological, sociological or psychological evidence bases. There is also an enormous and rapidly

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[2]   See Shaxson (2004) for a useful overview of the challenge of evidence-based policy-making.

expanding body of empirical research (both quantitative and qualitative) related to consumer behaviour and the environment.

But the overall field of consumer behaviour, as Gabriel and Lang (1995) have remarked, borders on being 'unmanageable'. Disparate parts of the evidence are often difficult to reconcile. Methodologies differ widely – even within disciplines. Results are often expressed in vastly different forms. Some studies report ethnographic qualitative research. Others derive quantitative correlations on the basis of statistical sample s.

The representativeness of both quantitative and qualitative evidence is a perennial issue. Most qualitative studies and many quantitative studies must be regarded as limited by the context of the study. Likewise, the direction of causal influence is sometimes problematic. The existence of a correlation between, for example, altruistic values and recycling behaviours cannot necessarily be taken to imply a causal effect from altruism to recycling. As discussed in more depth below, reverse causalities, in which behaviours influence values, have also been detected in the research. Moreover, the establishment of even quite strong correlations between particular variables rarely precludes the possibility that other 'intervening' variables, excluded from the study (the existence of kerbside facilities, for example) might be playing important causal roles.

In this context, a coherent and widely supported conceptual insight can often provide as much value as a very detailed piece of empirical work involving quantitative evidence of topical behaviours. For example, the insight – built up over several decades of detailed qualitative research – that human beings interact with material artefacts partly on the basis of the symbolic values those artefacts hold for them (see section 2.6 below) could potentially be as useful to policy development as knowing that out of 1009 households surveyed in Greater London during 2002, 14% of the 485 households in the sample with kerbside recycling did little or no recycling (RRF 2002, 2004).

Human motivations are so multi-faceted that about the only thing one can say with absolute certainty is that it is virtually impossible to derive universal causal models with which to construct behaviour change policies in different domains. Searching for robust and useful things to say about consumer motivations and behaviours is often, therefore, a case of weighing up the 'balance of evidence' from a wide variety of studies from different kinds of perspective and establishing broad understandings from which to inform more detailed and more specific policy development.[3]

1.5   The Limitations of Systematic Review

A further important caveat follows here. The movement towards evidence-based policy has built its case for influencing policy on the extensive use of *systematic reviews* of the evidence base (Cooper and Hedges 1994, Davies 2003). The principles

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[3]   One of the immediate lessons from this complexity is the need for an incremental approach to policy development involving preparatory work to select and design taylored policy mechanisms, appropriate piloting, and careful evaluation . This point is returned to later in the study.

inherent in systematic review – namely a critical appraisal of the literature and rigorous analysis of the strength of evidence according to explicit and transparent criteria – are clearly laudable. In the context of social and behavioural issues, however, the challenges of the systematic review concept are quite considerable.

A systematic review of all the literature relevant to the three guiding questions set out above is, in all probability, an impossible task. Furthermore, its value in guiding policy development would almost inevitably be obscured by the sheer size of the task and weight of the output. Once again, the virtue of synthetic insights drawing from large bodies of evidence may be higher for policy-making than exhaustive accounts of every position in the knowledge base.

At any rate, the resources available for this study certainly do not stretch to systematic review. This study is not therefore a systematic review in the formal sense. Rather it is a broad synthesis of a wide literature base relevant to the guiding questions. As such, it may of course inform later systematic reviews of particular elements within the evidence base. Hopefully, it will also be relevant to the incremental development of policy initiatives in its own right.

1.6   Overview of the Structure

In pursuit of these aims, the review is divided into three substantive parts. The first part – **Framing the Debate** – sets out the context for the study and includes a broad summary of modern understandings of consumption and consumer behaviour. This synthesis is qualitative in nature and relies heavily on earlier reviews. In particular, it summarises some of the findings from Jackson and Michaelis's (2003) study for the Sustainable Development Commission. It highlights some of the main elements of contemporary understandings of consumer behaviour and points to their relevance for understanding behavioural change.

The second part – **Models of Consumer Behaviour** – explores a variety of different conceptual models of both mainstream and pro-environmental consumer behaviour. and discusses their relevance for the task of motivating sustainable consumption. Starting from the dominant rational choice models, the study examines the main limitations of the rational choice paradigm. It describes a variety of other behavioural models drawn from various disciplines and teases out the implications of these models for understanding and motivating pro-environmental behaviour.

The third part – **Towards Behavioural Change** – attempts to move the debate towards a robust understanding of what is possible in relation to encouraging and promoting pro-environmental behavioural change. It first summarises some of the key understandings about change and learning processes. Finally, it explores the options and opportunities available to policy-makers wishing to think creatively about motivating sustainable consumption.

2   Consumption: the vanguard of history?

Understanding (mainstream) consumer behaviour is a pre-requisite for understanding how to motivate or encourage pro-environmental consumer behaviour. But it is also a daunting task. The terminology and the context of sustainable consumption are relatively recent. But the debates about consumption, consumer behaviour and consumerism are much older and much deeper.

Consumption, in the words of one social scientist, has become the 'vanguard of history' (Miller 1995). To question consumption is, at one level, to question history itself. To engage in attempts to change consumption patterns and consumer behaviours is, in one sense, to tinker with fundamental aspects of our social world. And to proceed without acknowledging this degree of complexity and sophistication is to invite an inevitable failure.

The wider debates on consumption have an extraordinary pedigree. They can be traced back (at least) to classical philosophy. They encompass the critical social theory of the 19th and early 20th century, the consumer psychology and 'motivation research' of the early post-war years, the 'ecological humanism' of the 1960s and 1970s, the anthropology and social philosophy of the 1970s and 1980s, and the sociology of modernity, popularised in the 1990s.

Each of these different avenues of exploration asks slightly different questions about consumption and about consumer behaviour. The motivation researchers wanted to find out the best way to design and market products that people would buy; the critical social theorists and the humanists were alarmed at the ecological and social impacts of rampant materialism; the anthropologists and the sociologists were out to understand modernity, and reflect on the kind of society we had become. In spite of these differences, they all have something to say about consumption and about consumerism, and as such what they say is relevant to the aims of this report.

The purpose of this section is to offer a very brief overview of these extensive debates and to draw out some of the important implications for understanding and for influencing pro-environmental consumer behaviour. This summary draws from an earlier paper published by the Sustainable Development Commission (Jackson and Michaelis 2003). Supporting accounts of the underlying literatures can also be found in Bocock (1993), Edwards (2000), Gabriel and Lang (1995), Jackson (2003), Michaelis (2000), Miller (1995), Røpke (1999) and Sanne (2002) amongst many others.

2.1   Consumption and Well-Being

In some simple sense, it is argued, consumption can be viewed as a functional attempt to improve individual and collective well-being by providing the goods and services necessary to meet people's wants and desires. This linear view of consumption (Figure 1) is, by and large, the one encoded in conventional economics (Mas-Colell et al 1995, Begg et al 2003). Stressing the 'insatiability' of consumer desire and the

'sovereignty' of consumer choice, economics takes a broadly utilitarian approach to evaluating consumer goods and services.

I buy a particular commodity because it offers certain functionalities which are useful to me. My new car gets me from A to B more efficiently, cheaply and pleasantly than my old car did. My new fridge freezer has more room for ready-made frozen meals. My wide-screen plasma TV is easier to see and hear. I am willing to spend more money on these purchases because I value these additional services. Moreover, my wants as a consumer can never be taken to be entirely satiated, because there will always be new and better products offering me more and different ways of satisfying my appetites and tastes.

Figure 1: A Supply Chain View of Well-being
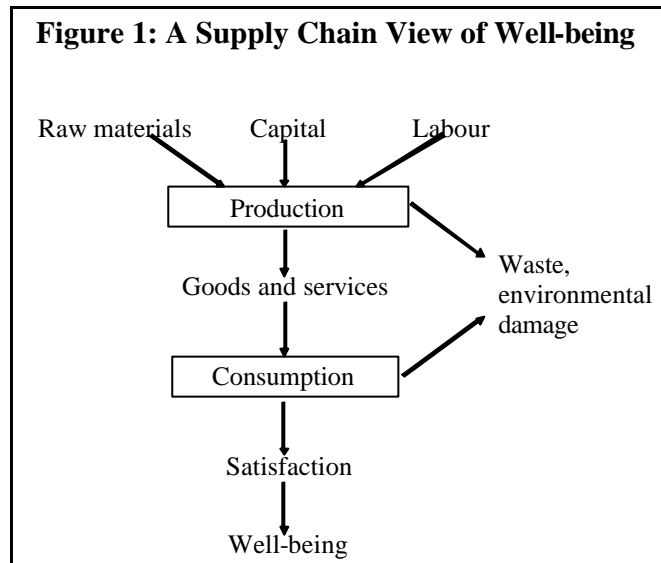
Though it is based on the assumption that consumers have a certain set of preferences or tastes, the economic view of consumption is virtually silent on the underlying motivations for these preferences. The most that economics attempts to say about these motivations is what is 'revealed' about preferences from the ways in which consumers spend their money in the market. As we shall see in more detail in the following section, economics makes key assumptions about the rationality of consumers in being able to choose products that do indeed offer them utility and thereby contribute to their well-being.

2.2 Consumption and Needs

The conventional economic position has been openly attacked by numerous critics over the years. One of the most telling critiques draws heavily on the concept of human needs. Needs theorists suggest that, in contrast to the 'insatiability' of desire, 'true' human needs are finite, few and universal (Max Neef 1992, Maslow 1954, 1968).

Classifications and typologies of human need tend to distinguish between material needs (such as subsistence and protection) and social or psychological needs (such as self-esteem, autonomy, belongingness). They also distinguish between needs

themselves and satisfiers, and suggest crucially that not all satisfiers are equally successful at meeting the underlying needs. Food for example is a satisfier of the need for subsistence. But not all foods have equal nutritional value and some are positively bad for us in anything more than very small quantities.

The possibility that some of what we consume does not satisfy our needs provides the basis for a long-standing critique of consumer society (Springborg 1981). Far from meeting our needs, social critics maintain that commercial interests in modern society have created whole sets of 'false' or 'unnatural' needs that now serve only to alienate consumers from their own well-being and in the process threaten the environment (Fromm 1976, Illich 1977, Marcuse 1964, Scitovsky 1976).

According to this critique, the consumer way of life is 'deeply flawed, both ecologically and psychologically' (Wachtel 1983). It serves neither our own best interests nor the protection of the environment. Proponents of this argument call on the so-called 'life-satisfaction paradox' in their defence. Real consumer expenditure has more than doubled in the last thirty years, but reported life-satisfaction has barely changed at all (Donovan et al 2002). Recent evidence that materialistic values hinder vital aspects of personal well-being also tends to support this critique (Kasser 2002).

The debate about human needs has generated protracted and sometime fierce disagreements between protagonists (Douglas et al 1998, Jackson et al 2004). Cultural theorists and sociologists in particular tend to be fiercely sceptical of the whole discourse of needs, arguing that it is naïve, rhetorical and moralistic. Nonetheless, the language of needs retains a popular appeal and an obvious resonance with the discourse of sustainable development.

Moreover, the needs-based critique of consumer society appears to hold out considerable hope for sustainable consumption. If social and psychological needs really are ill-served by modern commodities, then it should be possible to live better by consuming less, and in the process reduce our impacts on the environment.

On the other hand, this begs the question: why, if consumerism fails to satisfy, do we continue to consume? The social critique of consumer society tends to point here to the power of commercial marketers – the 'hidden persuaders' in Packard's (1956) terminology – to 'dupe' consumers into buying things that do not serve their needs at all. But there are a number of other equally powerful and sometimes more sophisticated responses to the same question.

2.3   Consumption and Desire

One rather persuasive response to the question posed above is that the emphasis on needs has been overstated. Consumers are driven not so much by coherent attempts to satisfy well-defined sets of needs and wants at all, according to this view. Many of our tastes and preferences are informed by desire. And desire, it is argued has a very different character than needs. Far from being associated with 'rational' efforts to match the functional character of goods with our specific personal or social

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requirements, desire is to be associated with powerful emotional or sexual drives and motivations.[4]

The idea that consumption has something to do with sexual desire is borne out by ethnographic research (Belk et al 2003) and clearly resonates with the common wisdom of advertising executives that 'sex sells'. From cigarettes to chocolate, and from underwear to cars, sexual connotation has been widely employed in advertising, both directly and indirectly, to render goods and services attractive to prospective consumers. But this association of objects with sexual desire is not by any means an arbitrary or artificial device dreamed up by marketers out of nowhere. If it were, it would be highly unlikely to succeed. What advertising attempts to exploit is a very real and rather widespread association of material commodities with sexual and social status.

Not surprisingly, therefore, display and status aspects of consumption have been the focus of sociological and psychological discourses on consumption for well over a century. Veblen's (1898) notion of *conspicuous consumption* and Hirsch's (1977) concept of *positional goods* both point to the importance of material goods in social positioning. Hirsch also points to the dynamic nature of this kind of consumption. We must run faster and faster to stay in the same place, like the Red Queen in Lewis Carroll's *Through the Looking Glass*, precisely because our sexual and social competitors are also engaged in the same race.

This is where accounts of consumer desire sometimes call on evolutionary biology in their attempt to explain and understand status and display-oriented consumption (Wright 1994, Ridley 1994). The theory of evolution suggests that animal behaviours are the result of evolutionary adaptation under pressure from the forces of natural selection (inter- and intra-species competition for scarce resources) and sexual selection (intra-species competition for sexual partners). Recent work on evolutionary psychology suggests that these forces have also shaped psychological traits such as our desires, attitudes, and natures. In other words, this avenue of thought suggests that consumer behaviour is conditioned, in part at least, by social and sexual competition. In doing so, it suggests a biological basis for consumption that portrays the task of changing behaviour in an even more daunting light.

However, evolutionary psychology does not offer a unique role to competitive or self-interested behaviours. It also provides an account of cooperative and moral behaviours (Hamilton 1964, Ridley 1996). Importantly, these aspects of the theory suggest that individual choices between competitive and cooperative behaviour depend crucially on the social climate. And as we shall discuss in more detail in Section 12, Government has a vital role in shaping this climate.

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[4] A related and rather interesting hypothesis is Campbell's (1987, 2003) idea that modern consumers are engaged in form of hedonistic dreaming – the pursuit of pleasure through the evocative power of material goods to conjure up imagined desires.

2.4   Ordinary and Inconspicuous Consumption

Some recent work in sociology suggests that the conspicuous and status-seeking aspects of consumer behaviour have been overemphasised. According to this view, a great deal of consumption in fact takes place *inconspicuously* as a part of the ordinary, everyday decision-making of millions of individual consumers.

'Ordinary' consumption, argue these authors, is not oriented particularly towards individual display. Rather it is about convenience, habit, practice, and individual responses to social norms and institutional contexts (Gronow and Warde 2001, Shove 2003, Shove and Warde 1997). And far from being willing partners in the process of consumerism, consumers are seen as being 'locked-in' to a process of unsustainable consumption over which they have very little individual control (Sanne 2002).

The concept of 'inconspicuous consumption' is important to an understanding of consumer behaviour for several reasons. In particular, it has a clear resonance with our day-to-day experience of consuming. High-street shopping for fashion goods may explicitly engage our display motivations on selected occasions.   Apart from compulsive or addictive shoppers however, we do not as a rule spend our day-to-day life engaged consciously in this kind of consumption. Much everyday consumption is almost invisible, even to ourselves.

In particular, the regular payments that leave our bank accounts to cover our mortgages, insurance payments, utility bills and local taxes appear to have very little in the way of display or status associated with them at all. Even when we change electricity or gas suppliers, for example, very few people tend to be motivated in their choice of new supplier by any attempt to improve their social standing. Indeed there would be little point in engaging in such a strategy. As well as being inconspicuous to ourselves, such choices are virtually invisible to our social peers, our sexual competitors, or the world at large.

One of the messages that flows from this analysis is that consumers are a long way from being willing actors in the consumption process, capable of exercising either rational or irrational choice in the satisfaction of their own needs and desires. More often they find themselves 'locked in' to unsustainable patterns of consumption, either by social norms which lie beyond individual control, or else by the constraints of the institutional context within which individual choice is negotiated.

2.5   Consumption and Identity

Irrespective of the tension between conspicuous and inconspicuous consumption, there is a broad agreement that, in modern society, consumption is in some sense inextricably linked to personal and collective identity. Identity, according to Gabriel and Lang (1995, 81) is the 'Rome to which all discussions of modern Western consumption lead, whether undertaken by Marxist critics or advertising executives, deconstructionists or liberal reformers, advocates of multi-culturalism or radical feminists'.

The idea that material goods play some role in defining and delimiting the concept of the self has a long pedigree (Belk 1988). It can be traced, for example, to William James's assertion that:

> 'a man's Self is the sum total of all that he can call his, not only his body and his psychic powers, but his clothes, his friends, his wife and children, his ancestors, his reputation and works, his lands and yacht and bank account…' (James 1890, 291-292)

In the hands of certain sociologists and social philosophers, the insight that consumer goods are important to processes of identity creation has become the basis for a quite specific view of consumer society. According to this view, the individual consumer is engaged in a continual process of constructing and reconstructing personal identity in the context of a continually renegotiated universe of social and cultural symbols.

Giddens (1991) points to the 'dilemmas of the self' faced by the individual in modern society, through the continually enlarging choice of consumer goods. Baumann (1998) points to the convenient resonances between the process of perpetual reconstruction of identity, and the impermanent, transient nature of modern consumer goods. 'Aggregate identities, loosely arranged of the purchasable, not-too-lasting, easily detachable and utterly replaceable tokens currently available in the shops,' he writes, 'Seem to be exactly what one needs to meet the challenges of contemporary living.'

Authors take different positions on the extent to which this relationship between identity and consumerism is a good or a bad thing. Campbell (1997) argues that an open choice of consumer goods is vital to enable consumers to function as autonomous individuals in modern society. Cushman (1992) argues that the 'empty self' of the modern consumer, which is constantly in need of 'filling up', is a cultural artefact generated quite explicitly by and for the commercialism of modern society. Baudrillard (1970) condemns the 'social logic' of consumption as a 'luxurious and spectacular penury'.

Despite these differences, the link between the consumption of material goods and the construction and maintenance of personal identity is one of the most prominent and perhaps most important elements in modern understandings of consumer behaviour. Whereas in earlier times we were what we did (or sometimes who we knew), in modern society we are what we consume.

2.6   The Symbolic Role of Consumer Goods

Embedded within the idea that consumption and identity are linked, lies an even more important insight into our relationship to consumer goods. This is the claim that consumer goods play vital symbolic roles in our lives (Barthes 1973, Czikszentmihalyi and Rochberg-Halton 1981, Dittmar 1992, McCracken 1990). We value goods not just for what they can do, but for what they represent to us and to others. Without this almost magical potential, it is doubtful that plain 'stuff' could play such a key role in our lives.

The insight that consumer goods attain symbolic properties clearly has some resonance with popular psychology about our relationship with material possessions. A child's favourite teddy bear, a woman's wedding dress, a stamp collector's prized first day cover, the souped-up, low-sprung sports car of the 'boy racer': all these examples suggest that there is much more at stake in the possession of material artefacts than simple functional value.

Over the second half of the twentieth century, this popular wisdom was given much more robust and sophisticated footing. The symbolic importance of consumer goods has been underlined by a wide range of intellectual sources including the semiotics of Charles Morris (1946) and the social philosophy of Jean Baudrillard (1970). The evidence from anthropology is perhaps the most convincing (Appadurai 1986, Douglas 1976, McCracken 1989, Sahlins 1976). Societies throughout the ages have used material commodities as symbolic resources to denote a wide variety of different kinds of meanings in an even wider variety of situations and contexts.

It would be impossible to do justice to the enormous literature supporting this insight here. Nonetheless, the lesson from this huge body of work is rather clear: material commodities are important to us, not just for what they do, but for what they signify (about us and about our lives, loves, desires, relationships, successes and failings) both to others and to ourselves. Material commodities are not just artefacts. Nor do they offer purely functional benefits. They derive their importance, in part at least, from their symbolic role in mediating and communicating personal, social, and cultural meaning.

Moreover, it is vital to point out that the fundamental basis for this process – the symbolic role of material artefacts – is not unique to modernity. In the light of the anthropological evidence, we must see the symbolic role of consumer goods as an essential feature of human societies with long roots in antiquity. Any understanding of consumer behaviour not built on this insight is likely to underestimate the social and psychological importance of consumer goods and services.

2.7   Consumption as Social Conversation

This symbolic role for material goods opens is not confined to creating and maintaining personal identity. The individual psychology of material possessions is important, of course. But the task of constructing and maintaining symbolic meaning is itself a social one. Symbols are by their nature socially constructed. The value attached to symbols is constantly negotiated and re-negotiated through social interactions within a specific cultural context.

In other words, the symbolic function of consumer goods fits them perfectly to play a key role in 'social conversations' – the continuing social and cultural dialogues and narratives that keep societies together and help them function. 'Forget that commodities are good for eating, clothing and shelter,' argue Douglas and Isherwood (1979). 'Forget their usefulness and try instead the idea that commodities are good for thinking; treat them as a non-verbal medium for the human creative faculty.'

Douglas and Isherwood draw attention, in particular, to the importance of material goods in providing 'marking services'. These are social rituals - dinner parties, work functions, or festive celebrations, for example – which serve to embed people in their social group, cement social relations and play a vital role in maintaining information flows within the social group. These information flows, claim Douglas and Isherwood, go far beyond the invidious 'display consumption' offered by Veblenesque critiques of consumerism. They serve a vital purpose in helping the individual to maintain and improve social resilience in the face of cultural shifts and social shocks, and in helping the group to maintain its social identity and to negotiate inter-group relationships.

In other words, the symbolic role of consumer goods facilitates a set of vital social conversations about individual and social identity, group cohesiveness and cultural meaning. These conversations appear to play a decisive role in strengthening the resilience and ensuring the survival of human social groups.[5]

2.8 Consumption and the Pursuit of Meaning

The ability of consumer goods to operate discursively, as a form of social conversation, means that they become embedded in a wide variety of different personal, social and cultural narratives. There is, for example, persuasive ethnographic evidence to suggest that people use material artefacts in negotiating the boundaries between the sacred and the profane, in defending against the ever-present threat of demoralisation and anomie, and in constructing social and cultural meaning structures that give both our personal lives and our society a sense of significance and purpose (Belk et al 1989, Berger 1967, Campbell 2003, Douglas 1976, Jackson 2004, Solomon et al 2003).

This view is typified by McCracken's (1988) discussion of the role of consumer goods in the pursuit of 'displaced meaning'. McCracken argues that one of the most pressing problems a culture must deal with is the 'gap between the "real" and the "ideal" in social life', the distance between our aspirations (for ourselves, for our society, for human nature) and the reality with which we are daily confronted. He suggests that consumer goods play a key role in helping to overcome this problem. Material artefacts, he says, are 'bridges' to displaced meaning.

Designer sunglasses, the new car, the wedding outfit, the seaside vacation, the rose-covered cottage are far more than satisfiers of functional needs. They are bigger, in some sense, either than the objects themselves or even than their use value. They are material representations of our expectations for the future, of the status to which we aspire, of the comforts that we deserve, of the rewards that we fervently hope will be showered upon us. They are bridges to our displaced ideals.

These insights are clearly vital where our understanding of consumption is concerned. It is already clear that no purely functional account of material goods is going to

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[5] Research from an entirely different quarter appears to reinforce these ideas. The importance of gift-giving in exchange relations has been widely explored in consumer psychology and motivation research (Belk and Coon 1993).

deliver a robust model for understanding consumer behaviour: because functionality is not the point (or at least not exclusively the point). We consume not just to nourish ourselves or protect ourselves from the elements or maintain a living. We consume in order to identify ourselves with a social group, to position ourselves within that group, to distinguish ourselves with respect to other social groups, to communicate allegiance to certain ideals. To differentiate ourselves from certain other ideals. We consume in order to communicate. Through consumption we communicate not only with each other but with our past, with our ideals, with our fears and with our aspirations. We consume, in part at least, in pursuit of meaning.

2.9   Conclusions

The psychological, sociological and anthropological literature on consumption is enormously rich. Its richness has long been recognised in marketing, consumer studies and motivation research. Business and commercial interests have drawn widely on this depth in order to design products and devise strategies for persuading people to buy them. Importantly, the same literature represents an enormous resource for policy-makers attempting to get to grips with the problem of unsustainable consumption.

At the same time, it is clearly not an easy or malleable literature. It is dogged with disagreements and intellectual tensions. Its sheer size militates against easy assimilation. And its understandings straddle some well-entrenched and rather intractable debates with very long histories. Nonetheless, it is possible to draw out two or three important themes in relation to understanding unsustainable consumption.

The first of these is that we are living in a consumer society. To say this, is not just to make obvious points about the massive expansion in the availability of consumer goods in developed economies over the last fifty years. It is not just to point to the structural reliance of those economies on consumption growth, or even to highlight the extensive commercialisation of previously public goods and services. All these things are important. But almost certainly there is more going on.

Fundamental aspects of our cultural identity are different now from what they were a hundred and fifty or two hundred years ago. Modern consumer society has its own logic, its own dynamics, its own epistemologies and ethics, its own myths and cosmologies. And all of these are identifiably different from those of other times and places. This perspective on the centrality of consumption in modern society is obviously daunting. But it will not help policy-making to evade the issue: large-scale shifts in consumption patterns will inevitably involve engaging with the 'vanguard of history'.

At the same time, there are certain respects in which the consumer society is much like any other society before it. The second key insight to be drawn from the consumption literature is that material artefacts play important symbolic roles and as a result of this are able to negotiate vital psychological and social functions in our lives.

The main objective of the individual in consumption is no less, in Mary Douglas' words than 'to help create the social world and to find in it a credible place'.

The symbolic role of material artefacts is something that we appear to share with every society for which there is anthropological evidence. But the extent to which this symbolic role is appropriated in modern society for key social and psychological purposes does appear to be a distinguishing feature of modernity. At any rate, the social-psychological and cultural complexity associated with this relationship is one of the main reasons for the apparent intractability of consumer behaviour and consumption patterns.

Equally importantly, however, the evidence indicates that consumer motivations are often embedded in a variety of ordinary, routine and habitualised behaviours which are themselves heavily influenced by social norms and practices and constrained by institutional contexts. These factors emphasise that far from being able to exercise free choice in the selection of goods and services, consumers often find themselves 'locked in' to specific consumption patterns by a variety of social, institutional and cognitive constraints.

These understandings highlight the difficulty and complexity associated with negotiating pro-environmental behavioural change. But they also point to the importance of understanding and influencing the social context within which consumer choice is negotiated. Policies that seek to promote pro-environmental behavioural change will need to engage as much with the social context that shapes and constrains social action as it will with mechanisms of individual choice. We return to this issue in Section 12.

PART 2: MODELS OF CONSUMER BEHAVIOUR

'The heart has reasons, reason does not know at all'
(Pascal 1670)

3   The Role of Models

Understandings of consumer behaviour and of policies to influence consumer behaviour rest, either explicitly or implicitly, on certain kinds of 'models' of what behaviour is, what its antecedents are, how it is influenced, shaped and constrained. These models are generally built from a set of conceptual premises, and some form of causal relationship between dependent and independent variables.

A simple example relevant to pro-environmental behaviour serves to illustrate how this relationship works. Schwartz's (1977) Norm Activation Theory (see Section 7.2 below) suggests that personal norms (intentions to behave in pro-social ways) are activated by two antecedent variables: an awareness of the consequences of one's actions and the assumption of personal responsibility for those actions. For example, if I am aware of the consequences of fuel consumption for the problem of climate change and prepared to accept that I have some responsibility for my own fuel-consuming behaviour, then I am more likely – according to the theory – to develop a personal norm to reduce my fuel consumption.

A much more complicated model of consumer behaviour is illustrated in Figure 2. Howard and Sheth's (1969) 'theory of buyer behaviour' was one of the earliest and most influential schematic representations of consumer choice widely recognised by marketers.
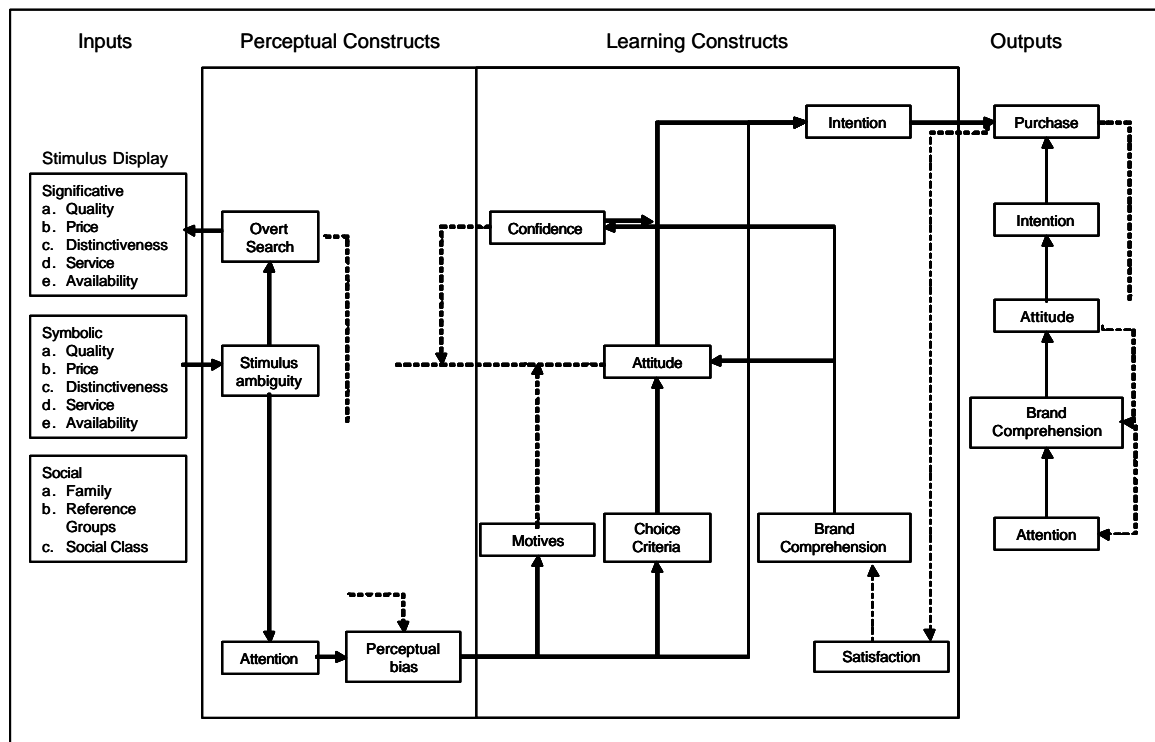

Figure 2: Howard and Sheth's (1969) theory of buyer behaviour

At first sight a model such as this looks rather intractable, particular from a policy perspective. What exactly is to be made of the complexity illustrated here? How and where in such a model should policy-makers seek to interact? And to what extent does the model allow for or predict consumer responses to policy interventions? All of these questions are difficult to answer, and partly for this reason, the Howard and Sheth model is rarely used today, even in advertising research.

In fact, models such as this have been widely criticised, mainly for being untestable, and for 'lacking specificity' in their variables. 'Theories that incorporate virtually every known social-psychological construct and process,' argue Ajzen and Fishbein (1980, 15), 'Not only lack parsimony but, more important, they are likely to generate confusion rather than real understanding'. Nonetheless, Figure 2 serves to illustrate several important points about the use and usefulness of behavioural models.

In the first place, it clearly illustrates the diverse range of influences considered by mainstream consumer research as relevant to purchasing behaviours. This is a typical feature of a great deal of consumer research and marketing literature. These professions have adopted an eclectic approach to research drawing widely on a range of theoretical traditions and frameworks in order to construct pragmatic understandings of consumer behaviour.

At one level, the eclecticism inherent in seven or eight decades of 'motivation research' represents a real resource for those seeking to understand consumer behaviour, and identify strategies through which to influence it. At the same time, consumer research is not an easy literature to grapple with. This is in part because of the scale, complexity, and historical depth of the field. But it is partly because the interests of consumer researchers and marketers – how to find ways of identifying consumer needs and desires and designing products and services to satisfy these – are structurally different from the interests of those seeking to influence consumer behaviour in the public interest.

Figure 2, for example, is mainly structured around trying to inform marketing strategies with an understanding of the relationship between external stimuli and brands in consumer choice. It may provide some insights that could later inform policies for sustainable consumption. But it was not designed for that purpose.

Perhaps more importantly, a model such as the one illustrated in Figure 2 is not particularly useful for undertaking quantitative empirical work aimed at investigating the strength or weakness of particular relationships between specific attitudes, intentions and behaviours. It is, quite simply, too structurally complex for that task.

This illustrates another crucial point about models. To the extent that such theories are validated (or at least, not falsified) by empirical evidence, they offer two kinds of benefits in terms of understanding consumer behaviour and attempting to influence it.

Firstly, they can provide heuristic devices for exploring the nature of specific behaviours and for identifying the factors that might be important to policymakers who are attempting to influence those behaviours. So, for example, Schwartz's theory

suggests that the ascription of personal responsibility for the consequences of one's actions plays a key role in activating personal norms to behave in pro-environmental ways. As such it suggests that the negotiation of consumer and citizen responsibilities is an important area for consideration, if we wish to influence consumers to act in ways that will reduce fuel-related greenhouse gas emissions. Likewise, the theory of buyer behaviour highlights the importance of the relationship consumers have to brands and the impact of this on their purchase decisions.

But a second potential function for models such as these is to provide a conceptual and theoretical framework for carrying out detailed empirical research on the structure of specific behaviours, and the role of interventions in influencing those behaviours. Norm-activation theory, for example, has been employed to explore a variety of pro-environmental behaviours such as recycling (Bratt 1999), car use (Bamberg and Schmidt 2003) and water conservation (Harland et al 1999).

To be usable (and therefore useful) however, models in this latter category must focus quite closely on a (relatively) limited number of specific relationships between key variables. Beyond a certain degree of complexity, it becomes virtually impossible to establish meaningful correlations between variables or to identify causal influences on choice. Conversely, these simpler models run the risk of missing out key causal influences on a decision, by virtue of their simplicity – as illustrated by our discussion of Schwartz's norm activation theory.

Typically, of course, this means that there will always be something of tension between simplicity and complexity in modelling consumer behaviour. More complex models may aid conceptual understanding but be poorly structured for empirical quantification of attitudes or intentions (for example). Less complex models may aid in empirical quantification but hinder conceptual understanding by omitting key variables or relationships between key variables.

A further tension inherent in modelling consumer behaviour arises in relation to the *kinds* of variables different models attempt to measure. Firstly, one can distinguish a set of approaches that study and model behaviour mainly as a function of processes and characteristics which are conceived as being *internal* to the individual: attitudes, values, habits and personal norms. Another set of approaches studies behaviour as a function of processes and characteristics *external* to the individual: fiscal and regulatory incentives, institutional constraints and social norms.

The 'internalist' approach has mainly been pursued in disciplines such as social and cognitive psychology; the 'externalist' approach has mainly been the domain of disciplines such as applied behavioural analysis and institutional or evolutionary economics. But disciplinary distinctions are not always hard and fast. For example, some early sociology of consumption characterised modern consumers in terms of 'invidious' behaviours conceived of (largely) as responses to internal cognitive processes. Later approaches to the sociology of consumption have placed a great deal more emphasis on external constraints, consumption 'practices' and the 'social logic' of consumer behaviour. Marketing studies typically adopt a more eclectic approach

drawing loosely from both perspectives, but tending to emphasise the importance of 'revealed' economic or ethnographic accounts of consumer tastes and preferences.

The distinction between internalist and externalist approaches is important to the debates about sustainable consumption precisely because each approach suggests very different conceptualisations of individual and societal change. Whereas the former approach envisages that changes in consumption patterns will flow from changes in individual beliefs, attitudes and norms, the latter sees change in external conditions as exercising a vital influence on individual behaviours.

In the first perspective, enlightened consumers are free to choose pro-environmental behaviours – assuming that they possess appropriate beliefs or attitudes; in the second, consumers are 'locked in' to consumption choices by a variety external conditions ranging from genetic conditioning to economic necessity, social expectation, accessibility constraints and the 'creeping evolution of social norms'.

It would probably be fair to say that these kinds of tensions are far from being resolved. There have certainly been some ambitious attempts – for example by Bagozzi and his colleagues (Bagozzi et al 2002) and by Stern and his colleagues (Stern et al 1999, Stern 2000, Guagnano et al 1995) – to construct coherent models of consumer behaviour capable of capturing both internalist and externalist dimensions of pro-environmental consumer choice. We review some of these models in Section 10 below.

But there have been relatively few attempts to apply these more complex schematic models empirically as a way of obtaining quantitative evidence about real attitudes and behaviours. Nor is it easy to see how this could easily be remedied. Some of these models remain, in some sense, too complex. Their main virtue, therefore, has to be seen as heuristic – that is, as fulfilling the conceptual role identified above, rather than the empirical one.

Nonetheless, there is also an enormous variety of more applicable models, some of them quantitative, others qualitative that can and have been used to explore consumer behaviour in general and pro-environmental behaviour in particular.

As any student of behaviour will know, a comprehensive discussion of even a representative sample of these models is a daunting task. Table 1 (below) summarises a selection of common models that bear particularly on the question of pro-environmental consumer behaviour. But it by no means exhausts the possibilities. Nor is it particularly easy to offer a systematic review even of the literature within this selection, for reasons that have already been discussed. The rest of Part 1, therefore, presents a synthetic overview of some of the most important of these models, structured in a particular way.

Specifically, the starting point for the overview will be the rational choice model that underlies conventional economic understandings of consumer behaviour and a number of other behavioural models. Next, we discuss some of the limitations of and objections to conventional rational choice theory. Following on from this, we outline

two specific kinds of responses to these limitations. One response has been to construct what might be called adapted expectancy-value models that attempt to correct for some of the deficiencies of the rational choice model. In addition, however, there have been some attempts to start from different places in their attempts to understand social action. Some of these models (for instance those developed by Paul Stern and his colleagues) have been developed more specifically in the context of understanding pro-environmental behaviour.

Table 1: Social-Psychological Theories of Behaviour and Change
(**bold type** in the description refers to another entry in the table)

Social Psychological Theory	Key References	Description
Attitude-Behaviour-Context (ABC) Theory	Stern and Oskamp 1987, Stern 2000	A kind of **field theory** for environmentally significant behaviour. Behaviour (B) is an interactive product of 'internal' attitudinal variables (A) and 'external' contextual factors (C)
Cognitive Dissonance Theory	Festinger 1957	Argues that people are motivated to avoid internally inconsistent (dissonant) beliefs, attitudes and values.
Cultural Theory	Thompson et al 1990	Hypothesises a four-fold typology of cultural 'types' with different conceptions of governance and the good life: hierarchists, egalitarians, individualists, and fatalists.
Elaboration-Likelihood Model	Petty 1977, Petty and Cacioppo 1981	A **persuasion** model which predicts that the long-term success of a persuasive message depends on how much mental processing or 'elaboration' of the message is undertaken by the subject (target).
Expectancy-Value Theory	Fishbein 1973, Ajzen and Fishbein 1980 eg	A broad class of theories (of which **rational choice** theory is one) based on the idea that behaviour is motivated by the expectations we have about the consequences of our behaviour and the values we attach to those outcomes.
Field Theory	Lewin 1951	Influential early social-psychological theory positing behaviour as a function of a dynamic 'field' of internal and external influences. Behavioural change relies on unfreezing (existing behaviours), shifting to a new level, and then refreezing.
Interpersonal Behaviour (TIB)	Triandis 1977	Like the **Theory of Reasoned Action** the Theory of Interpersonal Behaviour (TIB) includes both **expectancy-value** and normative belief constructs. However, TIB also includes the influence of habitual, social and affective factors on behaviour.

Motivation-Ability-Opportunity model	Ölander and Thøgersen 1995	An integrated behavioural model that combines both internal motivational variables – usually based on the **Theory of Reasoned Action** - with external contextual variables of ability (including habit and task knowledge) and opportunity.
Means End Chain Theory	Gutman 1982, Reynolds and Olson 2001	A qualitative form of **expectancy-value theory** which posits that preferences are based on a 'laddered' relationship between attributes, consequences and values.
Norm Activation Theory	Schwartz 1977, 1992	One of the better known attempts to model pro-social or altruistic behaviours: a personal norm (PN) to behaviour in a pro-social way is activated by awareness of the consequences (AC) of one's actions and the ascription of personal responsibility (AR) for them.
Normative Conduct	Cialdini, Kallgren and Reno 1991	Cialdini's Focus Theory of Normative Conduct proposes that behaviour is guided by social norms which are either descriptive (what is done) or injunctive (what should be done) in nature. The strength or 'salience' of these different kinds of norm in a given context depends on a variety of dispositional and situational factors.
Persuasion Theory	Hovland et al 1953, Petty et al 2002.	A set of theoretical approaches to the 'art of persuasion' that identifies (1) the credibility of the source, (2) the message and (3) the thoughts/ feelings of the receiver as the three critical structural elements in the success of persuasion strategies.
Rational Choice Theory	Elster 1986, Homans 1961 etc	The underlying basis of most economic theories of consumer preference and several other social-psychological theories of behaviour. Suggests that behaviour is the outcome of rational deliberations in which individuals seek to maximise their own expected 'utility'.

Self-Discrepancy Theory	Higgins 1987	Suggests that people are motivated to act according to feelings aroused by the perceived gap between their actual and 'ideal' selves.
Self-Perception Theory	Bem 1972	Proposes that people infer their attitudes by observing their own behaviour.
Subjective Expected Utility (SEU)	Ajzen and Fishbein 1980, Eagly and Chaiken 1993	A form of **expectancy value** theory closely related to the **rational choice** model, SEU theory suggests that behaviour is a function of the expected outcomes of the behaviour and the value assigned to those outcomes.
Structuration Theory	Giddens 1984	Attempts to provide a model of the relationship between agency (how people act) and structure (the social and institutional context). Giddens structuration theory relies on a distinction between 'practical' and 'discursive' consciousness.
Symbolic Interactionism	Blumer 1969, Mead 1934	Argues that people interact with things (artefacts, institutions, others) on the basis of the symbolic meanings those things have for them.
Symbolic Self-Completion Theory	Wicklund and Gollwitzer 1982	A **symbolic interactionist** theory which suggests that people create their sense of identity through the appropriation of symbolic resources to complete the 'self-image'.
Theory of Planned Behaviour (TPA)	Ajzen 1991	Adjusts the **Theory of Reasoned Action** to incorporate the actor's perceived control over the outcomes of his or her behaviour.
Theory of Reasoned Action (TRA)	Ajzen and Fishbein 1980	Perhaps the best-known social-psychological attitude-behaviour model, the Theory of Reasoned Action adjusts **expectancy value theory** to incorporate normative social influences on behavioural intention.
Value-Belief-Norm Theory	Stern et al 1999, Stern 2000	An attempt to adjust Schwartz's **Norm Activation** theory to incorporate a more sophisticated relationship between values, beliefs, attitudes and norms.

4   Rational Choice

The rational choice model is so widespread and so deeply entrenched in the institutions and structures of modern (Western) society, that it tends to have an immediate familiarity to us. The basic tenet of the model is that we behave in such a way as to maximise the expected benefits to ourselves (as individuals) from our actions.

A premise of the rational choice model is that human behaviour is a continual process of making deliberative choices between distinct courses of action. Faced with such choices, according to rational choice theory, we weigh up the expected benefits and costs of the different actions, and choose the one that offers the highest expected net benefit or lowest expected net cost to us.[6]

In travelling between home and work, for example, I am faced with a choice whether to go by car or to take public transport. I choose to go by car, because the journey is (generally) shorter, the marginal cost is (usually) lower and I like listening to the radio. Or alternatively, perhaps, I choose public transport because it is (generally) more environmentally friendly, (often) less stressful, and I enjoy the company of strangers.

The process of establishing the net costs and benefits of different alternatives is supposed to have two distinct components. One is a set of expectations about the outcomes of each choice. The other is an evaluation of those outcomes. In the example above, for instance, my choice to travel by car depends both on my expectations (that the journey will be cheaper and shorter eg) and my (positive) evaluation of those outcomes. This feature of the model often leads to rational choice models being referred to in the literature as expectancy-value models (Fishbein 1973).

One of the key features of the rational choice model (especially in its application to consumer behaviour[7]) is an emphasis on the individual as the unit of analysis. It is individuals who make choices in the model, on the basis of rational deliberations that consist of individual evaluations of subjectively expected outcomes.

The value attached to an outcome is often called the 'utility' of that outcome for the given individual, and the rational choice model is therefore one of a more general class of models sometimes referred to as subjective expected utility (SEU) models. The individual-centred approach of these models is referred to as methodological individualism. Social behaviour, in this view, is an emergent property of a collection of individual behaviours, each of which results from deliberative choices based on the subjective expected utility of the individual.

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[6]   The literature on rational choice models and critic isms of them is huge. A useful overview of the theory and common critiques can be found in Scot (2000). Key rational choice texts include Becker (1976), Elster (1986), Friedman and Hechter (1990), Homans (1961).

[7]   The rational choice model has also been applied to the behaviour of entities other than human individuals, for example, firms. But even in this case, the basic assumption is that the organisation operates as an individual entity in the deliberative framework.

One of the reasons why rational choice theory may seem familiar is that it closely resembles and indeed draws heavily on the intellectual underpinnings of classical economics. Cost-benefit analysis, for example, is nothing more than a highly quantitative form of rational choice model. As we shall see in the following sections, economics certainly does not have the monopoly on rational choice. But the rational choice model is so-deeply embedded in the economic theory of consumer preference that it is instructive to make that the starting point of our overview.

4.1   Consumer Preference Theory

The common economic theory of consumer preferences (Begg et al 2003, eg) has four basic elements to it: the consumer's available income, the price of goods on the market, the consumer's tastes or preferences and the behavioural assumption of 'utility maximisation'. Given a limited income, a specific range of goods to choose from, and a potentially infinite set of (exogenous) tastes or preferences, the consumer chooses goods from those available in such a way as to maximise his or her subjective expected utility within the constraints of his or her available income.

Several elements of this model are worth commenting on in more detail. The first is the assumed 'rationality' of consumer choice. Rational consumers are those who make reasoned choices that maximise their expected utility over the set of possible purchases. This is the same concept of rationality, clearly, that is embedded in the rational choice model. In order to achieve this utility maximisation, however, consumers need to be in possession of a certain set of information. In particular, and this is the second point, they will need to know the range of possible goods they could choose from, and the prices of each of these goods. Thus, information plays a key role in the actual behaviour of consumers in real-life situations. 'Rational' choices are only possible in the context of 'perfect' market information.

Next, it is important to note that the preferences or tastes that underlie consumer choice lie outside the model itself. They are assumed exogenous to it. The consumer preference model has little or nothing to say about the nature, structure or origin of consumer preferences. Since Samuelson's (1938) work, the most that economics attempts to say about the structure of individual or collective preference is what is 'revealed' about these preferences through the actual decisions that rational consumers make in the market place.

Finally, it is instructive to note that economic theory has an important assumption of 'non-satiety'. In other words, economics assumes that there is no limit to the desires that consumers have for goods and services. The underlying wants and needs are assumed to be potentially infinite. This requirement is structurally important not just to the operation of the consumer preference model – without it the concept of constraint in relation to utility maximisation would not work – but at one level to the entire project of economics as the science of the allocation of scarce resources.

When it comes to the question of influencing consumer behaviour, the consumer preference model has, at least, the virtue of simplicity. The key influences in any given situation are the range of private costs and benefits and individual taste or

preference (Figure 3). In addition, of course, the model envisages a key role for information, in allowing consumers to make 'rational' choices. But there still only appear to be two rather limited points of intervention in the model, for policy-makers seeking to achieve social goals. One is to ensure that consumers are provided with the requisite information to make rational choices. The other is to adjust private costs and benefits to reflect the existence of social costs and benefits that may lie outside the realm of individual choice.
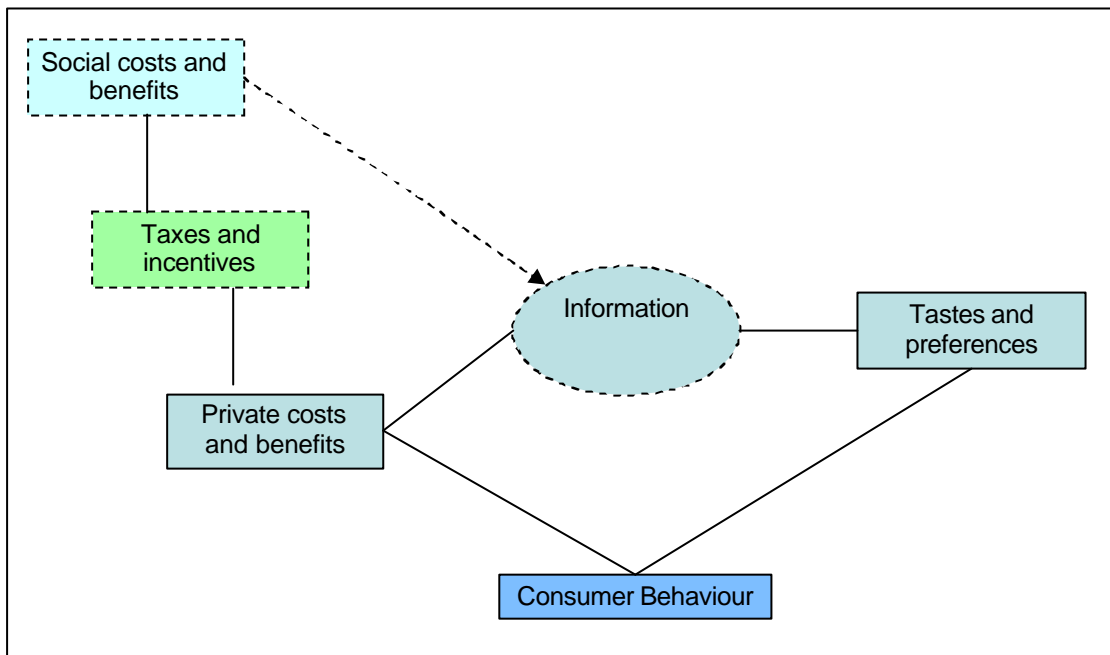
Figure 3: Simple Economic Model of Consumer Preference

4.2   The Attribute (Lancaster) Model

There is a variation on the consumer preference model that is worth mentioning briefly. This variation was originally proposed in 1966 by Kelvin Lancaster and is hence often referred to as the Lancaster model or sometimes the Attribute model of consumer preference.

Lancaster's suggestion was that consumer preferences for goods are not formed on the basis of the products themselves, but on the attributes that those products possess and the values of those attributes for individual consumers. The economic theory of choice constructed from this suggestion has proved considerably more complex than conventional preference theory. Nonetheless, it has been widely employed and developed to explore consumer preferences for product attributes in sectors as diverse as food (Crawford 2003, Philippidis and Hubbard 2003 eg), luxury cars (Anurit et al 1999), health care (Ryan and Bate 2001), and renewable energy investments (Bergmann et al 2004).

4.3 Rational Choice in Non-Purchasing Behaviour

Consumer preference theory – and its extension to 'attributes' – were developed to apply specifically to economic transactions: that is, basically, to consumer's purchasing behaviours. But the rational choice model has also been applied to people's non-purchasing behaviours. Perhaps the best-known application of rational choice to non-purchasing behaviours is the work of Gary Becker, whose (1976) *Economic Approach to Human Behaviour* and (1981) *Treatise on the Family* won him the Nobel Prize. Becker used the concept of human capital to understand apparently non-economic household behaviours such as divorce, the increase in women's participation in the labour force and the distribution of child-rearing and household labour between men and women.

Consistent with its roots in anthropological theories of social exchange (Homans 1961), rational choice models see exchange as a fundamental determinant of human behaviour. The trade in economic goods and services is only one aspect of social exchange. At a broader level, according to this extended rational choice model, we exchange a variety of different goods (time, gifts, labour, critical appreciation, sexual services and so on) in the expectation that (at least over the long-term) these exchanges will benefit our own self-interest.

In principle, therefore, and to the extent that it is a valid model of behaviour, rational choice theory ought to be useful in describing a wide variety of environmentally-relevant behaviours. Establishing the individual costs and benefits of non-purchasing behaviours (recycling, for example) is as important as understanding people's purchasing behaviours (buying recycled goods, eg).

Moreover, the distinction between purchasing and non-purchasing behaviours very often breaks down under a careful analysis. More often than not, as the travel behaviour example above illustrates nicely, any such choice will involve both financial and 'non-financial' costs and benefits. Pro-environmental behaviour like many other kinds of behaviour involves both purchasing behaviour and non-purchasing behaviour. The focus on economic exchange inherent in consumer preference theory is to some extent an arbitrary limitation on understanding pro-environmental behaviour. But for the rational choice model, more generally, this is not necessarily a problem. There is a well-established tradition of extending rational choice beyond purchase decisions.

Where we might expect rational choice theory to confront some problems, however, is in relation to moral and social behaviours. The evidence (discussed in more detail in Section 7.1 below) suggests that only a limited proportion of pro-environmental behaviour can be regarded as flowing from a fundamentally self-interested value-orientations. Altruistic, pro-social and biospheric value orientations also appear to be influential in motivating pro-environmental behaviours, and this is particularly likely to be the case where pro-environmental behaviours incur net private costs to those who engage in them.

There are some ways round this problem for rational choice theory, in particular through the concept of extended self-interest. But since the problem of values is part

of a wider critique of the rational choice model, we defer discussion of this to the next section.

5   Against Rational Choice

At the heart of rational choice theory lies the image of the self-interested economic person, an image whose roots can be traced back to the writings of Adam Smith and John Stuart Mill and Jeremy Bentham (Russell 2000, Sen 1984). Though powerful as an image, and firmly imbedded in many modern institutions, this conception of human action has never been without its critics, and in the last half century the rational choice model has been subject to an increasingly ferocious assault for a variety of reasons.

The rational choice model is built on a number of key assumptions about social action (Scott 2000, Zey 1992). These can be categorised under three main headings: 1) that choice is rational; 2) that the individual is the appropriate unit of analysis in social action; and 3) that choices are made in the pursuit of individual self-interest. Most of the criticisms of rational choice theory can be categorised as responses to one or more of these assumptions. The rationality assumption has been attacked mainly on cognitive grounds; the individuality assumption mainly on sociological grounds and the assumption of self-interest mainly on moral and epistemological grounds. We address each of these criticisms in turn.

5.1   Bounded Rationality, Habit and Emotion

One of the most famous critiques of the rational choice model lies in the Nobel Prize winning work of Herbert Simon. Simon (1957) argued that in decision-making situations actors face both uncertainties about the future and costs in acquiring information about the present. These two factors, he claimed, limit the extent to which rational decision-making (in the sense of a comprehensive calculation of net costs and benefits) is possible. Not only do I simply not have the time to amass all the information necessary to make a thorough comparison between choices; some of that information is simply not available to me, because it concerns events that lie in the (uncertain) future.

Environmental issues in particular raise new kinds of uncertainties for consumers because in many cases the impacts of our actions are distanced from us, either in space or in time. In acting sustainably, consumers are required to take account of agricultural, manufacturing, economic or social processes that take place on the other side of the world – or only become relevant at some point in the future. Moreover, it is often the cumulative effect of many people's actions over time that is problematic rather than my own actions *per se*.

The problem here is structurally similar to the problem (alluded to in Section 1.5) of carrying out a systematic review. In the face of limited resources, a systematic review of the evidence required for 'rational' decision-making (policy-making) is not always possible, indeed in Simon's view is frequently impossible. The image of choice as a process of rational deliberation over a complete range of alternatives is unrealistic. Decision-making in practice is not like that. It occurs under time constraints and operates under cognitive limitations.

Ordinary people in ordinary situations are simply not capable of processing all the cognitive information required for so-called 'rational' choices. Drawing on evidence of the actual behaviour of firms, Simon argued instead for a model of 'bounded rationality' in which actors make decisions not by 'optimising' across all possible choices but by 'satisficing' – that is by setting a minimum level, with which if they achieve they will be 'happy enough'.

One of the ways in which people cope with the cognitive demands of choice, particularly where it occurs on a routine basis, is through a variety of cognitive and emotional heuristics and biases – rules of thumb – against which they tend to make immediate and sometimes not even conscious decisions (Tversky and Kahnemann 1974). The existence of such heuristics and biases again potentially confounds the deliberative model of decision-making inherent in rational choice theory.

This kind of low-cognitive-effort decision-making is most obvious in the case of what we commonly call routine or habitual behaviours. We saw in Section 2.4 how routine and habit are increasingly regarded by sociologists and social psychologists as an important aspect of ordinary consumer behaviour. The same notion is inherent in the opening experiment in Section 1. My inability to locate the kitchen waste bin, seven or eight days after it has been moved, is the result of a deeply-ingrained habit that now appears to be interfering with my ability to make rational choices.

The existence of habit, its role in decisions, and its apparent departure from the model of rational cognitive deliberation has exercised critics of rational choice for well over a century. From the early writings of Durkheim (1893) to the more recent sociological work of Bourdieu (1990) and cognitive psychology of Bargh (1994), Aarts and Verplanken (1999) and others, the role of habit has assumed an important place in the critique of rational choice theory and in the development of robust social-psychological models.

In fact, some attempts can be made to recover the concept of rationality in the face of habit. From one perspective habits can be regarded as cognitive scripts whose role is to reduce the cognitive effort required to make routine decisions whose rationality (ie optimality from the perspective of self-interest) has already been determined. For as long as these cognitive scripts serve the interests of rational decisions, they can in fact be regarded as rational habits.[8] In particular, of course, one of their benefits is to reduce the transaction costs associated with rational deliberation.

Quite often however, as in the case of the disappearing waste bin, the existence of counter-intentional habits (Verplanken and Faes 1999) interferes substantially with the ability of the individual to make decisions in his or her own best interests. In particular, in any circumstances in which one is attempting to change one's own behaviour (or indeed the behaviour of others) the transaction costs of rational deliberation appear to be reversed by the existence of habitualised behaviour. A distinct cognitive effort is now required to overcome habitual behaviour, *even where*

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[8]   Simon 1957 coined the term procedural rationality to refer to the rationality inherent in this context, as opposed to the 'substantive rationality' embodied in the rational choice model.

the new behaviour carries substantial benefits to the individual concerned. In a later section, we shall return to the importance of this issue for policy-making.

Quite apart from the role of habit in ordinary behaviour, critics of rational choice theory have also pointed to the emotional or affective dimensions of decision-making. I choose to buy this, that or the other shirt, not on the basis of rational calculation of the costs and benefits of a range of options, but because I have an affective response to the colour blue (say). Or to take another example, I decide to keep, rather than give away or have put down, an elderly cat who has suddenly begun to urinate in my study and cause me untold frustration and extra housework, not because I have totted up the costs and benefits of keeping it, but because I have an overriding affection for another creature who has shared a part of my life with me.

Of course, rational choice theory can attempt to recover rationality in these cases by capturing my affective responses to cats and the colour blue within the concept of individual utility, and perhaps even attempt to impute an economic value to these affective responses on the basis of the time and money foregone in cleaning up cat's mess. But from the perspective of those critics of rational choice theory who highlight the role of emotion (Zey 1992, Etzioni 1988), this is an almost futile and potentially tautological attempt to protect a crumbling theory from its own limitations.

In fact, in some constructions, the recognition of emotion as an important influence on human choice threatens to dethrone cognitive deliberation from behaviour altogether. Some attempts have been made to construct a theory of rationality in which reason itself – far from being a deliberative process – is viewed as a set of conditioned responses to patterns of learning laid down as 'emotional markers' in the body (Damasio 1994, 1999). Reason itself, in this model, is a construct of our emotional responses to situations. We make decisions on the basis of our cognitive responses to affective (emotional) states which are themselves the result of physiological triggers in the body, that are built up from both innate responses and learned behaviours reinforced over the history of the individual life.

Though clearly a long way from rational choice theory, this kind of model does suggest some explanation for the much-lamented (by economists) irrationality of ordinary behaviour. It is also a part of the common wisdom of marketers. The relationship that marketers attempt to establish between brands and consumers is a fundamentally affective one.[9]

5.2   The Argument against Individualism

A second strand of the argument against rational choice theory concerns the assumption of individuality. The unit of analysis in rational choice theory is the decision-making process of the individual. Individuals themselves are defined as rational self-interested maximisers of subjective utility. Social behaviour is explained, in rational choice theory, as an emergent property of the individual behaviours and actions of which it is composed. 'The elementary unit of social life is the individual

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[9]   Personal Communication, Chris Pomfret, Unilever, 2nd March 2004.

human action,' claims Elster (1986, 13). 'To explain social institutions and social change is to show how these arise as the result of the action and interaction of individuals.'

Again, this kind of 'methodological individualism' is familiar to us because it is deeply imbedded in the institutions of the modern economy. The concept of individual choice, the rights of the individual, and the supremacy of individual preference occupy a central role both in the structure of market economies and in the culture of Western society. That there might be any alternative to this conception is, in itself, something that we sometimes have a hard time grasping.

Nonetheless, there is a very long-standing critique of methodological individualism which argues that it is an 'undersocialised' account of human agency and overlooks both our understanding of the relationship between self and other and the nature of decision-making and choice in real life (Granovetter 1985, Zey 1992). Although it would be impossible to do justice to the complexity of this critique, it is worth highlighting three dimensions of it here.

Firstly, the notion of individual choice as a coherent entity is itself challenged by the social psychology of identity. From the early work of George Herbert Mead, social psychology has proposed a notion of self which is socially constructed. For Mead (1934), the self is the result of 'social conversations'. In some senses, social interaction is formally antecedent to identity. We learn to construct a sense of self, an identity, but we do so only through our interactions with others (Burr 2002). At the very least, according to social psychology, the relationship between self and other must be regarded as dualistic. Though the concept of an individual 'self' capable of engaging with others and thereby influencing the nature and structure of social conversations is at one level coherent, it depends for its existence and its development on social interaction, on the social conversations that it also plays a part in perpetuating.

This conception of self makes the assumption of individual rationality hard to defend, however. As Zey (1992, 14) contends: 'habits of mind and behaviour develop in a social and cultural context'. Our 'individual' decisions are influenced by our relation to others at a level that is beyond our conscious control. Individual choice in this framing of identity is helplessly mired in the fabric of social norms, expectations and interactions.

A second avenue of criticism against methodological individualism flows from organisational studies of decision-making. This avenue points to the fact that in practice a good many decisions are made in a collective, organizational setting. Individual rationality is compromised in this context by the need to account for the wishes and desires of others. But more importantly, organizational psychology suggests that in group situations – where many decisions are made – individuals adopt social roles that are defined by the particular context and situation in which they find themselves. Moreover, the identity of the group itself becomes a key determinant of group behaviour and of the social processes that exist within the group (Tajfel 1982).

These intra and inter-group processes undermine the very possibility of individual rationality in such a context.

The final element of the critique against individualism flows from the long-standing concern of sociology with problems of social action and social structure. The question of understanding how social structures arise, how they change and how they influence human behaviour has been central to sociology for at least a century (Giddens 1984). If every social structure could be reduced to the actions of particular individuals, then it might be possible for methodological individualism to account for it. Sociologists argue that this is not the case. In particular, they point to the existence of social structures which do not appear to benefit any particular individual, the longevity of social structures over time (sometimes exceeding many individual lifetimes), the behaviour of individuals in associating themselves with groups that do not appear to support their own self-interest, and the apparent deference of individual behaviour to the wishes of the group in numerous different kinds of situation.

In place of individualist theories of social action, sociologists and social anthropologists have attempted to build structuralist accounts of social action (Polanyi 1944) or else to devise theories of practice (Bourdieu 1990, Reckwitz 2002), where the units of analysis are the components of structure and practice themselves rather than the individual behaviours subsumed within it.

Critics of the sociological approach have accused it of 'over-socialising' human action, just as critics of rational choice theory accuse it of 'under-socialising' individual choice (Campbell 1996 eg). What we are faced with here is a very long-standing debate between two different units of analysis, commonly referred to as agency on the one hand and structure on the other. Or to be more precise, we are caught between proponents of the view that individual agency is the important unit of analysis in understanding social action and proponents of the view that social structure should play that role. As we shall see below, this long-standing debate is mirrored by a very similar and more recent debate between 'internalist' and 'externalist' conceptions of pro-environmental behaviour.

In any such situation, where a modern debate finds itself piggybacking on the structure of a much more long-standing historical debate, we clearly need to take care in adopting hard and fast methodological positions. On the other hand, the extent to which rational choice theory, and many of the familiar institutions that are built on it, has undersocialised human action is strongly supported from a number of different theoretical frameworks and with quite a considerable body of evidence. This undersocialisation of rational choice theory – and many modern institutions that are founded on it – is one of the key lessons for sustainable consumption policy that may be drawn from the critique of rational choice theory.

5.3   The Moral Critique

The final major critique of rational choice theory takes exception to the idea that humans act only out of self-interest. Once again this debate is as old (at least) as the history of classical economics. Critics of the concept of the self-interested economic

person point both to moral dimensions of individual behaviour and to the acceptance by individuals of the moral dimensions of social structures (Scott 2000). Both of these kinds of influences limit the extent to which self-interest actually operates in society, according to critics of rational choice.

The latter issue is clearly related to the problem of accounting for social structure within methodological individualism. Why is it that as individuals we accept social structures at all? One reason might be, as some opponents of individualism suggest, that these structures are formally antecedent to individual behaviour, and that we, as individuals are socialised automatons, helpless in the face of institutional structure. Another possibility is that – as individuals – we recognise that behaviours dominated by self-interest fail to protect the long-term best interests of society at large. But in accepting either of these explanations we are essentially rejecting fundamental aspects of rational choice theory.

The moral dimensions of behaviour are also visible from within the perspective of individual action. Frank (1988) for example points to the place of moral sentiments in human decisions. We routinely forego narrowly conceived self-interest for the sake of broadly altruistic motives. We invest a great deal of time and energy in looking after our children, our relatives, our close friends and occasionally even, total strangers. Even more puzzling perhaps, from the perspective of rational choice, is the existence of self-destructive motives such as vengeance and spite, in which we are prepared to wreak havoc on others even at the cost of harm to ourselves.

Some kind of 'rational' explanation for these types of behaviour is offered by evolutionary psychology (Wright 1994), which supposes a series of genetically-based mechanisms (kin selection, reciprocal altruism and so on) for both altruistic and spiteful behaviours (Hamilton 1970). But the rationality inherent in these explanations is very different from that inherent in the idea of individual self-interest. The genetic explanation for parental love (and other forms of kin selection) lies in the success of such strategies in securing the survival of genes from one generation to the next. But this 'genetically rational' behaviour is prosecuted through individual behaviours which have little or nothing to do with subjective self-interest. Whether these evolutionary mechanisms can offer any comfort to those seeking pro-environmental behaviour is another matter entirely.[10]

Some attempts can be made to rescue the 'rationality' of non-self-serving decisions, even within the structure of a subjective expected utility model. In particular, by assigning individual utilities of various kinds to pro-social behaviours, rational choice theory can, to some extent claim to incorporate them within a subjective expected utility model. I behave in an altruistic way, in this view, because there is a value to me (feeling good about myself perhaps, or the expectation that others will reciprocate) that can be incorporated into the cost-benefit equation of rational deliberation. Once again, however, these attempts to extend the boundaries of subjective expected utility into a moral terrain have been roundly condemned by critics of rational choice theory.

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[10] For a fuller discussion of this issue see (eg) Jackson 2002a.

At the very least, the existence in practice of clearly defined and measurable pro-social and pro-environmental values that appear to transcend individual self-interest (Schwartz 1977, Stern and Dietz 1994, Schultz 2001) suggests that not all moral behaviour can easily be subsumed under the rational choice model.

6   Adjusted Expectancy-Value Theory

Not surprisingly, the extensive critique of rational choice theory has prompted a number of efforts to come up with alternative conceptual models of consumer behaviour that attempt to accommodate these critiques. Interestingly, and in spite of sometimes vociferous opposition to the economic theory of consumer preference, many of these alternatives retain some at least of the expectancy-value structure of rational choice theory. Generally however, they differ from conventional consumer preference theory in at least one of three separate ways.

In the first place, they generally do not assume the commensurability of different underlying utilities or values. In other words consumer preferences are not cashed out purely in terms of the financial values of market transactions. Secondly, they generally attempt to unpack preference and offer some kind of revelation of the underlying expectancy-value structure of consumer attitudes. Finally, they often adapt the basic expectancy value structure to incorporate elements such as social influence, moral concern or habit.

In this section, we describe some of these adjusted expectancy value theories, starting with a very simple expectancy value model of consumer attitudes and then proceeding to a variety of more or less qualitative and more or less complex models that have been used in the literature to describe and predict consumer behaviours.

6.1   Simple Expectancy-Value Attitude Theory

The most straightforward application of expectancy-value theory to consumer preference is a social psychological model which posits that a consumer's attitude towards (preference for) an object (eg product, service, place, person or idea) can be resolved explicitly in terms of two (measurable) antecedents. These are, on the one hand, the consumer's beliefs (b_i) about the characteristics of the purchase (expectations); and on the other hand, the consumer's evaluation (e_i) of those characteristics (values). Expectancy-value theory suggests that consumer's overall attitude (A_{obj}) towards the object is expressed in the following equation:

$$A_{obj} = \sum_{i=1}^{n} b_i e_i$$

My attitude towards an object is the sum of my beliefs about its characteristics, weighted by my evaluations of those characteristics.

This construction is used, empirically, both to test and to predict consumer attitudes. Typically, empirical studies might design questionnaires in which respondents quantify both their beliefs about specific characteristics of a product (or range of products) and their evaluations of those characteristics on a point scale. So, in testing consumer attitudes towards re-usable milk-bottles (for example) one might design a questionnaire in which consumers were asked to express their beliefs about

characteristics such as convenience (on a scale ranging from not at all convenient to very convenient), cleanliness, environmental impact and so on; together with their evaluation of these characteristics (on a scale ranging from 'not at all important' to 'very important', eg).

The assumption of rationality inherent in this theory is much the same as that inherent in other rational choice models. The rational consumer is one who makes choices that maximise A_{obj} subject to their available resources. In spite of this similarity, this social psychological model goes further than conventional economic preference theory in its attempt to unpack consumer's attitudes. Whereas economics suggests that the best we can discover about preferences is what is revealed through the choices that consumers make in the market, the social-psychological approach suggests that it is possible to distinguish between and to measure the two antecedent variables, beliefs and values. In doing so, it suggests a clear distinction between policy initiatives aimed at changing beliefs (eg through advertising campaigns, labelling, information schemes and so on) and those aimed at changing values. We shall return to this distinction in the final Chapter.

6.2   Means-End Chain Theory

A far more qualitative variation on the same theme is employed in Means-End Chain Theory (Gutman 1982, Reynolds and Gutman 1988). This model has been used widely in marketing since the early 1980s. It takes as its starting point the idea that consumer behaviour is (either consciously or unconsciously) goal-directed. Consumers buy goods in order to achieve certain goals. The goals themselves often reside in the realm of over-arching personal, social or moral values: the desire to be happy, to feel useful, to belong, to protect one's family and so on. These values are regarded as the 'ends' that consumers seek in purchasing goods.

The means for achieving these ends, according to Means-End Chain theory, are the attributes of the products that consumers purchase. In this respect, at least, the model closely resembles both the rational choice theory inherent in the Lancaster model, and the simple expectancy-value theory described above. Developed for marketing and advertising research, Means End Chain theory asserts that people's preferences can be construed in terms of a 'laddered' relationship (Figure 4) between a product's *attributes*, the *consequences* accruing from these attributes, and the relevance of those consequences for achieving important personal *values*.

A very simple example serves to illustrate how this works. In purchasing a new fridge freezer for my kitchen, for example, I am drawn to selecting my purchase on the basis of a number of specific attributes of the products I see before me. I end up choosing a given model for a number of different reasons. But in particular (it transpires during an interview), I choose a white fridge freezer because whiteness is both a symbol of cleanliness and a means of telling me whether or not the fridge freezer is actually clean. This is important to me because I believe that a clean kitchen will protect the health and vitality of my family, and this is an end that I value highly.
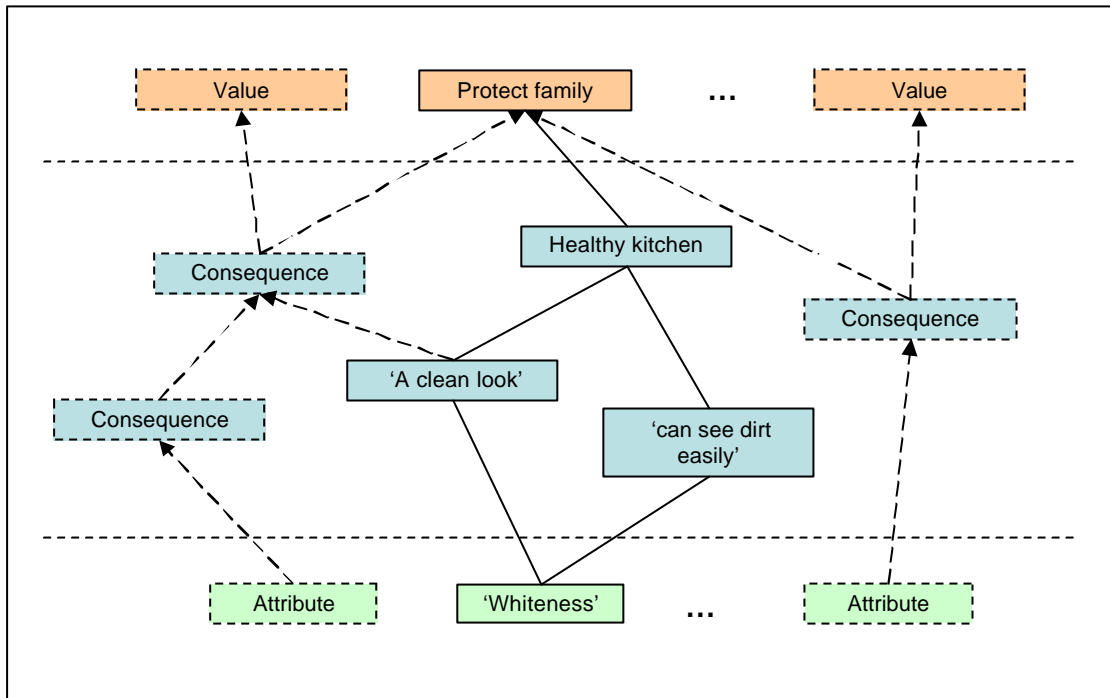
Figure 4: Hypothetical Means-End Map for Fridge Freezer Purchase

Though Means End Chain theory draws on Lancaster's attribute model, it differs from conventional consumer preference models in two important respects. Firstly, it provides for a much more qualitative exploration of consumer preferences than does conventional consumer preference theory. Consequently, the model has been widely applied in ethnographic market research both to inform product development and to develop advertising and marketing campaigns (Reynolds and Olson 2001).

Secondly – and like the social-psychological model described above – it does not regard preferences as exogenous to the model. On the contrary, Means-End Chain theory attempts quite specifically to identify both the values that underlie consumer choices, and the chains of reasoning that lead from those values to specific choices, via the attributes of products.

It is clear from this description, however, that Means End Chain theory remains a variation on rational choice that lies firmly in the realm of expectancy-value theory. Though it relaxes the assumption that values are self-interested, and makes no attempt to define rationality in terms of optimisation procedures, Means-End Chain theory does assume, sometimes explicitly (Gutman 1997), that consumer decisions are rational in sense of being a) goal-directed and b) driven by identifiable underlying values.

It is worth noting that in addition to its uses in conventional marketing and advertising research, Means-End Chain theory provides a potentially valuable tool for understanding pro-social or pro-environmental consumer decisions in terms of

underlying values, and has occasionally been applied in this way (Palmer-Barnes et al 1999 eg).[11]

6.3   The Theory of Reasoned Action (TRA)

One of the most widely-applied theories of social behaviour flows from the ground-breaking work of Martin Fishbein and Icek Ajzen in the late 1970s. Drawing from a long tradition of social psychological work on the attitude-behaviour relationship, the two authors developed what they claimed to be a quite general theory of social behaviour called the Theory of Reasoned Action (Figure 5).
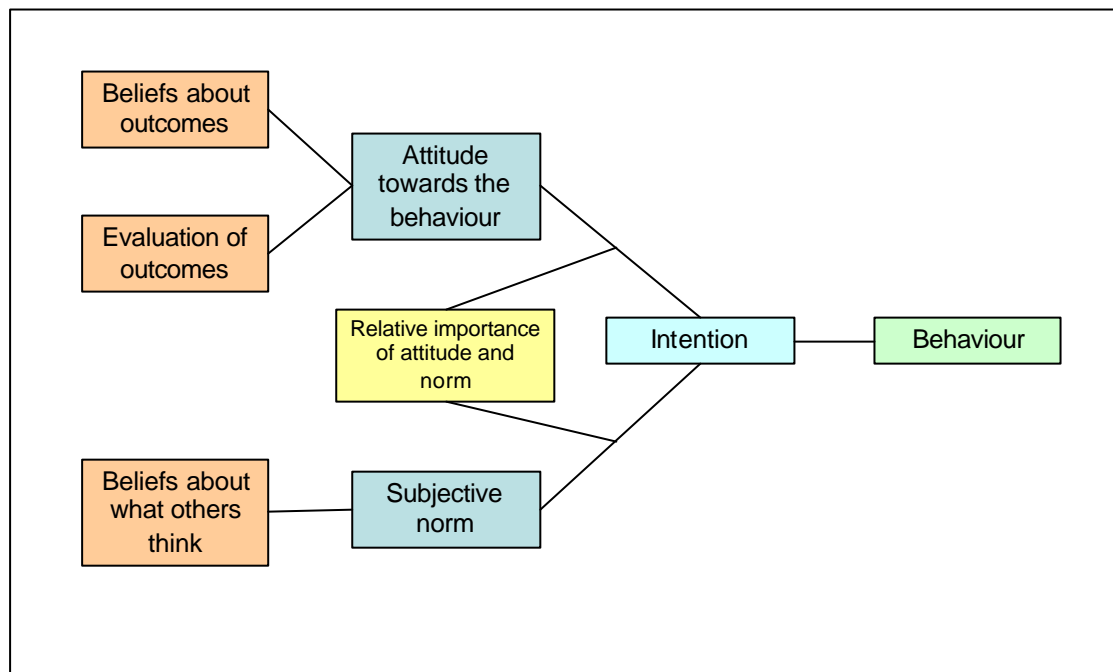
Figure 5: The Theory of Reasoned Action

The starting point for this theoretical development is the expectancy-value construction described at the beginning of this section: people behave according to their beliefs about the outcomes of their behaviour and the values they attach to those outcomes. *Beliefs* about and *evaluations* of outcome lead to an *attitude* towards the given behaviour, according to Fishbein and Ajzen (1975), and this attitude towards the behaviour is one of two main influences on people's *intention* to act in the given way. Intention to act, in the Fishbein-Ajzen model, is the immediate antecedent and key determinant of behaviour.

However, the Theory of Reasoned Action departs from simple expectancy-value theory in one important respect. A second major influence on intention in the Theory of Reasoned Action is what Fishbein and Ajzen called a person's *subjective norm*, that is 'his [sic] perception that most people who are important to him think he should

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[11]   An ESRC project led by the University of Leeds is currently using a variation on this model to explore the difference between the purchase behaviours of 'ordinary' consumers and 'voluntary' simplifiers'.

or should not perform the behaviour in question' (Ajzen and Fishbein 1980, 57). As this prescription makes clear, the subjective norm is to be construed as an individual belief about what other people who are important to me think of the specific behaviour, rather than my own personal belief about the morality of the given behaviour. This latter construction has been called a *personal norm* in the literature.

The distinction between subjective norms and personal norms has been the subject of some discussion (Kashima and Kashima 1988 eg). Fishbein and Ajzen (1980) maintained that personal norms are essentially subjective behavioural beliefs and did not therefore need a separate elaboration. However, several other models including Triandis' (1977) Theory of Interpersonal Behaviour and Schwartz's (1970) Norm Activation model treat personal norms rather differently (see below).

More recently, a number of attempts have been made to adjust the Ajzen/Fishbein model to incorporate moral norms explicitly (Sparks and Shepherd 2002). Given the importance of moral and normative issues in the critique of rational choice theory, and their relevance for sustainable consumption, these subtleties may eventually turn out to be crucial to the success or failure of Theory of Reasoned Action in treating pro-environmental behaviours.

As a response to the critique of rational choice theory, Theory of Reasoned Action certainly has the virtue of making explicit the antecedents of preference or attitude. More importantly, it acknowledges the social influence on personal behaviour, which is incorporated into the model in the form of a subjective norm. The limitations of cognitive deliberation, the role of habit, the influence of affective or moral factors are, however, not specifically addressed by the model.

Nonetheless, the claim of its architects is that Theory of Reasoned Action represents a quite general theory of social action. Fishbein, Ajzen and others have applied the theory in a wide variety of different contexts to understand behaviours as different as dieting, women's occupational orientations, family planning, voting, giving up alcohol, choice of transport mode, and so on (Ajzen 1991). It has also been used explicitly to understand and to predict consumer's purchase behaviours (Ajzen and Fishbein 1980, Chapter 13). In contrast to some of the earlier models of consumer behaviour (such as the Howard and Sheth model), the Theory of Reasoned Action has the virtue of being able to explore specific aspects of consumer action and preference in some detail.

Ajzen and Fishbein distinguish between four different elements involved in consumer behaviour: the target (brand or product), the action (buying, using, borrowing, disposing etc), the context (own use, gift etc), and the time horizon (now, next week, next year etc). 'Variations in each of these elements of consumer behaviour will similarly affect the consumer's normative belief,.' claim the authors (op cit, p 172). An advantage of Theory of Reasoned Action is its ability to address the attitudinal antecedents of these different elements.

An important limitation of much of the empirical work based on the Theory of Reasoned Action is that, in many cases, studies are limited by what they can discover

through questionnaire surveys and/or interviews. At the end of the day, these questionnaire surveys entail asking people about their attitudes (beliefs about and evaluations of consequences), their subjective norms, and their intentions. The success of the theory is generally taken to be its ability to correlate intentions with its antecedents (attitudes and subjective norms). Studies have rarely gone on to measure actual behaviours as well as intentions. Rather, intentions have generally been taken as being good predictors of behaviours. However, this is only true in particular circumstances, namely where there is a reasonable degree of volitional control over the behaviour in question.

6.4   The Theory of Planned Behaviour

Its authors claim that the Theory of Reasoned Action is able to explain a considerable degree of the variance between attitudes, subjective norms and intentions, in situations where people have volitional control over their actions. My intention to act in a certain way is, in these circumstance, likely to be a reliable indicator of my actual behaviour.

However, the existence of cases where actors have incomplete volitional control scarcely needs pointing out. It may even be argued that these cases outnumber those in which volitional control is achieved or even achievable. The road to hell, as they say, is paved with good intentions.

The Theory of Planned Behaviour (Ajzen and Madden 1986, Ajzen 1988, Ajzen 1991) is an extension of the Theory of Reasoned Action specifically to those situations in which actions are not under volitional control. The specific modification (illustrated in Figure 6) is to include a new variable known as perceived behavioural control (PBC) as an additional indicator of both intention and action.

PBC is defined as 'the person's belief as to how easy or difficult performance of the behaviour is likely to be' (Ajzen and Madden 1986). According to the architects of the Theory of Planned Behaviour, the inclusion of PBC, together with behavioural intention can be used directly to predict actual behavioural achievement. Ajzen (1991) offers two rationales for this hypothesis.

Firstly, he argues that, holding intention constant, the degree of success in actually carrying out that intention depends on the strength of our belief in our ability to carry out that behaviour. Someone who is confident that they can master a particular activity – engaging in garden composting for example – is more likely to succeed than someone who doubts their ability to carry it through. Secondly, argues Ajzen, perceived behavioural control can be taken as an indicator of actual behaviour control. Provided that the individual's perceptions of control are not misguided, PBC is likely to indicate actual behaviour control, and if the individual truly does have volitional control over their actions then intention is likely to correlate closely with behaviour.
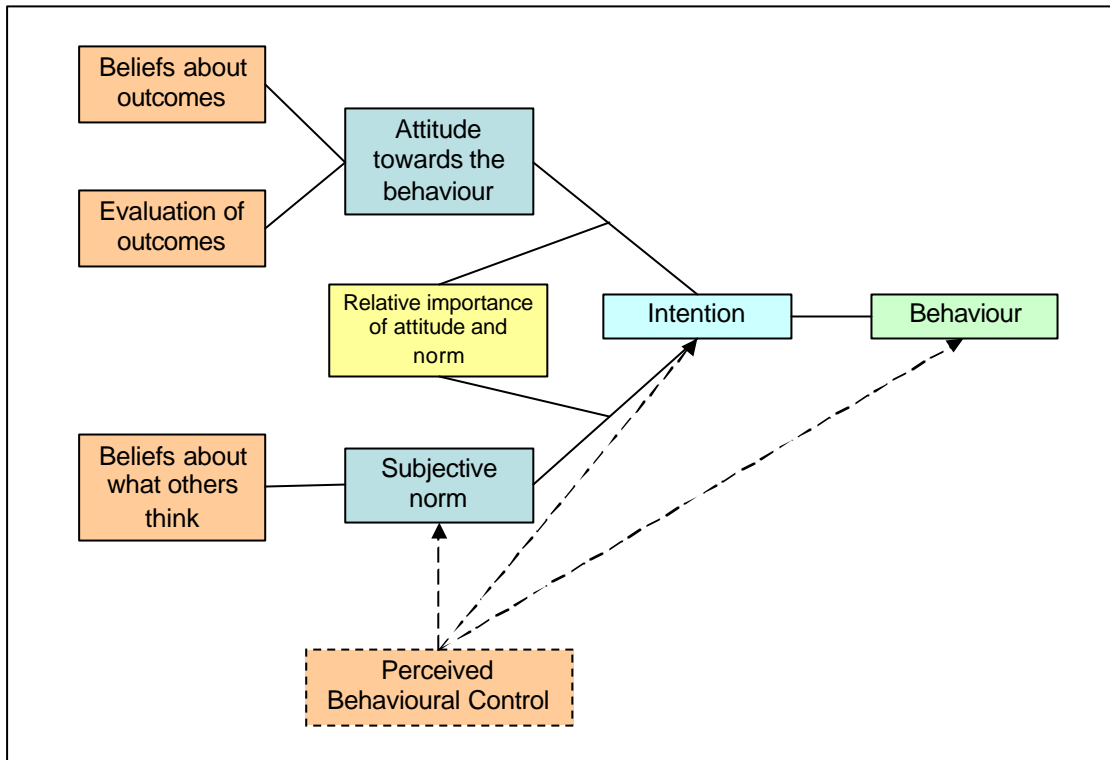
Figure 6: The Theory of Planned Behaviour

The construct of PBC has some similarities with – and indeed draws some historical pedigree from – the concept of self-efficacy. Bandura (1977, 1982) proposed that self-efficacy is concerned with 'judgements of how well one can execute courses of action required to deal with prospective situations'. The self-efficacy belief is learned in various ways, according to Bandura, including personal experiences (good or bad) and the example provided by others (modelling). Perceived self-efficacy can determine whether an individual attempts a given task, the degree of persistence when the individual encounters difficulties, and ultimate success.

A systematic programme of investigation by Bandura and his colleagues has supported the idea that people's actual behaviour is strongly correlated with their confidence in their ability to perform the action in question. Ajzen (1991) uses this evidence to claim support for the concept of PBC. But this equivalence is not universally accepted. Armitage and Conner (1999) found, in a study of intentions to eat a low-fat diet, that self-efficacy and PBC had distinct and independent effects on intentions.

The Theory of Planned Behaviour has been applied widely to the task of understanding behaviour in a vast range of different contexts. A recent meta-survey of the application (and efficacy) of the theory (Armitage and Conner 2001) identified applications in 154 different contexts. These included smoking behaviours, alcohol consumption, health screening attendance, breast/testicular examination, food choice, sexual behaviours, blood donation, internet use, gift-buying, accident avoidance, investment, engaging in collective action and making consumer complaints (East 1997, Conner and Sparks 1996).

Planned behaviour is also one of the models most frequently used in the literature to explore pro-environmental behaviour. Applications of the model to what is often called 'environmentally significant behaviour' (Stern 2000) include attempts to use it to understand or predict recycling behaviours, travel mode choice, energy consumption, water conservation, food choice, and ethical investment (Staats 2003, Wall et al 2003).

Again many of these studies fail to measure actual behaviour, and concentrate mainly on measuring the relationship between attitudes, intentions and PBC. However, there are certainly some studies that support a strong correlation between pro-environmental intention and pro-environmental behaviour in the context of a high degree of volitional control (Boldero 1995).

In the final analysis, the Theory of Planned Behaviour remains an adjusted expectancy value model. It is capable of incorporating affective or moral antecedents of behaviour only in so far as these are modelled as attitudinal beliefs about or evaluations of the outcomes of specific actions. In the following subsection we explore another set of models that attempt a much more explicit modelling of moral influences on consumer behaviour.

7   Moral and Normative Conduct

A common assumption in explorations of pro-environmental behaviour is that those who undertake such behaviours tend to have at least some altruistic or moral reasons for doing so. It turns out that this is not always the case. Some pro-environmental behaviours can be motivated entirely by self-serving interests. All the same, a part of the case for pro-environmental behaviour is a moral case. Problematic environmental impacts of my individual actions here today are as likely (or perhaps more likely) to fall on other people at some other time and place, as they are to fall directly on me. Even if I am not myself motivated to care about these impacts on others, I may care about the expectations of others on me not to act in anti-social ways.

There is therefore an inescapably normative dimension to the understanding of pro-environmental behaviour. Expectancy-value theories struggle to accommodate this component because of underlying assumptions about individual self-interest as the basis for human motivation.

Adjusted expectancy-value theories such as the Theory of Reasoned Action and the Theory of Planned Behaviour can at least incorporate normative influences on individual consumers via the concept of the *subjective norm*: my beliefs about how important others think I should behave. However, it has been argued, with some degree of cogence, that this concept of normative influence exhausts neither the range of normative influences nor the importance of altruistic or moral values in individual behaviour.

Some attempts have been made to adjust the Theories of Reasoned Action and Planned Behaviour to incorporate moral beliefs explicitly. Manstead (2000) reviews some of these studies and concludes that the specific inclusion of moral beliefs improves the predictive power of the theory in a variety of applications in which pro- or anti-social dimensions of behaviour are relevant. These include committing driving violations (Parker et al 1995), organic milk consumption (Raats et al 1995), and GM food consumption (Sparks et al 1995). A more recent study by Sparks and Shepherd (2002) on consumer's attitudes towards meat consumption and food produced by genetic engineering confirms this conclusion.

These kinds of results suggest that there may be a key role for theories that focus explicitly on the moral and normative dimensions of human behaviour. In this subsection we briefly describe four such models. The first is the 'value theory' developed in the wake of Dunlap and van Liere's (1978) work on the New Environmental Paradigm. The second is the Norm-Activation theory introduced briefly in Section 3 above. A third model is an attempt by Paul Stern and his colleagues to link ecological value theory to the Norm Activation model. Finally, we briefly explore Cialdini's Focus Theory of Normative Conduct.

7.1   Ecological Value Theory

The earliest and simplest normative model of pro-environmental behaviour suggests that pro-environmental behaviour arises from quite specific value orientations in the individual. In its simplest form, the suggestion here is that pro-environmental behaviours flow directly from pro-social or moral values. Thus, if I hold certain kinds of moral or altruistic values I am more likely, according to the model, to engage in pro-environmental behaviours.

Much of this work draws on empirical evidence of the existence of two or three main value orientations in society. Early work (Schwartz 1973, 1977 eg) distinguished mainly between a 'self-enhancement' (ie self-regarding) value orientation and a 'self-transcendent' (ie other-regarding) value orientation. The former corresponds closely with the assumption of self-interest at the heart of the rational choice model. The second orientation is supposed to offer a distinct alternative to the self-interest model.

The value model hypothesises that those who hold primarily self-interested values are less likely to engage in pro-environmental behaviours than those who hold primarily self-transcendent values. A variation on this thesis suggests the existence of a third distinct value orientation focused on valuing the environment (as distinct from other people). This 'biospheric' value orientation – which is regarded as distinct from a pro-social or altruistic value orientation – is supposed to have emerged quite recently in human history.

The earliest and most well-known study of the biospheric value orientation is the work carried out in the context of Dunlap and van Liere's (1978) New Environmental Paradigm. The starting point for Dunlap and van Liere was the suggestion of numerous earlier writers that environmental problems stem in part at least from the values, attitudes and beliefs that prevail in society. These earlier writers had pointed in particular to 'our belief in abundance, our faith in science and technology, and our commitment to a laissez-faire economy, limited government planning and private property rights' (Dunlap and van Liere 1978, 10) as contributory factors in the 'environmental crisis'.

Dunlap and van Liere believed that this set of values – referred to by some (Caldwell 1970, Campbell and Wade 1972) as the 'Dominant Social Paradigm' – was being moderated or eroded to some extent in modern society by the emergence of a 'New Environmental Paradigm'. The New Environmental Paradigm, they argued, contained a set of core values which, as distinct from the Dominant Social Paradigm, pay increased respect to natural limits and the importance of preserving the balance and integrity of nature.[12]

Since Dunlap and van Liere's original study a huge number of studies have been carried out attempting to confirm the existence of three distinct value orientations: biospheric, social and egoistic. A number of studies have also attempted to explore

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[12]   There are resonances here between the new environmental paradigm and Inglehart's (1990) argument about the emergence in modern society of 'post-materialist' values.

the relationships between these different value orientations and pro-environmental behaviour.

As we have already indicated, there is no general one-to-one correspondence between biospheric values and pro-environmental behaviours. Some pro-environmental behaviours are motivated by self-interest, some by altruism, and others by biospheric values.

There is interesting evidence to suggest that those with primarily egoistic value orientations or less likely to engage in certain kinds of pro-environmental behaviour than those with pro-social or biospheric value orientations (Stern et al 1995) and that those who adhere strongly to the Dominant Social Paradigm are less likely to hold pro-environmental attitudes (Kilbourne et al 2001). Perhaps most interesting is work that explores the contextual nuances between different kinds of behaviour and these value orientations.

Zavestoski (2002), for example, finds that concern for the environment correlates positively with both self-enhancement (egoistic) and self-transcendent (altruistic) value orientations. Concern for over-consumption, by contrast, correlated positively with the self-transcendent value orientation, but negatively with the self-enhancement value orientation. If am egoistic I may indeed still be likely to express concern for the my environment. I am less likely to eschew the benefits offered by consumption goods. This finding appears to suggest that while motivating environmental concern may be able to proceed without value change, persuading people to consume less probably cannot.

Taken as a whole however, ecological value theory must contend with three key difficulties. The first of these is the attitude-behaviour gap.[13] Having pro-social or pro-environmental values or attitudes is not the same thing as engaging in pro-social or pro-environmental behaviour. This point is most deliciously illustrated by Bickman's (1972) study on littering. In a survey of 500 people's attitudes to littering, 94% of those interviewed acknowledged responsibility. However, only 2% of those interviewed picked up litter that had been strategically planted by the researchers on their way out!

The same issue has been highlighted in recent studies of domestic energy-consumption. Gatersleben et al (2002) and Jensen (2002) both demonstrate that pro-environmental intentions and behaviours do not necessarily correlate with reduced energy consumption in the household. In fact, there is evidence of a reverse correlation. Environmental attitudes are often reported as being higher in households in the higher socio-demographic classes. But household energy consumption correlates positively with household size – a key indicator of socio-economic class.

A second, related problem faced by ecological value theory lies in the difficulty of distinguishing dispositional influences on behaviour (such as value or attitude) from

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[13] The existence of an attitude-behaviour gap (sometimes also called a value-action gap) has plagued attitude behaviour theory since at least 1957, when Festinger published his work on cognitive dissonance (see section 9.3 below).

contextual or situational variables. Studies of recycling, for example, have pointed to higher levels of reported recycling or willingness to recycle amongst higher-income white households, than amongst lower-income black or Asian families (RRF 2002, 2004). Sometimes such studies have pointed uncritically to the need for information campaigns targeted specifically at lower income families, without pausing to consider contextual factors – such as the convenience of recycling – in the two cases. But this response betrays a worrying disregard for situational demographics. More black and Asian families live in areas of high density housing with poor recycling facilities – and often no kerbside service. Paraskevopoulous et al (2003) have argued that contextual factors (such as social exclusion) are themselves an important antecedent of environmental attitudes.

The tendency to attribute variances in behaviour to dispositional factors (attitudes, beliefs or higher level psychological constructs such as values) and to overlook the influence of situational variables is known in psychology as the 'fundamental attribution error'. The Perceived Behavioural Control element of the Theory of Planned Behaviour is one attempt to overcome this constraint of simple attitude-behaviour models. Another attempt is the attitude-behaviour-context (ABC) model developed by Paul Stern and his colleagues (see Section 10.2 below).

A final problem for value models lies in the instability of individual values across different contexts and situations. There is quite a lot of (not entirely conclusive) evidence on longitudinal or cohort shifts – for example changes in the strength of environmental values over time or at different ages.

There is also some fairly convincing evidence to suggest that the values and beliefs that are *salient* at any one time – ie important to the decision-making process – vary according to the context or situation in which people find themselves. Biel and Nilsson, for example, have recently found that the strength of a person's environmental values in a professional context can vary significantly from their environmental values in a personal situation (Biel 2004). We return to this issue of salience in later Sections.

None of these problems can be taken to dismiss the link between values and pro-environmental behaviour entirely. However, they do point to the need for considerable care in imputing behaviour from values and in understanding the contextual variables that moderate the attitude-behaviour relationship.

7.2   Norm Activation Theory

Shalom Schwartz's (1977) Norm Activation theory remains one of the most widely applied models of moral behaviour. The original motivation of the theory was to provide a framework for understanding pro-social, altruistic behaviours, and Schwartz restricted the domain of application quite specifically to these kinds of behaviours.

The basic premise of the theory is that personal norms are the only direct determinants of pro-social behaviours. Schwartz conceived of personal norms as feelings of strong

moral obligation that people experienced for themselves to engage in pro-social behaviour. He rejected the idea that intentions mediate this relationship.

It is clear that the concept of personal norm in Schwartz's theory is markedly different from the concept of subjective norm embodied in the Theory of Reasoned Action. Schwartz argued that some behaviours are intended quite specifically 'to benefit another as an expression of internal values, without regard for.. social and material reinforcements' (op cit, 77)

Norm-Activation theory regards internalised personal norms as having two direct psychological antecedents, namely an awareness of the consequences of one's actions and an acceptance of the personal responsibility that one holds for these consequences (Figure 7).
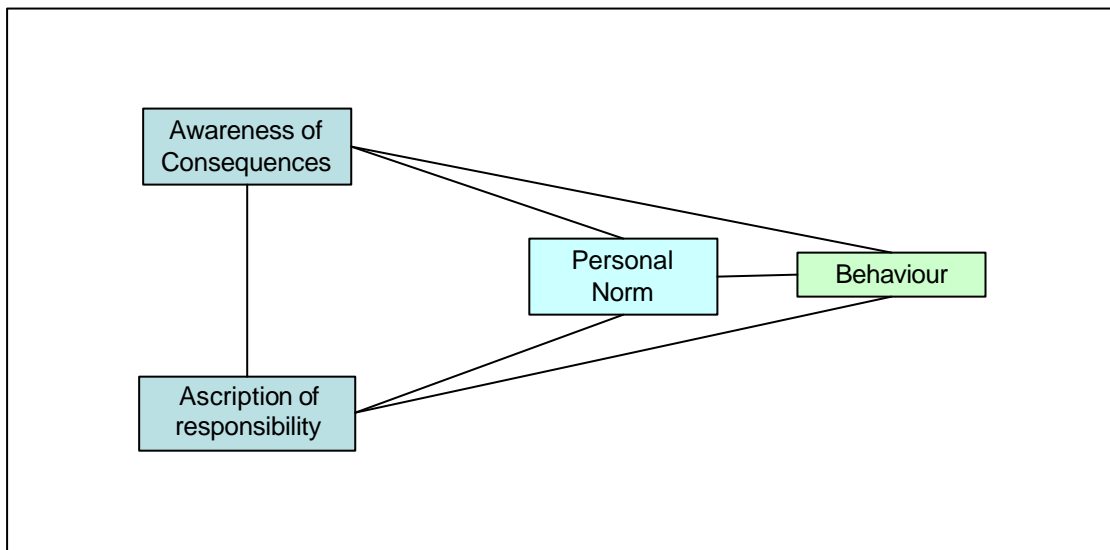
Figure 7   Schwartz's Norm Activation Theory

Importantly, awareness of consequences and ascription of responsibility are not just causal antecedents of the personal norm, their strength is also supposed to moderate the link between the personal norm and the behaviour. In other words, the relationship between personal norm and behaviour is stronger in the case where one is aware of the negative consequences of not engaging in the pro-social behaviour and where one accepts responsibility for these consequences, and weaker where one is unaware of negative consequences and denies responsibility.

In practice, however, as with the Theory of Planned Behaviour, studies often restrict their focus to the correlations between personal norm and its psychological antecedents, and assume that the existence of the personal norm is sufficient for the behaviour to occur. Where the relationship between personal norm and behaviour is modelled, it is often moderated by the strength or weakness of external contextual or situational constraints (see below).

Because of its goal of explaining specifically pro-social behaviours, Schwartz's theory has been widely applied in attempts to understand and to predict pro-environmental

behaviours. Stern et al (1986) used the theory to investigate support for environmental protection, Hopper and Nielsen (1991) and Vining and Ebreo (1990 & 1992) used it to examine recycling behaviours, Black et al (1995) to explain household energy adaptations and Bamberg and Schmidt (2003) to explore alternatives to car use.

The degree of explanation of variance in behaviour predictable by these models differs from case to case. The single biggest factor which appears to interfere with personal norms in the success of pro-environmental behaviours is the existence of external social or institutional constraints. This finding is extremely important to an understanding of pro-environmental behaviour. In a later section, we shall look at some attempts to construct integrated models of behaviour that incorporate both social-psychological and contextual variables. Before doing so, however, we briefly examine an adaptation of Schwartz's theory, proposed by Paul Stern and his colleagues.

7.3 Stern's Value Belief Norm Theory

Paul Stern is undoubtedly one of the most experienced and prolific of those who have attempted to construct social-psychological models of pro-environmental consumer behaviour. Drawing extensively on studies of energy behaviours dating back to the late 1970s, Stern has engaged in an increasingly sophisticated attempt to understand 'environmentally significant behaviours' and to develop a coherent theory about them (Gardner and Stern 2002, Stern 2000).

A premise of much of this work has been that pro-social attitudes and personal moral norms are significant predictors of proenvironmental behaviour. Thus, Stern and his colleagues have drawn extensively on previous work on altruism, helping, and pro-social behaviour to construct models of pro-environmental behaviour. One such attempt (Figure 8) is the Value-Belief-Norm theory (Stern et al 1999) of pro-environmental behaviour which explicitly links Scwartz's Norm Activation model to ecological value theory (see above).

The theory postulates that acceptance of the new environmental paradigm (NEP) is formally antecedent to awareness of consequences in the norm-activation model. [14] The degree of acceptance of the NEP is itself correlated (positively) with biospheric and altruistic values and (negatively) with egoistic values. That is, if I hold strong altruistic or biospheric values I am more likely to accept the NEP. The stronger my egoistic value orientation, the less likely I am to accept it. [15] Acceptance of the NEP correlates positively with awareness of the (environmental) consequences of my actions, and this in its turn leads me to become aware of my responsibility to reduce

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[14] There are some formal differences between the structure of Stern's norm-activation model and the one originally proposed by Schwartz. For example, in the original theory AC and AR are independent variables, whereas in this model AC is antecedent to AR. In addition, the mediating influences of AC and AR on the PN-behaviour relationship are excluded from the Stern model. These formal differences need not concern us here. For a fuller discussion, however, see Wall et al 2004.

[15] Given that the NEP consists in statements in supportive of social and environmental attitudes, this is of course not particularly surprising, except perhaps as evidence that these value orientations really are distinct.

those consequences. On the basis of this, I develop a personal norm (in Stern's model) to engage in pro-environmental action.
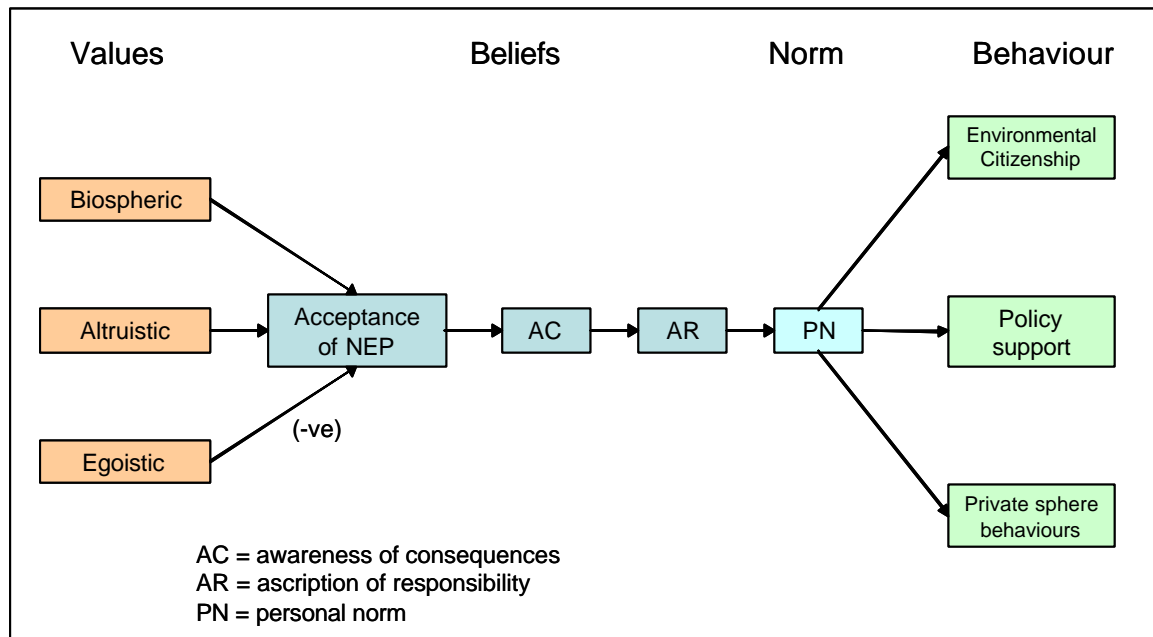
Figure 8: Stern's Value-Belief-Norm Model

Stern argues that the Value-Belief-Norm model provides 'the best explanatory account to date of a variety of behavioural indicators of non-activist environmentalism' (Stern 2000, 412). In defence of this assertion he cites evidence from several prior studies (Black et al 1985, Gardner and Stern 1996, Stern et al 1995a, Stern et al 1995b and Stern and Oskamp 1987).

Stern et al (1999) compared the Value Belief Norm model against three ecological value models in relation to three different indicators of pro-environmental behaviour: reported private sphere behaviour (recycling etc), support for environmental policies, and environmental citizenship (membership of NGOs eg). The study found that this model consistently explained more of the variance in such behaviours than the competing value theories.

Data from this study and two others (Karp 1996 and Stern et al 1995b) all suggest that altruistic values are most strongly implicated in the activation of a personal pro-environmental norm. Self-enhancement (egoistic) values tend to be negatively correlated with pro-environmental norms and actions (Stern 2000). The precise role of biospheric values – as distinct from altruistic values – is still unresolved empirically. Stern et al (1993) find support for the existence of distinct biospheric values in a study of 348 college students. So too does a more recent and broader set of studies (Schultz 2001).

But Stern et al (1993) also argue that different value orientations co-exist in the same individual and may all influence behaviour. Stern hypothesises that 'individual action may depend on the belief or value set that receives attention in a given context' (op cit

336). This hypothesis mirrors something we have already remarked upon and draws some support from Cialdini's Focus Theory (see below).

The implications of this hypothesis for understanding the link between values and norms or actions are quite profound. It suggests, in particular, that respondents to questionnaire surveys are particularly sensitive to the way in which questions are framed. In particular, Stern et al suggest that egoistic values become more salient when questions are framed in terms of willingness to pay taxes to protect the environment – 'questions that draw attention to the monetary and thus egoistic aspects of environmental problems' (op cit, p339). Perhaps even more importantly, it suggests that behaviours depend critically on the salience of specific beliefs and values in specific contexts.

A further problematic area for value models of environmental action is the relatively weak correlation between personal norms and indicators of pro-environmental behaviour. For example, even though Stern et al's (1999) study performed better than the competing value models, it still explained less than 35% of the variance in such behaviours. For private sphere behaviours the explained variance was less than 20%.

These kinds of results certainly do not rule out the importance of values as a basis for motivating (or predicting) environmental action. But they do suggest that such results must be treated with some caution. Once again, the role of situational or contextual factors is an obvious candidate for improving the explanation of behavioural variance. Stern's attempts to incorporate such factors into integrated attitude-behaviour-context model are described in Section 10.2.

7.4   The Focus Theory of Normative Conduct

As Stern et al's (1993) hypothesis indicates, theories relating personal norms to personal values have somehow to cope with the fact that the salience of specific values depends, amongst other things, on the social context in which we find ourselves.

In a group of deep green, tree-hugging, sandal-wearing environmentalists, I am tempted to forego the rack of lamb on the restaurant menu, even though I love the sound of it and have no personal moral objection to the slaughter of lambs for human delectation. Conversely, I may be tempted to abandon my strict vegetarian beliefs when I am taken to dinner by a group of sharp-suited, blue-chip, stock-holding asset managers whom I am trying to persuade to fund my research work (on consumer behaviour of course). The influence of the social context on personal conduct is the subject of the final model in this Section.

The concept of social norms has generated fierce debate in social science, in part because of a linguistic confusion in the term itself. In one reading, the word norm simply means what is normally done (or to our perceptions about what those in our social group would normally do) in a particular situation. In quite another, the word

norm appears to refer to what ought to be done (ie to our perceptions as to what most people would approve or disapprove of).[16]

The confusion in the literature was largely laid to rest by rather simple definitional adjustment made to the theory of norms by the social psychologist Cialdini and his colleagues in the early 1990s. Cialdini's Focus Theory of Normative Conduct (Cialdini et al 1990, 1991) argues that the two kinds of norms exist, but are formally and functionally distinct.

The first kind of norm (what most people do) Cialdini refers to as a *descriptive* norm. It carries little in the way of moral weight and simply refers to the perception we hold about what is normal in a given situation. A simple example of the power of a descriptive social norm is provided by a social experiment in which a huge crowd of people was persuaded to gather on a street corner and stare at an empty spot in the sky, simply by seeding the idea in people's mind with a sample group (Milgram et al 1969).

Less trivially, we tend to negotiate and inform much of our individual behaviour on the basis of what others around us do. If everyone around me regularly puts out their rubbish bins for collection on a given day, I feel confident not only that this is a socially appropriate action but also that it would be expedient for me to do the same. Likewise, if everyone around me drives at just a few miles above the clearly defined speed limit, I am tempted to regard this as a social norm and to follow suite. Indeed, I may even penalise myself by not following suit, if the goal is to get safely from A to B in the least amount of time.

This example illustrates that descriptive social norms play an adaptive role in our behaviour. Cialdini and his colleagues argued that by simply copying the way that others around me behave, I am able to bypass the mental effort involved in thinking it out for myself, and to free up cognitive resources for more important tasks (see also Section 8.1 below). Thus a reliance on descriptive social norms is an example of what Simon (1976) called 'procedural' rationality. Its outcomes may in fact turn out to be less than optimal for me, but its short term advantages can be rather high.

In contrast to descriptive norms, which simply reflect what *is* done, Cialdini referred to the second kind of norm, what ought to be done, as an *injunctive* social norm. This second kind of norm explicitly reflects the moral rules and guidelines of the social group. Injunctive norms tend to motivate and constrain our actions by promising social rewards and sanctions for acting or not acting in certain kinds of ways.

Thus, social norms operate in two distinct ways. On the one hand, they provide behavioural examples that may be helpful in selecting the behaviour appropriate to any given situation. In this capacity, they function as a kind of heuristic for guiding or moderating our behaviour without spending too much cognitive effort. On the other

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[16] This latter meaning is closer to the sense of the word norm in both Schwartz's theory and Ajzen and Fishbein's work; although, as we have already mentioned, there is a subtle difference between what I believe ought to be done (personal norm), and what I think people others believe ought to be done (subjective norm).

hand, social norms relate to the social outcomes associated with the performance of a given behaviour.

In both cases, there may be a lot at stake for us. Our ability to adhere to social norms (and in particular to injunctive social norms) may have a critical influence on how we are perceived in our peer group, and hence of our social and personal success. Our ability to fit in, find a mate, develop a peer community, get our children into a good school and so on, are all mediated (to some extent) by our success in following social norms.

A critical aspect of Cialdini's Focus Theory is that the two kinds of norms may easily apply to the same situation. For example, there is clearly an injunctive norm (expressed through speeding restrictions, fines, penalties, and public disapproval) against driving too fast. This injunctive norm operates in such a way as to motivate people to stay within the speed limit, even as the descriptive norm often operates in such a way to encourage people to exceed it.

Given that contradictory injunctive and descriptive norms may apply to the same situation, how do we decide what to do? Cialdini argues that we respond to normative influences in a rather flexible way, depending on the context in which we find ourselves, the social group around us, the importance of the action, the state of our environment, and the circumstances which accompany the situation. Whether and how we respond to a descriptive norm or an injunctive norm depends on which kind of norm is salient (or in focus) for us.

For example, in the absence of police cameras, patrol cars and accidents, I tend to follow the descriptive norm and find myself driving at much the same speed as everyone else on the motorway. On becoming aware that there is a patrol car just ahead, that there may be cameras on the road and that someone on the opposite carriageway has just had a crash, I tend to slow down, even if those around me have not yet done so. Moreover, I am generally swift to express moral disapproval when someone else's speeding has led them to knock down an innocent pedestrian.

Of course this is not to deny that some people buck descriptive norms on a regular basis. On the whole, however, the evidence from a considerable body of social psychological work suggests that our actions are influenced in no small part by the existence and salience of social norms. Personality, situation and personal norms (belief about what I should do irrespective of what others are doing or think I should do) all play some part in determining my response to these norms.

There is a good deal of evidence from Cialdini's work and elsewhere that people 'who are dispositionally or temporarily focused on normative considerations are decidedly more likely to act in norm-consistent ways' (Cialdini et al 1991, 204).[17] For example, in Cialdini's original study, people's littering behaviours were vastly different depending on whether descriptive or injunctive norms were salient in any given situation.

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[17] See also Berkowitz 1972, Berkowitz and Daniels 1964, Gruder et al 1978, Miller and Grush 1986, Ruskowski et al 1983, Schwartz and Fleischman 1978.

Clearly, the same kind of framework is useful to an understanding of other kinds of behaviour, including many environmentally-significant behaviours. Whether I engage in kerbside recycling, drive to work, buy Fair Trade goods, take a two week holiday in the Caribbean every year, sign up for a green electricity tariff, install energy efficient light bulbs, or compost all my kitchen waste, will all be heavily influenced by the existence and salience of descriptive and injunctive social norms.

At one level, the complexity inherent here may re-enforce the idea that engaging in behavioural change is a lost cause. On the other hand, there are clear policy lessons that can be drawn from the importance of social norms in guiding individual behaviour. Cialdini himself was keen to point out how insights into the effects of focus and salience could be used to the advantage of public interest policy. We shall return to these issues in Part 3 of this review.

8   The Matter of Habit

Rational choice theory suggests that consumer behaviour is the product of cognitive deliberation. In deciding on a course of action, we are supposed to tot up the costs and benefits of alternative options and plump for the one that maximises our individual utility. A similar model of cognition lies at the heart of some of the other adjusted expectancy-value models that we have examined in this report. In Ajzen and Fishbein's models, for instance, behaviour is mediated by intention, which in itself presupposes some kind of cognitive deliberation.

It may be true to suggest that human behaviour, in the abstract, is goal-directed, in some rather general sense. However, it is certainly not the case that individual actions are invariably the result of conscious cognitive deliberation. The existence of instinctive or automatic responses has been well-established not just in social psychology but in biology and medical science for over a century (McDougall 1908). We know, as individuals, that we often seem to act instinctively, automatically, out of routine or habit, or driven by emotional responses that appear beyond control in certain situations. We also know – and have made the point above – that this sometimes occurs in spite of our best intentions to act otherwise.

This situation is clearly problematic for models that regard behaviour as being mediated by intention. It is also problematic for attempts to motivate pro-social or pro-environmental behaviour. Even if we can persuade people to change their attitudes and beliefs in favour of pro-environmental action, even if we can convince them of the need to behave in pro-social ways through injunctive or descriptive social norms, even if we are successful in getting people to internalise pro-environmental personal norms, there is still no guarantee that they will actually behave in pro-environmental ways.

This realisation has led some people to dismiss intention-based and value-based models of individual behaviour entirely. Some sociological responses would even have us abandon any model of individual agency as irredeemably flawed and reconstruct social action in terms of 'practices' located at the collective rather than the individual level. Behavioural change in this view would simply be seen as the evolution of 'social practices'. One of the advantages of such a position would be to highlight the existence and the importance of social norms in human behaviour.

On the other hand, our understanding of the dynamics of social practice, of the ways in which social practices evolve, and of the interaction between policy and social practice is as yet so limited that it would be difficult to see how policy could make use of this position – beyond taking social norms a bit more seriously as influences on behaviour. Since policy-makers are themselves a group of individuals immersed in social practice, the idea of using policy to influence social practice has about it something of the impossibility of lifting ourselves up by our own bootstraps.

Before renouncing behavioural models entirely therefore, it would certainly be worth asking if there is anything at all that can be said about how, where and when

individuals may be said to act from their intentions; how, where and when they appear to act in automatic or routine ways; and how if at all, this knowledge might help us understand and further pro-environmental behavioural change. In fact, there is a long-established and by now rather sophisticated body of work in social psychology that explores exactly these questions. In the following three subsections we examine some of this work and its relevance for environmentally-significant behaviour.

8.1   Cognitive effort – control, automaticity and heuristics

Early social and cognitive psychologists basically agreed that mental processes were either 'automatic' or 'controlled' (Johnson and Hasher 1987). Controlled processes involve intention, control, the efficient consumption of attentional resources (cognitive effort) and awareness – what has Bargh (1994) called the 'four horsemen of automaticity'. Automatic processes were assumed not to possess these characteristics.

More recently, it has been concluded that there is no clear division between automatic and controlled cognitive processes. Controlled processes often become automatic ones once they are learned and engrained in us. I have to think hard about the act of shifting gears when I am learning to drive the car. Now that I have been driving to work everyday for fifteen years, I sometimes don't even notice stopping at traffic lights.

More fundamentally, it has become clear fairly recently that a mental process generally involves both controlled and automatic attributes simultaneously (Kahneman and Treisman 1984, Logan and Cowan 1984, Bargh 1996). For example, having recently established separate containers for domestic recyclables, I may have to exert cognitive effort in distinguishing whether or not the item in my hand is recyclable. But once that is done my learned automatic waste disposal skills take over – provided of course that someone has not moved the bin.

Somewhere on the spectrum between control and automaticity lies the use of 'heuristics' – simple cues or cognitive signs that allow us to dispense with full cognitive deliberation. The concept of heuristics is familiar in consumer research. It is well-known (as illustrated in Figure 2) that consumers often make choices on the basis of simple signals like brand or price. This is particularly the case when we are making routine or habitual purchases.

The upshot is that the process of selecting an action or behaviour has both controlled and automatic components in different measure – depending on the action and the context for it. Three basic factors are believed to play a role in determining this balance between cognitive effort and automaticity.

In the first place, the degree of control increases with the degree of 'involvement' of the decision-maker in the process. This in its turn is influenced by the degree of importance of the decision. Tversky (1969, 1972) demonstrated that we are more likely to use simple heuristics when the consequences of the decision are less important. Conversely, the attention of the actor is higher when the consequences are more significant. Interestingly, attention to a decision may sometimes be voluntary –

where we are engaged in pursuing a new opportunity, for example the purchase of a new car. Equally however, it may also be involuntary in situations where the satisfaction of an important need is jeopardised (Kahneman 1973).

A second precondition for increased cognitive effort is the perceived complexity of the decision task. This complexity can be related to the range of opportunities with which we are faced, the number of attributes these opportunities possess, the difficulty in predicting consequences from attributes, or the degree to which trade-offs between different personal goals are involved.

A final, important influence on the investment of cognitive effort is the degree of constraint imposed by the decision itself. Time, cognitive capacity, and access to knowledge all constitute constraints on our ability to exercise complete cognitive control over a decision. Time is one of the most important if these constraints. This is one of the reasons why people tend to use simpler decision heuristics when they are under a time pressure (Ben Zur and Breznitz 1981, Maule and Svenson 1993).

Of course, the implications of this finding for sustainable consumption policy are quite profound, particularly in a society in which consumers feel increasingly hurried and harried (Southerton and Tomlinson 2003). The pace of life, the demands on cognitive attention from an increasingly wide range of sources, and the tendency to respond to time pressure by reducing cognitive effort all appear to militate against behavioural change and in favour of automaticity, routine, heuristics and habit.

8.2   The Role of Habit and Routine

The literature on 'ordinary consumption' (Section 2.4) has highlighted the routine, habitualised nature of a great deal of 'environmentally significant' behaviour. Our everyday lives are full of repetitive actions. Following a specific route to work, buying a given brand of coffee, turning the light on, turning the television off, disposing of waste paper, paying for electricity, running the bath or shower: decisions about all these routine activities are generally taken with very little conscious thought.

Even though, sometimes we may be conscious *of the fact that* we are acting from habit, the actual performance of the task still requires very little cognitive effort. This is because routine behaviour is highly automated. On the spectrum from control to automaticity, habits lie close to the automatic end (Jager 2003).

There has been a tendency – particularly amongst rational choice theorists – to denigrate habitual behaviour as irrational. But it is important to understand that habits offer quite considerable benefits to human functioning. Instead of exerting cognitive effort on routine decisions that we have taken many times before and that have, initially at least, served us well, we relegate these decisions to the realm of low cognitive effort where simple heuristic cues or automatic responses can guide us. In the process we free up cognitive resources for more important decisions (Posner and Snyder 1975, Schneider and Shiffrin 1977, Baumeister et al 1998). Habitual behaviour therefore falls quite clearly into Simon's category of procedural rationality.

Habitual behaviour is particularly successful as a strategy when decision contexts barely change. In such circumstances, we are clearly justified in believing that deliberation would always come up with the same answer. This is one of the reasons why habit is so prevalent in situations of ordinary everyday decision-making, as has been demonstrated, for instance, by a number of recent studies on modality choice in transportation (Aarts and Dijksterhuis 2000, Aarts et al 1998, Bamberg and Schmidt 2003, Gärling et al 2001). People's past behaviours and habitual travel patterns turn out to be more successful in explaining the variance in behaviour than either expected value or morality.

At the same time, of course, habitual behaviour – the relegation of decision-making to the realm of low-cognitive effort – becomes problematic when the context or conditions of the decision change. My habitual motion towards the wrong corner of the kitchen to deposit my rubbish is positively infuriating after a week or so. The availability of a low-cost, sustainable and equally tasty Fair Trade alternative to my usual choice of coffee will completely pass my by, if the realm of grocery shopping is dominated by habitual response. And my dawning awareness of a clear link between standby electricity consumption and climate change may fail entirely to stem the motion of my semi-automatic finger on the remote control button.

This latter example highlights a further aspect of habitual behaviour. In addition to the savings in cognitive effort, habits are often reinforced by short-run rewards and incentives. As anyone who has tried to give up eating fatty foods or smoking will know, these short-run incentives can outweigh the long-term benefits of making a behavioural change, and derail our best intentions to quit. *Counter-intentional habits* (Verplanken and Faess 1999) therefore represent a kind of 'cognitive trap' that locks us into routine behaviours, even where these behaviours conflict with rational deliberations, are at odds with social norms and confound our best intentions to change.

The discussion in this section points, on the one hand, to the immense difficulty of achieving pro-environmental behaviour change. At the same time it highlights the importance of understanding the process of habit formation and change, if policy is to influence people towards pro-environmental behaviour. Not surprisingly, there is some literature on both these processes, and some models that offer useful insights into how behavioural change can be negotiated. We review some of this literature in Section 11.

8.3   Framing, Priming and Bias

Cialdini's Focus Theory (Section 7.4) points to the importance of situational factors in determining the degree of 'salience' of particular social norms. The concept of salience has broader connotations in cognitive theory. We have also noted the evidence supporting the hypothesis that people's reported values may depend on the situational factors that make specific value orientations salient for us at any one point in time. As a less-than-fully-committed vegetarian, I may well forego my moral concerns about eating meat in certain circumstances.

There is also some fascinating evidence of the impact of 'mortality salience' on consumer values and behaviours. People exposed to images of violence and death appear to report more highly on a scale of materialist values than do control groups (Arndt et al 2003, Solomon et al 2003). This evidence has been used to support the idea (Section 2) that a part, at least, of our relationship to material commodities is concerned with quite basic psychological and sociological processes concerning the creation and maintenance of personal and social meaning (Jackson 2002b & 2004, McCracken 1990).

Common to all this evidence is the suggestion that our cognitive responses depend on a variety of different aspects of the way in which a situation is framed. These framing factors constitute a set of sometimes unconscious 'cues' which function in such a way as to bias our cognitive responses towards or away from particular choices. Tversky and Kahneman (1974) demonstrated that, even in very clear and transparent choice problems, the way in which the decision is framed has a large influence over people's responses to it.

Once again, this phenomenon is believed to fulfil an adaptive function in pursuit of procedural rationality. It aims to minimise cognitive effort in decision-making contexts. Some of our framing responses or biases appear to be learned and are often culturally and contextually specific. In a certain context, the white (doctor's) coat signifies that a person should be trusted, in another that he or she should be feared. But some biases appear to be hard-wired in us, and common across different contexts. For example, Tversky and Kahneman demonstrated that framing a decision task in terms of 'winning' had a considerably different impact than framing the same decision task in turns of 'losing'.

The importance of cognitive framing effects has been widely acknowledged in advertising and marketing. In one sense, the art of advertising could be thought of as the successful selection of culturally resonant cues that persuade consumers in favour of a particular product or brand. At any rate, the idea that it is possible to 'prime' a specific response to a given situation or choice by strategically framing the context is a powerful and well-established technique of persuasion.

This insight has some quite specific applications to pro-environmental choice (Niva and Timonen 2002). The impact of mortality salience on consumer attitudes is one example of this. Some recent work on priming environmental values shows that the same cognitive processes can also be used in favour of pro-environmental behaviour. Biel (2004) reports how unconscious 'priming' of respondents with images of nature had a significant impact on their value orientations and intentions to recycle.

The difficulties associated with priming individual choice are well-known to advertisers. In spite of some 'hard-wired' responses, most people respond differently to different situational cues. Nonetheless, an understanding of these effects can only serve to improve the design of attempts to promote pro-environmental behaviour. In Section 11, we shall examine some of the implications of these cognitive processes for social marketing techniques.

9 Sociality and Self

Most of the models that we have looked at in preceding section presuppose that there is a workable concept of *individual* agency. It makes sense to talk about my individual attitudes and beliefs, the values that I hold personally about the environment, and the way in which those values and beliefs influence my individual deliberations to act in certain ways. It is also defensible to assume that where my personal intentions are strong enough, they will trigger specific individual actions.

I am a committed environmentalist, with a profound belief in the holistic integrity of the earth, and as a result I renounce materialism, invest only in ethical companies and recycle everything. Or, alternatively, I belief that humans hold dominion over the earth and that science and technology hold the key to humanity's continued progress. As a result I resist what I perceive as Luddite attempts to control technology and go out of my way to trade in my performance car for a newer faster model every eighteen months. In both cases, the antecedents to my action are generally assumed to be the values, beliefs or preferences that I hold – as an individual.

This individualistic approach to deliberative action is, as we have seen, most strongly imbedded in the rational choice model. In the case of conventional consumer preference theory, individual preferences are the single key determinant of both individual and aggregate consumption patterns. The adapted expectancy value models make some attempt to incorporate social influences on individual behaviour through the concept of subjective norms – my personal beliefs about what important others might think of my actions.

Normative theories move further than this towards the importance of sociality for individual deliberation. In certain social situations – for example where my reputation is at stake – my behaviour is constrained within quite narrow margins by the social norms and conventions I find around me. Even in daily life, I respond almost instinctively to the descriptive norms of other people's behaviour. I am locked into the social fabric in ways which almost suggest that individual deliberation is a mirage. If every bin on the street is overflowing, I feel far less compulsion to reduce and recycle. If everyone recycles, I avoid my neighbours gaze as I drag out the heaving wheelie bin on rubbish day.

Rational choice theory attempts to recover individuality in such situations by suggesting that social constraints can be cashed out in terms of the overwhelming individual costs associated with defying norms and conventions. Critics suggest that this response is potentially circular and unenlightening as a way of understanding and predictive social behaviour. Irrespective of who is right in this debate, it is clearly worth investigating some alternatives conceptions of sociality and understanding how these relate to the concept of self and individual action.

In this section, therefore, we examine the complex relationship between self and other, between the individual and society, from several, slightly different perspectives.

We also discuss the relevance of these views for understanding and influencing pro-environmental behaviour.

9.1   The Social-Symbolic Self

The idea that identity and self-concept have a social dimension has a long pedigree in social science. One of the earliest and most influential writers to point to the socially-constructed nature of the self was George Herbert Mead. Mead (1934, 1956) drew on empirical evidence both from developmental psychology – how our attitudes, behaviours and concepts of self evolve during childhood and adolescence – and also from ethology: the scientific study of animal behaviour.

He argued that both the mind and the concept of self arise out of a fundamentally social process: communication. Mead identified two distinct kinds of social conversation. The first is what he called 'the conversation of gestures' – the series of gesture and counter-gesture that characterises inter-individual situations. Mead's now-famous example of a dog-fight illustrates this idea:

> 'Dogs approaching each other in hostile attitude carry on such a language of gestures. They walk around each other, growling and snapping, and waiting for the opportunity to attack… The act of each dog becomes the stimulus to the other dog for his response. There is then a relationship between these two; and as an act is responded to by the other dog, it, in turn, undergoes change.' (Mead 1934, 151)

In this example, as in many others, there is no such thing as individual behaviour in the abstract. Each action is a response to a social situation. The combination of actions constitutes a process of communication: a social conversation.

This more or less unconscious process is to be distinguished from what Mead called the 'conversation of significant gestures' in which participants in the conversation remain not only fully aware that they are participating in a conversation but must also gain familiarity with the 'significant symbols' through which communication occurs. In humans for example, our ability to communicate through language offers a whole new realm of social conversation and a whole new complexity to inter-personal behaviour.

The most important aspect of Mead's ideas about communication is their implication for the concept of self and for identity. For Mead, the self only exists as a result of conversations of significant gestures.

> 'The self is something which has a development; it is not there at birth, but arises in the process of social experience and activity, that is, it develops in the given individual as a result of his [sic] relations to that process as a whole and to other individuals in that process'. (Mead 1934, 135)

> 'A self can arise only where there is a social process within which this self has its initiation. It arises within that process' (Mead 1956, 42).

More recent authors have stressed the same point. Stringer (1982, 58) suggests that 'man [sic] is the sum of his social interactions. Through constant interaction with

others, the self is constantly changing.' In summary, according to this viewpoint, the individual self can only be said to exist in relation to social conversation. Personal identity, in other words, is an emergent property of inherently social relations.

In Mead's view this emergent self plays an essentially evolutionary role. It is there to support the cohesion of the group. And it is able to achieve this precisely because it is the result of social conversations. These social conversations provide the mechanism both for negotiating and for internalising (in personal identity) the values, attitudes and beliefs of the social group. In this way, the concept of the self also plays a key role in negotiating and perpetuating culture. Cultural norms are negotiated by and internalised within individuals by way of social conversations.

It is clear from his writing that Mead is thinking of the term 'significant symbols' mainly in terms of language itself. For Mead, therefore, the 'conversation of significant gestures' is a 'conversation' more or less in the usual sense. But later developments served to broaden the conception of 'significant symbols' beyond spoken and written language, to incorporate the symbolic meanings associated with and carried by objects, people, processes and situations.

Section 2 noted the importance of the (mainly anthropological) evidence suggesting that people respond to material artefacts on the basis of the symbolic meanings that these artefacts carry. The school of 'symbolic interactionism' formalises this insight through three key premises about human action (Blumer 1969):

- that human beings act towards things on the basis of the symbolic meanings those things have for them;
- that the meaning of such things is negotiated through social interaction; and
- that in any given situation these meanings are handled in and modified by an 'interpretative process' specific to the situation and the individuals involved.

The first of these premises is a straightforward expression of the insight that things carry symbolic significance as well as functional utility (cf Douglas and Isherwood 1978). The second flows directly from the insights of Mead and others about the ways in which social conversation mediates our attitudes and behaviours.

The third premise is worth commenting on briefly. For it is this premise that prevents individual human agency being construed as meaningless. Action is mediated in the symbolic interactionist view by a process of interpretation which takes place within a given context or situation. And interpretation is not to be seen as a purely automatic application of established or 'given' meanings. On the contrary, the actor 'selects, checks, suspends, regroups and transforms the meanings in the light of the situation' in which she is placed and the direction of her action (Blumer 1969, 5).

Section 2.7 highlighted the social importance of what Douglas (1976) called 'marking services' – the use of symbolic goods in exchange rituals that serve to negotiate and define social structure.   In a sense the exchange of goods (and values) achieved in marking services is quite precisely a conversation of gestures. The symbolic role

attributed by human beings to material artefacts creates a whole new realm of symbols which become the subject and the object of whole new social conversations.

Whether these conversations are 'significant' – in Mead's sense of being aware – is a very interesting question. Given that material goods operate as symbols, and that the formation of symbols appears to require creative faculties that belong within the realm of awareness, then presumably Mead would have answered this question in the affirmative. However, there is also plenty of evidence to suggest that our everyday responses to symbolic signals occur at a sub- or semi-conscious level. We may be fully aware, at some level, that – as one group of respondents in Belk et al's (2003) study on consumer desire pointed out – 'no one's gonna spot you across a crowded room and say, "wow! nice personality!"' But that doesn't mean that we literally and consciously 'clock' every visual signal carried by material objects at every moment of our waking lives.

Sometimes our sense of whether we do or do not belong in a certain group is nothing more than an uncomfortable feeling of displacement. In all probability, it swept over us almost instantaneously upon entering the room, conveyed by a myriad subtle but undeniable visual signals: the clothes we were wearing, the clothes others were wearing, their demeanour, hairstyle, the way they tied their shoes, the shade of wallpaper on the walls, the photographs hanging there, the fabric of the upholstery on the chairs.

Thus the conversation of gestures opened up to us through the symbolic role of material goods is one that is neither fully aware, nor fully unconscious. As such it protects itself with a peculiarly powerful veil of 'collective misrecognition' (to use Bourdieu's phrase). We 'know' intellectually that the symbolic nature of goods plays an important role in social conversations. But we do not carry this awareness into every such conversation with us. And we seldom articulate it in a fully conscious conversation of ideas. As such, the symbolic conversation of gestures embodied in the use, exchange and trade of material goods presents us with an incredibly difficult domain for policy intervention. We return to this difficulty in Section 12 of this review.

The key point here is this: that in facilitating an entire 'new' realm of social conversation (ie separate from the realm of animal gestures and separate from the 'significance' of the linguistic realm), the symbolic meanings of material artefacts fits them perfectly for an absolutely vital role in social and psychological functioning. Moreover, this is not – as some observers have suggested – a defining feature of modernity. The symbolic role of commodities was always employed in this way.

In summary, this perspective highlights several key points about social behaviour: that we respond to situations as social beings on the basis of symbolic meanings; that those meanings are socially negotiated and constructed; and that these socially-constructed meanings are adapted and transformed on a continual basis in the context of specific situations. As we shall see, these lessons have a wide applicability for understanding both consumer behaviour in general and pro-environmental behaviour in particular.

9.2   The Project of Symbolic Self-Completion

The social-symbolic role of consumer goods occupies an important role in modern conceptualisations of identity and the negotiation of the 'self-concept'. As we noted in Section 2, the insight that material goods play an important role in the process of identity construction is one of the key elements in the sociology and psychology of consumption. The idea that material goods are also a part of the 'extended self' (Belk 1988) ties our consumption patterns closely to individual and collective processes of identity construction.
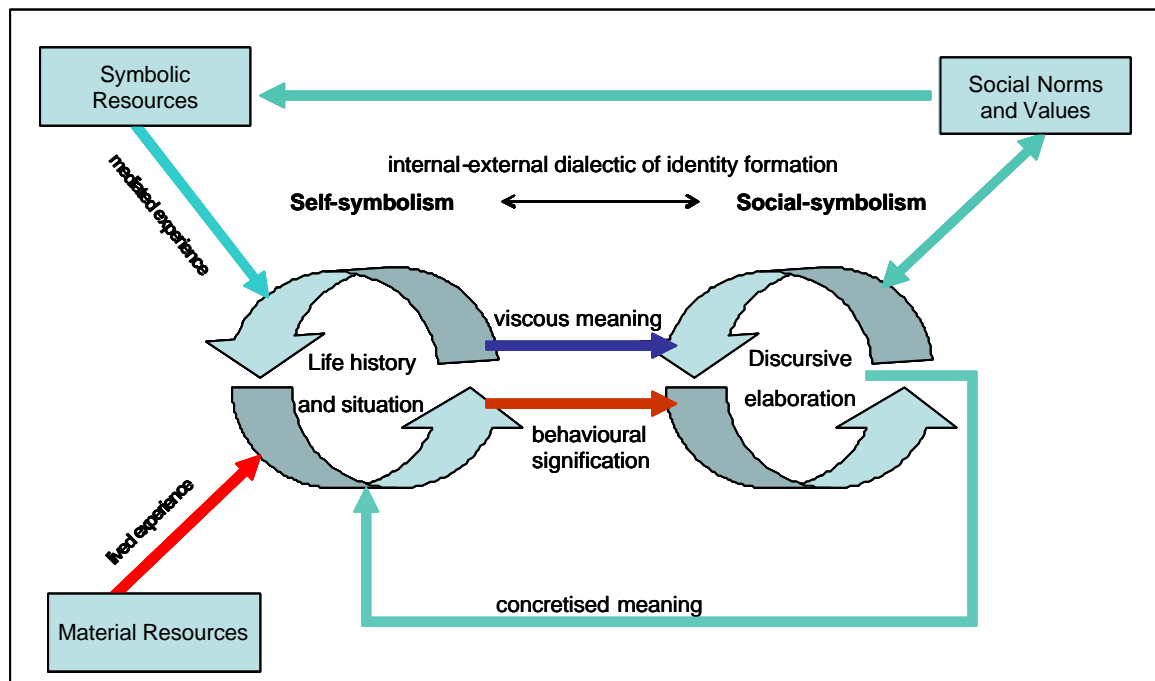
Figure 9: The Symbolic Project of the Self (after Elliott and Wattanasuwan 1998)

In particular, there is a view of identity in which the construction of the self-concept requires access to both material and symbolic resources. Like Mead's view of self, this view insists that identity construction is a social process and proceeds through social conversation. Elliott and Wattanasuwan (1998, Figure 9) offer a model in which two kinds of resources (material and symbolic) and two kinds of processes (individual and social) each play dual roles in the construction of identity. The basis for my self-concept at any one point in time includes my broad life history and situation. For example, I am a white forty-something British male, married and with three children, living in Farnham. But that broad history is also coloured by a myriad of details about the precise nature of my life, and that detailed picture is constantly changing. As it changes, my self-concept changes with it.

I am encouraged (socially and culturally) to think of myself as successful if I have access to certain kinds of material resources: a nice house, a smart car, decent clothes and so on. My lived experience of these material resources becomes a part of my self-concept. If they are ripped suddenly from my life, through tragedy or unemployment or disaster, I am disabled not just functionally but psychologically as well. These

material resources are a part of the 'lived experience' that creates and maintains my self-concept.

But my relationship to these material resources is in part a 'mediated experience'. I know how to think about my car, my house, my clothes, my wife and my children, in part at least, because of the social symbolism which these elements of my life convey (to me and to others). These symbolic resources are as important to the negotiation of my self-concept as the material resources on which I rely functionally (Thompson 1990, 1995).

Even more importantly, my lived and mediated experience of these material and symbolic resources is part of a social process. At best I am able to attribute what Elliott and Wattanasuwan (1998) call 'viscous' meaning to my individual experiences at the personal level. I must then test out this unsolidified meaning through a process of 'discursive elaboration' in which I describe, discuss, argue about, laugh at the mediated symbolic meanings I glean from the symbolic resources around me (Thompson 1990). And it is only in the social realm, that these symbolic meanings become solidified and allow me to 'complete' the symbolic project of the self.

I am proud of my new 3 litre sports car. One of my motivations for buying it was an advertisement I saw suggesting the symbolic association of this particular car with social and sexual status. In practice, I enjoy both its functional ability to get me away from the traffic lights faster than other cars, and the status I imagine this confers on me. I am a man in a hurry. I have places to go, and I am not going to let others stand in my way. Imagine my distress when my colleagues turn up their noses at my prize possession. This car is aggressive, they say. It speaks of someone obsessed with power. Or perhaps trying to disguise impotence. What is more, this car consumes the earth's resources at an unsustainable rate and is contributing to anthropogenic climate change. No one who cares about other people and the future of the planet could possibly drive such a car.

The example may be trivial. The outcome uncertain. I may eventually renegotiate a self-concept that accommodates these competing influences on identity. Maybe I will ride the ridicule for the sake of perceived social status. Perhaps I will even sell the car. But, according to symbolic self-completion theory, the process of discursive elaboration of symbolic meanings illustrated by this example is typical of the way in which we negotiate self and maintain our identity.

At any rate, this view of the social-symbolic negotiation of identity has a good deal of purchase in consumer research and marketing. Advertising has been recognised as one of the most potent sources of symbolic meaning in modern society (Grunert 1986, Sherry 1987). Ritson and Elliott (1995) have pointed out how advertised meanings are 'co-created' through discursive elaboration. Elliott and Wattanasuwan (1998) show how brands and advertised meanings operate as symbolic resources in the social construction of identity. And a cursory overview of advertisements in the public domain provides a fair sprinkling of evidence that these ideas inform common marketing practice. As we shall see in the next section, this view also has some clear applicability to pro-environmental consumer behaviour.

One of the interesting questions arising from this model of identity construction is the extent to which different kinds of societies rely on different kinds of symbolic resources in the process of self-completion. As we have pointed out already, the association of symbolic meanings with material artefacts appears to be universal across all societies. Likewise, the use of symbolic resources in the process of self-completion is supposed to be a common feature. Wicklund and Gollwitzer (1982) argued that it is part of the human condition to be born, in some sense, incomplete, without a fully-formed concept of self. A similar view is proposed by narrative identity theory. Ricoeur (1984, 1992) argues that we are engaged in a continual process of building personal and social identities, employing complex narratives about ourselves, our relation to others, our relation to the material world about us. Jenkins (1996) emphasises how this task must be continually validated through social interaction.

Clearly however, the precise nature of the symbolic resources employed in this process may differ from one society to another. In one society, symbolic self-completion may primarily occur through the social-symbolic importance attached to particular trades and capabilities. In another, it might be pursued mainly through the exchange of mythical social roles and narratives (Campbell 1959). What characterises modern Western society, in the eyes of Baumann (1998), Dittmar (1994), Featherstone (1991), Giddens (1991), McCracken (1990) and a good many others is that the symbolic project of the self is mainly pursued through the consumption of material goods imbued with symbolic meaning. But the project itself is common across all societies.

In summary, this view of identity construction supposes that we pursue, negotiate and affirm our self-concept through the social-symbolic conversation associated with the acquisition, disposition and exchange of both material artefacts and symbolic resources. It is precisely the power of material goods to embody symbolic meanings that fits them for this task in identity construction. And the process of negotiating symbolic meaning is inherently social. I know who I am not simply through self-reflection, but through social conversations about symbolic meanings with others. A critical part of these social interactions is itself mediated through the language of goods (Douglas and Isherwood 1979, Campbell 2003) .

From this perspective the project of sustainable consumption can perhaps be seen as the goal of shifting the symbolic basis of social conversation from material 'stuff' to some other kind of non-material resources.[18] How this to be achieved is less obvious. But clearly other societies and other cultures have at other times found other sources of symbolic meaning with which to negotiate social conversation. The 'materiality' of modern society should be seen therefore as a contingent rather than a necessary feature of social organisation.

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[18]   See Jackson 2005 for a fuller discussion of this point.

9.3   Self-Concept, Cognitive Dissonance and Spillover

The notion of self-concept plays an important role in people's motivations to behave in certain kinds of ways – and not to behave in other kinds of ways. The question of how I think of myself can turn out to be critical in influencing how I intend to behave – and how I actually behave. In particular, of course, the self-concept can be linked explicitly to the motivation for pro-environmental behaviours. If I think of myself as environmentally concerned, it would seem intuitively plausible that I would be more likely to recycle, buy organic food, and resist the lure of fast gas-guzzling cars.

Sparks and Shepherd (1992) tested this idea for the specific case of organic food. In particular, they wanted to know whether the 'self-identity' of people as green consumers constituted a significant influence on their consumption of organically-produced vegetables. In addition they wanted to find out whether this effect was independent of people's attitudes. They found that self-identity appears to exert a significant influence on intentions to consume organically, over and above the contribution of the attitude constructs included in Ajzen's Theory of Planned Behaviour.

They also found that this effect persisted even when past behaviour was included in the model. People who think of themselves as green consumers are more likely to be motivated to consume organic food than those who do not, irrespective of past food consumption practices. This is just one example of how the way we think of ourselves can have an important influence on pro-environmental motivations and intentions.

In fact, the idea that self-concept plays an important role in human motivations is another of those ideas that has a long pedigree. Festinger's (1957) *cognitive dissonance* theory, for example, postulated that internal feelings of discomfort motivate people to reduce inconsistencies in the cognitive information they hold about themselves, their behaviour or their environment. These feelings of discomfort might arise from conflicting attitudes or values, but equally they might be invoked by discrepancies between an attitude (about the self, for example) and a behaviour.

One of the ways in which this general idea has been incorporated into social-psychological theories of pro-environmental behaviour is through an exploration of so-called 'spillover effects' between one kind of environmental behaviour and another. Thøgersen (1999) has been one of the principal proponents of the view that the presence of one kind of pro-environmental attitude or behaviour in a given individual ought to be a reliable predictor of general environmental attitudes, and perhaps of other pro-environmental behaviours. If for example, I am a keen recycler then – according to this cognitive dissonance interpretation, I ought to be more likely than someone who doesn't recycle – to hold positive attitudes towards buying organic food, say.

Thøgersen envisages a number of different possible mechanisms for this kind of spillover effect. Firstly, my positive attitudes towards recycling may be inconsistent with my negative attitudes towards organic food. This inconsistency causes me cognitive or emotional discomfort, and I therefore change my attitude towards organic

food and view it more favourably. This effect in which my positive attitude to one pro-environmental behaviour leads to a positive attitude towards another pro-environmental behaviour is called positive spillover. An alternative, clearly, is that I reduce the dissonance associated with conflicting attitudes by shifting my attitude towards recycling and viewing it less favourably. This effect is called negative spillover.

There is also interesting evidence that behaviours themselves have a direct influence on attitude. For example, Thøgersen and Ölander (2002) found evidence supporting the hypothesis that people who engaged in recycling were more likely to hold positive attitudes towards other environmental behaviours, and that this effect was independent of their attitudes towards recycling. In other words, the very act of recycling appears to improve my attitudes towards pro-environmental behaviour in general.

Again, the idea that behaviours can influence attitudes has considerable purchase in social psychology. In fact, Bem (1972) suggested that we infer our own attitudes on the basis of observations about our own behaviour, in much the same way that we infer the attitudes of others on the basis of their behaviours. I know what my attitudes about recycling or organic food are by observing whether I recycle or whether I buy organic food, according to this view. Though this assumption that behaviours are prior to attitudes is certainly not always valid, Bem's self-perception theory provides a useful compliment to Festinger's cognitive dissonance theory (Fazio 1977) and highlights the importance of behaviour as an antecedent of attitude, in certain situations.

From an environmental perspective, this insight may turn out to be critically important in policy terms. The jury is still out on the existence and strength of spillover effects (Thøgersen and Ölander 2002, 2003). But the possibility that engagement in a specific pro-environmental behaviour can influence positively our attitudes towards other pro-environmental behaviour suggests the intriguing possibility of an additional dividend for policy that seeks to improve facilitating conditions. Investment in recycling infrastructure, for example, might be justifiable not just from the improvement in recycling rates that it is likely to bring about, but also from the knock-on effect that recycling behaviour has on people's environmental attitudes in general (and thence on other pro-environmental behaviours).

9.4   Self-Discrepancy Theory

Not all of the implications of cognitive discrepancy are so fortunate for sustainable consumption. One of the most sophisticated attempts to construct a generalised theory of how internal discrepancies affect people's motivations is Higgins' (1987) *self-discrepancy theory*. The starting point for Higgins theory is the articulation of a variety of different kinds of self-concepts. In the first place there is my actual self-concept – my own individual conception about who I am right now. But it also makes sense to talk of (my perceptions about) how others conceive of me. In other words, at any one time I have a self-concept which is derived partly from own perspective on myself and partly from my perceptions of others' perspective on me.

In addition, Higgins points out, there is a meaningful distinction between my actual self and my potential self – conceptions of how I am right now and how I might be or could potentially be in the future. And this potential self in its turn can be conceived either as an ideal self (what I as an individual or others around me wish me to be) and an ought self (what I or others around me think I ought to be). In total therefore, Higgins identifies six distinct types of self-concept: actual-own, actual-other, ideal-own, ideal-other and ought-own, ought-other.

Critically, according to self-discrepancy theory, discrepancies can arise between any two different kinds of self-concept, and each kind of discrepancy will give rise to different types of emotional response – different 'qualities' of cognitive discomfort. So, for example, Higgins marshals evidence to indicate that the discrepancy between my (own) actual self-concept and my (own) ideal self-concept is likely to give rise to dejection-related emotions such as disappointment and dissatisfaction. Discrepancies between my (own) actual self-concept and the ideal concept others have of me, on the other hand, is most likely to give rise to feelings of shame or embarrassment. And discrepancies between my (own) actual self-concept and my (own) ought self-concept is likely to give rise to feelings of guilt.

It is easy to see how each of these kinds of discrepancies might be relevant, in different ways, for understanding sustainable (and unsustainable) consumption. For example, the discrepancy between actual-own and ought-own underlies Sparks and Shepherd's work on self-concept as a green consumer. Dittmar (1999, 2003) has shown how a particular kind of self-discrepancy – the distance between actual and ideal self-concepts – can be used to predict compulsive or excessive buying behaviours. This same discrepancy is the one explored in McCracken's (1990) exploration of consumer behaviour as the pursuit of 'displaced meaning' (Section 2.8). The actual-own and ideal-other discrepancy clearly informs consumer motivations that are prompted by status anxiety and group identification.

Thus, to the extent that self-discrepancy theory is supported by the evidence,[19] it offers a particularly powerful way of understanding both individual and social motivations for consumer action. We experience a variety of uncomfortable emotions when there are large discrepancies between the way we see ourselves and the way we would like to be, or between the way we see ourselves and how we believe others think we ought to be. These emotions motivate action to reduce the discrepancy. Some of those discrepancy-reducing intentions are mediated by material goods.

This is a message that is clearly not lost on the advertising industry. 'What does your pen (car, house, pair of spectacles, holiday destination, toilet roll holder etc) say about you?' is a constant theme in marketing strategies, and appeals to a set of powerful self-discrepancy dynamics. Some would go further than this and suggest that one of the roles of advertising has been to stimulate this kind of self-discrepancy dynamic, specifically because it fosters (fundamentally insatiable) consumer appetites (Packard 1956, Hamilton 2003 eg).

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[19]   Higgins himself (1987) cites a good many studies in support of the thesis, and subsequent studies bear out the main conclusions.

Be that as it may, self-discrepancy theory provides some important insights into the social influences on consumer action, and offers supportive evidence in favour of a number of the understandings of consumer behaviour discussed in Section 2.

9.5   Social Identity Theory

Social theories of the self and social-symbolic theories of identity allow us to capture some of the social dimensions that are missed from purely individualistic approaches to motivation and behaviour. Where individualistic approaches assume that consumer choice is a matter for individual cognitive rationality, the social and social-symbolic approaches attempt to account for the influence of others in the very process of identity construction and choice.

Often however, the principal unit of analysis remains individual: individual identity, individual perceptions of what others think or individual behaviours generally form the focus of attention. When cashed out in operational terms, for example, models such as self-discrepancy theory generally measure differences between an individual's perceptions of self and his or her perceptions about the social expectations of others. The social-symbolic model of self-completion (Figure 9) does incorporate a fundamentally social process – discursive elaboration. But this process is again viewed largely from the standpoint of the symbolic project of the (individual) self. There are some social-psychological approaches which attempt to go beyond using the individual as a unit of analysis. One of these is social identity theory.

Social identity theory arose out of a quite convincing body of evidence suggesting that competitive inter-group behaviour is common to almost every society that we know of. In fact, there is wide-spread cross-cultural evidence that society organises itself into distinct groups which favour the 'in-group' – ie those within the given reference group – and discriminate against the 'out-group' – those outside the group (Wetherell 1982).

Moreover, this tendency appears to operate even when there are no obvious goal or scarcity conflicts to trigger inter-group competition (Rabbie and Horowitz 1969, Ferguson and Kelley 1964, Rabbie and Wilkens 1971). A famous experiment by Billig and Tajfel (1973) showed how in-group and out-group biases seem to emerge, even under quite arbitrary categorisations of people into different social groups. The 'minimal group hypothesis' suggests that, rather than being based on clear and identifiable discrepancies between social groups, it is the very act of forming social groups that leads to in-group identification and intergroup conflict.

In an attempt to explain these observations Tajfel and Turner (1979) and their colleagues (Hogg and Abrams 1988, Tajfel 1978, Turner and Giles 1981) developed a theory of intergroup behaviour which is based on the premise that social identification with a 'reference group' is a key component of identity. This 'social identity' is defined in terms of 'the individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of the group membership' (Tajfel 1972, 31).

More recent work by Ellemers et al (1999) appears to confirm this social component of the self-concept. They furnish evidence to suggest that social identity is based on a *cognitive* awareness of one's membership of a group, a positive or negative *evaluation* of this group membership – a sense of 'group esteem' – and an emotional or *affective involvement* with a particular reference group or set of reference groups.[20]

Social identity theory then attempts to explain the minimal group hypothesis (and by extension intergroup behaviour generally) by suggesting that there is a widespread if not universal human desire for positive social identity. We are motivated as human beings to feel good about the group we perceive ourselves as belonging to.[21] There is certainly some cross-cultural evidence to support this hypothesis (Wetherell 1996). Positive social identity is in some sense the glue that keeps social groups together, regulating individual behaviour, preventing the fragmentation of social norms and strengthening the advantage of the group as a whole (Ellemers et al 1999, Bergami and Bagozzi 2000.

To achieve positive social identity, however, in-group members are motivated to discriminate against the out-group, because the discriminatory strategy itself establishes a distinction between the two groups, enhances the positive value of the in-group, and provides for a positive social identity. Though this effect appears to be stronger where there are either objectively definable differences or external grounds for competition (conflicts over scarce resources eg) between the groups, social identity theory asserts that it is the process of social categorisation itself that is the primary driver of in-group/out-group bias. We appear to have an in-built tendency both to form discrete social groups and to favour our fellow group members over outsiders.

Social identity theory also has some important things to say about how social change occurs. As we have seen, the theory attributes the general form of intergroup behaviour to social categorisation and self-esteem processes. But it attributes the specific manifestation of those behaviours (eg conflict, harmony, emulation etc) to people's beliefs about the nature of intergroup divisions and relationships.

Different societies not only have different social structures,[22] they have different belief systems about the degree of social mobility that is permissible or achievable within that structure. Modern Western societies are characterised by a high social mobility belief system in which people are supposed to be able to move freely between social groups, and in particular to have easy access to 'higher' social groups. This belief system means that the most obvious strategy for social improvement is an individual mobility strategy, in which the individual exercises his or her perceived right (and ability) to pass from a lower to a higher status group (Figure 10).

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[20] Social identity theory supposes that as individuals we may belong simultaneously to a number of different reference groups. The importance or salience of our membership to each such reference group will differ according to circumstantial and dispositional factors.

[21] A corollary of social identity theory – the self-esteem hypothesis – is that individual self-esteem improves with positive perceptions of the ingroup and is negatively correlated with positive perceptions of the outgroup. However, the evidence for the self-esteem hypothesis is inconsistent at best (Hogg and Vaughan 2002, Houston and Andreopoulou 2003).
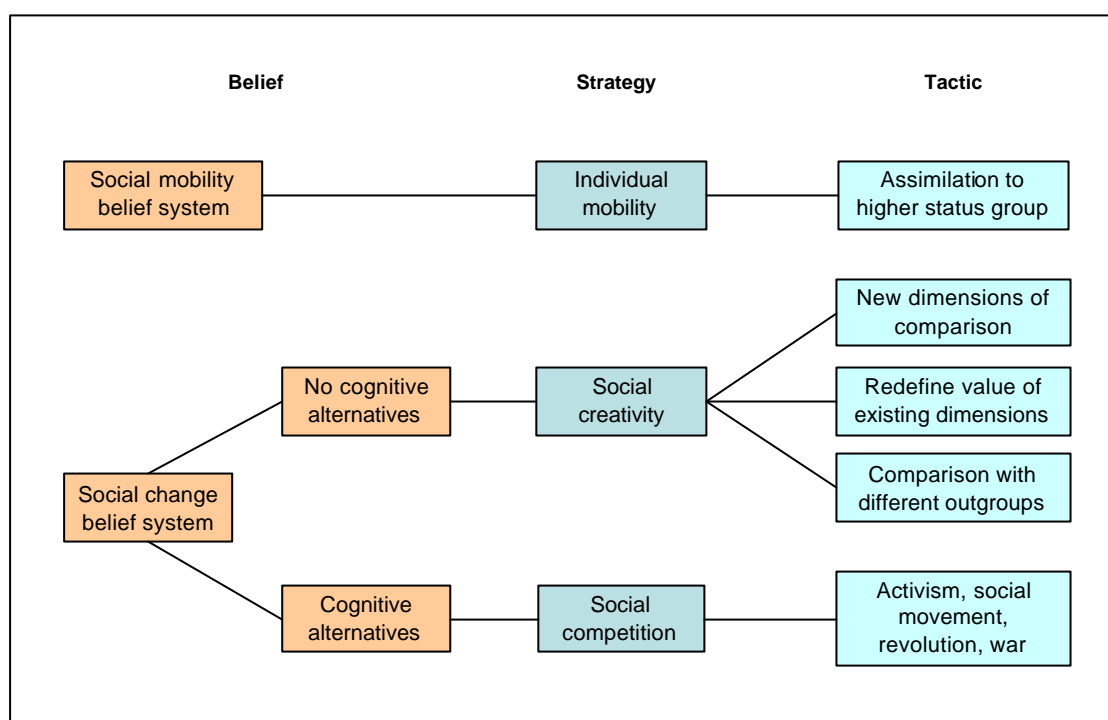
[22] See also Section 9.6 below.

Belief	Strategy	Tactic
Social mobility belief system	Individual mobility	Assimilation to higher status group
	Social creativity	New dimensions of comparison
No cognitive alternatives		Redefine value of existing dimensions
Social change belief system		Comparison with different outgroups
Cognitive alternatives	Social competition	Activism, social movement, revolution, war

Figure 10: A Social Identity Perspective on Social Change[23]

The main alternative to a social mobility belief system is one in which people believe that social improvement can only occur through a change in the social order itself.[24] In some cases, however, even this kind of change appears impossible and the social order is perceived to be not only legitimate but more or less immutable. Examples of such belief systems include the caste system in traditional Hindu society and feudal society in the middle ages.

In these circumstances, people simply do not believe they have cognitive alternatives to the existing social order. Consequently, they engage in a variety of creative strategies for promoting the self-esteem of the group they happen to find themselves in. These might include, for example, identifying new value dimensions – on which the in-group scores well – as the basis for intergroup comparison. Perhaps we are working class, and have no money and very few prospects. But at least we are more honest, fun-loving, authentic, sociable, morally good (eg) than those who consider themselves better off than us. Another social creativity strategy (Figure 10) is to shift the basis of social comparison onto different out groups.

Sometimes, however, the existing social order is perceived as neither legitimate nor immutable. In these circumstance a change in the social order is a real cognitive alternative and social improvement may then proceed through a variety of different

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²³ Adapted from Hogg and Vaughan 2002.

²⁴ It is important to note that the determinant of strategic action here is not actual social mobility but perceived social mobility. It may in fact be less possible to improve one's social standing in modern Western society than is currently believed. But this does not – at least over the short term – diminish the strength of social mobility as a belief structure or the perceived legitimacy and efficacy of individual mobility as a social psychological strategy.

kinds of collective social action: including activism, social protest, terrorism, revolution and war.

The implications of social identity theory for the project of understanding and influencing consumer behaviours are many and diverse. In the first place, of course, the theory offers an explanatory account of the importance of social norms (both descriptive and injunctive) on consumer action. Certain kinds of actions and behaviours are more or less ruled in or ruled out for me, simply because I perceive myself as belonging to a certain social group. Moreover, the roots of these 'normal behaviours' have very little to do with individual rational deliberation. Rather they are heavily influenced both by intergroup and by intra-group dynamics. And in both cases, my personal influence over prescribed or proscribed action is severely limited.[25]

Equally important is the support that social identity theory lends to the changing salience of specific social norms. The fact that typically I will belong to more than one reference group suggests that I am likely to be subject to different – and sometimes competing – social influences. Sometimes, the strength of these influences may be skewed heavily by the situation in which I find myself – as in the 'weak vegetarian' example of Section 7.4. At other times I may be subject to some quite difficult value conflicts, when the social identity component associated with one reference group (my professional affiliation with the green lobby, for example) comes up against the social identity component of another reference group (my old school friends who are all now working in investment banking, say).

Social identity theory has been applied to a variety of different circumstances and social behaviours. It has been useful in understanding behaviours as varied as delinquency, 'anti-social' behaviour, frustration-aggression, ethnocentrism, social protest, self-sacrifice and stereo-typing (Hogg and Vaughan 2002).

There are also useful lessons for and applications to consumer behaviour. It is well-known that consumer goods are implicated in the construction and maintenance of identity (Dittmar 1992, Baumann 1998, Featherstone 1991). Amongst the important processes of identification that consumer goods facilitate is identification with the in-group – or conversely distinction from the out-group. Bourdieu's (1984) theory of social distinction offers one representation of the way in which consumer goods offer distinctive social identities.

Mary Douglas (1997) has articulated a view of shopping as a form of protest that owes much to social identity theory. Far from being motivated by clearly definable, coherent versions of individual identity, Douglas argues that what holds consumer decisions together and offers them coherence is the notion of protest. 'Protest is a fundamental cultural stance', she maintains (op cit 17). People may not know what they want; but they are very clear about what they do not want. And these hostilities are directed continually at perceived out groups. 'One culture accuses others, at all

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[25] Here is a situation in which, rather than social behaviour being an emergent property of individual behaviour, personal behaviour is an emergent property of group behaviour (and social context).

times' (ibid). Consumption decisions, in this view, are expressions of protest against other cultures and cultural types.

What is true of shopping behaviours may be equally true of other kinds of behaviour. It has long been recognised, for instance, that some forms of environmental activism are motivated as much by protest against incumbent or dominant ideologies as by concern for the environment *per se* (Stern et al 1999). That environmentalism is a form of social protest is scarcely news. But the converse is also true, and equally important: resistance to pro-environmental messages and behaviours has to be understood, at least partly, in the context of social identities.

Just as environmentalists construe themselves in opposition to certain social groups, so too do those who resist pro-environmental behaviour. For example, surveys of attitudes towards recycling have consistently identified a certain hard-core of respondents who persistently fail to recycle, express clear opposition to recycling, and declare that they would never recycle, however easy it was for them to do so (RRF 2002, 2004). From a social identity perspective, we must expect that the emergence of a clear social identity relating to recycling behaviour will give rise to social opposition. I simply won't recycle no matter how easy it is or how often I am asked, not because I perceive the individual costs and benefits to be too high or too low, but because recycling for me is associated with a certain kind of person belonging to a certain kind of social group and *this group is not the one I belong to.*

This situation is clearly more uncomfortable for policy than one in which every individual agent is open to 'rational' persuasion concerning the social benefit of pro-environmental action. Government attempts to influence behaviour must somehow confront the dynamics of social identity if they are to be successful. Clearly there are some options open in the pursuit of this. For example, the use of role models – belonging to successful in-groups – to promote pro-environmental and sustainable behaviours has been suggested as one route towards influencing public behaviour (Halpern et al 2003) and this suggestion draws some support from social identity theory.

On the other hand, the complex dynamics of social identification – and in particular the inherent tendency towards social differentiation and intergroup conflict – suggests that achieving pro-environmental change through 'uniformity' or 'copying' will not be particularly easy. The stronger the signal that a certain behaviour associates people with a particular group, the greater the likelihood that some people will resist that behaviour, and choose a different behaviour simply for the purposes of social differentiation.

Moreover this tendency towards cultural protest may be exacerbated in highly stratified societies such as the one in which we now live. In more 'uniform' societies, with low levels of social stratification and strong group norms of social identity, the chances of achieving particular kinds of behaviour may be more realistic than in highly disaggregated societies characterised by large income inequalities, which celebrate individual choice, and place a high premium on social mobility and cultural

pluralism. The implications of this understanding for pro-environmental behaviour change will be addressed more fully in Section 12.

9.6   Cultural Theory

In the previous section, we highlighted the importance of social differentiation as a source of motivation for cultural differences in behaviour. Douglas (1997) promotes the idea of social protest to the position of a central organising feature of consumer behaviour. Social identity theory sees this kind of intergroup hostility as arising from the process of social identification itself. By contrast, Douglas perceives it as being rooted in cultural dialogues about the proper functioning of society. 'The basic choice that a rational individual has to make is the choice about what kind of society to live in', she argues 'Commodities are chosen because they are not neutral; they are chosen because they would not be tolerated in the rejected forms of society and are therefore permissible in the preferred form. Hostility is implicit in their selection' (ibid). This insight can be formalised, according to Douglas, in terms of a particular theory concerning different kinds of social organisation. Cultural theory assumes that there are four fundamentally different cultural forms of social organisation. Drawing on Max Weber's (1958) early exploration of different types of society, Douglas (1966, 1970) and her colleagues (Douglas and Isherwood 1979, Douglas and Wildavsky 1982, Thompson et al 1990) argue that there are only a limited number of different forms of social organisation and that these are defined along two separate axes: group and grid (Figure 11).

The position of a given society along the 'group' axis denotes the relative importance of the group as opposed to the individual in that society. In a 'high-group' society, group values prevail over individual values, individual action is constrained and curtailed by group norms, and society is organised extensively around group relationships. Individual identity by contrast is relatively weak and individual competition is subordinated to the best interests of the group. In a 'low-group' society, the opposite is true: the individual dominates over the group, leading to unfettered competition in the pursuit of individual interest, and the subordination of group values and norms.

The 'grid' dimension of the cultural theory diagram denotes the extent to which the relationships between individuals in a given society are free and unconstrained. In a 'high-grid' society, there are a variety of 'insulations' between individuals that prevent free transactions. These insulations can be either physical in nature (such as physical separation between specific individuals or groups of individuals) or the result of self-made rules – such as the caste system in India. The result of such insulations in a high-grid society is that certain kinds of transactions are barred, leading to asymmetries in relationships between people. In a low-grid society, by contrast, there are no such insulations, transactions between people are free and unconstrained, leading to symmetric relationships between individuals.
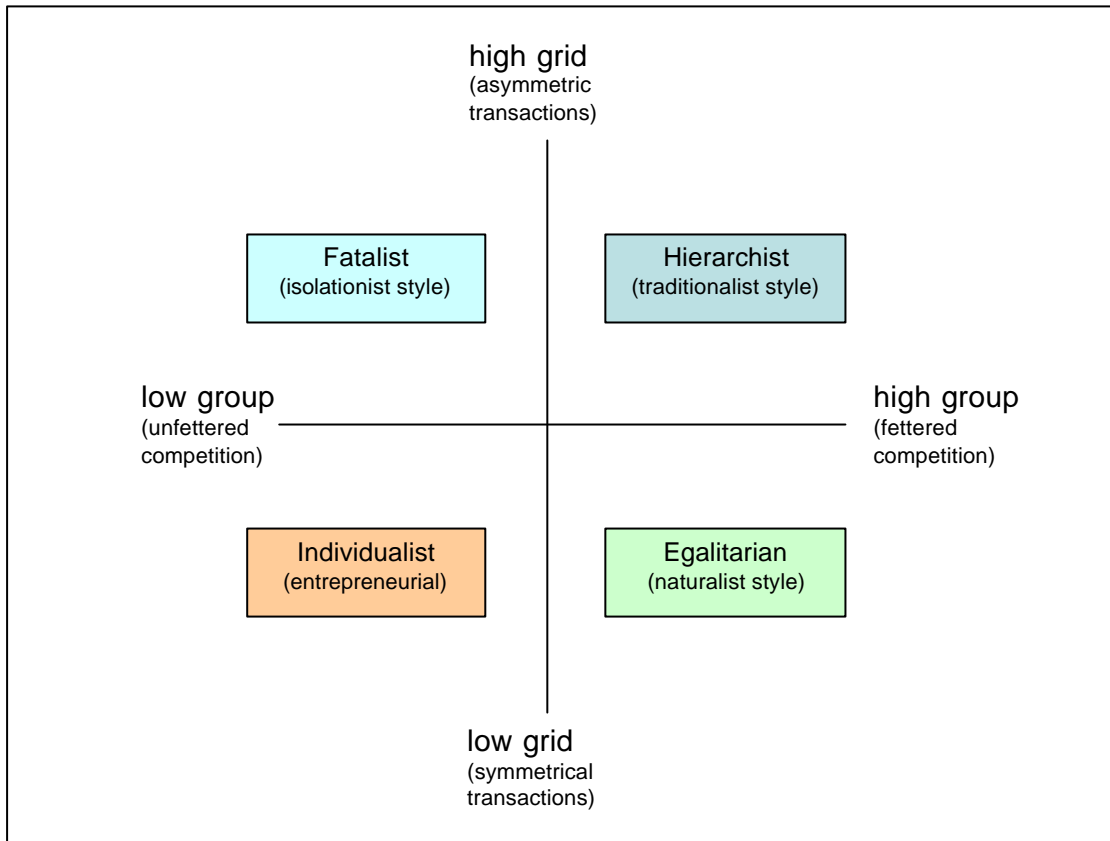
high grid
(asymmetric
transactions)

Fatalist (isolationist style)	Hierarchist (traditionalist style)

low group
(unfettered
competition)

high group
(fettered
competition)

Individualist (entrepreneurial)	Egalitarian (naturalist style)

low grid
(symmetrical
transactions)

Figure 11: Cultural Theory's Typology of Social Organisation and Cultural Type

Cultural theory's 'impossibility theorem' argues that there are four and only four types of social organisation.[26] Each of these forms of social organisation 'induces' a distinctive form of rationality. In individualist societies for example, rationality is largely associated with the pursuit of the best interests of the individual, in the absence of coercive norms. In egalitarian society, rationality consists in the collective management of resources to the mutual benefit of the group, and so on.

It is clear from this description that modern economies are to be characterised essentially as low-group, low-grid societies, corresponding to an individualistic model of rationality. This insight offers some explanation for the dominance of the rational choice model within existing institutions and policy frameworks. Much of the preceding discussion in this paper has been concerned with highlighting the limitations of that model. Cultural theory offers the insight that the rational choice model is associated with a particular way of conceiving of social organisation. But that this is only one of four different possible forms of social organisation.

Some later work in cultural theory suggests that in addition to being associated with specific models of rationality, different cultural models are also associated with different types of individuals. The suggestion here is that there are different kinds of

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[26] In fact, some later versions of cultural theory identify a fifth cultural types, the hermit, based on a model of 'conviviality without coercion' (Dake and Thompson 1993 eg) that sits outside the grid-group categorisation.

individuals (cultural types) who each 'prefer' different kinds of social organisation. The four cultural types identified by cultural theory (Figure 11) are:

- **Hierarchist**: this cultural type adheres to established traditions and institutions, maintains social relations through a defined network of family and old friends, and is resistant to social change.
- **Individualist** (or entrepreneurial): this cultural type prefers wide-flung, open networks, and celebrates competition, innovation, individual choice and personal freedom;
- **Egalitarian**: this cultural type is against formality, rejects authoritarian institutions, and 'prefers simplicity, frankness, intimate friendship and spiritual values' (Douglas 1997);
- **Fatalist** (or isolate): this cultural type withdraws from social organisation, eschews friendship, competition, gift-giving and commerce, preferring to make do with their own resources.

There is a subtle but important difference between cultural theory as a theory of social organisation, and cultural theory as a theory of individual cultural type. In the former case, support for the theory is to be sought in historical evidence of the existence of each kind of social organisation. In the latter case, the evidence base would be provided by identification of distinct psychological types in society. Interestingly, there is evidence in favour of both interpretations. The social organisational evidence is perhaps the most convincing and draws on both sociological and cultural anthropological evidence of different kinds of society (Douglas 1966 & 1970, Ophuls 1973, Sahlins 1976, Weber 1958).

But there is also more recent evidence to support the idea that these four (or five) forms of social organisation correspond to specific 'worldviews' or belief systems which in their turn are associated with different individuals belonging to specific psychological types. A number of authors have found evidence for the existence of these individual types, and established that each type appears to favour distinct cultural myths about nature (Schwartz and Thompson 1990) has different consumption tastes and preferences (Dake and Thompson 1993) and responds differently to environmental and social risk (Thompson and Rayner 1998). Some recent work has also established correlations between cultural types and underlying (egoistic, altruistic, biospheric) value sets (Meader et al 2004).

Schwartz and Thompson (1990) found that entrepreneurs regard nature as robust, isolates regard it as unpredictable, hierarchists regard it as robust within certain prescribed limits, and egalitarians see nature as fragile. In response to these different conceptions of nature, each cultural type favours particular forms of environmental management. Largely, these are the ones associated with the form of organisation preferred by that cultural type. Thus egalitarians tend to prefer community-based management policies; hierarchists favour rule-based responses, and individualists favour market solutions.

These insights are potentially useful both in understanding consumer motivations and in identifying and delimiting the policy options available for pro-environmental

behaviour change. At the same time, the two interpretations of cultural theory pose interesting, non-trivial, questions about the relationship between cultural types and forms of social organisation. Is the preponderance of cultural types the result of the domination of particular forms of social organisation? Or are cultural types formally prior to (or independent of) types of social organisation?

It is clear, for instance, that most of our social organisation in modern society lies in the lower left-hand quadrant – the individualist type. Conventional policy-making has favoured free-market solutions to common resource problems and most of our institutions and concepts of rationality reflect this. Presumably then, it would not be at all surprising to find a preponderance of people with value sets that are widely influenced by the dominant social norm or paradigm of individualism.

Questions such as this are important because the answer to them has clear implications for the design of policy. If cultural types are prior to social organisation, then policies designed to influence behavioural change should probably be differentiated according to cultural type. If the preponderance of cultural types – or the salience of certain values and norms in individuals – depends on the dominant form of social organisation, then shifting individual behaviours is going to be difficult without shifts in the form of social organisation.

These questions tend not to have been addressed explicitly within cultural theory and must remain beyond the scope of this paper. But they clearly have some similarities to the difficult questions about the relationship between individual beliefs, social values and cultural worldviews that haunt the social psychological models. Further research into these relationships and their importance for pro-environmental behavioural change may be needed.

10 Integrative Theories of Consumer Behaviour

As we noted in an earlier section, there are – broadly speaking – two identifiably different kinds of approaches to understanding consumer behaviours. Firstly, we can distinguish a set of approaches that study and model behaviour mainly as a function of processes and characteristics which are conceived as being *internal* to the individual: attitudes, values, habits and personal norms.

Quite another set of approaches studies behaviour as a function of processes and characteristics *external* to the individual: fiscal and regulatory incentives, institutional constraints and social practices. The first ('internalist') perspective carries an implicit assumption of consumers as atomistic agents autonomous of social structure, while the second ('externalist') perspective sees consumers as constrained operators programmed (or at least heavily influenced) by external forces beyond their comprehension or control.

The literature on recycling is typical of this 'divergence' in perspectives. In particular, the early literature on recycling shows clear evidence of the division. Internalist perspectives, such as those of Arbuthnot (1974), de Young (1986 & 1990) and Pardini and Katzev (1983/4), focused exclusively on attitudes, beliefs and intrinsic motivations as critical determinants of recycling actions. Externalist approaches such as those of Ingram and Geller (1975), Jacobs and Bailey (1982/3) and Witmer and Geller (1976) concentrated solely on the role of external constraints, prompts, and incentives in promoting recycling behaviour.

Not surprisingly, the two perspectives tend to differ widely in their policy prescriptions. On the understanding that public attitudes are the most important determinants of successful pro-environmental behaviour, the internalist approach calls mainly for awareness raising, information provision and advertising campaigns to motivate pro-environmental attitudes. By contrast, the externalist approach tends to call for a combination of incentives and changes in the regulatory structure to create the right conditions for pro-environmental behaviour.

More recent literature on recycling (for example) tends to adopt more freely from both perspectives (Hopper and Nielsen 1991, Oskamp et al 1991, Tucker et al 1998, Perrin and Barton 2001, Oates and McDonald 2004). But it doesn't always do so in a particularly structured way. In particular, this literature often does not explore the relationships *between* internal factors and external constraints in any depth. In this section we briefly examine a number of different frameworks for social action which attempt to combine both internalist and externalist perspectives.

10.1 Structuration and Social Practices

The internalist-externalist dichotomy in theories of consumer behaviour mirrors a more long-standing, and more deeply entrenched debate in social science concerning the relationship between agency (or human action) and structure (the social institutions that constitute the framework for human action). The basic dilemma in the agency-structure debate can be expressed in the question: are humans capable of

autonomous, directed social action; or are they rather locked into historical and social processes over which there is no possibility of individual or collective control?

The dimensions of this problem are complex and involve sociological, biological, historical, and philosophical elements. The debate has been explored most thoroughly by sociologists, for whom the attempt to formulate coherent understandings of social action is paramount. This concern with social action, its origins and driving forces, is one of the factors that has led sociology to condemn the one-dimensional rationality inherent in the conventional rational choice model. It has also led some sociologists to attempt to devise more sophisticated forms of 'structuration theory' which attempt to bridge the agency-structure dichotomy and offer more sophisticated, integrative models of social action (Parker 2000).

Perhaps the most well-known form of structuration theory is that of Giddens (1976, 1984) who coined the term 'structuration'. Giddens starting point in trying to build an integrated model of human agency and social structure draws something from the interactionism of Mead and others (Section 9.1). Individual subjectivity is mediated through social interaction. Social interaction is what gives individuals access to language, intersubjective interpretation, meaning and knowledge. Only by being embroiled in the social world of others, with whom they can reliably interact, can people achieve 'ontological security' (Giddens 1984, 375). This ontological security provides for a continuing sense of the 'well-foundedness of reality' (Parker 2000, 56).

Giddens' structuration theory rests on three fundamental understandings about the nature of social interaction:

- reflexivity: the continuous 'monitored character of the ongoing flow of social life' (Giddens 1984, 3);
- recursiveness: the continual production and reproduction of the social practices in which social actors are engaged (Johnston et al 2000, 798); and
- regionalisation: the temporal, spatial or time-space differentiation of the social processes that channel social life (Giddens 1984, 376).

These propositions about social life allowed Giddens to construct a model of the interconnection between ordinary everyday routine action and the long-term, large-scale evolution of social institutions. Specifically, individual and collective agency provides for the production, regularisation, extension and reproduction of complex patterns of social interaction – or in other words for the 'constitution of society'. But this concept of agency is only possible because actors have access to the 'transformative capacity' of historical social structures, such as language, rules, norms, meanings and power (op cit, 28-9). These 'rules and resources' are not endowed with agency in and of themselves. But they come to have effect through being known and applied by social actors. Thus, Giddens model portrays social structure as both the medium and the outcome of people's ordinary social practices.

From the perspective of understanding consumption behaviours, one of the most important elements in structuration theory is a distinction between 'practical' and 'discursive' consciousness. Practical consciousness is the everyday knowledge that

people have about how to do things. It depends on a huge wealth of commonly accepted knowledge concerning how to go about things. In fact, Giddens suggests that the bulk of human agency rests in using this kind of practical consciousness in the context of familiar, routine (routinized) situations and behavioural contexts.

In one sense, it is this practical consciousness which allows me to identify the whereabouts of the rubbish bin faultlessly (until it is moved), drive to work without noticing that I have stopped at the lights, and respond effortlessly to many of the trivial tasks that fill my everyday life. Most of this kind of action appears to take place without any recourse to premeditation or conscious, deliberative reasoning.

At the same time, human agency is also characterised by the ability to engage in such reasoning, for example, when asked to expand upon the underlying reasons for (even routine) action. This 'discursive consciousness' consists in everything that actors are able to say about the social conditions of their action. It presupposes both that social actors have an awareness of action and that this awareness has a discursive form – it is prosecuted through social discourse. However, this kind of consciousness does not necessarily describe a process of continual rational deliberation over individual actions. On the contrary, according to Giddens, accounts of intention are generally produced during or after action, rather than before it. Agency is, for the most part, the process of being enmeshed in the repetitive, routine practices of everyday life.
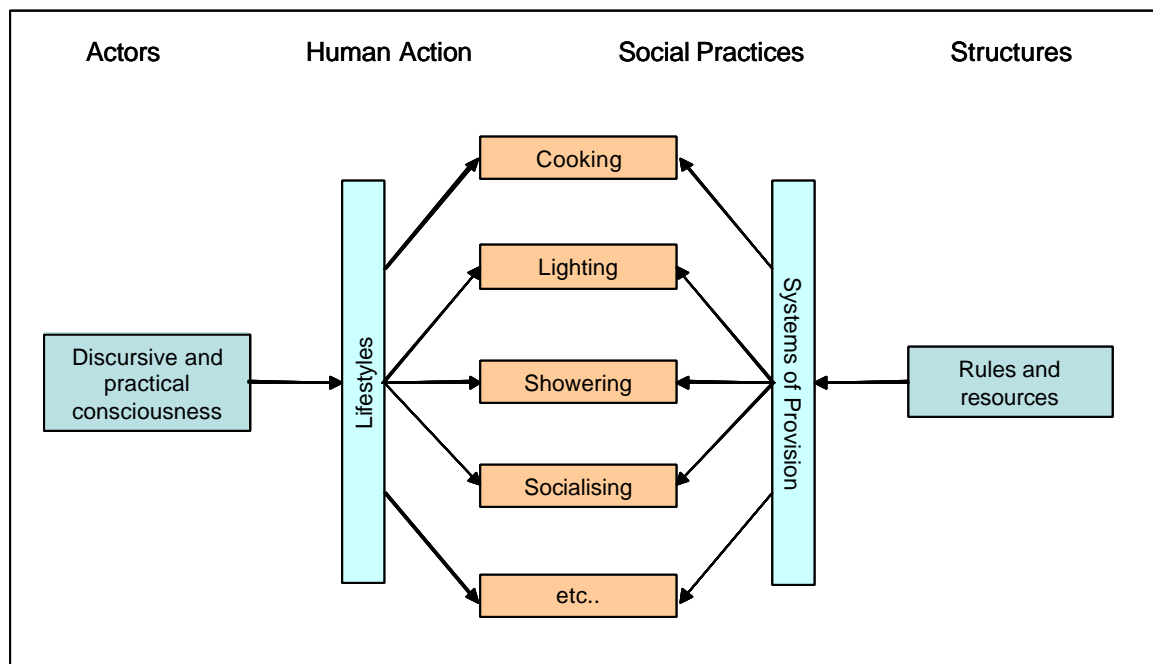
Figure 12: Consumption as Social Practices (after Spaargaren and van Vliet 2000)

The distinction between practical and discursive consciousness clearly has some resonances with the social psychological understandings of routines and habits. It also has some important implications in terms of motivating pro-environmental behaviour. Spaargaren and van Vliet (2000) have suggested a model of consumption as a set of social practices (Figure 12) influenced on the one hand by social norms and lifestyle choices and on the other by the institutions and structures of society. They

suggest that shifting consumption patterns requires us to 'raise' routine behaviours from the level of practical consciousness to discursive consciousness. Most everyday, routine action is performed in practical consciousness. But there is evidence to suggest that intentional or goal-oriented behaviours require elaboration in discursive consciousness. This insight is important in devising strategies to change habitual behaviour (Section 11.5).

10.2 Stern's Attitude-Behaviour-Context Model

One of the most significant efforts to overcome the internalist-externalist dichotomy in the social psychological literature is the attempt by Stern (2000) and his colleagues (Guagnano et al 1995, Stern et al 1999) to develop integrated 'attitude-behaviour-constraint' (ABC) models of environmentally-significant behaviour (Figure 13).
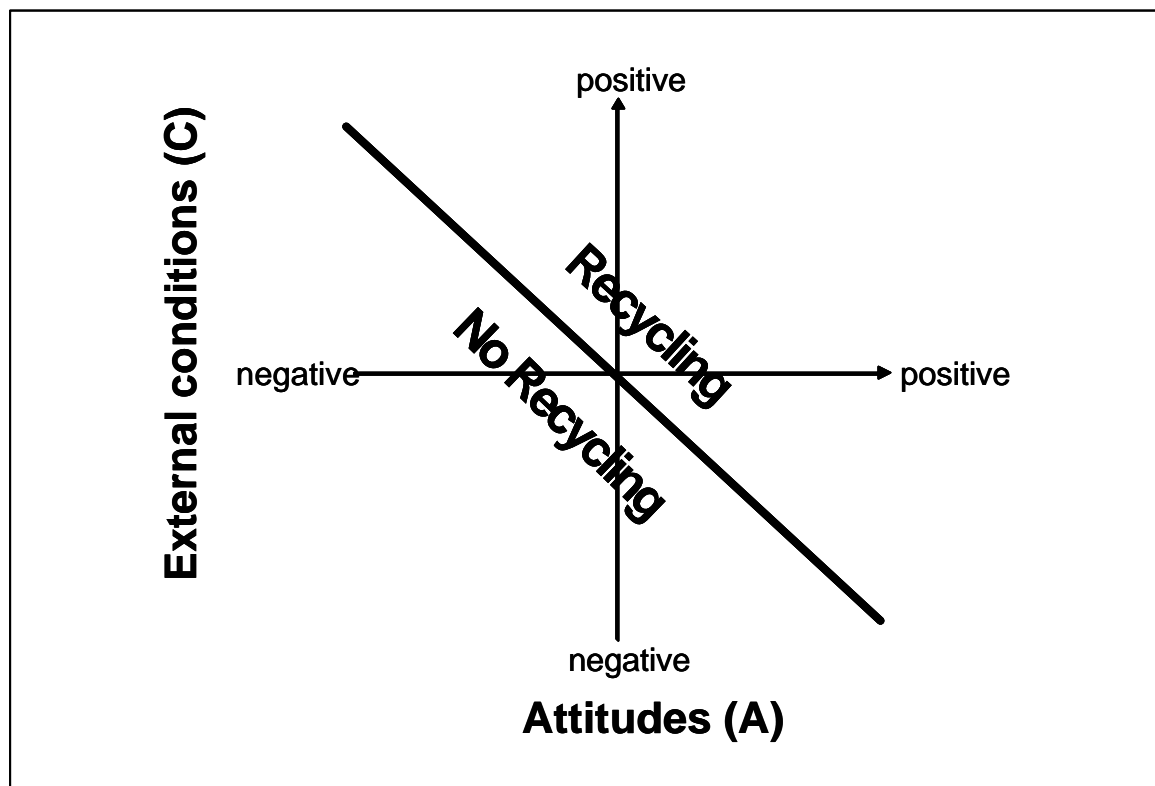
Figure 13: The Attitude-Behaviour-Context Model applied to recycling

The fundamental starting point for Stern's approach (drawing on Lewin's *field theory*) is the understanding that behaviour is a function of the organism and its environment. Or in the language of ABC, behaviour (B) is 'an interactive product of personal sphere attitudinal variables (A) and contextual factors (C)' (Stern 2000, 415).

Attitudinal variables considered in such theories might include a variety of specific personal beliefs, norms and values as well as general 'pre-dispositions' to act in certain ways. Contextual factors can potentially include a wide variety of influences such as: monetary incentives and costs, physical capabilities and constraints, institutional and legal factors, public policy support, interpersonal influences (social

norms eg) and in some cases (Olli et al 1999) broader dimensions of the social context, such as allegiance to or influence by environmental groups.

The structural dynamics between the influence of attitudes (ie internal factors) and contextual (ie external) factors is a key dimension of the ABC model. In particular, its proponents claim that the attitude-behaviour link is strongest when contextual factors are weak or non-existent; and that, conversely, there is virtually no link between attitudes and behaviours when contextual factors are either strongly negative or strongly positive.

So, for example, in the case of recycling, when access to recycling facilities is either very hard or very easy, it scarcely matters whether or not people hold pro-recycling attitudes. In the first case, virtually no-one recycles; and in the second case most people recycle. In a situation, however, in which it is possible but not necessarily easy to recycle, the correlation between pro-environmental attitude and recycling behaviour is strongest. Guagnano et al (1995) found empirical support for this hypothesis in a study of kerbside recycling.

10.3 Triandis' Theory of Interpersonal Behaviour

If there is one key element in the social psychology of behaviour that is still missing from Stern's ABC model it is the role of habit. Stern (2000) acknowledges this and proposes that an integrated model of environmentally significant behaviour would consist of four factors:

* attitudes
* contextual factors
* personal capabilities and
* habits.

As yet, Stern and his colleagues have not yet developed this suggestion into an empirical modelling framework. Interestingly, however, the general thrust of Stern's suggestion is very similar to an attempt made almost thirty years ago by social psychologist Harry Triandis to develop an integrated model of 'interpersonal' behaviour.

Triandis recognised the key role played both by social factors and by emotions in forming intentions. He also highlighted the importance of past behaviour on the present. On the basis of these observations, Triandis proposed a Theory of Interpersonal Behaviour (Figure 14) in which intentions – as in many of the other models we have examined – are immediate antecedents of behaviour. But crucially habits also mediate behaviour. And both of these influences are moderated by 'facilitating conditions' (a similar concept to Stern's notion of external contextual factors).
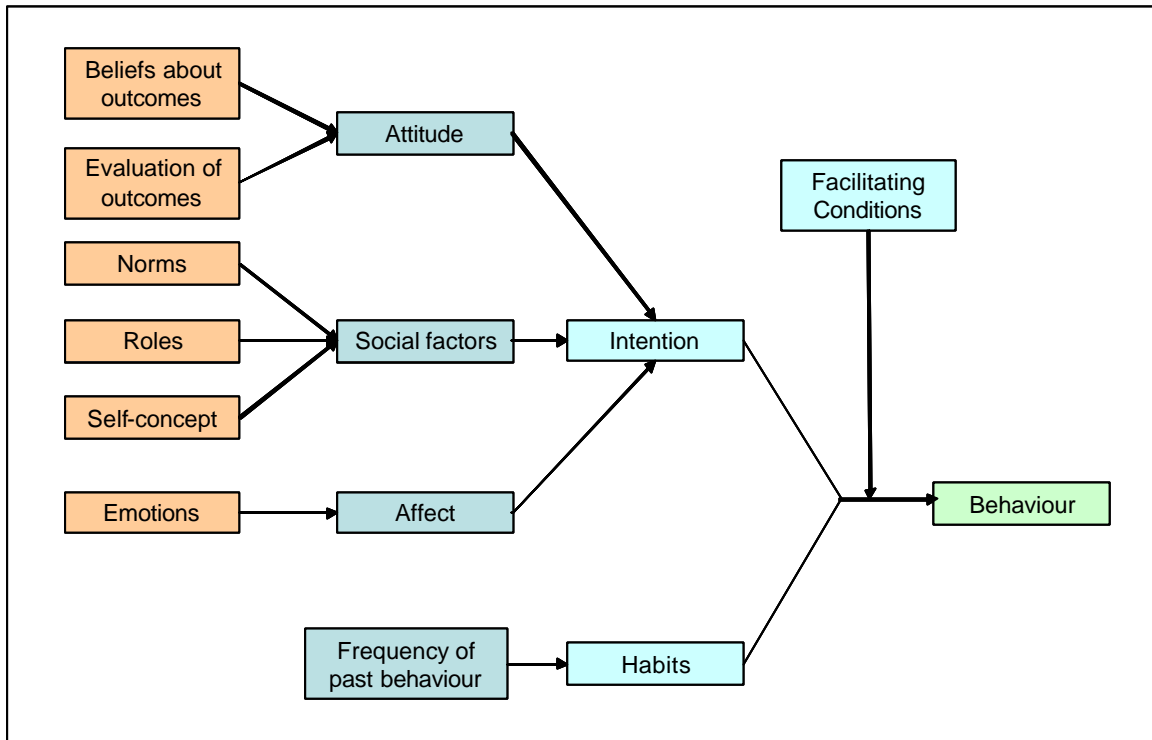
Figure 14: Triandis' Theory of Interpersonal Behaviour

Equally importantly, intentions are in themselves seen as having three distinct kinds of antecedents. Attitudes – or to be more specific the perceived value of the expected consequences – play a role in mediating intentions, just as they do in Ajzen-Fishbein's expectancy-value theory. But Triandis is also particularly concerned to include both social and affective factors in the model.

Social factors include norms, roles and self-concept. Norms, for Triandis, appear to be conceptualised in much the same way as Cialdini conceptualised injunctive social norms – that is, as social rules about what should and should not be done. Roles are 'sets of behaviours that are considered appropriate for persons holding particular positions in a group' (Triandis 1977, 8). Self-concept refers here to the idea that I have of myself, the goals that it is appropriate for this kind of person to pursue or to eschew, and the behaviours that this kind of person does or does not engage in. These elements of the theory of interpersonal behaviour certainly draw some legitimacy from social psychological theories of self and identity (Mead 1934) and are supported by the insights of social identity theory (Tajfel 1973) and self-discrepancy theory (Higgins 1987) in particular.

Triandis is one of the few theorists to offer an explicit role for affective factors on behavioural intentions. Emotional responses to a decision or to a decision situation are assumed distinct from rational-instrumental evaluations of consequences, and may include both positive and negative emotional responses of varying strengths. There is certainly some indication in Triandis' writing that affect is a more or less unconscious input to decision-making, and is governed by instinctive behavioural responses to particular situations. This sometimes leads to a rather one dimensional characterisation of affect along a pain-pleasure axis (see Triandis 1977, 35).

Nonetheless, the attempt to incorporate emotional antecedents into a model of action has a lot of support in more recent writings (Bagozzi et al 2002, Steg et al 2001) as well as a (rather contentious) pedigree in behaviourism (Skinner 1971).

In summary, my behaviour in any particular situation is, according to Triandis, a function partly of what I intend, partly of my habitual responses, and partly of the situational constraints and conditions under which I operate. My intentions in their turn are influenced by social, normative and affective factors as well as by rational deliberations. I am neither fully deliberative, in Triandis' model, nor fully automatic. I am neither fully autonomous nor entirely social. My behaviours are influenced by my moral beliefs, but the impact of these is moderated both by my emotional drives and my cognitive limitations.

Triandis theory of interpersonal behaviour captures many of the criticisms levelled at rational choice theory in way that is not done by some of the other models that we have looked at. It offers a clear heuristic value in the conceptual sense discussed at the beginning of this section, as a model. It also can be, and has been, used as the framework for empirical analysis of the strengths and weaknesses of the component factors in different kinds of situations.

Ironically, far less use has been made of Triandis work than was made of the Ajzen-Fishbein work or even of Schwartz's Norm-Activation model. And this is particularly true in relation to pro-environmental behaviour. This is probably partly because of the greater complexity – or as Ajzen and Fishbein (1975) would have it, the lack of parsimony of the model. However, it is telling that, where it has been used, it appears to have additional explanatory value over Ajzen's model.

Bamberg and Schmidt (2003) compared the predictive power of Triandis' theory against the Theory of Planned Behaviour and Schwartz's Norm-Activation model in the context of car use. They found that one of Triandis' variables – role beliefs – significantly increased the explanatory power offered by Ajzen's model in predicting intentions to use a car. They also discovered that another of Triandis' variables – habit – significantly increased explanatory power in predicting self-reported car use.[27]

10.4 The Motivation-Opportunity-Abilities model

Another well-known attempt to construct an integrative model for consumer action is the motivation-opportunity-abilities (MOA) model proposed by Ölander and Thøgersen (1995). These authors acknowledge that consistency between attitudes and behaviours can only be expected under conditions of volitional control. They point to the improvements in predictive power achievable by incorporating an 'ability' concept and a concept of facilitating conditions or 'opportunity' to perform the behaviour into the model (Figure 15).

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[27] Interestingly, this study found no significant effect from the incorporation of the concept of personal norm on either intention or self-reported behaviour.
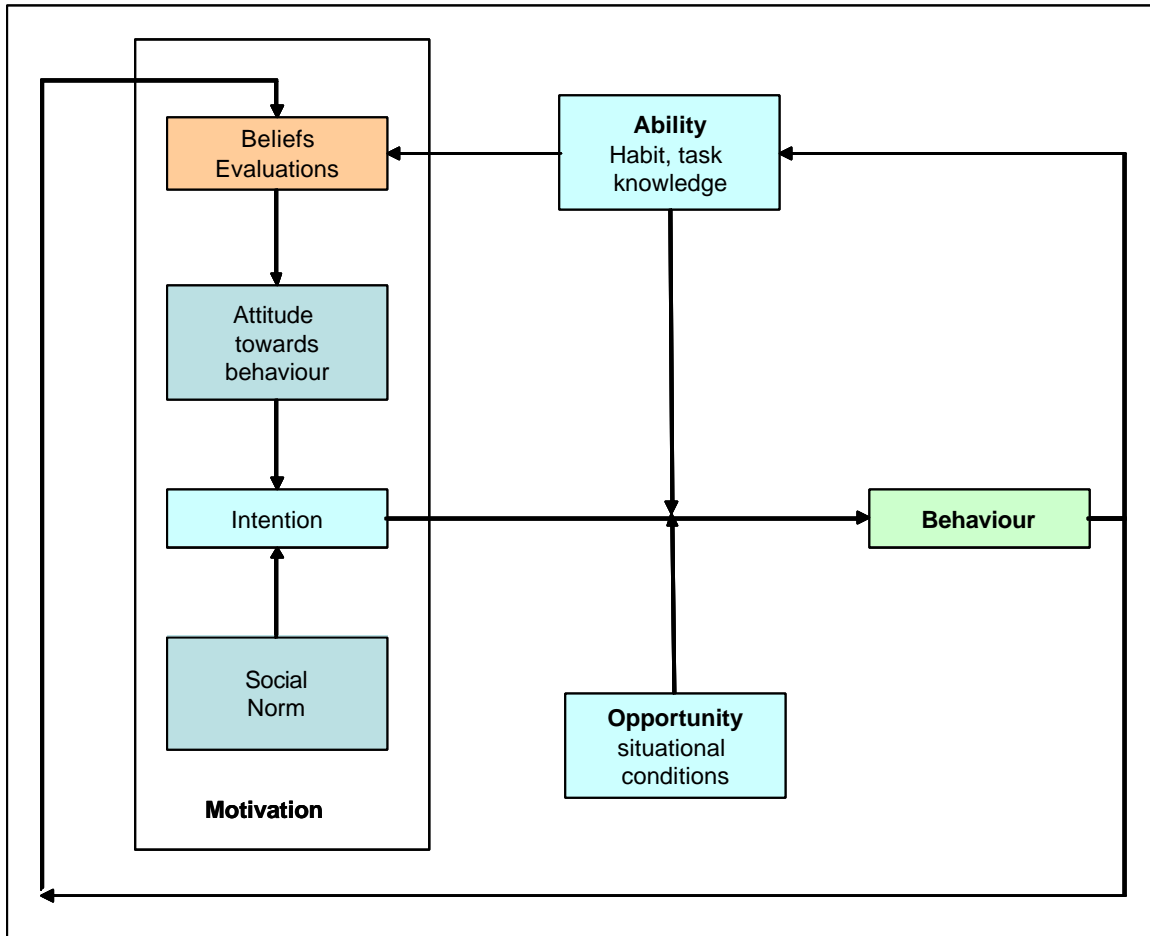
Figure 15: The Motivation-Opportunity-Ability Model

The Motivation component of the MOA model is recognisable in Figure 15 as a simplified version of the Theory of Reasoned Action (Section 6.3). However, Ölander and Thøgersen (1995) also suggest several other possibilities here, including the use of the motivational part of Triandis' model or the insertion of Schwartz's Norm-Activation model.

The 'ability' concept is supposed to incorporate both a habit and a task knowledge element. Its inclusion in the model draws support from a variety of places, including previous research on waste separation and recycling behaviours (Kok and Siero 1985, Pieters 1989, 1991, Thøgersen 1994a). The importance of habit both as an independent determinant of behaviour and as a moderator of intention has already been discussed. Task knowledge is also clearly an important consideration, particularly in relation to new procedures relevant to pro-environmental behaviour, such as the appropriate separation and sorting of recycling materials (Verhallen and Pieters 1985, Thøgersen 1994b).

The influence of situational factors on consumer behaviours has been raised a number of times in this review. The opportunity component of the MOA model is clearly related to Triandis' concept of facilitating conditions and Stern's notion of external conditions. Though Ölander and Thøgersen prefer to see opportunity as 'objective preconditions for behaviour', this aspect of the model also has some similarities with

Ajzen's concept of perceived behaviour control – at least in so far as the latter concept is regarded as being a proxy for actual behaviour control.

Evidence for the importance of situational factors as a precondition for pro-environmental behaviour is plentiful. Ölander and Thøgersen point to a study of source separation carried out at the Aarhus Business School (Johansson 1993, Thøgersen 1990) which showed that improving the opportunities for recycling had a significant impact on actual recycling behaviours that was independent of either attitudes towards recycling or the perceived difficulties of recycling. Similar evidence is cited by Guagnano et al (1995).

The important structural feature of the MOA model is its attempt to integrate motivation, habitual and contextual factors into a single model of pro-environmental behaviour. Applications of the MOA framework include its use to describe attempts by households to reduce energy consumption (Gatersleben and Vlek 1997, 2000).

10.5 Bagozzi's Model of Consumer Action

One final integrative model of consumer behaviour worth mentioning here has arisen from a long-standing programme of research on consumer behaviour pursued by Robert Bagozzi and his colleagues (Bagozzi et al 2002). Bagozzi's early attempts to understand consumer action focused on the act of trying (Figure 16).
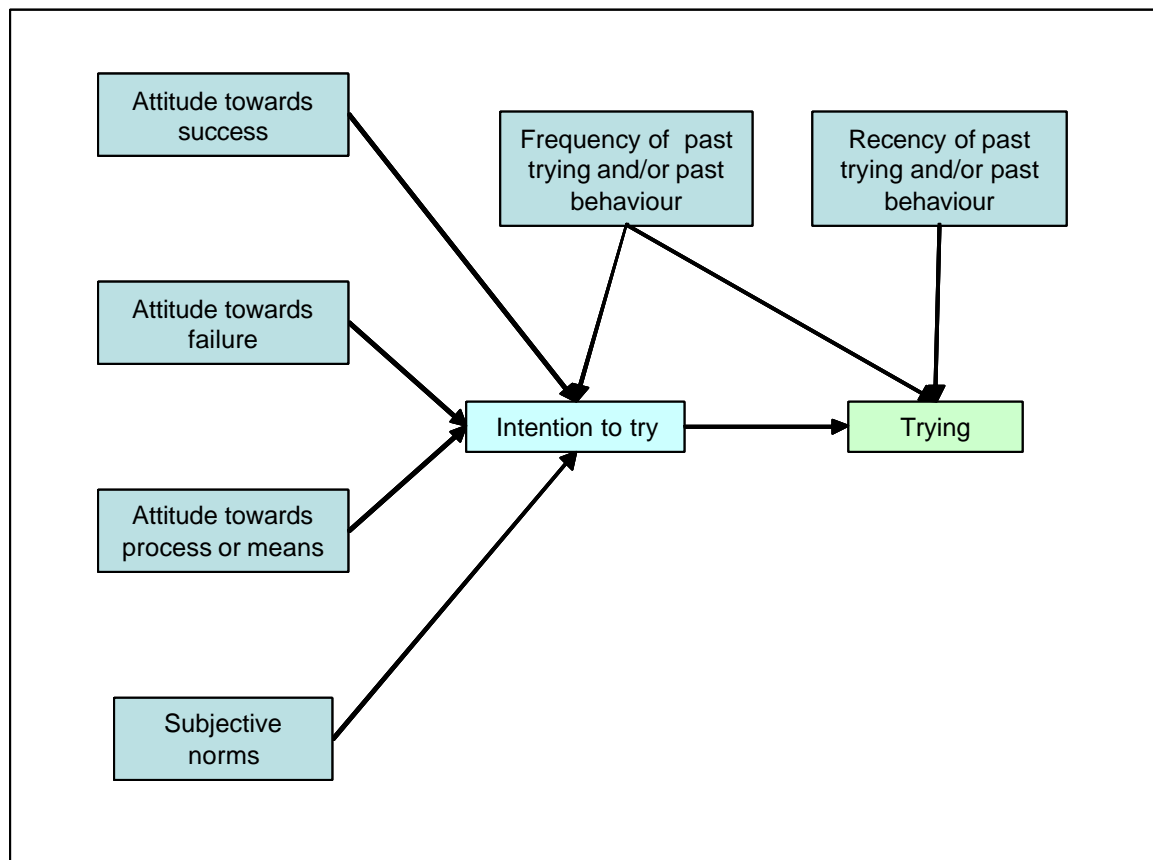

Figure 16: Bagozzi and Warshaw's Theory of Trying

Bagozzi and Warshaw (1990) proposed that many consumer behaviours could be studied from the perspective of trying to act. 'To fulfil one's consumption goals, a consumer must see their own action as a purposive endeavour where foresight and effort are needed', argue Bagozzi et al (2002). They discuss, for example, the situation in which a consumer is trying to buy an appropriate gift for a friend. To succeed in this action, the consumer must construe their action explicitly as being composed of a variety of different tasks: deciding to embark on a shopping trip, identifying which stores to browse, deciding how much to spend, and so on. This set of tasks comprises the actions required in 'trying' to buy a present for the friend.

Importantly, the Theory of Trying regards the act of trying as being mediated by the intention to try and moderated by both the frequency and the recency of past trying or past behaviour. The inclusion of aspects of past behaviour in the model is akin to the inclusion of habit in the Triandis model and draws strong support from empirical evidence. In a meta-analysis of 64 studies, Ouellette and Wood (1998) found robust evidence of the impact of frequency of past behaviours on future behaviour.

The immediate antecedents of the intention to try, in Bagozzi and Warshaw's model look rather similar to the Ajzen-Fishbein models, except that Bagozzi distinguishes attitudes about success explicitly from attitudes about failure and attitudes about the process of trying itself.

More recently, Bagozzi and his colleagues have extended and elaborated the theory of trying into a comprehensive model of goal-directed consumer action (Figure 17).[28] The extended model incorporates many of the kinds of variables introduced in earlier sections of this review including affective, normative, habitual and social components. This model of consumer action is very modern in the sense that it attempts to show how unconscious cerebral factors (shown in red in Figure 17) influence both emotional and deliberative decision-making processes.

As we remarked in Section 5, Damasio (1994, 1999) has offered a radical account of rationality in which decision-making processes are affected by non-conscious emotions, signalled through somatic marker effects in the body. Damasio (1994, 173-4) argues that prior to cognitive deliberation, these marker effects induce pleasant or unpleasant feelings which highlight different options and induce positive or negative biases. These biases serve either to favour or to eliminate certain options, prior to cognitive deliberation.

A slightly different model has been elaborated by Libet (1993) who discovered that people's conscious decisions to initiate bodily movements are preceded by a 'readiness potential' which is involved in sending signals to the muscles to move. In other words, Libet's work supports the hypothesis that unconscious processes initiate choices before cognitive deliberation occurs. Libet argued that decision-making is the act of choosing to allow or disallow an action to continue, after the action itself has been unconsciously initiated.

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[28] This comprehensive model is a combination (and extension) of the Theory of Trying and Perugini and Bagozzi's (2001) Model of Goal-directed Behaviour.
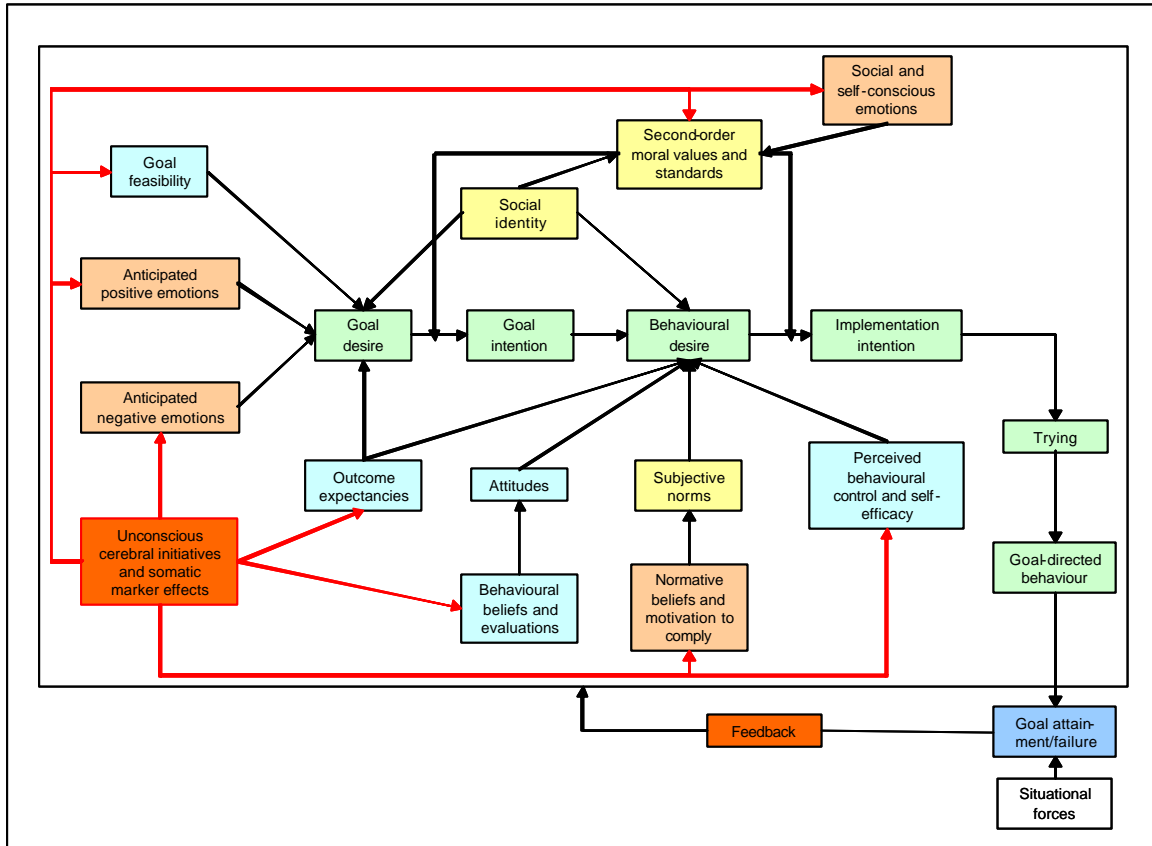
Figure 17: Bagozzi's Comprehensive Model of Consumer Action

The Bagozzi model is perhaps the most elaborate attempt in recent years to incorporate the range of influences on consumer behaviour into a single composite theory of consumer action. What it achieves in terms of heuristic inclusion, however, it lacks in parsimony. Not surprisingly, no attempt has yet been made to apply this theory empirically. Nonetheless, there are a number of studies that test and support many of the individual relations proposed between different variables. Moreover, the model clearly offers a more sophisticated understanding of consumer behaviour than simple expectancy-value theories.

10.6 Summary Discussion

In summary, it should be clear that recent understandings of consumer behaviour, and of pro-environmental consumer behaviour in particular, have come a long way from the simple expectancy-value models embedded in the Theory of Reasoned Action. These more recent models also go some way towards answering critiques of the rational choice model.

In particular, social psychological models attempt to account, systematically, for moral, social, symbolic and affective (as well as reasoned) components of consumer behaviour. They describe the role of descriptive and injunctive social norms on individual action. They show how cognitive processes and unconscious biases impact on goal-directed behaviour. They highlight the importance of habit, both in reducing

the cognitive effort associated with goal-directed behaviour, but also in moderating behavioural intentions.

The issue of habit illustrates very clearly the existence of trade-offs between different components of consumer decision-making. Cognitive efficiency – sometimes reinforced by short-run rewards – means that we are often locked into counter-intentional habits, in spite of our best intentions. Affective motivations (emotions) often conflict with moral concerns. Social norms interfere with individual preference. Situational conditions interfere with intention. The broad social and cultural context is a powerful influence on attitudes and motivations.

Choice, in these circumstance, is never a straightforward process of individual rational deliberation. Intentions and desires are moderated by social, cognitive, situational and cultural factors.

When it comes to the models used to describe this complex terrain, there is clearly a tension between parsimony and explanatory power. The simpler models are more readily applicable, and generally speaking have been more frequently applied (and tested) in empirical studies. On the other hand, the ability of these simpler models to offer robust explanations for, or predictions of, different kinds of behaviour is limited. For example, the explained variance associated with Stern's Value Belief Norm theory was less than 35% (Stern et al 1999) in empirical studies.

As the conceptual complexity of the models rise, however, their empirical applicability diminishes. Designing, testing and corroborating a sophisticated multi-variable social-psychological model (with feedback) of the type illustrated in Figure 17 is a daunting empirical task. To date, it has not been carried out.

Does this matter, in terms of developing a policy-relevant understanding of consumer behaviour? Perhaps not. In the first place, there is a fairly robust evidence base in support of each of the individual links proposed in (for example) Bagozzi's Comprehensive Model of Consumer Action. We know that the frequency and recency of past behaviours moderates intentions. We know that affective factors mediate rational choice. We know that normative factors moderate desire. The quantitative and qualitative empirical support for such links is relatively well-established.

As conceptual models of consumer action, therefore, these more sophisticated models offer policy-makers a fairly robust picture of the factors that shape and constrain consumer choice. They also point to some key areas for further examination in promoting pro-environmental behavioural change. In particular, of course, the importance of habit in consumer action, draws attention to need to understand and to influence the processes of habit formation and change. The moderating effect of external situational factors on consumer intentions highlights the need to improve facilitating conditions in a wide range of environmentally-significant situations. And, perhaps most telling of all, the embeddedness of the individual in a social group points to the vital influence of social and cultural context on consumer behaviour.

On the other hand, of course, deciding on the exact balance of affective, moral, habitual and social motivations and situational conditions in any given situation is no easy task. We cannot necessarily assume that the importance of habit (for example) is as high in one situation (energy conservation eg) as it is in another (travel mode choice, say). Nonetheless, the broad understanding that consumer action is framed by these different components, together with some detailed empirical studies of the strength of specific relationships, can provide useful lessons for policy-makers seeking to encourage pro-environmental behaviour.

Admittedly, not all of these lessons are particularly easy ones. For a start, the sheer complexity inherent in consumer action is frightening from a policy perspective. Figure 17 is a far cry from the simple consumer preference model illustrated in Figure 3. In the latter case, there were basically only two possible points of policy intervention: the provision of adequate information to enable informed choice; and the adjustment of private costs and benefits to reflect social externalities.

By contrast, the terrain of Figure 17 is much more complex. It suggests a model of consumer choice in which there is a multiplicity of different points of intervention, for example, through influencing the social and institutional conditions that affect moral choice and social identity as well as through addressing the situational conditions associated with specific actions. It also suggests that some attention needs to be paid to the cognitive processes of behavioural change.

Of course, these more complex kinds of intervention also pose some considerable problems and make some considerable demands on policy-makers. But fortunately, there are at least some insights into how these problems can be overcome and these demands can be met. It is to these insights that we now turn.

PART 3: TOWARDS BEHAVIOURAL CHANGE

'If wishes were horses, beggars would ride.'
(Anon)

11   Change, Persuasion and Learning

Behavioural change is fast becoming a kind of 'holy grail' for sustainable development policy – and in particular for sustainable consumption policies. How can we persuade people to behave in more environmentally and socially responsible ways? How can we shift people's transport modes, appliance choices, eating habits, leisure practices, lifestyle expectations (and so on) in such a way as to reduce the damaging impact on the environment and on other people? How can we encourage sustainable consumption and discourage unsustainable consumption?

As the exploration in preceding sections has made abundantly clear, these tasks are enormously complex for a variety of reasons. Consumer choices are influenced by moral, normative, emotional, social factors, facilitating conditions and the sheer force of habit, as well as by so-called rational deliberations and intentions. In many cases, as we have highlighted throughout, people appear to be locked in to behaviours and behavioural patterns that seem to be resistant to change.

And yet behaviours do change. In fact, they change continually and sometimes radically over quite short periods of time. The uptake of mobile phones, 4x4s, wide-screen plasma TVs, power showers, standby modes in electronic appliances and air conditioning in cars, patterns of holiday travel and school transport: these are all examples of technological and behavioural change which have occurred in the space of only a decade or so in recent Western development. Much further reaching changes have occurred over only slightly longer timescales.

What is significant about these sorts of changes is that they represent a kind of 'creeping evolution' of social and technological norms. Individuals do change their behaviours, that much is clear. Sometimes individual behaviour initiates new social trends. More often individuals find themselves responding to societal and technological changes that are initiated elsewhere, at some higher or deeper level. It is clear, therefore, that we must think of individual behaviour as being 'locked-in' not just in a static but also in a dynamic sense. We are locked into behavioural trends as much as and possibly more than we are locked into specific fixed behaviours. Some of this perspective is implicit, for example, in the agency-structure debates discussed in Section 10.1.

It is beyond the scope of this review to discuss this phenomenon of 'dynamic lock-in' in detail, although this is clearly an important topic worthy of future consideration. Nonetheless, it is also clear that developing policies to encourage pro-environmental and pro-social consumer behaviours has to be informed by some kind of understanding of the dimensions of and possibilities for behavioural change. So how do behaviours change? What understandings exist for the processes of change? And given that behaviours do change, sometimes quite radically, over time, how can these understandings be used to inform behaviour change policies?

At one level this task is as complex as trying to understand consumer behaviours. It also involves the same kind of entrenched and often intractable debates that dog the

debates about consumer behaviour. For example, some approaches focus on voluntaristic, goal-directed change processes. Others assume a more or less 'behaviourist' approach in which sometimes arbitrary behavioural variations are reinforced (either positively or negatively) by external stimuli. This dichotomy clearly mirrors the dichotomy between internalist and externalist conceptions of behaviour.

In spite of these complexities, there are only a relatively limited number of quite specific avenues for behaviour change. Specifically, the literature suggests that humans learn new behaviours through trial and error, through persuasion, or through various forms of modelling (social learning). Each of these routes is important to pro-social or pro-environmental behaviour change and we explore them in various ways in this section. Specifically, we discuss the literatures on persuasion, modelling, and social learning. We address the key role of habit formation and change. Finally, we look at the role of participatory problem-solving and community based social marketing.

11.1 Persuasion Theory

If the aim of government policy is to change either attitudes or behaviours in a pro-environmental direction, then one of the places to look for inspiration is the rather extensive literature on persuasion. Like much of the work reviewed in this report – persuasion theory has a rather long pedigree. It can be traced, for example, to Aristotle's 'three pillars of rhetoric': ethos, logos and pathos.

A more recent casting of the Aristotelian model emerged from an extended programme of research on persuasion that spanned the 1940s and the 1950s. The work of the Hovland-Yale Communication and Persuasion (HYCP) group framed successful persuasion in terms of three key elements (Hovland et al 1953, Hovland 1957):

- the credibility of the speaker (the source);
- the persuasiveness of the arguments (the message); and
- the responsiveness of the audience (the recipient).

It is now recognised that this rather linear model of persuasion has some significant limitations (Petty et al 2002). Most importantly, the HYCP model assumes that attitude change occurs through the assimilation and comprehension of the persuasive information. In other words, the chain of events looks something like this: I am exposed to a particular persuasive message – such as an argument to the effect that there is a need to reduce energy consumption in order to halt climate change; and as a result of hearing and understanding this message, I change my attitude towards energy consumption and (ultimately) my energy consuming behaviour.

Though it sounds reasonable enough, it turns out that empirical evidence fails to support this hypothesis. On the contrary, empirical evidence indicates both that learning can occur without any change in attitudes, and that attitude (and behaviour) change can occur without any assimilation of the persuasion message (Greenwald 1968, Petty and Cacciope 1981).

Several attempts were made to overcome the deficiencies of the HYCP model. One of these was the *balance theory* of persuasion (Abelson et al 1968 eg). This model draws inspiration from Festinger's (1957) cognitive dissonance theory (Section 9.3). People appear to prefer consistency not just in their own attitudes, motivations and behaviours, but also in their interpersonal relationships. Balance theory suggests that it is possible to exploit this preference – for instance by suggesting or highlighting inconsistency – in order to change people's attitudes.

Another important attempt to overcome the linearity of the HYCP model emerged in *cognitive response* theory, which placed a greater emphasis on individuals as active participants in the persuasion process. This model suggests that attitude change is extensively mediated by people's cognitive response to the persuasion message (which depends in its turn on the specific involvement, history and context of the individual) rather than by routine message learning. Some evidence emerged to corroborate this (Greenwald 1968).

11.2 The Elaboration Likelihood Model

One of the most influential recent persuasion theories is the *elaboration likelihood model* (ELM) of Petty and Cacioppo (Petty 1977, Petty and Cacioppo 1981, 1986). In contrast to previous theories, the ELM suggests that there are two distinct types of psychological processes involved in attitude change, one involving central processing and one involving peripheral processing (Figure 18).

The *central processing* route is one in which attitude change occurs as the result of mindful attention to the content of a persuasive message, elaboration of its implications and integration into one's own attitude set. This route relies, according to the ELM, on a high level of motivation and ability in the target audience to engage with the message. This is most likely to occur when the issue at hand is personally relevant to the target audience.

The *peripheral processing* route, by contrast occurs when the target's motivation and/or ability to engage with the issue is low. In this case, peripheral 'persuasion cues' may be used to suggest 'source attractiveness'. As an example, consider the association of a celebrity with a particular pro-environmental behaviour (public transportation or energy efficiency eg). In this case, rather than attending to the message content, an audience with low motivation or ability to engage in the issue itself responds to the peripheral suggestion that there are potential rewards ('I too can be like this celebrity') associated with the target behaviour.

According to the theory, the central processing route is most likely to lead to enduring attitude change. However, there are also ways in which peripheral processing can be successful in long-term attitude and behaviour change. According to the peripheral route, source attractiveness or the suggestion of potential rewards can sometimes lead directly to behavioural change (the right hand route in Figure 18).
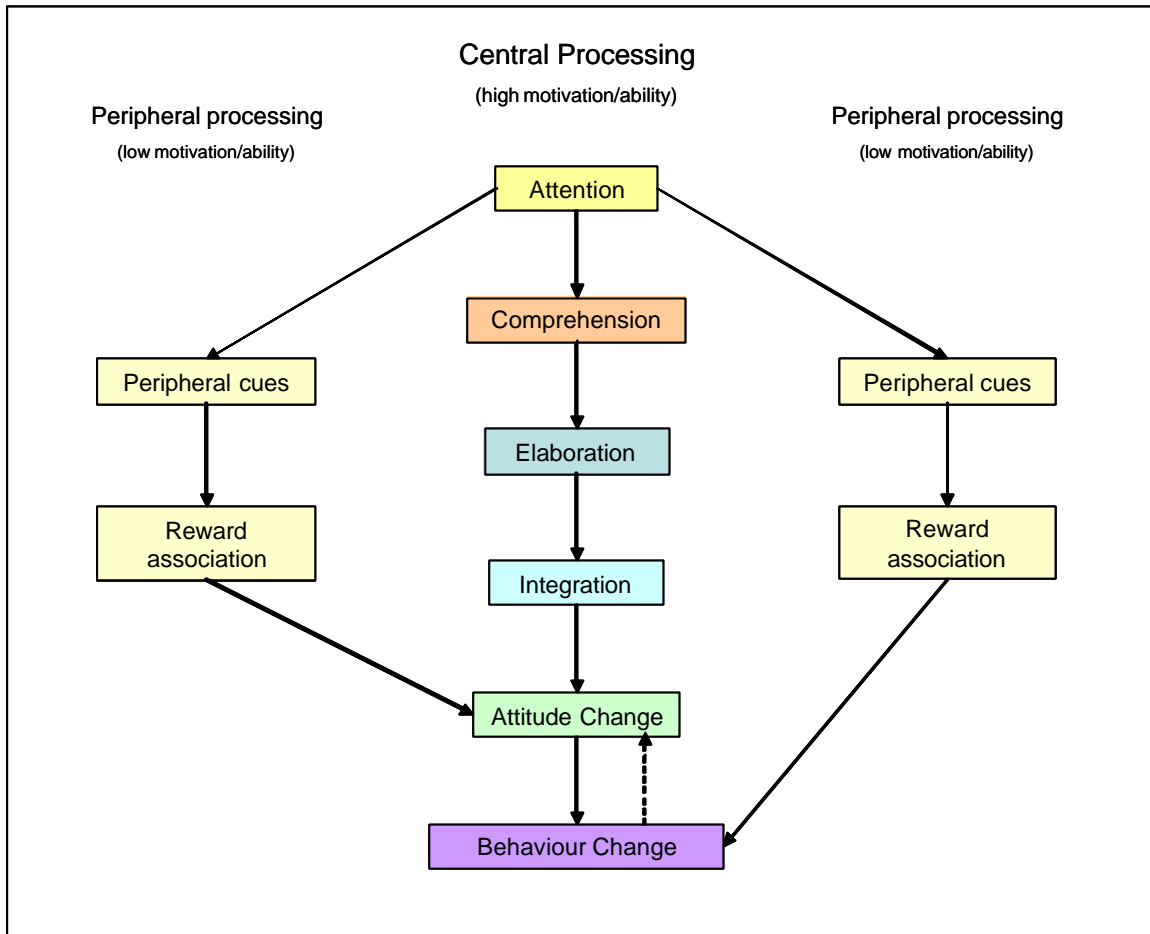
Figure 18: Petty and Cacioppo's Elaboration Likelihood Model

For example, a target responding to the celebrity involvement (eg) may find themselves taking public transport without ever having deliberated over the choice. Once the behaviour in question has changed, the target begins to consider the advantages of public transport and adjust their attitudes accordingly. This possibility is consistent with Bem's (1972) self-perception theory (Section 9.4) which suggests that we sometimes infer what our attitudes are by observing our own behaviour.

Clearly however, this strategy relies on something more than peripheral persuasion cues. These may provide the initial stimulus for behaviour change. But the change is unlikely to be enduring if the target, having taken public transport, finds that the buses are dirty, the trains are late, and he or she is severely disadvantaged by making that choice. Positive reinforcement of behavioural choices is essential if uptake is to be enduring and to lead in its turn to attitudinal change. Moreover, the empirical evidence suggests that the peripheral route is less successful in changing attitudes when the target is highly motivated and engaged in the issue in question.

Irrespective of these different routes, persuasion theory suggests a very careful attention to the target audience in any kind of persuasion strategy. Petty and Cacioppo's model predicts that enduring attitude change is most likely via the central processing route. But it also suggests that personally involving messages are most likely to facilitate the more successful central processing route.

Of course, the difficulty of ensuring people's involvement in persuasion messages is not inconsiderable. Knowing the target audience is a necessary but not sufficient step. In addition, increasingly, any kind of persuasive appeal has to compete in a very message-dense environment. Pratkanis and Greenwald (1993) argue that in order to have the best chance of success, persuasive appeals must employ highly credible sources and be structured around a single, well-placed, very positive message.

Bator and Cialdini (2000) identify several other characteristics of successful persuasion. These include:

- the emotional, imaginative appeal of the persuasive message;
- the immediacy, directness and relevance of the message;
- the use of commitments – such as bumper stickers, badges or loyalty schemes – to signal involvement; and
- the importance of identifying 'retrieval cues' that might help people bring the persuasive message to mind;

Bator and Cialdini also emphasise the importance of careful design, target identification and pre-testing of public interest information campaigns.

11.3 Social Learning Theory

Policy-makers have traditionally placed a high emphasis and expectation on the ability of persuasion to achieve goals that are in the public interest. This is perhaps understandable. For a start, this strategy is supported by the dominant understandings about rational choice. And besides, the concern with sovereignty of consumer choice appears to delimit the options available to the public sector to influence 'private' actions.

Nonetheless, the limitations of this kind of persuasion have long been recognised. Exhortation and information remain two of the most widely used ways of trying to influence attitudes or behaviours. But they are also, according to Donald Campbell (1963), amongst the least effective. Far more effective ways of achieving behavioural change, according to Campbell, are trial and error, observing what others do, and observing how others respond to one's own behaviour.

The behaviourist school in psychology placed the highest emphasis on trial and error, arguing that we learn what to do (and what not to do) by experiencing positive (and negative) reinforcements (rewards or penalties) for our behaviours. Pavlov's famous experiment with dogs illustrates this form of learning. If I am punished for buying incandescent light-bulbs and rewarded for buying fluorescent ones, I will end up avoiding incandescents and buying fluorescents, according to the behaviourists. And this strategy of punishment and reward will be far more effective than providing me with information about the relative greenhouse impacts of each type of bulb or exhorting me to save energy.

Albert Bandura (1973, 1977b) agreed that conversation (information and exhortation) is not a particularly effective way of learning. But he also took issue with the behaviourists' assumption that learning proceeds solely through trial and error. 'Coping with the demands of everyday life,' he argued (Bandura 1977b, 27), 'would be exceedingly trying if one could arrive at solutions to problems only by actually performing possible options and suffering the consequences.'

Instead, Bandura proposed that in real life, the process of trial and error is continually complemented by various forms of social learning. The main premise of Bandura's highly influential *social learning theory* is that, in addition to our own direct experience, we learn by observing others around us, including our parents, our peers and those portrayed through the media, and modelling our behaviour on what they do.

We learn from these social models in several distinct ways. In the first place, there appears to be a natural tendency – we remarked on it in Section 7.4 – to imitate behaviours that we see in others. This tendency is variously explained by invoking the procedural efficiency of descriptive social norms or aspects of social identity theory. But social learning theory predicts that in addition to modelling our behaviour on the behaviour of others, we also learn by observing the response of these models to given behaviours. For example, if we observe someone experiencing pleasure from a particular behaviour we will also tend to imitate that behaviour. These 'vicarious' experiences of other people's behaviours and behavioural responses have as much impact on our behavioural choices, according to social learning theory, as our own direct experience.

Bandura evolved his theory of social learning through a famous series of experiments on aggressive behaviours in children. Nursery-age school children witnessed an adult in an adjacent room repeatedly hitting and knocking down a Bobo doll[29] with varying degrees of aggression. The researchers compared the subsequent behaviour of these children towards a similar doll with a control group who had not been exposed to the models. They found that the children who had witnessed the aggression performed similar aggressive acts, while the control group did not.

A variety of further experiments involving variations on the same format – using different subject sets, different kinds of models and some of them using media images rather than live models – have confirmed the social learning effect (Murray 2004). Bandura's work has proved most influential in debates about whether or not children exposed to images of violence and aggression on the television exhibit violence themselves. This learning effect is not always constant. It is not the only way that we learn, and it depends in particular on the characteristics of the model and the modelling situation. We learn most effectively from models who are attractive to or influential for us, such as our parents (at certain ages), celebrities, people who are successful or powerful, or people who are simply like we are. We do not learn purely by imitation. Sometimes we learn by counter-example. We learn how not to behave by observing the behaviours of 'anti-role models' – those from whom we would like

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[29]   This is a type of doll with a wide semi-spherical base that rights itself when knocked over.

to dissociate ourselves – or by observing the negative consequences from other people's behaviours.

Modelling appears to be a particularly successful strategy for learning physical behaviours – involving routine practical actions[30] – and for assimilating social behaviours. It is therefore, particularly relevant to many kinds of behaviours that are encoded in ordinary everyday social practices. But social learning theory has also been highly influential – and arguably effective – as the basis for new forms of marketing and advertising.

The constraints faced by conventional advertising – in particular in relation to the 'message density' of the modern world – have led advertisers to attempt to develop new kinds of communication strategies that attempt to 'fly beneath the consumer's radar' and influence their buying behaviours without the consumer being aware that they are subject to persuasion. So-called stealth marketing – involving a variety of creative strategies such as viral marketing, brand-pushing, and celebrity marketing – (Kaikati and Kaikati 2004 eg) is often based heavily on the ideas of social learning theory. Stealth marketing offers a whole new interpretation of Vance Packard's (1956) 'hidden persuaders' argument and raises equally difficult moral and ethical issues. But its power is ample evidence for the effectiveness of social learning.

The potential applications of social learning theory for pro-environmental behaviours are legion. We have already remarked on some of them in the course of earlier discussions. Modelling plays a key role in the establishment and maintenance of social norms for example (Sections 7 and 9). I learn and remember how, where and when to put out the recycling as much from observations of those around me as by information from the council. My identity-related buying behaviours (clothes, cars, appliances eg) are influenced by those on whom my identity is modelled and by those from whom I am hoping to distinguish myself.

The use of influential role models in encouraging and promoting sustainable behaviours may be one of the applications of this kind of insight. Some have argued explicitly that public section communication programmes should avail themselves quite explicitly of the new social learning based techniques of stealth marketing, viral marketing and so on (DEMOS 2003). The effectiveness of stealth techniques in the service of pro-social messages is not yet proven. And there are also perhaps difficult ethical issues about the use of such techniques in any situations. But it is clear that sustainable consumption policies can at least learn something significant from these kinds of approaches.

Perhaps most importantly of all, social learning theory highlights the critical role that Government can play in providing leadership on sustainable consumption. While Government departments may not be the most obviously influential 'role models' for consumers there are a number of reasons why the starting point for effective behavioural change policy should be the example of government.

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[30]   Modeling is widely used as a practical learning technique in sports science, for example.

In the first place, a failure to exemplify the behavioural changes that policy wishes to see will significantly undermine any information and persuasion campaigns in which the government attempts to engage. In the second place, the example of successful internal procurement and environmental management programmes sends a strong signal to both businesses and consumers both about what is possible, and that government is serious about achieving what is possible. Finally, of course, such initiatives provide invaluable 'learning grounds', in which the difficulties of achieving sustainable procurement or other forms of pro-environmental change can be rigorously explored and overcome.

In summary, the key lesson from theory and the related empirical evidence base is that social learning is a powerful avenue of behavioural change. And this has been demonstrated empirically for a wide range of different behaviours in a wide range of different circumstances.

11.4 Control, Helplessness and Participatory Problem Solving

One of the many paradoxes that haunt the debates on behavioural change is that more information is not always better. Just because I supply you with more and more reasons why you should reduce the use of your car and change to public transport instead, does not in itself make it any easier or indeed more likely that you will make such a change. In fact there are several reasons why my misguided attempt at persuasion may make it even harder for you. Amongst these is the fact that by and large people like to feel in control of their lives and resist feelings of helplessness. My attempts to impose more information on your already crowded life may simply reinforce your sense of helplessness about the situation.

Kaplan and Kaplan (1989) identified three evolutionary insights into the information processing and problem-solving propensities of human beings. They concluded that people are motivated:

- to know and understand what is going on: they hate being disoriented or confused;
- to learn, discover and explore: they prefer acquiring information at their own pace and answering their own questions;
- to participate and play a role in what is going on around them: they hate feeling incompetent or helpless.

Kaplan (2000) uses this 'reasonable person' model of human motivation to suggest that helplessness is a 'pivotal issue' in understanding consumer behaviour and responding to it. Perhaps perversely, the provision of information does not necessarily either increase control or reduce helplessness. Sometimes it has precisely the opposite effect. For example, a study by Research International (Levin 1993) investigated the reaction to increasing levels of information about environmental problems. It concluded that more information led to greater concern, but paradoxically also to greater helplessness.

A later study by the NGO Public Agenda (Donn 1999) attributed a recent decline in concern about environmental issues, not to apathy but to an increasing sense of helplessness and futility on the part of individual citizens. These conclusions draw clear conceptual support from the importance of the 'perceived behaviour control' construct in the theory of planned behaviour (Section 6.3). They are also supported by a recent study showing that people who feel that their behaviour would not make any difference are less likely to participate in environmentally responsible behaviours (Allen and Ferrand 1999).

Kaplan (2000) proposes that the general solution to this kind of problem is to develop a participatory problem solving to encouraging sustainable behaviours. 'Rather than telling people what they must do or do without,' he argues, 'the proposed approach provides people with an opportunity to figure out for themselves how various broadly defined goals can be met.' Kaplan makes a distinction between three different understandings of behavioural change: 1) telling people what to do, 2) asking them what they want to do and 3) helping people understand the issues and inviting them to explore possible solutions. Although the first is often used and the second has been regarded as one way of increasing participation in government decision, it is the third understanding that lies behind the participatory problem-solving approach that Kaplan proposes.

A somewhat similar suggestion was made in the Cabinet Office Strategy Unit's recent report on personal responsibility and behavioural change (Halpern et al 2003). The authors of that report drew attention to the strategy of 'co-production', involving partnerships between individuals, experts and the state in achieving health-related and other public interest goals.

There is however a subtle but important distinction in emphasis between the Strategy Unit approach and the participatory approach proposed by Kaplan. The former draws attention to the role of personal responsibility for behavioural change. It is embedded largely in the liberal paradigm of individual choice, and its prescriptions are (either intentionally or unintentionally) complicit with the general assumption of reducing the role of the state in matters assumed to be about personal choice. The danger inherent in the co-production model is, therefore, that the state is seen as 'opting out' of its own responsibility for key public interest objectives. At the same time, there is an implicit assumption that this will 'save' money for the state, giving the impression that economic efficiency is the main driver for the co-production model, rather than effectiveness of change, and leaving people exposed to the impression that government wishes to do less rather than more to reach public goals.

Kaplan's approach by contrast recognises the need for the state to support and guide the process of participatory problem-solving. Citing evidence that people in groups prefer to work with experts than on their own (Wandersman 1979) he argues that this approach relies explicitly on expertise from governments, corporate and non-profit organisations, and must be supported by appropriate infrastructures and institutions. Participatory problem-solving is not a recipe for hands-off or 'hollowed out' government.

As we shall see in the next section however, the participatory flavour of these approaches draws support from a wide variety of other perspectives on behavioural change.

11.5 Breaking 'Bad' Habits

We have been drawn at various stages of this review to the critical role of habit and routine behaviours. Habits can be thought of as procedural strategies designed to reduce the cognitive effort associated with making choices, particularly in situations that are relatively stable. They allow us to perform routine actions with a minimum of deliberation and often only limited awareness. Moreover, the evidence suggests that habit is a crucial component in a wide variety of environmentally-significant activities: travel behaviour, shopping patterns, household chores, waste disposal, leisure activities, and even personal hygiene.

Habits are formed through repetition and reinforcement. Andersen (1982) identifies three stages in the formation of a new habit. The first stage, or *declarative* stage, involves information processing relating to a particular choice or action. For example, I may be exposed to information regarding a particular brand of ethically traded coffee. At this stage my attitudinal and affective responses to this information are both important. The information challenges my existing choice, but at this stage does not actually change my coffee-buying behaviour. In the second *knowledge compilation* stage, however, I convert this information into a new routine by exercising a different choice in practice.

In keeping with social learning theory, the successful performance of a particular action or behaviour reinforces subsequent performances of the same action. I am happy with the taste of the new coffee and its ethical sourcing offers an additional satisfaction. When the action itself is associated with a clear positive reinforcement, and repeated over time, a 'cognitive script' is developed which enables me to repeat the same action in similar circumstances with very little cognitive effort. This final *procedural* stage locks me into a new coffee-buying habit and virtually without thinking now I toss the ethically traded coffee into my supermarket trolley week after week. At this stage, my behaviour is more or less automatised and bypasses rational deliberation almost completely.

The strength of the habit is generally taken to be determined by two factors (Jager 2003). Firstly, it is stronger the more often the action is repeated (Jager 2003). Thus, it is harder to break my coffee buying habit (which is repeated on a weekly basis) than it is to break my habit of going to the Isle of Wight on holiday, which only happens once every year (if I am lucky). The second factor involved in the force of habit is the strength and frequency of the (positive) reinforcement that I receive and its proximity to the behaviour in question.

But here there is an additional complication. As we have already noted, habitual actions work for as long as the situation remains stable. But in certain cases, it becomes clear that particular habits are not in our long-term best interests. Or else conflict directly with social norms or expectations. In this case, short-term

reinforcements are traded off against long- (and short-) term disadvantages, and it is not clear in any given situation which will prevail. If the new information (an awareness of long-term disadvantage say) is sufficiently disconcerting, cognitive dissonance may encourage me to change my behaviour. On the other hand, if the reinforcement from the behaviour is particularly strong, I may choose another strategy for avoiding cognitive dissonance – for instance readjusting my long-term goals – rather than change the habit of a lifetime.

What is clear – both from the literature and from most people's personal experience – is that counter-intentional habits are exceedingly hard to break (Verplanken and Faes 1999). Routine behaviour is, in many case, extremely hard to change. And since many environmentally significant behaviours are embedded in social practices (Section 10.1), this makes the prospect of encouraging pro-environmental behaviour change particularly daunting for policy-makers.

Nonetheless, there is a remarkably consistent set of theoretical and empirical understandings about behavioural change which does provide some insights into changing 'bad' environmental habits and offer some hope to policy-makers attempting to support this.

The basic consensus arising from these different perspectives (Figure 19) is that behavioural change involves the 'unfreezing' of existing behavioural patterns and the discursive elaboration of new and preferable alternatives, before these become the basis of new behavioural patterns. The roots of this view are to be found in Kurt Lewin's influential change theory.
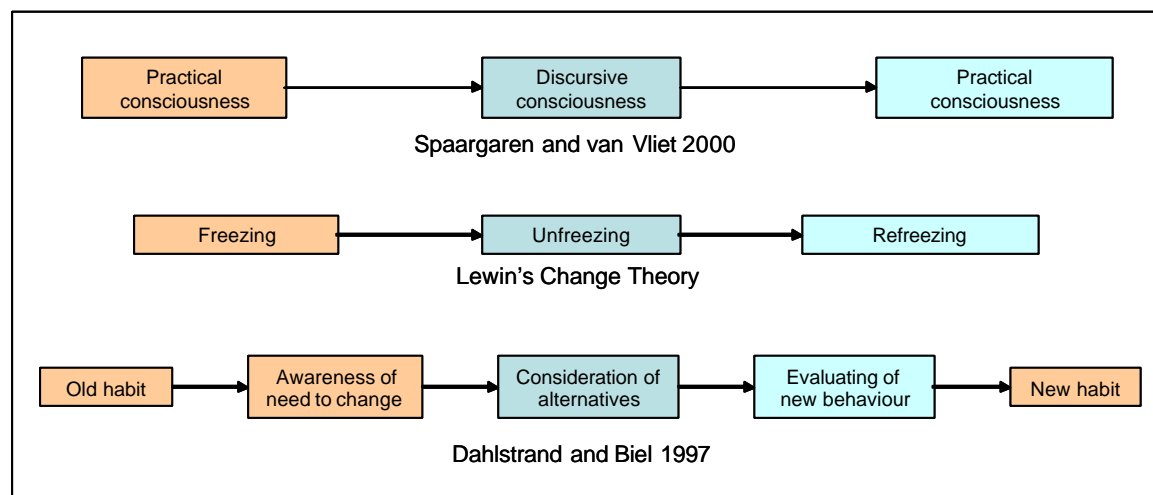
Figure 19: Breaking Bad Habits: some conceptual perspectives

An influential figure in social psychology,[31] Lewin suggested that behavioural change involves examining and challenging accepted beliefs and belief systems before different behaviours can be identified and incorporated into new patterns and routines. Crucially, since many behaviours and practices evolve from social norms and as a

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[31]   Many of the existing integrative theories of human action owe something to Kurt Lewin's 'field theory' – see Table 1.

result of social expectations, Lewin argued that this process of 'unfreezing' existing behaviour patterns needs to take place in a group environment and to involve open and supportive communication amongst those involved in negotiating the change.

A not-dissimilar model of behaviour change has been proposed within sociology, where, as we have seen (Sections 2 and 9), recent work highlights the fact that people often find themselves locked into particular behavioural patterns over which they appear to have little or no individual control. Individual behaviours are constrained by social practices and rest largely in what Giddens called practical consciousness. Spaargaren and van Vliet (2000) have used this framing of social practices to suggest that pro-environmental behavioural change needs to occur by raising specific behaviours from the level of 'practical consciousness' to 'discursive consciousness'. Once again, this discursive process is seen as involving a social exploration of new alternatives at the group or community level. The psychological process of habit formation and change developed by Dahlstrand and Biel (1997) echoes a similar sequence of processes.

This model of discursive social change not only offers the advantage of tackling entrenched routine and habitual behaviours; it also presents a way of overcoming the 'lock-in' associated with descriptive social norms and it draws support from other conceptual viewpoints such as social learning theory (11.3). It also clearly resonates with the model of 'discursive elaboration' that lies at the heart of key social symbolic processes such as meaning negotiation and identity construction (Section 9.2).

Perhaps more importantly, it appears to be well-supported by empirical evidence. For instance, the conceptual model of discursive social change forms the intellectual basis for Global Action Plan's 'Action at Home' programme (Burgess 2003) which has been amongst the most successful of the attempts to encourage and support pro-environmental behaviour changes at the household level. In fact, community-based approaches to social change are becoming an increasingly important part of the landscape of sustainable development, as Table 2 illustrates for the energy sector.

Table 2: Community-Based Initiatives Promoting Sustainable Energy Consumption

Name	Description	Location
Awel Aman Tawe	Community energy project which supports and promotes community renewable energy projects and offers advice on energy efficiency to local residents. http://www.awelamantawe.org.uk	Wales
Bedzed	The UK's largest 'carbon neutral' eco-village. Initiated by BioRegional, Bedzed provides 100 sustainable, low-energy living for around residents. http://www.bioregional.com/	Beddington, UK
The BioEnergy Village	Pioneering project to convert the entire heat and electricity supply of a village of 800 people in Lower Saxony to biomass. http://www.bioenergiedorf.de/index_e.html	Göttingen, Germany
Community Energy	A fund administered by the Energy Saving Trust offering grants to develop community-based district heating or CHP schemes – see below. http://www.est.co.uk/communityenergy/	UK
Environmental Action Fund	A scheme funded by the UK Department for the Environment Food and Rural Affairs; priorities for 2005-2008 include community-based initiatives on sustainable consumption. http://www.defra.gov.uk/environment/eaf/	UK
GAP EcoTeams	Groups of households (usually 6-8) who, for 4 months, commit to monitoring their consumption habits with regard to waste, gas, electricity, water, transport and shopping and aim to make them more sustainable. http://www.globalactionplan.org.uk	Nottingham and SE England
Harlock Hill Wind Farm	The UK's first co-operatively owned wind energy project, constructed in 1997 and consisting of 5 500kW Wind World turbines. http://www.baywind.co.uk/pages/HHL.htm	Cumbria, UK
Slateford Green	A car-free, low-energy sustainable housing development consisting of 120 mixed tenure units. http://www.canmore-housing.org.uk/	Edinburgh
Small Change	A community project scheme run by Global Action Plan and aimed at helping primary school children and their families to use energy more efficiently, eat more healthily and reduce waste & pollution. http://www.globalactionplan.org.uk	East London, South West England
Travel Smart	A community-based programme that encourages people to use alternatives to travelling in their private car. http://www.dpi.wa.gov.au/travelsmart/index.html	Perth, Western Australia
Way to Go	Fosters safer, healthier travel alternatives for elementary and middle school students. http://www.waytogo.icbc.bc.ca/	Vancouver, BC
Woking Borough Council	A progressive local council strategy aiming to serve the local community with community heating, combined heat and power and renewable energy. http://www.woking.gov.uk/html/climate/	Woking, UK

11.6 Community-Based Social Marketing

One recent attempt to use these kinds of insights to encourage pro-environmental behavioural change is the emergence of community-based social marketing.[32] Social marketing is an approach to policy design which begins with understanding the barriers that people perceive when attempting to engage in a given activity. Community-based social marketing merges this approach with a psychological insights into the importance of social norms and community engagement in changing behaviours. It is based around four consecutive steps:

- selecting behaviours and identifying barriers;
- designing a programme to overcome barriers to the selected behaviour;
- piloting the programme;
- evaluation.

The first step involves identifying a set of behaviours relevant to a particular environmental goal. For example, in attempting to reduce greenhouse gas emissions from the home we might identify a number of behaviours including: switching to low-flow showerhead, turning out lights, installing additional insulation and so on. Rather than attempting to promote all of these behaviours, the aim of the first step is to identify the barriers that each such behaviour faces and then selecting a specific behaviour to promote, based on three different criteria:

- what is the potential impact of the proposed behavioural change?
- what are the barriers specific to this behavioural change?
- what resources are required to overcome the barrier?

The idea of the first step is to identify behaviours where a change could have a significant pro-environmental benefit, but where the barriers to change would not demand under resource investments. One of the key issues here is whether the behavioural change in question is a one-off behaviour (purchase of an energy efficient appliance, for example) or involves shifting routine behaviours (such as turning off lights. Generally speaking, as we have already remarked, effecting a lasting change in habitual or routine behaviours is much more difficult than influencing one-off behaviours.

The design stage must aim to construct a strategy which removes as many of the barriers to the selected behaviour as possible within a limited allocation of resources. It is in this stage, that the importance of social-psychological insights comes into play. For example, community-based social marketing might draw on the use of a variety of social-psychological devices in order to motivate change. For example, the use of 'commitments' to reinforce people's intentions to engage in pro-environmental behaviour, 'prompts' designed to increase the salience of behavioural norms and remind people to behave in certain ways, and 'signals' to reinforce descriptive and injunctive social norms, have all proved useful in reinforcing pro-environmental

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[32] See for example Kassirer & McKenzie-Mohr 1998, McKenzie-Mohr 1996 & 2000, McKenzie-Mohr and Smith 1999, Peattie 1999, Peattie and Peattie 2004.

behaviours. The important aspect of the design stage is to target interventions very specifically towards the identified barriers, drawing on social-psychological insights into the nature of those barriers and the way in which people's behaviours are motivated and constrained in order to devise ways of overcoming the barriers and promoting the desired behaviours.

A key element in successful social marketing strategies is an adequate piloting and testing stage. In Section 1 we remarked on the peculiar difficulty associated with establishing a robust evidence base for policy interventions aimed at behavioural change. The sheer complexity of human behaviours and motivations makes it very hard to predict with certainty what the impacts of policy interventions on people's behaviours are going to be. In this context, the 'consumer-proofing' of policy mechanisms and social marketing strategies achieves an over-riding importance. Typically, a small-scale pilot of community-based social marketing strategy is rigorously tested and evaluated before proceeding to a wider implementation programme.

Examples of successful community-based social marketing include a strategy to promote household composting in Nova Scotia. This programme used a combination of public commitments and visible signals to establish a strong community composting norm. The evaluation stage revealed that around 80% of those originally approached were found to be composting several months after the programme began. In another experiment a community-based social marketing strategy was tested against an information-only strategy in the context of lawn-watering. The social marketing strategy was found to have reduced the watering of lawns by 54%, whereas it increased by 15% over the same period in the information-only control group (McKenzie-Mohr 2000).

The lesson from such examples is that the careful design of community-based social marketing strategies can have a significant impact even on relatively intractable, routine behaviours.

11.7 Summary Discussion

Shifting consumption patterns towards more sustainable behaviours relies on a robust understanding not just of what motivates consumers, but also on how behavioural change occurs, and how (if at all) it can be influenced by public sector interventions. This section has illustrated that, in spite of the complexity of the issue, there are a number of useful avenues for thinking about and facilitating change.

For example, the long pedigree of persuasion theory has some salutary lessons for conventional public sector information campaigns. But it also provides useful pointers to the design of effective social marketing and behaviour change programmes. In addition, the section has highlighted once again the social-embeddedness of consumer behaviours and behaviour change processes. Far from suggesting that these processes are intractable to policy intervention however, the evidence suggests that there clear and identifiable dynamics to these processes, and that ways of influencing those dynamics do exist. The opportunities for community-

based social marketing, social learning, participatory problem-solving and the discursive unfreezing of embedded, routine behaviours are all key areas for those thinking about behavioural change.

12   Policy Options and Opportunities

Policies to encourage pro-environmental behaviour have tended in the past to favour two main avenues of intervention. The first avenue is information intensive. It assumes that providing people with appropriate information about (eg) climate change or air pollution will change their attitudes – and hence their behaviours in pro-environmental or pro-social ways. The second perspective attempts to influence the private economic costs and benefits associated with individual behaviours. In this perspective, the aim of policies has been to propose a variety of taxes and incentive schemes to encourage pro-environmental change.

Sadly, the evidence does not support optimism in relation to either of these perspectives – at least by themselves. The history of information and advertising campaigns to promote sustainable behavioural change is littered with failures (Geller 1981, Geller et al 1983, McKenzie-Mohr 2000). In one extreme case, a California utility spent more money on advertising the benefits of home insulation than it would have cost to install the insulation itself in the targeted homes (McKenzie-Mohr 2000).

The fiscal approach has also faced limited success in encouraging long-term pro-environmental behaviour changes. Although there is evidence to suggest that price differentials (for example) are sometimes successful in persuading people to shift between different fuels, there is much less convincing evidence of the success of economic strategies in improving energy efficiency overall or in shifting behaviours more generally. Examples of pro-environmental interventions which offer both private benefits to individual consumers are legion. Yet it is well known that people still tend not to take up these options. A variety of different obstacles and barriers are blamed for this (Jackson 1992, Sorrell et al 2000).

McKenzie-Mohr (2000) argues that the failure of such campaigns to foster sustainable behaviours is partly the result of a failure to understand the sheer difficulty associated with changing behaviours. As a review of the Residential Conservation Service – an early energy conservation initiative in the US – once concluded, most such efforts tend to overlook 'the rich mixture of cultural practices, social interactions, and human feelings that influence the behaviour of individuals, social groups and institutions' (Stern and Aronson 1984).

The evidence reviewed in this report tends to support this view. The two conventional avenues of intervention both flow from the rational choice model of human behaviour. The limitations of this perspective were explored extensively in Part 2 of the report. The failure of the rational choice model to account adequately for matters of habit, moral behaviours, emotional and affective responses, cognitive limitations, the importance of social norms and expectations and the social embeddedness of individual behaviour has been extensively documented.

Attempts to account for these elements of consumer behaviour in social-psychological and sociological models go some way towards understanding where, when and how such factors become important in the context of sustainable consumption. But these

theories paint a much more complex and in some ways intractable picture of consumer behaviours. Evidence from learning and persuasion theories also underline the complexity associated with pro-environmental behavioural change.

At one level, the lessons from all this are salutary. Looking at consumer behaviour through a social and psychological lens reveals a complex and outwardly hostile landscape that appears to defy conventional policy intervention. Consumer behaviours and motivations are complex and deeply entrenched in conventions and institutions. Social norms and expectations appear to follow their own evolutionary logics, immune to individual control. Social learning is powerful but not particularly malleable. Persuasion is confounded by the information density of modern society.

The rhetoric of consumer sovereignty is inaccurate and unhelpful here because it regards choice as entirely individualistic and because it fails to unravel the social and psychological influences on people's behaviour. But short of mandating particular behaviours and prohibiting others – an avenue that Government has been reluctant to pursue – it is difficult at first sight to see what progress can be made in this intractable terrain.

At the same time the urgency of addressing the task remains undiminished. In particular, as the evidence in this review has illustrated, delving into this complex terrain is essential if behaviour change initiatives are to address key 'problem areas' in consumer behaviour. In particular sustainable consumption policies must find ways to tackle the question of habit and routinisation on the one hand and the social embeddedness of individual behaviours on the other.

So how should policy-makers go forward from this point? What options are available to them for addressing these key issues? And what kind of framework should we use to think about policy interventions, beyond the limited perspective of rational choice?

These are all critical questions, and a full response to them is beyond the scope of this review. However, in the following sections we set out, first, a broad historical overview of the policy terrain and, second, a view of policy intervention which opens out a range of new possibilities for thinking about the role of government in promoting pro-environmental behaviour change and sustainable consumption.

12.1 Policy Options in Historical and Cultural Context

At its broadest level, the problem of motivating sustainable consumption – or of encouraging pro-environmental changes – is a particular manifestation of an eternal social issue. As Gardner and Stern (1996), Ophuls (1973, 1977), Daly and Cobb (1989) and others have pointed out, it is essentially the problem of ensuring that behaviours which threaten the well-being of the social group are discouraged and that those which promote long-term well-being are encouraged. In one sense, it is quite precisely the problem of societal governance, of coordinating individual behaviour for the common good.

Pointing to Plato's *Republic* and other historical writings, Ophuls (1973) highlighted the perennial nature of this issue. He also suggested that, from time immemorial, there have only ever been a few basic methods – written about by philosophers and employed by societies - for achieving this. Specifically, the four 'solution types' are (Gardner and Stern 1996, 27):

1. government laws, regulations and incentives;
2. programmes of education to change people's attitudes;
3. small group/community management; and
4. moral, religious and/or ethical appeals.

Different societies and different writers at different times have tended to favour specific options or combinations of options. Hobbes, for example, championed the first approach, while Rousseau favoured the third. As we have already noted, conventional policy prescriptions in our society tend to favour the first two options. Or, to be more precise, we tend to favour a specific configuration of the first two solutions, one in which the balance of government intervention is focused on fiscal incentives designed to internalise social and environmental externalities and information is provided to ensure that people make informed or 'rational' individual choices.

What is interesting is the existence of clearly defined and well-recognised solution types which are not particularly evident in the current policy mix – namely options 3 and 4. Quite why this should be the case is slightly puzzling at first. Some insights into the ascendancy or otherwise of specific solution types can, however, be gained from the understandings of cultural theory (Section 9.6).

Cultural theory suggests four distinct forms of social organisation, with associated 'cultural types' and related assumptions about the appropriate form of governance. Modern societies can best be categorised within this framework as low group, low-grid societies, ie lying in the lower left hand quadrant of Figure 11. The guiding principles for social organisation in such societies favour the rights of the individual over the rights of the group and place a premium on social mobility. Governance is 'light' in this cultural worldview. Competition, open access to markets, and equality of opportunity are all prized. Regulation, hierarchy and social insulations are eschewed. This is the entrepreneurial, individualistic society. And its models of governance are precisely those that conform to the particular combination of the first two solution types.

Though cultural theory does not exactly explain how we came to be such a society, it does do two things. Firstly, it highlights that this form of social organisation is only one of a number of possible different forms. Secondly, it suggests that since the world is inhabited by a variety of cultural types, a single over-riding form of social organisation is never likely to be entirely successful.

From the perspective of this review, we might also offer here another cultural theoretic hypothesis. Namely, that the forms of governance familiar to the individualistic/entrepreneurial society are never, by themselves, going to be sufficient

to achieve the kind of behavioural change demanded by sustainable development. The complexity of human behaviour and the enormity of the challenge of achieving pro-environmental behavioural change mean that we can no longer afford to restrict policy options to the particular combination of solution types conventionally attributed to low-group, low-grid societies. Thinking outside the familiar policy options is going to be vital.

So how much could be learned from the relatively unused or underused options for managing the common good? This must remain a slightly open question for the moment. And yet, there are clear opportunities for exploring these possibilities further.

The decline of religious authority and the rise of moral relativism in the modern age appear, at one level, to rule out the possibility that the fourth solution type can offer anything productive to sustainable consumption policy. At the same time, of course, every society retains moral and ethical codes of some kind, and our society is no different. We accept the right to life and health. We condemn those who infringe the rights of others in these respects. Typically, therefore, and in spite of the rhetoric of consumer sovereignty, there remains an ethical basis for restraining individual freedoms where these are seen to undermine or compromise the common good or the well-being of others.

What determines the viability of policy interventions on moral or ethical grounds is often the strength or resonance of an appropriate 'moral conversation' associated with particular freedoms or choices. Is there a public debate over a specific moral issue? Does it resonate at all in the public consciousness? Are people concerned about environmental damage, resource scarcity, the exploitation of others, infringements of the rights of the less fortunate? Evidence suggests that in general terms they do express such concerns. It also suggests that they express these concerns in varying degrees in relation to a wide variety of different issues.

In the last two decades, for example, issues as varied as smoking in public places, drink-driving, the rights of animals, labour rights in developing countries, the side-effects of immunisation, the rights of the embryo, the behaviour of multi-nationals, and the risks associated with genetically modified organisms have all become the subject of very heated 'moral conversations'. Understanding and responding to these conversations is clearly a part of the challenge of Government. But the potential also exists, and is occasionally exploited, for Government to take a more active role in stimulating, facilitating or initiating such conversations.

The option that stands out perhaps most obviously as lying outside the conventional policy menu is the third: small group or community management. Gardner and Stern (1996, 150) call this solution type the 'forgotten strategy'. They illustrate the form of communal management by citing two examples, one relating to grazing rights in the Swiss alpine village of Törbel and the other amongst crab fishermen in Maine. In both examples, common resources are managed effectively over long periods of time (five centuries in the case of Törbel) by the emergence and adoption of strong group rules

and norms. Elinor Ostrom (1990) illustrated a range of similar strategies for governing the commons.

Successful community management initiatives have several characteristics, according to Gardner and Stern (Table 3). Firstly, local control of the resource in question has to be achievable – there must be definable boundaries of control, changes in the resource must be locally monitorable and the rights of local control must be recognised by higher-level authorities. Secondly, the local community must be sufficiently dependent on the local resource that there is an incentive for self-regulation. The existence and strength of the local community is a key issue in successful community management. Finally, group management depends on 'appropriate' rules and procedures. In particular, the selection and modification of such rules must be a participatory process.

Table 3: Conditions Conducive to Successful Community Resource Management
(adapted from Table 6.1, p130 in Gardner and Stern 1996)

1. Resource is controllable locally
   a. definable boundaries
   b. resources stay within their boundaries
   c. local management rules are recognised
   d. changes in the resource base can be monitored
2. Local Resource Dependence
   a. perceptible threat of resource depletion or degradation
   b. difficulty of finding substitutes for local resources
   c. difficulty or expense attached to leaving the area
3. Presence of community
   a. stable, usually small population
   b. 'thick' network of social interactions (weak grid)
   c. strong shared norms, especially in upholding agreements
   d. sufficient local knowledge to devise fair and effective rules
4. Appropriate rules and procedures
   a. participatory selection and modification of rules
   b. group control of monitoring and enforcement processes
   c. rules emphasis exclusion of outsiders, restraint of insiders
   d. congruence of rules and resources
   e. in-built incentives for compliance
   f. graduated, easy-to-administer sanctions and penalties for non-compliance.

In organisational terms, according to Gardner and Stern (1996, 135) what makes community management systems work is a combination of participatory decision-making, monitoring, social norms and community sanctions. The psychological basis of group management draws heavily on some of the social psychological theories reviewed in this report. In particular, the importance of social norms and expectations as an influence on individual behaviour is clearly visible here. In addition, the internalisation of those norms through social learning and the emergence of a social identity are key to the success of such systems.

Even though community schemes do include sanctions and penalties for non-compliance, these are not, according to Gardner and Stern, the most important element in ensuring compliance. Rather, the effectiveness of group management comes from the internalisation of the group's interest by individuals in the group. The authors suggest that there are several reasons why people internalise group norms. In the first place, they have participated in creating them. In the second place, they can see the value of these norms for themselves in preserving and protecting the interests of the local community and themselves as members of that community.

In addition, these group norms become a part of the shared meaning of the community, and contribute to the social well-being of the group, not just through the protection of resources, but through the development of trust, collaboration and social cohesion. Sanctions may be necessary to protect the group from those tempted to violate the collective good for individual interests, but the main reason people accept and act on social norms is that doing so cements social relations, signals membership of the group, and contributes to a sense of shared meaning in their lives.

Clearly, the conditions for successful group or community management identified in Table 3 do not always hold. There are two principal difficulties that we could point to. The first is that many of the environmental issues that we would wish to tackle do not have the characteristic of local resource scarcity issues typical of successful community management strategies. Problems such as climate change and ozone depletion are inherently global. Moreover, the distancing of environmental impacts from behaviours through trade specialisation and economic inequality substantially reduce the incentive for engaging in community management.

It might, in principle, be possible to mitigate the severity of this limitation in various ways. For example, encouraging energy sufficiency or renewable energy targets at the regional or local level increases the incentive for community engagement in local resource management. The negotiation of carbon quota systems at the local or community level may also contribute to the development of this kind of group norm. At the very least, an understanding of the power of group norms and processes could be employed in developing community change initiatives such as those exemplified by Global Action Plan's 'Action at Home' initiative, the Quakers' 'Living Witness' project, the Church of England's 'eco-congregations' and others (Burgess 2003, Church and Elster 2002, Jackson and Michaelis 2003, Michaelis 2002).

The second major obstacle is that social trends appear to be undermining the social conditions for community management. At one level, community management is a form of social organisation. Gardner and Stern suggest that it represented the norm in social organisation throughout much of human history, exemplified in nomadic tribes, agricultural villages, fishing communities and small rural towns. For this reason, they claim, it retains an intuitive appeal for most people, even today.

Others have suggested that that this is an over-romanticised view of a particular form of social organisation, and that earlier societies were more usually highly stratified, hierarchical and feudal in nature (Douglas and Isherwood 1979, eg). Small

community life can sometimes, as Gardner and Stern also recognise, be bourgeois, backward, intellectually sterile and socially repressive.

Whatever the pros and cons of small communities, it is clear that as a form of social organisation they are far less common today than a hundred, fifty, or even twenty-five years ago. Powerful social and economic forces have intensified trade, eroded community boundaries, distanced cause from effect, and undermined some of the basis for local governance. These trends have been supported by ideological transitions that prioritise social mobility, the globalisation of commerce and culture, and uniformity of political form. From a cultural theory perspective, community management belongs in a completely different quadrant (specifically the lower right – and to some extent the upper right side of Figure 11) from the entrepreneurial, individualistic cultural form that characterises modern society.

In the final analysis, Gardner and Stern (1996, 31) argue, no single solution type, on its own, is likely to be effective in delivering pro-environmental behaviour change. Effective policies for motivating sustainable consumption are going to need to draw creatively on all four perspectives. They will need to explore the untapped potential for governance within each perspective. Given the critical importance of social processes in consumer behaviour, alluded to over and again in the evidence base reviewed in this paper, the scope for exploring the 'forgotten strategy' from amongst Gardner and Stern's solution types – namely community management – should be given serious consideration.

12.2 Policy Opportunities in Social and Institutional Context

The literature reviewed in Part 2 of this report was structured around a critique of the rational choice model of human behaviour. In the previous subsection, we saw how this model of behaviour both supports and is supported by a particular model of governance. If humans behave according to the rational choice model, then the appropriate forms of government are those which ensure that people have adequate information on which to base their decisions and that private costs reflect social externalities.

The limitations of the rational choice model, by the same token, point to limitations of the entrepreneurial-individualist form of governance. But the failings of the conventional model cannot be taken as evidence that human beings are unconcerned by economic costs and benefits, that they are unmotivated by selfish concerns, or that they do not engage in rational deliberations.

On the contrary, the evidence on pro-environmental behaviour suggests that cost (and its time equivalent personal effort) is a primary issue for respondents in surveys on recycling, organic food, public transportation and a number of other key areas of environmental concern. Likewise low awareness, inadequacy of information and lack of knowledge are cited over and again as obstacles to the uptake of recycling schemes, composting, ethical purchasing and so on (NCC 2003, WCC 2004 & 2003, RRF 2004 & 2002).

Thus, the conclusion to be drawn from the evidence in this report is not that fiscal incentives and information campaigns are irrelevant or inappropriate as policy options to facilitate pro-environmental behaviour change. People are sometimes self-interested. They do make economic decisions. Their choices are swayed by cost. Adjusting prices to incorporate negative or positive externalities is therefore a legitimate avenue through which to promote pro-environmental or pro-social behaviour and to discourage anti-social or environmentally damaging behaviour. Providing accessible and appropriate information to facilitate pro-environmental choice is also a key avenue for policy.

But the evidence reviewed here does suggest very strongly that these measures are insufficient on their own to facilitate pro-environmental behaviour change of the kind and scale required to meet existing environmental challenges. And as such, this evidence base provides a critique of the model of governance in which the role of policy is confined mainly to providing information and internalising externalities. In the language of cultural theory, the individualistic/entrepreneurial cultural form is insufficient to deliver sustainable consumption. It simply fails to reflect the complexity and social nature of human behaviours.

There is also evidence that this model of governance is nothing more than an 'ideal form', supported by a set of rather unrealistic assumptions about human behaviour and the role of the state. In a sense, the 'hands off' rhetoric of modern governance is nothing more than an ideological discourse. The reality is that policy intervenes continually in people's behaviour. Specifically, it intervenes directly – through taxes, incentives and the regulatory framework. More importantly, it intervenes indirectly through its extensive influence over the social and institutional context within which individual behaviours are negotiated.

This view of the state – as a continual mediator and 'co-creator' of the social and institutional context – opens out a range of vital avenues for policy intervention in pursuit of behavioural change. The complex terrain of human behaviour, as viewed in a social, psychological and cultural context, is not a place devoid of possibilities for state influence. Rather it is one in which there are numerous possibilities at multiple levels for motivating pro-environmental behaviours and encouraging sustainable consumption. In the following paragraphs, we outline some of these possibilities very briefly:

Facilitating Conditions
Time and again, the evidence suggests that external situational factors (also referred to in Section 10 as facilitating conditions, situational conditions or contextual factors) are a key influence on the uptake of pro-environmental behaviours. Such conditions include the provision of recycling facilities, access to energy efficient lights and appliances, the availability of public transport services and so on. The adequacy of such facilities and services, equality of access to them, and consistency in their standards of operation are all vital ingredients in encouraging pro-environmental choice. Inadequate or unequal access, insufficient information, incompatibilities

between different services: all these factors are known to reduce the effectiveness and uptake of pro-environmental behaviours.

Institutional Context

At a broader level, the set of rules, regulations and operating conditions – defining the context within which choice is negotiated – is another key intermediary between policy and public behaviour. For example, the market conditions – established by Government – under which energy supplies are generated, distributed and supplied has a profound impact on the kinds of energy generation that are preferred and the extent to which energy efficiency is or is not cost-effective for consumers. These conditions could either foster or sabotage the viability of renewable energy, energy efficiency, energy service companies and so on.

Government also has a vital role in negotiating the institutional context in which business and consumers operate through the setting of legislation, regulations and standards. In particular, it is clear that:

- **product standards** could make vital differences between durability and obsolescence, between efficiency and waste, between recyclability and landfill;
- **building standards** could further improve or simply hinder the efficiency of the UK building stock;
- **trading standards** might either foster or prevent excessive or addictive consumption and play a key role in the success or failure of sustainable consumption patterns;
- **media standards** play a vital role in influencing the wider social and cultural context of consumer attitudes, motivations and desires (see below).
- **marketing standards** could either encourage or inhibit unscrupulous or inappropriate selling, advertising and marketing practices;

This last area is worth commenting on in more detail. At one level, it is clear that Government can, does and should intervene in the marketing of products or services that are harmful, either to the individual or to others, or which impose costs on the state. Cigarette advertising, for example, has long been subject to certain restrictions in this respect. But there are much further reaching conclusions to be drawn from the evidence in this review.

In Section 9 we pointed to the key role played by symbolic resources, both in the social construction of identity and in the negotiation of shared meanings. As Figure 9 illustrates, these symbolic resources provide a vital link in social identification processes. But a crucial question arises here for sustainable consumption policy. Who or what controls these symbolic resources? Do they lie within the control of the social actors who make use of them? Do they lie within the remit of public policy intervention? Are they subject to control by agents who seek to profit from their influence on others?

To some extent, all three of these relations hold. The one that is potentially the most problematic however, is the third. Control over the symbolic resources available for

discursive elaboration of meanings lies mainly in the realm of the marketing strategies of corporate actors. These actors have a vested interest in controlling such resources. They also have a long and rather sophisticated experience in effecting this control to their own best advantage.

The commercial nature of this relationship is particularly problematic where children are concerned. From about the age of five onwards, social and developmental psychology suggests that the social community within which discursive elaboration of symbolic meanings occurs shifts gradually away from parental influence and towards the peer group. And yet it is clear that – at least until the early teens – this peer group lacks the critical faculties needed to resist, select or accommodate the complexities of these messages. It is precisely for this reason that some Nordic countries have banned advertising for those under 12, and why the UK National Family and Parenting Institute has called for similar measures.[33]

Moreover concern over the social control of symbolic resources is by no means restricted to advertising targeted at children. Asymmetries of power and resources in the relationship between advertisers and their target audience suggest the need for much stronger public control of commercial media – extending at least as far as exerting strong advertising standards, and possibly including restrictions on specific marketing practices such as certain forms of stealth marketing (Section 11.3).

Social and Cultural Context
It should by now be clear that Government plays a significant role in the social and cultural context within which consumers act. Nor is state influence simply confined to regulation, information and tax setting. These activities are obviously important both as direct and as indirect influences on consumer behaviour. But there is more at stake here. A part of the indirect influence of State policy is symbolic. The evidence from social anthropological theories (discussed in Section 9) suggests that people respond quite explicitly to the symbolic meanings of things. Responses to Government interventions and public policy messages are no different in this respect.

Government policies send important signals to consumers about institutional goals and national priorities. They indicate in sometimes subtle but very powerful ways the kinds of behaviours that are rewarded in society, the kinds of attitudes that are valued, the goals and aspirations that are regarded as appropriate, what success means and the worldview under which consumers are expected to act. Policy signals have a major influence on social norms, ethical codes and cultural expectations.

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[33] A recent Ofcom report on the role of advertising in relation to childhood obesity accepts some of these points. But it comes out against an outright ban on children's TV advertising of food products on the grounds that advertising is only one of the impacts on obesity, that it would hit both 'good' and 'bad' food advertising, and that it would reduce investment in commercial children's television and hence restrict viewing choice. The evidence reviewed in this report suggests that this should not be regarded as the final word on advertising to children.

In particular, the consistency or inconsistency of government actions can have a profound effect on the success or viability of pro-environmental messages and interventions. A good deal of ethnographic evidence on consumer behaviour suggests that people mistrust and ignore pro-environmental exhortation if it appears inconsistent with policy messages coming from elsewhere in Government, or is seen to be at odds with the behaviour of central government, local authorities, private companies and the behaviours of other key social actors (WCC 2004, NCC 2003 eg). In short, it is not enough to expect that individuals can be exhorted to behave in certain ways. Consumers are social beings, enmeshed in a complex institutional and cultural logic. The architecture of this social logic plays a vital role in facilitating or inhibiting what is socially possible. Government policy must be aware of its own role in this context, and seek to act accordingly.

Business Practices

Consumers are also employees. As employees, people are immersed daily in a certain set of behaviours, values and logics. In particular, they are exposed to a variety of environmentally significant practices. Does the company behave in an environmentally responsible manner? Do they recycle? Are their procurement practices sustainable? Do they operate a sustainable transport policy? The answers to these questions can have a significant influence on consumers – both as employees and as householders.

In the first place, there is evidence to suggest that behaving in certain ways in one context can have a knock-on effect in another context (Section 9). If I am encouraged to recycle at work, it is more likely that I will attempt to recycle at home. This spillover is thought to occur in two distinct ways. On the one hand, I gain a familiarisation with the actual practice of recycling. I learn, for example, that wastes can be separated, that quality grading of wastes is important and that appropriate siting receptacles can facilitate sorting. On the other hand, I am encouraged to think of myself in a particular way (Section 9.3) and this changed self-concept has an influence on my domestic behaviour.

Sadly, the evidence appears to suggest that recycling at work is significantly less common than recycling at home (KPMG 2004). This means not only that business practices are less sustainable than they ought to be, but also that a unique opportunity for influencing and supporting domestic behaviours is lost. There is even a danger that failure to encourage pro-environmental behaviours at work can significantly reduce the incentive for consumers to act responsibly at home. Through its influence on business, Government policy can seek to redress this balance.

Community-Based Social Change

Throughout this review, we have highlighted the strength of the evidence base concerning the social dimensions of consumer behaviour. Time and again, the evidence points to the influence of social norms, expectations and identification process on human behaviour. These social processes can present significant

impediments to pro-environmental consumer behaviour. But they can also be powerful forces for pro-environmental and pro-social change.

In Section 9, we highlighted the discursive nature of social-symbolic processes. Section 11 illustrated how a particular kind of elaborative social process is vital in 'unfreezing' habitual behaviours, and re-negotiating new social norms. In Section 12.1 we drew attention to the community management of social resources and role of internalised group norms in promoting the common good. The evidence is unequivocal that consumer behaviours are socially negotiated. Changing behaviour cannot be conceived as the processes of encouraging change at the individual level; pro-environmental behavioural change has to be a social process.

Government can play a key role in these processes: by recognising the importance of social norms in behaviour change policies; by initiating, promoting and supporting community-led initiatives for social change; by supporting the community management of social resources; and by designing effective community-based social marketing strategies.

Leading by Example

Finally, evidence suggests a clear role for Government in leading by example. Clear environmental management initiatives and strong sustainable procurement programmes in both the public sector and within public private partnerships can have a robust influence on sustainable consumption in a variety of ways.

Firstly, of course, public sector expenditure contributes almost 40% of the national income. Encouraging pro-environmental behaviour in the public sector is therefore a far from trivial contribution to the UK's environmental and social impact. Equally importantly, however, the evidence surveyed in Section 11.3 suggests that Government behaviour plays a strong functional and symbolic role in social learning processes. Unsustainable public sector behaviour can undermine pro-environmental information and awareness campaigns. But conversely. robust and successful environmental management and procurement programmes send a strong signal to businesses and consumers and demonstrate that the Government is serious about pro-environmental change.

Finally, strong public sector leadership in sustainable consumption provides invaluable learning grounds for policy about what is and is not possible, what is and is not necessary, what is and is not achievable in terms of successful behavioural change.

12. 3 Concluding Remarks

Changing behaviour is difficult. The evidence in this review is unequivocal in that respect. Overcoming problems of consumer lock-in, unfreezing old habits and forming new ones, understanding the complexity of the social logic in which individual behaviours are embedded: all these are pre-requisites for successful behaviour change initiatives.

But in spite of all appearances this complex terrain is not intractable to policy intervention. Policy already intervenes in human behaviour both directly and indirectly in numerous ways. And as we have attempted to demonstrate in this final chapter, a genuine understanding of the social and institutional context of consumer action opens out a much more creative vista for policy innovation than has hitherto been recognised. Expanding on these opportunities is the new challenge for sustainable consumption policy.

In following up on these possibilities, Government can draw some clear guidance from the evidence base. In the first place, leading by example is paramount. Secondly, we have drawn attention to the limitations of the rational choice model. Based on individual cognitive deliberation, this model is inadequate as a basis for understanding and intervening in human behaviours for a number of reasons. In particular it pays insufficient attention to the social norms and expectations that govern human choice and to the habitual and routine nature of much human behaviour. It also fails to recognise how consumers are locked into specific behaviour patterns through institutional factors outside their control. By contrast, the evidence suggests that discursive, elaborative processes are a vital element in behaviour change – in particular in negotiating new social norms and 'unfreezing' habitual behaviours. This shift from 'deliberation' to 'elaboration' as a working model of behavioural change can be seen as a key message of this study.

Throughout this review we have attempted to relate understandings of behaviour and behaviour change to the strength of the available evidence base. It is clear that this evidence base is unequivocal in certain areas. In particular, the relevance of facilitating conditions, the role of lock-in and the critical importance of the social and cultural context emerge as key features of the debate. The role of community in mediating and moderating individual behaviours is also clear. There are some strong suggestions that participatory community-based processes could offer effective avenues for exploring pro-environmental and pro-social behavioural change. There are even some examples of such initiatives which appear to have some success.

What is missing from this evidence base, at present, is unequivocal proof that community-based initiatives can achieve the level of behavioural change necessary to meet environmental and social objectives. There is simply not enough experience across enough areas and covering all the relevant parameters to determine precisely what form such initiatives should take, how they should be supported, what the best relationship between community-based social change and Government is, how relations between communities should be mediated, or what kinds of resources such initiatives require for success.

In these circumstances, there is an evident need to proceed with care, to develop and design pilot community-based schemes in a participatory fashion, to monitor the impact of these schemes and to 'consumer proof' policy initiatives carefully over time.

In the final analysis, the complexity of consumer behaviours should warn us against simplistic prescriptions for change. Material goods and services are deeply embedded in the cultural fabric of our lives. Through them we not only satisfy our needs and desires, we also communicate with each other, and negotiate important social relationships. Consumer goods are implicated in vital 'social conversations' about identity, social cohesion and cultural meaning.

It is clear from this that behaviour change initiatives are going to encounter considerable resistance unless and until it is possible to substitute for these important functions of society in some other ways. In this context, motivating sustainable consumption has to be as much about building supportive communities, promoting inclusive societies, providing meaningful work, and encouraging purposeful lives as it is about awareness raising, fiscal policy and persuasion.

This is not to suggest that Government should be faint-hearted in encouraging and supporting pro-environmental behaviour. On the contrary, a robust effort is clearly needed; and the evidence reviewed in this study offers a far more creative vista for policy innovation than has hitherto been recognised.

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