

# The Ecological Modernization of Social Practices at the Consumption Junction

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THE ECOLOGICAL MODERNIZATION OF SOCIAL PRACTICES AT THE CONSUMPTION-JUNCTION.

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### **Introduction**

When judged from the social sciences debate on sustainable consumption, ecological modernization theories most of the times can be said to represent a rather narrow defined eco-efficiency and innovation perspective, associated with mainstream politics, culture and economics. Ecological modernization is used by some authors to sharpen the contrast with more radical 'sufficiency' perspectives which can be said to represent a fundamental critique of modern consumer-society. We argue that there is more to ecological modernization than just eco-efficiency, since especially later formulations of the theory combine a focus on innovation and eco-rationalization with an equally important emphasis on the social, meaningful behaviors of consumers (1). This profound sociological variant of ecological modernization theory can be used for analyzing environmental change at the consumption-junction, where social practices of consumption are located right in between provision and demand. It is at the consumption junction that the productivist (technology and market originated) logics of providers run into the everyday-life logics as implied in ordinary consumption (2). Since environmental innovations are of recent origin and becoming wide-spread in modern societies, these 'green innovations' offer great possibilities to do research on processes of development, diffusion and appropriation of innovations, with respect to both their technological and socio-cultural dimension. Three clusters of research questions are presented to help organize research on the greening of social practices at the consumption junction (3). First, it can be researched how providers offer new (green) products, services and ideas which they expect and hope to become accepted, appropriated and used by eco-concerned consumers. We argue that the key issue here is about the construction of hierarchies of green qualities, with market actors indeed taking the lead e.g. the market mode of provision being the crucial or dominant axis of provision in modern societies (4). Second, we explore the ways in which green innovations become incorporated or embedded in social practices. For this purpose, we argue, ecological modernization theory has to be connected to and make use of theories of social practices as developed in the 1980's and revitalized and updated from 2000 onward. Theories of practice direct attention to the pragmatic, routine character of everyday consumption. From these theories it can be concluded that strategies for environmental change should address issues of (new, greener) technologies, meanings and identities not at the level of isolated products or individuals but first and foremost at the level of practices

themselves. With the help of theories of practices, we comment on two core themes which have triggered a lot of debate among social scientists when dealing with consumption: the interaction of humans and material objects and (green) technologies (5) and the issue of the greening of lifestyles and green identities (6). In the epilogue we shortly comment on the role of (green) lifestyles and lifestyle politics in public debates on sustainable consumption in reflexive modernity.

### **1. Ecological modernization theory and the sustainable consumption debate**

One of the founding fathers of ecological modernization theory, Joseph Huber, in his recent book on the role of technologies for environmental change dismisses and defeats the role of consumers in bringing about significant environmental change. He argues that technological innovations in end-products and end-user-behaviors have a rather modest (25% and 4 % respectively) share in the potential levels of technology based eco-innovation. Technological changes higher up in the production-consumption chains are more important and significant, since innovations in raw or basic materials (44%) and changes in intermediate products (27) have the greater contribution to make. From these figures Huber concludes that ecological modernization strategies should primarily be developed ‘upstream’, at the producer and provider side of production-consumption chains, while not bothering too much consumers and their consumer-behaviors ‘downstream’ production-consumption cycles. He suggests that environmental research and politics should stick or even return to their original focus on production, industry, providers, as can be read from the following quote:

"A paradigm shift from downstream to upstream implies a parallel shift in the emphasis of policy. Environmental policy will again have to focus on industrial production, while not spending too much time with user behaviour and consumer demand. Demand, though, has an important role to play. But it is manufacturers of end-products such as buildings, vehicles, appliances and consumer goods, and also large retailers, who are in the position to effectively implement supply chain management. This is none of a user's nor of a government's business" (Huber, 2004, p. 22)

The narrow focus on technology and the overall productivist outlook of this analysis are familiar characteristics of the first generation ecological modernization theories, as developed in the 1970's and 1980's. They share this technocratic, provider oriented outlook with many branches of environmental sciences. Consumption is treated as derivate of production, and the (foot-print) impacts of consumption are framed in the language of life-cycle-analyses, product-life policies and dematerialization strategies. Against this background, consumption and consumer behavior are judged to be less relevant for industrial ecology. The greening of industrial consumption patterns has to be organized preferably ‘behind the back of the consumers’ with major players in industry (applying PPP-strategies) and politics (providing level playing fields) taking the lead.

When putting forward the ‘don't bother the consumer’ argument, Huber shares company with a group of otherwise rather unlike companions. In their interesting volume ‘Confronting Consumption’ (2002) Ken Conca, Thomas Princen, and Michael Maniates discuss sustainable consumption politics from a primarily neo-marxist, political science perspective. They argue that in the sustainable consumption debate the ‘real’ and really important issues are not addressed or confronted, neither by business and policy elites nor by mainstream environmental movements in the USA. Through a process of ‘individualization’ of consumption, attention is taken away from the real social forces and power relations at stake. Individualization in this context means that responsibility for consumption-related (environmental) problems is naïvely ascribed to free-

standing individuals, who are supposed to solve big problems by small changes in their shopping behaviours (Princen et al., 2001).

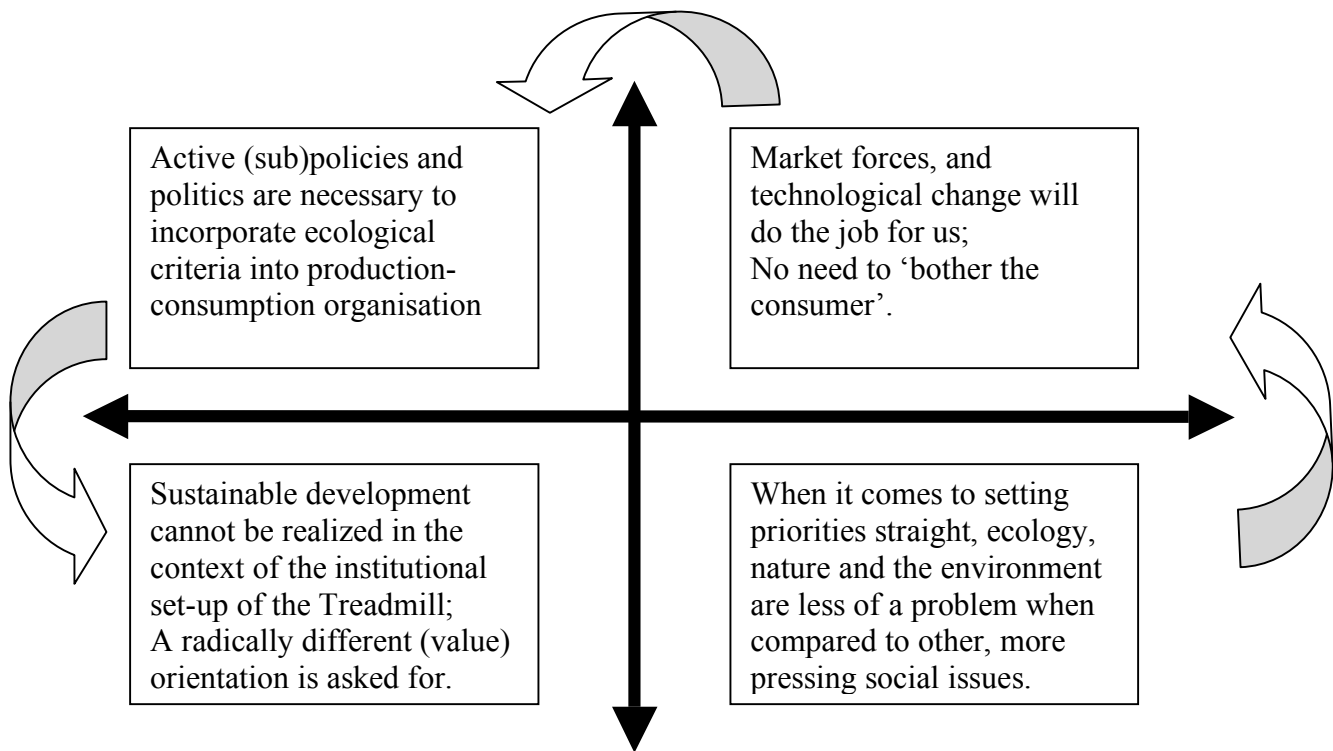
In a similar manner, Kersti Hobson takes critical stance with the mainstream discourses on sustainable development and sustainable consumption as they have developed in the United Nations and particularly in the UK in the 1990's. In the context of these debates, sustainable consumption is framed in terms of "the rationalization of life-style practices, which entails making them more efficient and shaping them according to the logic of instrumental rationality, as part of a prevailing ecological modernization paradigm" (Hobson, 2002, p. 96). In doing so, high-income countries construct a sustainable consumption discourse that fails to address issues of power and inequalities, enabling them "to remain part of, take leadership in, and hence have tangible controls over future international frameworks of environmental governance" (idem, 99). The incorporation of sustainable consumption issues into the neo-liberal discourse of rationalising the lifestyles and consumption practices of citizen-consumers implies that the eco-burden is passed on to individuals, who are asked in public campaigns by the Labour government to 'do their bit': "a few changes in what you do at home, at work, when shopping or getting out, is all that you need to do" (idem, 103).

For Mikko Jalas as well, ecological modernization and rationalization discourses put forward a specific, one-sided view on sustainable consumption, suggesting that problems can be dealt with by improving the eco-efficiency of the products and technologies we handle in everyday life. He writes "when applied to household consumption, the core concepts of ecological modernization – words such as innovation, efficiency and technology – have far reaching consequences. They impede the possibilities of contentment and portray a controllable view on the development of technology" (Jalas, 2006, p. 536). Ecological modernization hides from view that some problems cannot be dealt with in terms of just efficiency improvement. More radical changes in our lifestyles and ways of life are needed, and in response to the dominant paradigm of economic growth "we *must* fundamentally question the ways we strive for and derive utility while consuming" (idem, p. 535, ital. in original). While Princen c.s. and Hobson do not spend much efforts in presenting an alternative perspective to sustainable consumption in any detail, Jalas provides a fascinating, in depth case-study of 'wooden boating' in Finland which can be said to represent a new, radically different ways of dealing with consumption. Keywords in this 'sufficiency- perspective' are contentment and joy, respect for things and their life-histories, a network of consumers sharing their love for wooden boats, and lots of time spend on maintenance and repair to keep these cherished wooden objects alive. He then goes on to discuss the difficulties of having two fundamentally different approaches to sustainable consumption existing next to each other. Jalas asks himself to what extent is it possible to address both "the efficiency of production-consumption chains and the growth-critical question of sufficiency and contentment in everyday life" at the same time. This question is relevant since he takes it for granted that "the co-existence of these two tracks is constitutive for the research agenda of sustainable consumption" (Jalas, 2006, 534).

Most readers will recognize from the few examples some of the long standing debates in the social sciences and especially environmental sociology when it comes to sustainable development and sustainable consumption. In these debates ecological modernization theory is used, together with its two rival perspectives – the treadmill of production and consumption theory (ToP) on the one hand and the sufficiency/ de-modernization perspective on the other – to help structure the field, to provide a frame of reference, a common ground for debates. Inevitably a certain amount of simplifying the specific traits of a theoretical perspective will occur in this

respect, since it helps identifying and recognizing the differences between the theories<sup>1</sup>. We accept that in this kind of exercises, ecological modernization is given the role of a reformist theory, when this reformism implies working within the broad tenets of sustainable development as sketched in the Brundtland-report. A

position to be contrasted indeed with perspectives that argue for a radical dismantling of the existing (political, cultural and market) institutions of modern societies (Hobson; Princen c.s.). We also concur with the fact that ecological modernization is associated with clean technology (sometimes of a high-tech sort), eco-efficiency, a focus on products, energy and substance flows, and an important role being assigned to actors in the market sphere – including consumers - for implementing ecological modernization strategies (Jalas). Within the second generation of ecological modernization theories however, these core features have become embedded in a more encompassing sociological theory on environmental change in reflexive, global modernity (Mol and Spaargaren, 2000; Spaargaren, Mol and Buttel, 2000; Spaargaren 2003). It is more difficult to leave undiscussed the allegation that ecological



modernization theories and strategies are representing a business as usual point of view, arguing for more growth, believing that market forces - reacting to new scarcities - and yet-to-be-invented

<sup>1</sup> See for extensive critique on ecological modernization for example York and Rosa, 2003; Pellow et al., 2000. On earlier occasions, we have provided a more detailed discussion on the critiques raised against ecological modernization theory in general (Mol and Sonnenfeld, 2000) and with respect to its treatment of consumption issues (Mol and Spaargaren, 2004 in response to Corolan, 2004). Our present discussion is to highlight in particular the specific role and significance of the theory for the greening of consumption, where this 'greening' can be said to indeed represent rather different meanings and interventions for different authors.

technologies will do the job for us (Carolan, 2004). With respect to the issue of how broad environmental problems as social problems should be defined, ecological modernization theory indeed gives priority to issues of ecology, nature and environment also when they appear as social problems with a rather prominent ‘technical’ or ‘material’ dimension. The environmental risks facing modern societies are too serious to be ignored, neglected, ‘deconstructed’ or otherwise being assigned a subordinate position in political and scientific debates about the future. Figure 1 can be used to summarize in a rather simple form the different perspectives on sustainable development and consumption.

It can be concluded that ecological modernization theory is seen by some authors as to represent a rather narrow defined strategy of environmental change. The theory is associated first and foremost with the eco-efficiency revolution as it emerged during the 1980’s in industrial circles, and with the policies of sustainable consumption as put forward by the UN/UNEP, the OECD, WTO and similar mainstream institutions. In what follows we will build upon a (second generation<sup>2</sup>) formulation of ecological modernization theory, which combines a focus on eco-efficiency, green products and technologies with an equally important emphasis on the ways in which citizen-consumers in everyday life do or do not start using and valuing these green products, services and apparatuses. While starting from an eco-rationalization perspective, our profoundly sociological analysis will be used to explore the ways in which groups of citizen-consumers bestow these green products, services and technologies with new meanings while putting them to forms use that in the end result in consumption practices taking on a different form and content.

## **2. Between consumption and demand: investigating innovation processes at the consumption junction**

The sociology of consumption is one of the more promising fields in the social sciences, and Alan Warde can be credited for the significant inputs he made to this emerging field over the years. Warde has been arguing for a ‘sociology of consumption’ since the 1980’s and did substantially contribute himself by providing concepts and schemes derived from the works of both classic and contemporary sociologist, most notably Pierre Bourdieu, Ulrich Beck, and Anthony Giddens. To move away from individualist account of consumption as dominant in economics and psychology, he discusses ‘ordinary’ practices that are governed by dynamics that are partly beyond the control of individual consumer-choices. To situate these practices in a broader context, he discusses the production-consumption-cycles and systems of provision which are behind and govern situated practices like cooking or eating out. To prevent a one sided, productivist analyses of consumption, he argues that production-consumption cycles have to be understood in terms of different modes of production and provision on the one hand, and different modes of access and use on the other. Different modes of provision relate to diverging rules of access and use, also implying different evaluations and enjoyments from the side of (groups of) consumers. To study their everyday life entrenched ways of handling products and services, a praxeology or chreseology of consumption is asked for (Warde, 1990, 1992, 1994a, 1994b, 1995; Miller, 1995; Edgell et al., 1996).

Not by coincidence, Warde took a special interest in issues of the development, innovation and diffusion of new products in ‘market contexts’ after his move to the Manchester based Centre for

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<sup>2</sup> For a discussion on ‘first’ and ‘second’ generation ecological modernization theories, see Van den Burg, 2006.

Research on Innovation and Competition (CRIC). This resulted in a series of interesting research papers, together with Elizabeth Shove, Dale Southerton and others. This research is specifically aimed at gaining a better understanding of innovation from a sociology of consumption perspective. In the CRIC discussion paper no. 40 (Harvey et al., 2001) it is argued that consumption sociology so far did not show much interest in the commercial and market strategies of the providers of new products and services. Consumption sociology tended not to dive too much into issues of selling, advertisement, profit making and the creation of new markets. Sociologists do not feel at home with the economic and technocratic views that tend to dominate those segments of provision systems involved in the developing of new products and markets. They prefer to reside in analyses of meaning, display, identity- and lifestyle-formation as these are regarded the most relevant themes in the sociology and anthropology of consumption. As a result, there is a gap between market-oriented innovation studies that conceive of consumption primarily and sometimes exclusively as *demand* issues on the one hand, and sociological and anthropological accounts of consumption which are characterized by an 'over-socialized' view of consumption as determined by meaning, identity and social relations on the other (Harvey et al., 2001). The challenge then is to reconnect both perspectives on the development and use of new products and services, resulting in marketing studies taking into account issues of lifestyle (mis)fit, meaning and user-practices, while sociologists start investigating the ways in which (profit driven) providers operate when 'constructing' demand.

Following the suggestion of Schwartz-Cowan (1987), the most promising places to start developing a new synthesis between market- and technology driven innovation perspectives on the one hand and every day life and meaning oriented perspectives on the other, are to be found at the consumption junction. The consumption junction is defined as all those places where provider-logics meet the lifeworld-logics of citizen-consumers as end-users of new products and services. Marketeers and product developers meet consumers who are not just there to reveal preferences but who are performing their daily routines and from that perspective also look for the products and services they normally use to materially furnish their lifestyles. The consumption junction is to be found in the retail-outlet, where groups of citizen-consumers come to do the shopping and where they run into a sometimes dazzling range of new products, product presentations, information-flows and images that providers use to sell their products, services and storylines. But also the home, the fuel-station, the airport, the restaurant and the sport-canteen are examples of (social practices enacted at) the consumption junction. The consumption junction as a concept is used to refer to the sites of all those situated social practices that together make up the social lives of citizen-consumers. As we will discuss in more detail below (section 4 and 5), 'things' - products, technologies - are a constitutive component of social practices. Without objects there are no practices. You 'need' things in order to be able to cook, work, relax, travel or sport. So in the context of providers looking for new markets, social practices at the consumption junction are the places to be. Here they can join with organized groups of citizen-consumers who 'have to' make use of a range of objects, technologies and services to be able to do what they normally do. Connecting the study of innovations to social practices has a major advantage over (economics and psychology based) individualist accounts of innovation and diffusion. By taking social practices as units of analyses, innovations are researched in context, in direct connection with everyday-life consumption practices. Moreover, organizing innovation research with the help of a selected number of social practices in different consumption domains helps solve one of the pressing problems marketers have to face nowadays: it reduces the overwhelming diversity of possible use-modes, modes of access and applications of the ever expanding range of new products and services.

In the next section, we will discuss in more detail the research questions we think to be most relevant for innovation research in between a demand and a consumption perspective. These questions focus on one specific type or category of innovations. We will discuss the development, innovation and diffusion as well as the appropriation and use of all those products, services, concepts, courses of conduct and cooperation which are developed with the aim to contribute to the reduction of the environmental impacts and consequences of consumption. For reasons of convenience, we will just refer to them as ‘green’ innovations and devices<sup>3</sup>. In elaborating our research questions and key concepts we hope to be able to show however that the form of eco-rationality we think appropriate to apply to social practices of consumption stretches beyond the level of isolated eco-technological imperatives.

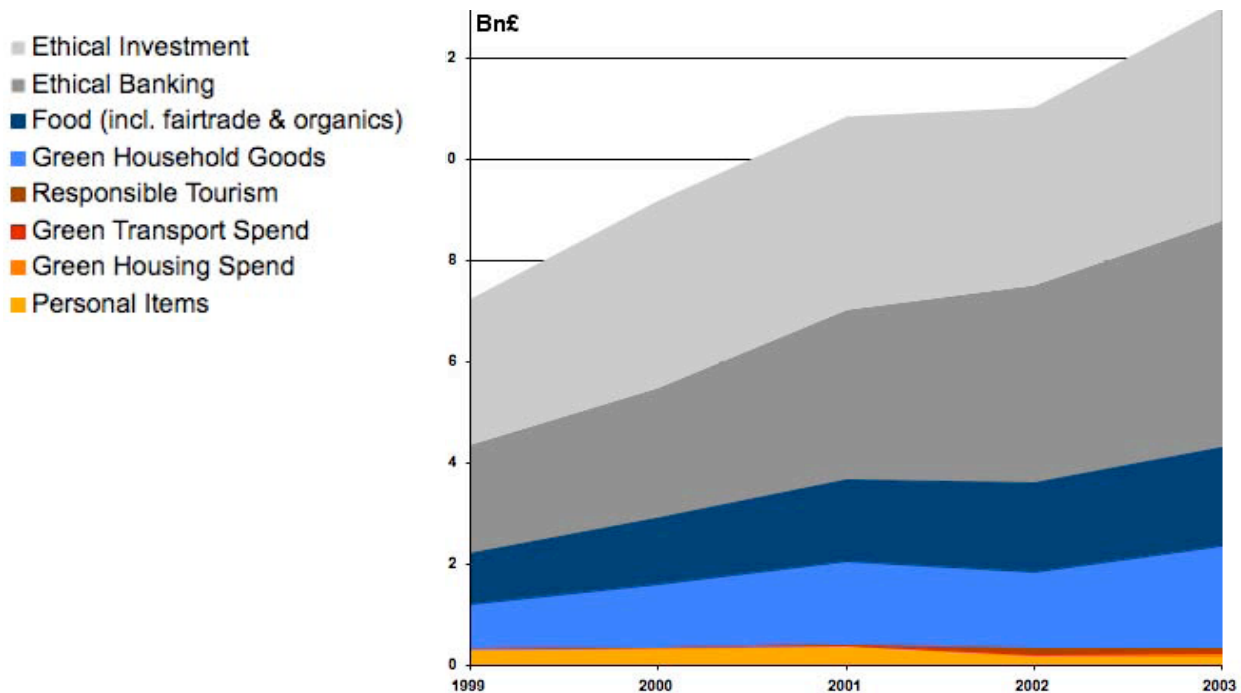
### **3. The Ecological Modernization of Social Practices: three sets of research questions**

Within ecological modernization theory, it is claimed that since the 1970s there have emerged sets of criteria and principles which facilitate a more rational organization of production-consumption-cycles when judged from an environmental perspective. These criteria for what counts as ecological rational products, technologies and organizations were developed mainly in scientific circles but have been spreading – due to active forms of environmental politics initiated by both governmental and non-governmental actors – also in business sectors, where they were picked-up by pro-active companies and incorporated in overall company strategies and more specific product policies, especially since the 1980’s. As a result, nowadays in OECD countries it is hard for average citizen-consumers to enact their daily consumption routines without being confronted sometimes at some places with green innovations of some kind. The rather recent origin of green innovations and their becoming more widespread in modern societies make them into an interesting object of study for sociologists of consumption. Of course the development and diffusion of green innovations differ for different sectors of society and the social practices located or contained in them. Figure 2 shows the uneven development of this process using as a rather approximate indicator the levels of spending in the different consumption domains.

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<sup>3</sup> We are aware of the fact that the label ‘green’ is sometimes used in a more narrow, circumscribed way when compared to the broader, classical Brundtland definition of sustainable development. The label green is just used for ease of reference however and must be interpreted as representing environmental change as discussed in the post Brundtland discourse; see also our epilogue.





Figuur 2: the emerging demand for green products (source: EPI 99-2003 (UK) - Coop Bank / NEF/ FFF).

The main research question we think to be especially relevant for sustainable consumption pertains to characterizing the nature and level of ecological modernization realized so far over a series of key social practices in different consumption domains. This question can, with the help of the conceptual model displayed in figure 3, be specified into three subquestions:

1. How can the level of green provision be specified both with respect to the quantity and the quality of the green innovations made available by providers to participants in social practices
2. What can be said about the penetration or incorporation of green innovations into social practices of consumption and in particular the key dynamics of change that are connected to new products, objects and technologies entering social practices?
3. For citizen-consumers participating in social practices, what can be said about the role of green innovations in processes of identity formation and the emergence of green lifestyles and lifestyle-politics, both at the level of individuals and social practices?

These research questions are very broad and ambitious and answering them in any serious empirical way will take several years of research<sup>4</sup>. Our present aim is to sketch the theoretical bodies of literature that could be used to specify and elaborate the central research questions. Research question number three can be specified and elaborated with the help of sociological and

<sup>4</sup> These research questions are the central focus of a social science research project on 'CONsumption TRAnSitions for SusTainability (CONTRAST) as initiated by Wageningen University and Tilburg University in collaboration with several research institutes and the government departments in the Netherlands. See also the paper by Sander van den Burg and information at our website, <http://www.contrast-research.nl>, where we would welcome input or comments.

anthropological literature on life-styles, identity formation, and life(style) politics associated with the works of Zygmund Bauman, Beck, Bourdieu, Warde and Giddens in particular (see section 6). The second set of questions will be elaborated upon with the help of theories of practices as developed by again Giddens, Warde and Bourdieu, and more recently by Andreas Reckwitz and Theodore Schatzki in particular. This body of literature on the dynamics of social practices will be confronted with the ideas on technology related

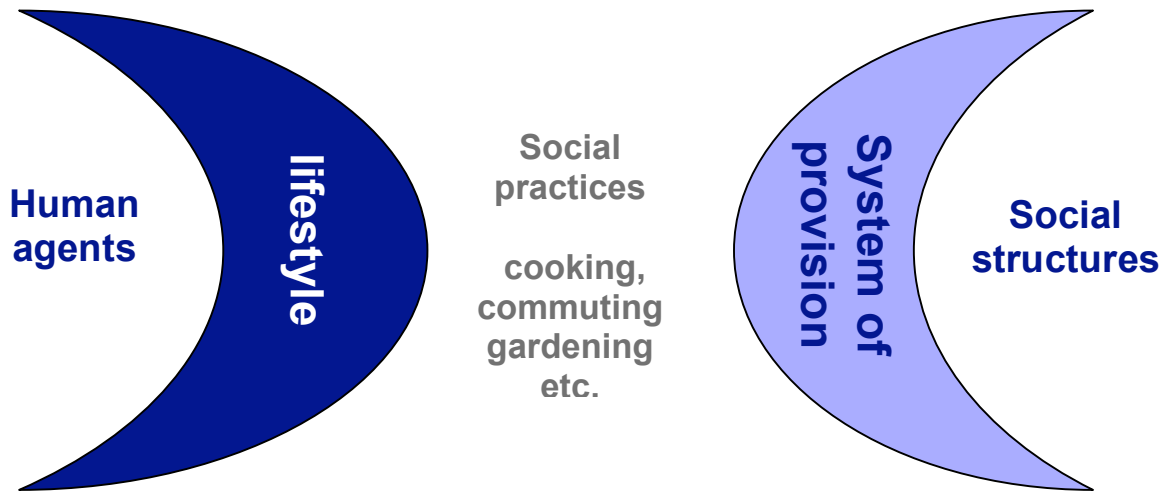


figure 3: social practices as units of analysis

(environmental) change in social practices as put forward by recently developed ‘transition-theories’ and in particular the application and translation of these theories to everyday life practices of consumption by Elizabeth Shove (2003). One of the key issues in this respect is the influence of technology and the human-object interactions at play (section 5). The first set of questions comes closest to the topic of green innovation as discussed so far with the help of the work of Warde and the literature on ecological modernization. It is this question on the nature of green provisioning that we will address first in some more detail.

#### **4. Provider strategies, differentiation and the emergence of hierarchies of green qualities**

In the context of so called integrated chain studies, production and consumption chains are depicted with respect to all the relevant links or spots of activity clusters, from design and production via retail and distribution on to the boxes of consumption or end-use (Marsden et al, 2000; Flynn et al, url). Most of the times, in these analyses the consumption box is assigned the status of black box, since when viewed from the overall dynamics governing chains, the contribution of consumption and consumers is judged to be marginal and of a different nature. Chains, as the argument goes, are governed by the dynamics of markets (competition, profits, cost-saving, in- or outsourcing etc) and technology (new products, new technologies for production, packaging and transport etc). Consumers perhaps do matter, but in a very restricted and circumscribed way: they have to accept and go along with the suggestions put on offer by the providers and retailers dominating the system. The most straightforward way to arrive at a

greening of consumption is then to target the 'big players', who for reasons of profits and emerging new markets will provide more sustainable end products like cars, houses, pizza's and planes. As discussed above, Joseph Huber and with him many environmental scientists adhere to this 'don't bother the consumer' argument and strategy for the greening of consumption.

Even if one disagrees with the top-down, technocratic outlook of this kind of approach, it must be recognized that the power relations between providers and consumers in production-consumption-chains most of the time are very uneven and in favor of providers, who dominate and set the scene in many corners of the production-consumption systems (Flynn et al., url). Decisions about the extraction and utilization of raw materials, the use of (green) energy for production and transport or about the kinds of packaging materials brought into play, most of the time rest in the hands of companies and big retailers. In the systems provisioning our daily food for example, the crucial role of retailers as powerful agents is well documented, also when it comes to the provision of organic food (Richter et al, 2001). When talking about the 'consumerist turn' or 'the empowerment of the consumer' it is good to be aware of the context bound nature of these processes. It is at the consumption junction, where providers meet with and 'join' consumers, that consumers as end-users really matter. It is primarily at the consumption junction that citizen-consumers are taken into account with respect to their (future) preferences and their opinions about the strategies followed by providers and retailers. When trying to specify what is meant by consumerist turn and consumer-empowerment, we take these concepts to refer to a circumscribed but still very relevant set of changes in the ways providers approach product- and market differentiation.

Providers with a low or absent consumer-orientation base their differentiation strategies on classical market and technology arguments only or primarily. They of course provide green variants of their products, but tend to do so only if forced by governments, when pressurized by environmental and consumer organizations, or when markets for these green products have already proven to be successful and stable. Providers not affected by ideas about consumer-empowerment do not show much interest in making themselves visible and present at the consumption-junctions. They do not spend too much efforts in organizing the ways in which end-users run into their packages of products and services. Alternatively, providers with a pro-active orientation towards citizen-consumers will strive for as many and as well organized confrontations with relevant groups of end-users as possible. They seek to connect frequently and in authoritative ways to the kind of social practices typically enacted by the groups of end-users which tend to go along with the typical products and servicing styles they have on offer. In short, citizen-consumer oriented providers display active differentiation strategies at the consumption junction.

Getting to know the habits and orientations of the groups of end-users typically attached to their groups of products and services helps providers and their marketers to construct more elaborate and effective hierarchies of (green) qualities of their products and services. There are a number of issues involved in active provider-strategies at the consumption-junction. We will discuss four issues we think to be relevant in this respect.

First, differentiation strategies can be manifold, since the object of differentiation can be of different kind. The most obvious form is when the products or things on offer are differentiated. In order to make the greener product or device visible, most of the time a label, a brand or a form of certification will be used. One of the things that bother providers in this respect is that introducing one specific green product or device in a family or category of products can have overall negative market impacts as a consequence of the non-green products being degraded in quality. For this reason some companies do not apply ecological modernization strategies at the

level of products and individual devices or services. They instead claim that all their products and services are produced and distributed under a green company regime, made visible by ISO14000 or similar standards in combination with specific corporate PPP-activities<sup>5</sup>. An environmental relevant form of differentiation next to products themselves are the modes of provision and access accompanying the products. Some authors argue that the shift ‘from ownership to usership’ for example is not just in line with dominant developments in markets (Rifkin, 2000) but at the same time potentially relevant for realizing major environmental benefits. The key example here is the case of product-service-systems (PSS) that realize environmental benefits by economies of scale on the one hand and by facilitating more collective forms of consumption (the shared use of cars, washing machines etc) on the other (Meijkamp, 2000; Scholl, 2006).

Second, what is aimed to be established in and through differentiation strategies can be of different kinds. To specify this content, it is important to get to know the basic elements which are referred to under the heading of green, environment or sustainable development? What are the most crucial dimensions of the environmental risk-profiles attached to ordinary social practices at the consumption junction? An important distinction here is between green quality as the ‘presence of something valued positive’ versus the ‘absence of something valued negative’ by citizen-consumers. When Shell advertises ‘Pura’ gasoline as better for your car and for the environment, or when providers of double or triple glazed windows promise you turn-back rates of investments within five years, they are referring to green consumer concerns of the first category. As important for green innovation however is the avoidance of risks. Health risks (in environmental policies referred to as ‘primary standards’ in comparison to the risks for ecosystems) are the prime example of the second category, and in the work of Ulrich Beck one can find many examples of the ways in which risks impact upon social practices in reflexive modernity. Consumption under the positive logic of the distribution of ‘goods’ provides different points of reference for evaluation of qualities when compared to consumption under the negative logic of risk-avoidance (Beck, 1986; Mol and Spaargaren, 1993). Flynn and colleagues provide a good description of the hierarchies of food (risks)-qualities that – in a period of major food-crises - were constructed in the 1980’s and 1990’ when retailers took over many tasks in the area of food-quality control from UK government (Flynn et al., url; Marsden et al., 2000; Oosterveer, 2005).

Third, differentiation strategies can be more or less brought in line with emerging (green) consumer concerns. From international comparative research it has become clear that green consumer concerns in different countries are different in almost all relevant consumption domains (Cohen, 2005). There is no space here to go into the literature on the ‘creation of needs’, but it is obvious that from a sustainable consumption perspective the issues investigated in this area are very interesting and relevant (Pantzar, 1997). Consumer concerns do not just fall from the air but are social constructs containing different layers and combining different elements. Providers can take an active stance here when trying to establish a non-trivial dialogue with targeted groups of potential consumers. Schot et al. discuss the efforts of providers to establish or at least help organize specific settings where citizen-consumers are invited to experience with and reflect upon (future) products and services made available by providers. They refer to these organized provider-consumer interactions at the consumption junction in terms of processes of ‘mediation’ and claim that there are two basic set-ups to be derived from

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<sup>5</sup> This is for example the case with IKEA, a worldwide company that acquired a strong position in the domain of dwelling or housing but refuses to furnish her consumption junction with specific green model kitchens, living rooms or bathrooms since they fear this would turn all other model and products grey (Martens en Spaargaren, 2002).

the literature on empirical experiments in this respect. Mediation ‘organized by providers’ is perceived differently by citizen-consumers when compared to mediation in settings organized and supervised by independent third parties. It goes without saying that trust mechanisms to an important extent help explain why innovation strategies and quality hierarchies are approached differently by citizen-consumers in both kind of settings (Schot and de la Bruheze, 2003).

Summarizing our discussion on the first set of research questions pertaining to the specification of green provisioning by providers for participants in social practices, we conclude – in line with ecological modernization theory - that the market mode of provision is to be regarded as the most relevant and dominant mode of provision in modern societies. Innovation strategies are market and technology driven, and take the form of strategies for the differentiation and the creation of hierarchies of green qualities. When investigating provider strategies of innovation and differentiation, a distinction can be made between consumer oriented and non-consumer oriented strategies. Consumer-oriented strategies are distinct for the pro-active stance they represent towards the need for providers to participate in (and seek to orchestrate certain aspects of) social practices at the consumption junction. Providers pursuing consumer-oriented innovation strategies look beyond the dynamics of the market and technology, and seek to get to know and connect to the broader dynamics governing social practices at the consumption junction. When doing so, they come to acknowledge the fact that social practices of consumption are not exclusively served in the market modes of provision and access. Social practices of consumption always and inevitably represent a mixture of market modes, state-modes and especially domestic and informal or communal modes of provision and access (Harvey et al. 2001, p.62). It is at this point where the sociology of consumption and in particular theories of social practices come in and have something to offer for the understanding of processes of innovation and change in social practices. In the next sections, we will discuss sociological ‘theories of practices’ in more detail and show how they approach technology related and identity related dynamics of change respectively.

## **5. The technological dynamics of (environmental) changes in social practices**

The most defining characteristic of theories of practices is the fact that they put social practices forward as the key unit of analyses in social science theorizing and research. The works of Giddens and Bourdieu are generally regarded as sociological theories of practices, with ‘the Constitution of Society’ (Giddens, 1984) and ‘Outline of a theory of Practice’ (Bourdieu, 1977) as cornerstones. As Giddens in particular has stated, the motivation for developing theories of practices was to get away from existing dualisms in the social sciences like ‘subject-object’, ‘actor – structure’ and ‘micro – macro’ and to replace these dualism with a series of concepts (practices, habitus being the most important in this respect) that could turn these dualisms into dualities, emphasizing the mutual dependencies and interconnectedness of the elements in the dichotomies. One of the benefits of applying these theories also to (sustainable) consumption behaviours is the fact that it makes possible the break with individualist accounts of social practices, where behaviours are treated as the results of individual decision-making primarily (Spaargaren, 1997, 2003). This individualist models are particularly dominant in social psychological and economic accounts of consumption behaviours. As we will discuss in section 6 in more detail, the break with individualist models does not imply that reasons, motives, interests and emotions of human agents are dismissed. They are however situated in (and to be researched

at the level of) social practices. In the words of Giddens: theories of practices are about ‘decentering the subject’ but at the same time emphasizing a specific kind of ‘subjectivity’. The second major benefit of working with theories of social practices in the field of consumption studies is the fact that they emphasize the routine, pragmatic, recursive, ‘ordinary’ and everyday-life character of action. Most of the things we do when enacting social practices, are done without discursive reflection or the giving of discursive accounts. Every day activities are rooted in our practical consciousness, in the habitus as the ‘structured and structuring structure’ that makes possible our daily routines without having to consciously consider all the time about ‘what next’. The pragmatic, routine character of daily life does not however preclude actors from being knowledgeable and capable agents who times and again know what to do, what to say, how to handle things, also when confronted with new, unexpected situations. Again, this view of practices helps us to get away from specific individualist accounts of consumer-behaviour, in particular the kind of (conscious, rational) decision-making behaviour as emphasized in many (marketing) studies. Theories of social practice provide a more in depth understanding of the different ways in which people orient themselves toward (new) products and services and also provide an understanding of the dynamics of change that moves beyond the individual preferences and orientations of individual actors.

Although Bourdieu’s ‘Distinction’ (1979) – probably the most cited work in the sociology of consumption – is all about the ‘goods’ people use to distinguish themselves from others, neither Bourdieu nor Giddens provide in their theories of practices any detailed account of how we should understand the role of goods, objects or things in the context of social practices. As for example Rob Stones (2005) has pointed out, Giddens was formulating his structuration theory in the late 1970’s, when the nowadays well known Actor-Network-Theories of Callon, Bijker and Latour amongst others were not yet widely discussed in the social sciences. This perhaps explains why the theme of ‘technology’ is given hardly any attention other than being relegated to the realm of theories of industrial society which mistakenly hold technology for the prime mover of social change (Giddens, 1984). We think the reworking of the theme of technology and more in general the ‘materiality’ of social practices is one of the substantial contributions made by the ‘second generation theories of social practices’. The key authors here are Theodore Schatzki (1996, 2002), Andreas Reckwitz (2002a, 2002b) and again Alan Warde (2004, 2005). They (critically) connect their theories of social practices to the works of Giddens and Bourdieu<sup>6</sup>, while offering more detailed accounts of the concept of ‘social practices’ and particularly the ways in which ‘human agents’ and ‘things’ can be said to ‘hang together’. We will discuss these recent theories of practices in order to derive from them a better understanding about the role of objects and technologies in the context of (environmental) change in social practices.

To make a proper discussion possible about the role of artefacts or objects in social life, it is important according to Schatzki to make a distinction between orders/arrangements on the one hand and social practices on the other. He elaborates on the differences between the two concepts by discussing orders and arrangements using the works of Latour and Foucault and by connecting social practices to the works of Giddens and Bourdieu in particular. Orders or arrangements are just ‘things hanging together’. Order is ‘Zusammenhänge’, existence of nexuses. These things, or entities or substances, can be either humans, artefacts, living organisms or things. They hang together in arrangements and can be characterized with respect to the kind of relations or

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<sup>6</sup> Other major sources of inspiration are (the later) Foucault, Latour, but also Garfinkel and Taylor.

dependencies that exist between them<sup>7</sup>. Having defined orders/ arrangements and the relations between their components, Schatzki then goes on to define social practices and the relationship between orders/arrangements and practices. Social practices in their simplest form are ‘organized activities of human agents’, with activities being defined as ‘doings and sayings’. Practices then are inherently connected to (knowledgeable and capable) agents acting. Without activities of human agents, there are no practices. When discussing the relationship between orders/arrangements on the one hand and practices on the other, Schatzki argues that that orders “*are established in practices*” (Schatzki, 2002, p. 23 ital. added). So orders/arrangements are established in practices, but they do not coincide, the crucial difference between the two categories originating from the specific role of human agents. Analytically separating the two “facilitates more careful consideration both of the different roles categorically disparate beings play in social life and of the relations of actions and words to ordered substances” (idem, p. 23). This analytically separating social practices as the doings and sayings of human agents from arrangements as ordered components opens up the possibility to confront theories of practices with the Actor Network school of thinking as especially connected to the work of Bruno Latour (1983).

This confrontation is necessary and important, according to Reckwitz, because the first generation theories of practices did not adequately confront the “unprecedented expansion of hybrids, ‘quasi objects’, non-human creatures that are neither pure nature nor cultural projections, but indispensable components of social ‘networks’ or ‘practices’”. (Reckwitz, 2002b, p.208). Especially in the light of the explosion of technical artefacts in contemporary societies, it becomes more difficult to “overlook the constitutive status of things for social practices” as put forward most prominently by Latour (Reckwitz, 2002b, p. 209). Reckwitz, following the elaborate formulation of Schatzki’s theory of social practices, explores in some detail how the status of objects and material worlds can be ‘restored’ after having been removed from central stage in sociology as the result of the cultural or linguistic turn brought about by the work of Wittgenstein in particular. The impact of things in the social order must be fully recognized and conceptualized, not just in terms of representations, or as things that are assigned and attributed meaning to by human agents. The effects of the objects themselves, the role of interobjectivity next to intersubjectivity, and objects being ‘constitutive’ for social practices all have to be considered and conceptualized in more detail. Reckwitz proposes to complement Schatzki’s work with Latours’ idea of the equally important constitutive role of things for social practices: ‘things handled’ are as important for theories of social practices as ‘minds/bodies performing’, so Reckwitz argues. In fact, he contends, “one can say that both the human bodies/minds and the artefacts provide ‘requirements’ necessary to a practice” (Reckwitz, 2002b, p. 212). Without things, objects and artefacts there is no social practice. The crucial role of things and their use for social practices is expressed in the one of the most elaborate definitions of the concept of social practices as it is provided by Reckwitz and cited by Warde with great consent. Social practices are:

“a routinized type of behaviour which consist of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, ‘things and their use’, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge” (Reckwitz, 2002a, p. 249, cited by Warde, 2004, p. 17).

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<sup>7</sup> Schatzki distinguishes four kinds of relationships: causal, spatial, intentional and ‘prefigurational’, the final form referring to relations between components in the present that particularly enable or constrain some future activities

Reckwitz concludes that Schatzki does not pay much attention to reflecting on the constitutive role of things for social practices. A more elaborate discussion and recognition is asked for, thereby partly integrating Latours' position in Schatzki's. He suggests that this incorporation could be realized somehow along the following lines. In the course of the recursive reproduction of social practices, things get attached to routinized meanings and ways of handling and know-how. In this way, *things incorporate these meanings and knowledges within the practice*. They have effects by being coupled to routine forms of knowing that co-constitute practices. Phrased in a Latourian way one might argue then that "things 'act', so to speak, as 'resources' which enable and constrain the specificity of practice" (Reckwitz, 2002b, p. 212).

We have been elaborating upon Reckwitz formulation of the material dimension of social practices, since we hold his account of theories of social practices as being the closest to ANT as possible, without violating some of the most cherished assumptions of theories of practices: the crucial importance of the role of knowledgeable and capable agents for the shaping of social life and the fact that objects or things do not act in a similar way as human agents. In fact we think Schatzki – in his emphasis on the distinction between order/arrangement and social practices – to be a bit more at a distance from Latourian thinking as Reckwitz would have it. For Schatzki, social practices are about activities of human agents, not about activities of actants, quasi actors or hybrids. He writes: "I contravene those theorists who contend that practices comprise the actions of various entities and not those of people alone" (Schatzki, 2002, 71). Emphasizing over and again the importance of human activities for social life is not an ethical choice for Schatzki, but founded in the historical fact that "the specific character of social life is to a remarkable extent attributable to the bundled activities" that practices are (Schatzki, 2002, 71).

What kind of conclusions can we derive from the discussion on the role of objects, things and their uses for process of the ecological modernization of social practices at the consumption junction? One obvious conclusion is that objects do matter, and that the role of (green) products, technologies and artefacts can hardly be underestimated in their significance for understanding environmental change at the level of social practices. As the sociology of consumption has emphasized in many different ways, products and the uses people make of products and services, are important for understanding modern life. Commodities help shape practices and lifestyles, and many of the know-how and capabilities of human agents are about how to handle objects in the context of everyday routines. With the help of a theory of practice, the handling of products and technologies by human agents are understood as being "not dependent on presumptions about the primacy of individual choice or action, whether of the rational action type or as expression of personal identity" (Warde, 2005, p.6). The routine appropriation and use of products and services are to be researched and understood as relevant social phenomena in themselves, not just in relation to 'consciously choosing' mentally loaded individuals. Second, theories of practices indicate in what ways objects and technologies are related to and involved in processes of changes within practices. Two important connections between objects/technologies and changes in social (consumption) practices are pointed at by Warde and Reckwitz: i) the breakdown or getting out of order of products, devices and habits in the course of the reproduction of the practices and ii) new objects and corresponding ways of handling that are entering social practices. In both cases, change is connected to the temporary break-down of existing routines. De-routinization will result from 'fatal moments' (Giddens) not just in the relation between human beings but also in the relation between human beings and objects, as the break-down of the electricity or water provision to households illustrates.



Isn't this just stating the obvious? Objects do matter and studying their role in social practices can enhance our understanding of environmental changes at the level of social practices. We don't think so, since most studies on environmental change are either on the side of rather deterministic (technological) system thinking or on the side of object-loose individual attitudes and norms. We do however agree with Warde that these discussion on the level of ontology or theory still have to be translated into empirical research with respect to circumscribed social practices and that this is not – as also Reckwitz and Schatzki are the first to admit – a one to one issue. Warde notices with respect to the theories of practices of Reckwitz and Schatzki that “as general theories of practice they tend to be idealized, abstract and insufficiently attentive to the social processes involved in the creation and reproduction of practices” (Warde, 2005, p. 5). We will discuss as our final theme in this section then how practices can be made object of empirical research, linking some key notions from the theory of practices with one empirical oriented body of literature on technological change, - transition theory.

When looking for ways to start operationalizing the concept of social practices for empirical research, the distinctions introduced by Schatzki between (basic) activities, tasks and project on the one hand and the distinction between ‘integrated practices’ versus ‘dispersed practices’ on the other can be regarded as an important first step. Integrative practices are “complex entities joining multiple actions, projects, ends, and emotions” (Schatzki, 2002, p. 88), with cooking practices, farming practices and business practices offered as empirical examples. Integrative practices are “the more complex practices found in and constitutive of particular domains of social life” (Schatzki, 1996, p. 98). Dispersed practices on the other hand are more ‘basic’ ways of sayings and doings, like answering, or chatting, or walking or greeting etc. Dispersed practices can be found in all corners of societies and are part of many integrated practices. Integrated practices as well as dispersed practices are part of the “webs of interweaving practices in which humans exist and co-exist” (Schatzki, 2002, p. 88). Warde himself adds to this Bourdieus’ concept of fields, which refer to ‘major areas of practices’ or domains of social life. Here we can think of the fields of sport, education, music, food, decoration etc. The concept of fields refer to “a relatively autonomous structured domain or space, which has been socially instituted and which has a history that is known and referred to by agents.” (Warde, 2004, p.12)<sup>8</sup>

The ways in which consumption practices are ‘embedded’ in broader socio-technological structures and how technological changes at landscape levels (the webs of practices?) relate to changes at regime-level (clustered practices/ integrated practices?) and project or niche level (social practices?), are among the basic questions dealt with by recent theories of transition and system innovation. Theories of (technological) transitions have especially been put forward by a number of authors from the traditions of Sciences and Technologies Studies (STS), the school of Large Technical System approaches (LST) and Latourian Actor Network theorists (Geels, 2004, 2005; Schot, 1997; Kemp, 1994). They argue that ‘technology related’ patterns of transitions are best understood when analysed from a historical perspective and from the interplay between innovation processes at all three levels. But where do we start looking for the most relevant factors and processes? Different (research strategies) seem to be possible in this respect. Mainstream transition theory seems to suggest that it is best to start at the niche-level, and then work our way up to the regime and landscape level. Some authors however argue that it can be as

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<sup>8</sup> The differences between ‘integrative practices’ and ‘fields’ are not to be found in the number and scope of the practices they embrace, but refer instead to the different dynamics they represent, as we will discuss in section 6 in more detail.

relevant to start mapping processes at landscape levels, gradually descending from major infrastructural systems down to the level of domestic practices attached to them (Graham and Marvin, 2001; Van Vliet et al, 2005).

Elizabeth Shove in her 'Comfort, Cleanliness and Convenience' (2003) has shown that the dynamics of technological change at the level of everyday-social practices like cooking, laundering, bathing or indoor climate control are not understood adequately when working only in the vertical dimension and in particular only bottom-up (niche-regime-landscape) as suggested in some versions of transition theory. The bottom-up view of technological innovation is dismissed using the example of airconditioning. She is able to show how airconditioning has entered households worldwide in a structured, uniform, top-down way. Neither is the reverse route – landscape- regimes-niches the only or most promising way of analysing relations between levels, as she illustrates from the history of household-based domestic routines like for example laundering practices. From here rich empirical studies on domestic social practices, she in the end concludes that there is more to technological change than just the vertical integration of practices. She introduces the notion of horizontal coordination or integration between social practices as a second way of investigating the dynamics of technology related changes, whereby the notion of 'system of systems' can be of used to refer to *clustered social practices at one level of analyses*<sup>9</sup> (Shove, 2003).

The suggestion we think can be derived from Shove's analyses – both in its empirical and theoretical dimension – is that empirical research on the ecological modernization of social practices might take as its most promising starting point the clusters of integrated practices like cooking, laundering, shopping, leisuring that people know, recognize and refer to as constituting the domains of everyday life. From this starting point, the integration of social practices can be explored both in horizontal and vertical directions by looking at the ways in which technologies 'hang together' with human agents in emerging patterns of transition. Technology related dynamics of changes in social practices - lock-in mechanisms, momentum, acceleration, path dependencies, break-down, lack of coordination, innovation etc - are phenomena we think to be at work both in the horizontal an vertical dimension, ranging indeed from the local niche up to the global landscape. However, these 'mechanisms of change' can never be used to explain (environmental) changes without reference to social practices as constituted by human agents. Also when lock-in mechanisms seem to 'force' arrangements of entities - humans, artefacts, living organisms or things hanging together – to develop in a certain direction<sup>10</sup>, it still holds true that 'orders or arrangements are *established in practices* and cannot be understood without taking into account the role of human agents in the constitution of social life. This brings us to the final section, on the role of agency, meaning and identity, and the role of individual agents and their lifestyles in the context of social practices.

## **6. Meaning in practice: (green) CCC-levels, identities and lifestyles.**

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<sup>9</sup> As discussed earlier – Spaargaren, 2005 – we tend to depart from Shove's analysis when 'agency' and social integration seems to become restricted to the horizontal dimension – managing the system of systems - , while assigning a crucial role to technology especially to (system) integration in the vertical dimension. What results is 'vertical *structuring*' by technology and 'horizontal *ordering*' by agents (Shove, 2003, p. 192).

<sup>10</sup> As we notices already, Schatzki uses the term 'prefiguration' in this respect

Theories of social practices are partly a response to the ‘over-socialised’ and ‘individualized’ accounts in which consumption is seen as resulting from the meanings, goals and interests of individual human beings. To correct the view of consumption as primarily connected to display, meaning and identity, theorists of social practices put forward the overwhelming influence of routine, every day practice, the ‘just doing and handling’ of things, normality, practical consciousness, pragmatic understandings and practical intelligibility. To correct for the individualist accounts of consumption, they emphasize the ways in which meanings and understandings, practical rules etc are becoming attached to routine activities at the level of social practices, thereby becoming an attribute not of individuals but of practices. In this section we will first discuss how contemporary theories of social practices analyse the role of meanings, identity and also display at the level of social practices. We will explore how meanings become attached to (green)objects, products and technologies at the level of social practices and how (new) meanings and identities are connected to innovation, change and transition. Second, we discuss meaning and identities in the context of individuals and their lifestyles, arguing that the concept of lifestyle is crucial for the sociology of consumption but given much too little theoretical attention in the second generation theories of social practices.

We start with the discussion on meaning at the level of social practices. Since arrangements are made up of both objects and human beings, it is important to see how meanings are attached and attributed to both categories. Schatzki argues that both objects and people have meaning, but only people have identity. Identities are ‘meanings interpreted and understood’ and therefore a subcategory of meaning which belongs only to human agents. Meaning is about what something is, while identity is about who it is (Schatzki, 2002, p. 47). Meanings then are attributed and become attached to both objects and people, but with people it is more complicated when compared to objects, since the self-understanding of people might differ from the meanings attributed to them by other peoples. With things it is less complicated though, since their meaning just derive from ‘where they fit in into existing arrangements’: an old car can be an object that brings you from home to work and it can become an olds-mobile cherished and maintained in the DS-network. A very important assumption in theories of social practices is furthermore that meanings derive from and must be analysed in direct relation to human activity. At this point Wittgensteinian thinking as incorporated in the theories of practice differ from Saussurian thinking, in which ‘meanings’ are said to emerge from ‘difference’, from positions in networks.

For understanding the dynamics of change in social practices, it is important to note that the rules, meanings and understandings at work in the reproduction of practices are most of the times of a practical, non-discursive nature. Meanings, norms and conventions become ‘normalized’ and are ‘taken for granted’ most of the times by human agents when involved in daily routines. Only when something in particular happens (a new product arrives, a technology breaks down, a conflict about a rule emerges) people switch-over from their practical consciousness and their pragmatic ways of dealing with things to the discursive handling of rules and objects, which (temporarily) become objects of special reflection, attention and dispute. Commenting especially on Bourdieu in this respect, Alan Warde has discussed the somewhat different nature of ‘fields’ when compared to ‘practices’ as used by Giddens, Schatzki and Reckwitz. Where practices refer to routine enactment and participating in the ongoing flows of doings and sayings, fields seem to refer to one particular category of action: strategic, instrumental, competitive action. Field refers to action as ‘performances’, as activities that are central to Bourdieu in for example ‘Distinction’: striving to be the best, to be different from the others. Warde argues that Bourdieu during his career gradually lost his original concept of ‘practice as organized ways of doings and saying’

and came to use instead the concept of field. As a consequence, a Bourdieu inspired sociology of consumption (practices) would result in an overemphasizing of competition and show-off and an under-estimation of habit, routine, the pleasure of participating and just ‘keeping to the level’ (Warde, 2004). Using social practices of cooking and eating out as examples, Warde is able to show that both the dynamics of field (top-chefs, Michelin stars etc) and the dynamics of practices (cooking class, family diner in nice restaurant) have their roles to play in constituting the domain of food practices.

What first and foremost captures the attention of researchers on social practices is the ‘normal’, the taken for granted nature of things and the ways new things entering the practice tend to become ‘normalized’ and embedded in existing meanings and conventions. Elizabeth Shove has introduced in the sociology of consumption a trilogy of concepts (Comfort, Cleanliness and Convenience, CCC) which facilitate research on the conventions governing practices. CCC is a set of middle range concepts that refer to “a variety of inter-linked conventions and habits and as such offer a vocabulary with which to explore and follow the evolution of routine, and with which to show how new arrangements become normal” (Shove, 2003, p. 3). CCC norms are ‘accepted’ and adhered to standards of quality in the provision of goods and services at the level of social practices. They are not adequately measures and conceive off at the level of individuals, since the ‘belong to practices’ and to the peoples and things making up these practices. So when a new product arrives in a social practice, it is important to analyse not just how the ‘object’ – the car, the washing machine or the recyclable bottle – fits in into the existing configuration of objects and their technical infrastructures. It is as important to analyse how these objects become incorporated into the CCC norms governing the practices and how these CCC-levels are affected by the normalization and incorporation of (new) things.

For research on sustainable consumption and on environmental change at the level of social practices, we think the concept of ‘green CCC’ to be of potential relevance in two respects. First, it can be used in empirical research to discuss how ‘green’ products and services relate to and perform when compared to the existing norms governing the practices. It is well known that the framing of green qualities and the identities that come along with more sustainable devices, courses of action and technologies, are subject to intense debate. The framing of organic food for example can be done with reference to personal health (Cleanliness...) or with reference to local/slow food standards and practices as critique of the fast and convenience food industries (Convenience). These framings very much influence the ways in which new products will (not) fit in into existing practices. The use of green CCC in reference to ‘general’ or existing CCC allows recognition of the fact that green innovations are valued and judged by citizen-consumers with the use of (quality) criteria presently reigning in the consumption practice: too expensive, inferior quality, wrong use-value etc. Second, green CCC as a concept can also be used to express and give form to the emerging criteria, standards and evaluation schemes used to help shape the very notion of sustainable consumption. When green CCC-levels are discussed, the performance of the objects and peoples in the context of social practices are analysed from one particular angle: their sustainability in the post-Brundtland meaning of the concept. As the theory of ecological modernization assumes, these new criteria and norms are have slowly evolved since the 1970’s and are gaining prominence over a range of ‘integrated’ social practices in modern consumer societies. To capture this phenomenon with specific reference to consumption practices, the notion of increasing levels of ‘green CCC’ could be used in a manner pretty similar to the way in which the concept of ‘green GDP’ is discussed and used at different levels of policy making. Contrary to the static, physical criteria as product LCA’s or foot-prints,

the sociological concept of green CCC recognizes and pays attention to the ‘embedded’ nature of environmental ways of doing and saying.

Our second and final discussion will be on the role of (green) lifestyles and identities as attached to human beings, and the ways individuals and their lifestyles relate to social practices. Individuals are participants of practices. They are the ‘carriers’ of many practices, and are involved both in all categories of practices as discussed so far, ranging from the basic doings of dispersed practices, via the (hierarchies of) tasks and projects involved in the reproduction of ‘integrated practices’ on to the fields that constitute the different (consumption) domains of modern life. While the notion of individual as carrier of multiple practices is accepted and discussed in the second generation theories of social practices, the concept of lifestyle seems to become gradually removed from stage. The life-style concept does not even appear in the index of Schatzki’s ‘Site of the Social’ and neither in the index of the 2001 volume he edited together with Knorr-Cetina and Van Savigny. It seems that ‘the practice turn in contemporary theory’ is turning its back to especially the elaborate discussions on ‘lifestyle’ as provided by one of the prominent first generation theorists of social practices: Anthony Giddens. For reasons beyond our understanding, the post 1984 (Constitution of Society) writings of Giddens on the self, lifestyles and lifepolitics (Giddens, 1990, 1991 and 1992 in particular) are detached from his structuration theory as theory of social practices and instead connected to (the political?) debate on the empowerment of the consumer, issues of ‘free choice’ and shallow forms of eco-rationalization of lifestyles and lifepolitics as discussed in section 1. The work of Giddens, Bauman and Beck on the changing role of individuals and their lifestyles in reflexive modernity are connected to the naïve image of “individuals actively and freely appropriating market-mediated lifestyles as a means of constructing and expressing their desired identities” (Harvey et al., 2001, p. 20). Adopting such an individualist account of consumption takes, Harvey et al. go on to argue, would ignore the crucial facts that “changes in the structure of consumption are brought about by shifts in the structure of production and retailing; that changes patterns of consumption emerge through macro-social shifts; and that there are changes in the form and content of social practices” Harvey et. Al (2001, p.3). Instead of interpreting Giddens’ lifestyle sociology as an individualist account to be contra-positioned to a rather straightforward determinist account of changes (but see our discussion on ‘macro-trends’ in food as contained in the box) in the form and content of consumption practices, we prefer to include the lifestyle sociology of Giddens in theories of social practices. At the level of ontology or formal theory this does not deliver any major inconsistency, so we would argue.

*Lifestyle-politics and retail power; the example of food*

The example of retailers in food-chains is often presented as an illustration not just of the power of retailers but also to show how they have gained this power in the first place and how they use it. The source of their power is the fact that they operate as a key-agent at the consumption junction! They have 'equal access' to both groups of citizen-consumers and providers. They 'help shape demand' in many different ways. First, by monitoring on a day-to-day basis the revealed preferences of their customers. But not just the buying of certain products is what they monitor and study. They secondly also look at the place of food as a lifestyle issue for different segments of the population; they offer lifestyle-specific frames for health, fitness and SD in direct relation to food. They study the changes in consumer-concerns for (healthy and green) food in society and over time, and they use this information for new product-design and development. They are, in one word, pro-active in constructing new (green) identities directly related to and shaped with the help of food. They not just do it to sell more products and make more profits; they are asked to act as main agents to control the quality of food. From the nineteen eighties onward, many central states deregulated the control of the quality of food. Or to be more precise, they re-regulated the quality control in such a way that private sector actors and agencies were invited to take over many of the more crucial roles (Flynn et al., url; Marsden et al., 2000; Dobson et al., 2003) formerly conducted by state-agencies. This general change in regimes for the control of qualities of food coincided with the emergence in the nineteen-eighties of a non-insignificant market demand for organic or eco-food in Europe and US at least. So also when (new) green qualities had to be established (with at least four or five dimensions of green or sustainable food fighting for priority (personal health, health and beauty of ecosystems, animal welfare and risks being very prominent and widespread) and when hierarchies of green qualities in food had to be offered both in terms of new products and in terms of differential conditions for getting access to the new products, the retailers had the lead. Environmental and consumer-organizations in many OECD countries at least were, stated bluntly, off-side: they preferred political activism and debate over taking the risky responsibility of co-constructing green consumption and green consumers.

At the level of ontology or formal theory, the definition of lifestyle as provided by Giddens in 1991 seems to us to connect well with contemporary theories of practices. Lifestyle then was defined as "a more or less integrated set of practices which an individual embraces, not only because such practices fulfil utilitarian needs, but because they give material form to a particular narrative of self-identity" (Giddens, 1991: 81). ). Lifestyles refer to the degree of coherence to be found in people's behaviour. The notions of integration and coherence are important because modes of action followed in one context (be it a practice, task or project) may reasonably differ with those adopted in others. Giddens refers to this phenomenon in terms of different lifestyle segments or lifestyle sectors. "A lifestyle sector concerns a time-space 'slice' of an individual's overall activities, within which a reasonably consistent and ordered set of practices is adopted and enacted" (Giddens, 1991: 83). If a person wants to maintain a certain level of credibility, both for herself and for others, then a certain degree of coherence in lifestyle and integration of actions in varying practices will become essential. We think this formal account of the ways in which slices of 'doings and sayings' go together from the point of view of the knowledgeable and capable agent reflexively monitoring his or her behaviour, goes very well together with and is in some circumscribed way also complementary to the concept of 'practical intelligibility' as put forward by Schatzki in this respect. Practical intelligibility is what 'governs' action in the sense that it makes a person do what he or she thinks it makes sense to do in such or such a situation. It specifies what a person does (next) and in that sense practical intelligibility is *an individualist phenomenon* (Schatzki, 2002, p. 75). It is always to an individual that a specific action makes sense to do, given his or her ends, the projects and tasks he or she is pursuing at that moment, and his or her affectivity. Practical intelligibility does not necessarily coincide with rationality and neither with normativity. "Practical intelligibility is, in the first place, practical" (Schatzki, 2002, p. 76). Giddens' concept of lifestyle seems to complement Schatzki's account of the activities of individuals at the crossroad of multiple practices and projects by referring explicitly to the

discursive accounts provided by the actor about the ways he or she connects to different practices in different ways. This is not just about identity as making sense of the meanings attributed to the actor by other human agents. It is as well reporting about the (lack of) coherence actors experience in their own behaviours over a range of different practices and the perhaps different story lines they attach to similar behaviours within different practices..

When applied to the analyses of environmental change and sustainable consumption, this formal set of concepts on individual identities and lifestyles can be used in two different forms of lifestyle-research. First, the concepts can be used to make possible empirical research on the level of 'greening' or ecological modernization individuals (strive to) realize through their participating in a range of diverging social practices. Social practices which represent, as we discussed above, different levels of 'green CCC' and contain dynamics of green innovation and change which could be interesting to research both for their similarities and their differences. Concepts like Diderot-effect, insulation of lifestyle-segments or spill-over effects (Thøgersen and Olander, 2001) in between different lifestyle-segments are already emerging on the research-agenda in environmental sociology. Doing this kind of research on the differential greening of the lifestyles of individuals could take us away from the classical studies on environmental attitudes and norms which dominated the field of environmental social sciences for some decades and are still very influential in some environmental policy circles. The second form of lifestyle-research is to apply the concept in empirical research on the lifestyles of all participants in one specific integrated practice. As for food the lifestyles can be found to be different when compared to the domains of mobility, dwelling the house, or leisure. This kind of research could bring us beyond the well known general pictures of citizen-consumers being innovators, early adopters or laggards.

## **Epilogue**

Since our overall analysis has been on exploring formal concepts provided by theories of social practices to be used in research on the greening of consumption practices, we did not go into the issue of the roles of green lifestyles and lifestyle-politics in reflexive modernity as debated by Hobson, Princen et al, Jalas and many others. When returning to these political debates, we want to conclude with some comments on the discussion of individualization, lifestyles and identities as put forward by Giddens, Beck and Bauman in their comments on the presentday 'political setting'.

Their analyses have been instrumental in pointing out some of the profound changes in the landscape of modernity and their consequences for individuals human agents when making (consumption) choices in everyday life. Consumption has been embraced as a way to express lifestyles and identities against the background of the melting away of the pre-fab, pre-fix and ready-made-delivered identity packages of simple modernity (Beck). This increased relevance of lifestyles and lifestyle-politics are an essential part of the citizen-consumerist turn and needs to be spelled out in some more detail to move beyond economic accounts of (green) demand while avoiding the assimilation of lifestyles with just trendy-ness or fashion in the narrow, advertising meaning of the term in marketing studies and also much of common language. Giddens, Bauman and Beck share the conclusion that there is no way back to the kind of 'simple modernity' variant of consumption as characteristic of the post-WWII period until about the 1980's. Whether labelled as radicalized individualization, or discussed as the emergence of lifestyle-politics, or analyzed as a general process of fluidization of modernity, all three authors argue that formerly agreed-upon ways of life, normative schemes and (group) identities are dissolving, while arguing

at the same time that at the collective level no alternatives are likely to emerge in the short run, in order to repair the damage done to the collective 'webs of lifestyles'. This 'dissolving' of institutions which used to play a key role in identity formation on the one hand brings freedom (from church, from peers, from parents, from teachers etc) to the individual, but also and at the same time results in new anxieties. How to live, dress, behave, date etc are questions to be 'dealt with' by individual citizen-consumers themselves. They have to make the right choices in order to keep their lives going in a meaningful, accepted way. They have to show all the time to everyone that they are knowledgeable and capable agents, knowing how to earn an income, how to travel abroad, and how to handle crises in their personal lives. And they have to do so against a background of fast increasing numbers of pretty equivalent choices. Choices (goods, services, lifestyle-stories) offered by many different providers with different profiles and histories. Choices that are subject to more intense discussion about their supposed (green) properties and promises and that are ever faster being replaced by ever more different and up-to-date solutions for whatever present or future needs.

It is against this all too familiar sketch of reflexive modernity that lifestyles and lifestyle politics gain a special significance. By adopting a lifestyle, people reduce the number of choices and the number of moments they have to choose. People adopt a lifestyle – a cluster of habits and story lines – as a way to routinize substantial parts of their daily lives, thereby reducing uncertainties and pressures that come along with the inevitability of choice. The difference with the lifestyles of the 1960's and 1970's is the fact that individual lifestyles are no longer supported by or embedded in the 'normative bonds of traditional groups and organizations'. For that reason individuals have to work hard to prove their lifestyles to be consistent and legitimate in the eyes of relevant others. They routinize daily behaviours of all kinds, but at the same time are always reflexively aware of the fact that they over and over again will have to keep on making their own choices, for which they as individuals can be kept responsible. The notion of lifestyle-politics is used to stretch the analyses of lifestyles beyond the mobile phone discussion. Although at first sight it seems that people lose interest in traditional political system and its basic functioning (voting, political parties, having a grand story and solution for everything, being different from the left or the right etc.), they do not lose interest in major political themes like a good pension scheme and fair and reliable health services, the preservation of bio-diversity and fair trade-conditions for small farmers or developing nations. With lifestyle politics, people connect the private to the planetary, and vice versa. They buy chocolates or chips with a WWF panda-logo, they interrupt their career for a year of travelling or doing volunteer work in another country to get to know other cultures. They build new networks with 'relevant strangers' at the internet to discuss ways of dealing with big political issues, and take part in citizen-fora practising new forms of discussion and policy-making.

Somewhere in between the routinization of lifestyle-choices on the one hand and lifestyle politics for global issues on the other, are all the choices for all those ordinary goods and services which on the one hand provide material support for everyday life but also at the same time relate to some of the themes prominent in (global) lifestyle-politics. Green products, services and story lines do exactly this. They can be consumed not just for their use-value but especially for the fact that they allow individuals to express their emerging green concerns which stem from big issues like climate change, loss of biodiversity or the exhaustion of resources. By consuming these goods and services, citizen-consumers actively construct in a very pragmatic manner their 'way of dealing' with the big issues of sustainable development. They use the products and services to construct parts of their emerging green identity and storylines, which can be of all sorts and all colours (from deep dark to 'environment light'), as long as they are accepted by fellow citizen-



consumers as plausible and reasonable things to do. When read in this way, the public discourse on sustainable lifestyles, life-politics and political consumerism (Micheletti, 2003, Spaargaren, 2005) is not such a bad thing after all.

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