

# The Everyday Challenges of Pro-Environmental Practices

**Sara Kristine Gløjmar Berthou,** *Skov & Landskab, The Faculty of LIFE sciences, University of Copenhagen Rolighedsvej 23, 1958 Frederiksberg*  
*E-mail: sabe@life.ku.dk*

**Abstract:** *Much research and policy planning aimed at climate change mitigation currently focuses on individual behavioural change as a means to reduce carbon emissions. An often used approach in order to achieve this is the attempt to influence behaviour through transfers of knowledge and information. However, awareness of climate change problems and intentions to live pro-environmentally friendly do not always translate into actual changed practice. In this sense, there is often a discrepancy between attitude and actual behaviour. This article is an in-depth empirical investigation of the logics guiding everyday pro-environmental practices, the aim was to examine the challenges experienced in this regard. Based on visits to households in Copenhagen, four major challenges are identified and discussed. The paper argues that everyday life, as the starting point of individual pro-environmental practices, is characterised by a complexity which people have to navigate, and thus that pro-environmental practices should not be seen as one demarcated field, but as interlinked with other practices in everyday life.*

**Key words:** *Everyday life, motivation, challenges, awareness and pro-environmental practices.*

## 1. Introduction

A growing number of public institutions in Denmark have included measures for climate change mitigation in their political goals. The consequence has been an increase in projects focusing on how individual citizens can be engaged to contribute to climate change mitigation in their everyday activities. Due to the perceived failure of political solutions, especially at the Conference of the Parties in Copenhagen (COP15), and the context of neoliberal political economy, both scholars and policy makers consider individual behavioural change and behaviour management important themes which need including in mitigation initiatives (Shove 2003, Hobson 2004, Maniates 2002). Initiatives include consumer educa-

tion, marketing strategies, information campaigns, incentive and pricing based schemes, smart technology and nudging approaches (Jackson 2005, Strenger 2010). From this perspective, citizens are ascribed agency and have responsibilities as private individual consumers in relation to a vast number of societal problems, environmental challenges being the most recent example (Halkier 2010). Many initiatives thus focus on the transfer of (what is seen as neutral) information from policy makers to citizens in order to change behaviour into safer, more ethical and more sustainable patterns (Halkier 2010, Hargreaves 2011). While seeking to spark behavioural change by affecting citizens in various ways, constructions, ideas and articulations of the premise and logic of behav-

behaviour thus emerge. However, there is a clear schism between, on one hand, the level of *pro-environmental* (Hargreaves 2011) awareness, intention and attitude and on the other hand actual actions. While many people possess the appropriate knowledge needed to act in a more environmentally sustainable manner many do not do so (Dembkowski 1998, Halkier 1999, Whitmarsh *et al.* 2010:xvi, Schousboe 1998, Læssøe 1995). In order to change people's practices, there is thus a need to examine this schism and how pro-environmental practices are composed in people's everyday life. This paper therefore seeks to inquire into the complexities of everyday life and take an in-depth look at the conditions for and meanings guiding everyday practices to address this schism.

## 2. Theoretical Approaches to Behaviour Change

The study of pro-environmental behavioural change can be divided into a number of subsections related to the assumed determinants of decision-making. While some have placed decision-making and behaviour within the cognitive realm, others find that the structural conditions are essential determinants while others again argue that the determining elements of behaviour are to be found in the social.

The cognitive approach can mainly be found within environmental psychology and behavioural economics. From this perspective, pro-environmental behavioural change has traditionally been understood in terms of individual and rational conceptions of agency. We can identify two broad directions: rational choice based theories where behaviour is seen as the outcome of individual cognitive capacity to make linear and rational calculations (Harrison & Davies 1998), and approaches based on segmentation and target group analysis wherein individuals remain the focus, but their practices are seen as being determined by social and cultural structures such as income and educational level. Both directions are based on ideas of the rational self-interested *homo oeconomicus* and the premise that transferring information (appropriate to a given population segment) will increase people's capacity to make rational decisions and thus lead to behavioural change. The elements included in the cognitive approaches to behaviour change are in particular beliefs, attitudes and values with the assumption that changing these will lead to a change in behaviour. Examples of such

theories are those of planned behaviour and theory of reasoned action (Ajzen 1991, Fishbein & Ajzen 1975). Over time more elements have been added to the basic models, such as moral norms, self-identity and belief salience (e.g. Conner & Armitage 1998, Mannetti *et al.* 2004). Lately, there has also been a recognition that individuals act in social contexts, thus allowing consideration of contextual elements (for instance Stern 2000). Yet more often than not, this has not challenged the basic premises of the theory, namely that individual cognitive capacities constitute the nexus of decision-making and thus the site for intervention and correction. Instead it has included context as yet another variable determining cognitive decision-making (Hargreaves 2011:81, Barr 2003, Martin *et al.* 2006, Olli *et al.* 2001).

In their different forms and redevelopments, these theories guide much of the existing policy on sustainable consumer behaviour (Jackson 2005:vi; Hargreaves 2011:81). This happens for instance by seeking to internalise externalities (e.g. environmental costs) so that they become visible to the individual. However, it is recognised that private decisions do not always take account of collective costs. The relation between individual costs and collective benefits constitutes a significant challenge with regard to pro-environmental behaviour, since the global collective benefits of local action (or global costs of local inaction) are experienced as too distant both spatially and temporally to make a personal connection (Poortinga & Pidgeon 2003, Norton & Leaman 2004, Lorenzoni *et al.* 2007, O'Neill & Hulme 2009). Policy approaches based on these theoretical perspectives also seek to regulate behaviour through economic incentives, an approach which has been criticised, though, for rarely creating significant changes in lifestyle or long-term pro-environmental behaviour patterns (Brannigan 2011) and for the fact that economic gain from decreased energy consumption is usually spent on even heavier emission-based consumption (Owen 2012).

Another related model underlining many policy approaches is the information deficit model in which information is regarded the ultimate driver of behaviour (Burgess *et al.* 1998, Owens 2000). Although the underlying assumption of the model is perhaps the most important guiding principle for policy making (Whitmarsh *et al.* 2011:5), several scholars

have argued that it is not sufficient for grasping the heterogeneous nature of the public, its diverse resources and values and the ways in which these different *publics* interpret, use or ignore information in diverse ways (Defra 2007, Lorenzoni *et al.* 2007, Irwin & Wynne 1996). Others have pointed to the continued growth in energy demand despite intense awareness-raising (Whitmarsh *et al.* 2011:5) suggesting that increased awareness does not necessarily lead to an actual change in behaviour.

Other theories within the social psychology approaches include theories of cognitive dissonance (Festinger 1957, Whitmarsh 2009), breaking and creating habits for pro-environmental behaviour (Verplanken 2011), and engaging individuals through emotions and values from a more neuroscientific point of view (Brannigan 2011). Due to the challenges these models face, Jackson points to the need for integrative theories of behaviour, not only resting on cognitive elements, but requiring a multidimensional view (Jackson 2005:12).

This paper rests on a practice theoretical approach to pro-environmental decision-making. Practice theory is not a theory as such, but a common denominator for social and cultural studies looking at *everyday life practices*. Furthermore, practice theory is not a new 'theory'. It is rather the certain reading of behaviour which is carried out by theoreticians who express parallel assumptions about individual behaviour as shared social practices (Halkier & Jensen 2008, p. 51).<sup>1</sup> The question raised by practice theorists in the 1970s concerned how to reconcile objectivist and subjectivist accounts of society; to include the reproduction of power as both cause and effect of everyday life interaction. In contrast to the focus on individual capacities, practice theorists seek to offer a broader and more holistic conceptualisation of everyday life practices and decision making, and the factors influencing these. The newer generation of practice theorists working particularly with theoretical aspects of practice theory include Reckwitz (2002a), Shove *et al.* (2012) and Shatzki (1996, 2001a, 2001b, 2002). Furthermore several practice theorists specifically focus on different aspects of consumption practices relevant to environmental concerns (Shove 2009a, 2009b), Shove & Walker (2010), Strenger (2010, 2011) Halkier (2010), Halkier & Jensen (2008), Hargreaves (2011), and Warde (2005).

In 2002 Andreas Reckwitz wrote a widely cited

influential article in which he argued that despite the differences among those who expound practice theories, practice theory is united by its focus on *everyday life* and *shared knowledge* (Reckwitz 2002a). Reckwitz furthermore places practice theory in contrast to other theoretical alternatives in order to establish how it reveals other and new insights into the social and into human agency: while other theoretical approaches place the social in the mind, the language, or interaction between people, practice theory sees the social as constituted in, and productive of, practices. In practice theory individuals are not interesting as actors in and of themselves, but as performers of practices and as a place where a plurality of practices intersect (Reckwitz 2002a:256, Warde 2005:139-145) which citizens navigate and prioritise between. Examples of these are consumption practices and transportation practices (in addition to broader historical and institutional relations). In this way, practice theory seeks to include contextual conditions *and* the role of human agency in analyses. Elisabeth Shove (2009a) for instance sees practice as integration between micro level practices with the material conditions and discourses of the macro level. These integrated practices function both as reference points for future actions and as legitimation of what is considered to be normal in a certain performativity and thus reproductive (Halkier & Jensen 2008:56). As such, practices are both productive and conditioned.

Another general denominator for a large number of practice theoreticians is that they regard practices as '*embodied, materially mediated arrays of human activity centrally organized around shared practical understanding*' (Schatzki 2001a:2). The notion of the embodiment of practices constitutes a point that many theoreticians – especially feminists – emphasize. It is argued that bodies and activities are constituted within practices and that the body is the meeting point both of mind and activity and of individual activity and social diversity. As such the body is not just an instrument individuals must use to carry out a given practice, but practices are bodily in essence (Reckwitz 2002a:251). Michel Foucault has for instance argued that not even the body can be understood as a universal entity since it varies between contexts – affected by different practices over time (Foucault 1971 [2001]).

While the term behaviour is used in this paper to signify what relates to behavioural approaches to behaviour change strategies; what people do (or what they state they do) as the product of beliefs, attitudes, opinions and values (Ajzen 1991), the term practice enables a closer look at how such doings are constituted in and of themselves, how they are interconnected as well as shaped by historical, social, cultural and material configurations (Strenger 2010:7-8).

### 3. Problem and Methodology

When we wish to examine the schism between stated and actual behaviour empirically, a qualitative approach is particularly suitable in order to examine actual behaviour rather than merely asking participants to state it. The paper is based on 12 visits to households in Copenhagen. The visits are part of an on-going extensive ethnographic case-study lasting from July 2011 which examines ways in which municipal planners in Copenhagen seek to affect and manage citizens' pro-environmental behaviour. Focusing on the department of the environment (DE) of the municipality, the case-study looks particularly at the process of formulating a Local Agenda 21 plan<sup>2</sup> (LA21-plan) covering 2012-2015. A public participation process has been carried out by the DE in order to gather new ideas and perspectives on the challenges the municipality face when trying to reach their environmental goals. These ideas have then been transformed into activities which is today part of the LA21-plan. The wish to include the perspectives of ordinary citizens has been a new approach in the municipality and earlier LA21-plans have been formulated by municipal planners alone. On one hand, the planners expressed doubts about the pro-environmental knowledge of citizens which they considered the main driver of behaviour; on the other hand, they still aimed to include the perspectives of lay citizens in their planning. Therefore as part of the present case-study the ethnographic visits were carried out in cooperation with the municipality of Copenhagen with two aims: First, to follow the process of formulating an environmental policy within the municipality and, second to gain insights into citizens' everyday life circumstances. The policy process related to the case-study will be analysed elsewhere and so the main focus of this paper and the question it seeks to address is:

*What challenges do the interlocutors and their families*

*experience when attempting to carry out pro-environmental practices in their everyday lives?*

The visits to 12 households in Copenhagen were carried out at the end of 2011 and early 2012 and lasted from one and a half to three hours. All households had personally responded to a general invitation from the municipality to participate in the study which was sent to an online panel of citizens. Each visit consisted of two parts. Beginning with a tour of the home where the interlocutor was encouraged to demonstrate and explain how everyday pro-environmental practices took place in the particular family (or what hindered such behaviour); the visit facilitated a concrete insight into ways in which the families dealt with the challenges and ambivalences of everyday pro-environmental practices. Pro-environmental practices included were transportation means, energy consumption, consumption strategies in general, household use of water and waste disposal, vacations, use of household appliances and relations to green areas. With meetings taking place in private homes, as a sort of temporary participant observation, they offered crucial ethnographic insights as the conversations became more practice-oriented than an isolated interview outside the home might have. During the visit, the interlocutors could demonstrate the concrete circumstances leading to either pro-environmental or non-environmental practices. The second part of the visits consisted of an ethnographic interview (Spradley 1979), inspired by *active interviewing* (Holstein & Gubrium 1995) following up on the rationales behind the actions described in the first part of the visit. Subsequently, field notes and interview transcripts were analysed based on a constructivist grounded theory approach to identifying essential themes (e.g. Charmaz 2006). The method was constructive in that it gave rich insight into the relationship between awareness, knowledge and attitudes on the one hand, and actual actions, challenges and contradictions on the other. Furthermore, the observations made during the visits offered a constructive starting point for the interviews, and constituted useful contextual knowledge used in the following analysis in order to make sense of statements made in formal interviews. In four of the visits, one of the planners working with creating activities for the LA21-plan participated in the first half of the visit, but never in the interviews. It was clearly stated at the beginning of each visit that the municipal planner present was not there as



a consultant, nor there to judge any unsustainable behaviour. It was made clear that s/he was there only to learn what the municipality could do on its part, to make pro-environmental practices easier for citizens. The citizens were not less adamant about explaining their barriers to pro-environmental practices when an administrator was present, on the contrary; this seemed to encourage many comments about what was difficult and how the municipality could ease these.

The overall methodology of this study is inspired by symbolic interactionism which holds as its premise that the meaning of a situation or a phenomenon is produced in the interaction between people or between people and objects (Järvinen & Mik-Meyer 2005:10). This is to say that meaning is not an independent entity to be revealed 'underneath' social life, but something constructed in it. The project takes an interactionistic approach in the recognition that the meaning people ascribe to phenomena is created in social relations and in the interaction between people and phenomena. In this perspective, empirical material is the result of interactive construction, not of uncovering essential truths (Järvinen 2005:28). This entails an understanding of the relation between ontology and epistemology, which Kirsten Hastrup (1999) has referred to as 'ontological dumping' – the circumstance that an epistemological account is transformed into an objectively existing condition, the nature of which it becomes possible to illuminate, meaning that the way we perceive the world becomes reality and thus the object of analysis (Hastrup 1999:168). Examples of ontological dumping include, for instance, society, culture, economy, language, speed and distance. What all these counts have in common, is that they are theoretical constructions that gather empirical complexity in objectifying terminology (Ibid.). This suggests that researchers should not accept empirical circumstances as natural or given, and data as a static substance that can be gathered by posing the right questions, but should look at these circumstances and data as particular understandings of the world, how they are constructed, shaped and assigned meaning. Following this, the term interlocutor is applied to signify the duality of all ethnographic methodology in which research participants are considered partners in producing knowledge along with the researchers, whereas the more commonly used 'respondent' or 'informant'

might signify a somewhat more unidirectional flow where information or data is simply extracted from the research participant. The term signifies that data is not regarded as objective entities that can merely be extracted from an 'informant' and that there is no such things as a pure 'respondent' that responds to assumed neutral questions independently from context; such responses will vary from situation to situation and from researcher to researcher. It is in this sense, the study is regarded as collaborative, and the data as something emerging from the dynamics between researcher, interlocutor, as well as material and historical context.

The interlocutors of the study reflect demographic diversity. The participants were between 22 and 69 years of age, evenly distributed among men and women (8 women, 9 men); they were included singles, those in relationships and/or living in families of up to seven members, and lived in various types of housing (rented, co-owned, owned, apartments and houses). There were three unemployed people, four people with none or short education, five people with semi-long or university degrees, three people that had retired as well as two students. The interlocutors' jobs were evenly distributed between the public and private sector, ranging from part time temp positions to a marketing executive. As the visits included the families of the interlocutors, the total number of participants was 17 people, not including children present under the age of 10. This is not to say, however, that the aim is a representative sample in a statistical sense. Generalisation is made on the basis of the analytical variables of the group of interlocutors, to theoretical or analytical categories and concepts (to be surveyed in other contexts), rather than numerical generalisations from 'respondent group' to population. The ability to make universal conclusions is neither the aim nor a possibility within the ethnographic methodology; the intention of ethnographic methodology is rather to offer detailed, in-depth descriptions of everyday life and practice in order to investigate how details of experience represent *webs of meaning* (Geertz 1973) through an emic perspective – by participating in the object of study. The goal then, is to bring about rich ethnography – what is traditionally referred to as *thick description* of the theme in question (ibid). As such the methodology leads to richer and detailed accounts of action, which may be more valuable in certain contexts (Flyvbjerg 2001). Significant

concepts and categories are therefore seen as emerging from the ethnographic encounter, rather than derived from theory.

Common for the interlocutors were their awareness of pro-environmental concerns and that they all found the topic relevant to their everyday lives. Conversely, they all experienced a number of challenges when trying act pro-environmentally friendly. Their high level of awareness about the topic is therefore not implying that they led more sustainable lives than other citizens. In general surveys show that the Danish population is very positive towards pro-environmental behaviour and concerns (Schousboe 1998:11, Læssøe 1995:12) while only 6,7 % express negativity towards environmental concerns (Beckmann *et al.* 2001:19, Thulstrup *et al.*1999:79-82). For Copenhagen in particular, studies suggest that the inhabitants of Copenhagen consider themselves very aware of environmental concerns (e.g. Voxmeter 2010). Moreover the city has won the European Green Capital Award by the European Commission for its public-private partnerships and urban planning for cyclists, illustrating further the context of the interlocutor's level of awareness. The interlocutors were engaged in discussions and reflections on how to live in a pro-environmental manner, but as the paper will also show, they simultaneously and just as often carried out practices completely contradictory to a pro-environmental lifestyle, such as frequent long-distance flights and eating large quantities of meat as an expression of what was considered quality of life, or practices that simply made their busy everyday lives easier, such as not sorting the trash or washing dishes in an old, water-consuming, machine. As such they provide an interesting group to focus on, since their high level of awareness did not necessarily translate into actual pro-environmental actions.

#### 4. The Challenges of Pro-Environmental Behaviour in Everyday Life

The research identified a range of challenges experienced by the interlocutors as they attempted to carry out pro-environmental practices in their everyday life. The concept of everyday life is used in this paper as a perspective on social life, where the complex relation between individuals, social relations and the societal context is described from the perspective of

the individual. The mundaneness and indiscernible nature of everyday life does not mean that it is inconsequential; in fact, it is in everyday life that almost all consumption takes place (Strenger 2010, Shove 2003, Patterson 2006) and thus holds immense importance for the study of pro-environmental practices. Everyday life is characterised by temporality – it has a frequency and it continues each and every day, but it is also characterised by a certain quality as it links the other fields which people relate to from within everyday life (Gullestad 1991). By contrast, other fields (such as the political realm or the work sphere) are characterised by being constituted as separate areas whereby everyday life is cross-cutting. Furthermore, everyday life is influenced by habits, routines, rituals and recognisable patterns of activities. At the same time, a crucial part of everyday life is that it contains an element of unpredictability, as it is the place where changes and shifts are handled and managed. As such, everyday life contains both elements of continuity and change (Strenger 2010:6, Shove 2003). Using everyday life as a starting point for investigation allows a focus on the social space in which the interlocutors act and interpret the various meanings of events and phenomena in their life, in interaction with others. Everyday life is thus not to be seen as an internally consistent, meaningful unit in and of itself, but rather as the dynamic processes taking places when people seek to create meaning in events, experiences and practices (Halkier, 1999). In this way, it is also in everyday life, that experiences and practices are tied together. In this sense, the concept of everyday life enables a focus which is not on pro-environmental practice in itself, but as a by-product of everyday life (Strenger 2010:5) in the acknowledgement that, for instance, energy consumption *'is not itself a practice but is, rather, a moment in every practice'* (Warde 2005:137). Consumption, in other words, makes every day practices possible.

The challenges identified can be divided into four themes. These themes revolve around *the wishes for and conditions of everyday lives, the negotiations of everyday life, the role of multiple rationalities, and the uncertainties of everyday life*. In the following sections each of these themes are explored.

## 5. The Wishes for and Conditions of Everyday Lives

The first challenge revolves around the lack of time available to do what one wishes or intends doing. The typical everyday life is for most people composed of practical and time consuming obligations and responsibilities. As one interlocutor put it:

*Well, sometimes, for some periods, it is just pure survival. And that's why it is important to work up some routines. Because it actually doesn't take more time to act in an environmentally friendly manner – it is just a matter of thinking at the right time. Sometimes we take it for granted that things work the way they do in life, but maybe if we thought about how to do it wiser. But then when you get to that point, if you get an idea – the actual getting from there to carrying it out seems completely impossible in this ordinary day to day life.*

What this points to, is a rather fundamental circumstance of modern everyday life; the concrete challenges of succeeding in getting the numerous obligations, appointments and doings to add up. For the interlocutors, living in contemporary western society meant expectations from employers to work as many hours as possible per week, being available online at any given moment, flexibility towards applying for jobs that are geographically distant, living a wholesome family life, being engaged in various organisations, taking part of community work, staying informed on local as well as global news, among many other things. A central theme when speaking about the challenges of pro-environmental behaviour was thus the routinised actions and their central place in everyday life. The interlocutors created a number of routines to help them manage the many demands on their attention while spending the least amount of time doing so. The repetitious nature of practices ease the strain of the tasks as they allow for less reflection, when done similarly every time, without need for reflection (Gram-Hanssen 2008:1182). The routines thus resulted in a kind of path dependency, causing the interlocutors to do in the future what they did in the past. In this way, the routines could become a hindrance for pro-environmental actions had they not been included in the daily routines in the first place. The interviews clearly demonstrated that it was often rather banal, concrete details in relation to time and accessibility that influenced the actions of the interlocutors,

even when these were explicitly concerned about pro-environmental matters. Frequently expressed examples referred to glass containers or organic supermarkets located inconveniently, thus causing the interlocutors not to use them. As such, material infrastructures become potent components mediating the interlocutors' everyday life practices (Reckwitz 2002b). Furthermore, the routinised everyday life could at times prevent space for new initiatives to form. One interlocutor, a landscape architect living with her family in a house, had a strong intention to make her house owners' association completely sustainable as a pilot project, but did not know how to do this. In the midst of her everyday life with children who needed lunch packages, transportation and care, a full time job, a husband and family, she described how the idea slowly died out, even though she thought about it often and was certain that such a project would make a big impact. The space needed to stop, reflect and plan for new strategies was simply not an option to her. Another interlocutor expressed this conundrum too:

*I signed up for a newsletter from my electricity supplier. They give you advice on how to save electricity. I always read them. And I really should turn off all those stand-by buttons, and such things. When I read it, I pay more attention to it, but then ... On some level I register it, but in a busy day to day life – I think it just becomes... Well, all of a sudden it is just gone, you know.*

What this quote points to, is a feeling of getting 'lost' and loosing initiative in the continuity of everyday life. It is indeed the very regularity of a certain practice which sustains and constitutes it as a practice (Warde 2005), meaning that although mundane; routines are important practices to focus on. The routinised tasks that people carried out every day thus made it difficult to create space for new initiatives or lifestyles. There are indeed studies showing that it is precisely in the restructurings and shifts in people's lifespan (parenthood, moving, divorces, new job or even power blackouts) which create such windows of opportunity for new routines (Verplanken, 2011, Reckwitz 2002a). Introduction of new knowledge or material infrastructure is not enough in itself however, if it does not become reproduced and adopted as actual practices (Strenger 2010:15). When time and energy is scarce, creating pro-environmental decisions is not a matter of edu-

cation then, but of transforming practices to make them more sustainable (Hargreaves 2011, Southern et al. 2004). In other words *'that the sources of changed behaviour lie in the development of practices themselves'* (Warde 2005:140).

## 6. Everyday Life Negotiations

The second challenge identified was the continuous negotiation the interlocutors took part in, when their wishes for their everyday lives collided with aspirations for living in a pro-environmental manner. Whereas the above described challenge was a discrepancy between intentions and resources, in the form of time and energy, this challenge points to the conflict between principles and wishes for what could be coined *the good life*. The interlocutors sought to navigate in this practically experienced discrepancy by negotiating between the two. As one interlocutor put it:

*I could come up with a lot of reasons why I would allow myself to take a long warm shower. I would think, if I skip a glass of wine and do not smoke a cigarette today, I can take a long warm shower. Because that would be the hardest thing for me, the shower. You have to live, you know?*

The people interviewed in this study, regarded sustainability as an extremely relevant problem and expressed genuine concern for the consequences of climate changes. Moreover, many expressed a more general attitude of what they referred to as *common sense*, the idea that a good sensible citizen would do his or her best not to litter, consume unnecessarily and to sort their trash, for instance. Such actions were considered sensible behaviour – *the right thing to do*. In this way, many conveyed the fact that they had carried out such sensible behaviour long before climate change and environmental degradation was a general focus in the public debate. As such, they did not ever question that living in a pro-environmental manner was what they ought and wished to do. At the same time however, they showed a constant navigation in relation to the practical consequences of these principles. A navigation which can be described as negotiations between what each person saw as good sustainable actions and a combination of the wishes and needs in regards to their own lives. This negotiation could be said to stem from the discomfort caused by having conflicting principles

and needs and meant that the interlocutors would refer to what could meaningfully bridge these; often an idea of the good life. Concretely, the negotiation was manifested in concrete trade-offs, where some actions were deemed legitimate, not just in relation to the action itself, but assessed in relation to other actions both related to sustainability and to entirely different areas such as health and comfort.

In this way, the interlocutors engaged in negotiations *within* pro-environmentally related categories, and estimated, for instance, that travelling by plane to distant destinations was legitimate, if consumption of meat or hot showers were minimised. They also entered into negotiations between pro-environmental concerns and entirely different actions, for instance by creating justifications for long showers by reducing consumption of tobacco or wine. In the latter example, health considerations were juxtaposed with pro-environmental concerns, thus placing them in the same calculation. The following conversation took place between a mother (M) and her adult daughter (D), who were by far the most engaged interlocutors of the study, in relation to living in a pro-environmental manner, and who did everything they could to minimize their negative impact on the climate and the environment – even to the point where they sought to influence others. In this conversation they had just described, for a substantial amount of time, all the things they did, and when coming to an end, they explained that some things were not easy to do:

D: *But it is also this thing with – it cannot become too dull, right.*

M: *No! No!*

D: *It really shouldn't be. Because then you will just end up becoming a person who sacrifices herself all the way, and no one else does the same.*

M: *And it is not like we are self-righteous or anything. Because, well – we do fly too.*

D: *Wow, yeah – we have flown 18 times this year!*

M: *That is really nothing to brag about.*

D: *Well, it is because we went on a round trip for five weeks. But we counted that we had made 18 flights in all. And then I thought about how much we will have to turn off the light for the rest of our lives... This thing about flying, I easily get a bad conscience about it, because it creates so much contamination.*

M: *I feel the same way!*

D: *But then I think, somebody just has to find a solu-*



*tion and not that we stop flying, but that we fly in a different way or with different fuel. Because it is just here to stay. This thing with flying.*

M: Yes, it is.

D: *It is not something you just change, right. And I love to travel. And I – well I hope that I can fly really far away, numerous times to come, and that will mean a lot on my carbon emission account so to speak. But I do love the actual flying – I find it fantastic. So I hope they will find something, I know it takes extreme amounts of fuel, which makes it almost impossible to find an alternative at the moment, but I hope they do someday, because I do not think it is something I can stop doing. But on the other hand – we are so conscious of what we do otherwise, and I do not eat any meat at all!*

The common denominator for all the negotiations the interlocutors entered into, was the consideration of the good life; a consideration which often legitimised many actions which were not in line with the interlocutors' own definitions of pro-environmental practice. *You have to live* was thus an often repeated response to the question of what would make someone limit concrete actions such as international flights or heated bathroom floors – elements considered to be particularly luxurious and therefore acceptable in this line of thought. A couple flying to USA six times a year replied the following when asked what could make them cut back on trips:

*In relation to flying, I don't know. We cannot change that, it has to do with a need we have. We just have to go. Or, we don't **have** to; there is nothing in life you **have** to do. But we feel there is a need. But most often we fly to New York, so it is not that far. Then that's alright I think. It is the first place the airplane stops. That is good. Now I feel better [laughs].*

And in relation to making choices about kitchen appliances:

*Yes. And I know that this pot we use to boil water in is not right at all. But we have chosen to say, that we have to live, and it has to be bearable. If we were to make a compromise ... Well the visual comes first. I would say. And it exists – electric water boilers, and they are much better than the pot, but I just can't stand to have all these things around us all the time. So that is why I chose the*

*pot. And when we boil water – it is only once a day, in the morning for coffee, so we sort of try to justify it inside our own heads, that it is okay, when it is not too often.*

As mentioned above, the interlocutors regarded pro-environmental practice as absolutely common sense and as the right thing to do. In order to act in contrast with such behaviour, they thus had to enter into communicative norm negotiations, in order to legitimise a given choice thereby making the choice possible to act upon. Disagreeing with oneself or carrying out practices not coherent with ones' own logic made it almost impossible to merely carry out a contrasting practice. As mentioned, embedded practical knowledge is an important term in practice theory and is further useful in grasping the practices of the interlocutors. The level of consciousness related to practical knowledge is often discussed (see for instance Strenger 2010:9), but what is agreed upon, is the fact that people are very able to maintain a theoretical understanding of their actions and thus legitimise them, but not necessarily of their motives. That is to say that, as this section shows, the interlocutors are able to explain what they do, how they do it and at times even why they do it, but rarely where this practice emerged from (Strenger 2010:9). For the interlocutors of the study, it therefore became necessary to find ways to continue being ideally in agreement and still act against these principles, when the complexity of everyday life offered other – at times more attractive – opportunities that could not always be explained. This is not to say that the negotiation of principles was a matter of insincerity or dishonesty on behalf of the interlocutors; on the contrary, it was the very sincerity of the commitment to living in a pro-environmental manner which caused the interlocutors to enter into the negotiation, rather than just dismissing the subject entirely. In this way, the meanings attached to their energy consuming practices such as flying (quality of individual life, cosmopolitan lifestyle, etc.) carried more weight than the meanings attached to the competing pro-environmental practices (common sense, being a good citizen). The broader societal context in which such meanings are created and reproduced would thus be essential to examine further, in order to study how such meanings gain legitimacy over others, and what societal trends and values that enforces this process.

## 7. Multiple Rationalities

The third challenge identified had to do with the multiple considerations in relation to the climate and the environment, which the interlocutors experienced as colliding, and, when compared with each other, constituting a puzzle particularly difficult to combine. Reduction of carbon emissions, organic consumption, fair-trade products, reducing packaging, pollution, sustainability, animal welfare and biodiversity were just a few examples of the many themes which the interlocutors continuously had to prioritise. Talking about her latest trip to the supermarket, one interlocutor illustrated this theme well when saying:

*I had to choose between organic apples from New Zealand and conventional ones from Denmark. And I wasn't sure what was best, but I chose the Danish ones – because of the CO<sub>2</sub> problem with the others. But then the Danish ones might be full of pesticides which I do not like. And then the tomatoes – I had the choice between Danish and Spanish ones. The Spanish ones I've heard are full of poison because there are no restrictions, but the Danish ones are grown in greenhouses which need electricity. It is very difficult and each time you have to choose, choose, and choose. It is hard – because why do four organic limes have to be wrapped in a carton box **and** plastic. Then again it is a matter of whether I should buy the sprayed [with pesticides] lemons or the organic limes which aren't sprayed. And the sprayed lemons are of course not wrapped, because they can endure much more. So then I chose to get the other ones. I think what to do – and then I have to make a choice. And then there is Fair Trade. I used to travel in Africa, and I really want to support the coffee farmers down there, give them a fair price for their products, but I know that there is the problem of the CO<sub>2</sub> – but it is something I prioritise anyway. It is hard to make sense of and you actually lose oversight of the full picture and then you go 'ah! We don't know whether it makes any difference anyway' – and I think many people give up at that point.*

A significant theme in each and every interview of this study was in other words that people experienced a great *practical* problem integrating the many concerns with each other. Paradoxically, the problem was that the interlocutors were so committed that

they had to relate to so many concerns, that they were left with the feeling that the actual challenge was to comply with them all *at the same time*. This resulted in constant renegotiations and revaluations regarding which concerns to prioritize, rather than a uniform strategy guiding all decision-making. Awareness and commitment to pro-environmental concerns was thus not making it easier for the interlocutors to act according to this commitment. In many cases it was these very things which created the confusion due to the many colliding concerns. The interviews thus pointed to the fact that knowledge about pro-environmental practices and intentions to act accordingly did not necessarily entail particular actions. The interlocutors rather navigated within the complex field of different concerns to be taken or dismissed in each concrete situation on the basis of an instant evaluation or intuitive sense-making. In addition, the situation was further complicated when other everyday life concerns added to pro-environmental concerns. For instance:

*I had a period of time where I completely dismissed eating rice, because from what I understood it is a very damaging crop CO<sub>2</sub>-wise. But then again we are so many in my family and then I have to say – 'Okay, now I can get a kilo of rice in the supermarket for 8 kroner', and then – well then we are having rice for dinner, right?*

In the current example, economic considerations were added to pro-environmental concerns. In some families, a nostalgic relation to a country of vacation, a commitment to Fair Trade products or old habits created other concerns which had to be prioritised in relation to pro-environmental concerns. In this way, knowledge, information and feelings were constantly overlapping in everyday life situations, leading to choices made based on an evaluation of different overlapping, at times contrasting rationalities, which, in the concrete situation, were equally necessary and logical rationalities. Even in cases where the interlocutors possessed knowledge, economic flexibility and idealistic intentions in relation to pro-environmental practices, the complexity of everyday life decision-making thus offered a multiplicity of rationalities influencing which choices to be made at what times. What this points to, is the fact that pro-environmental practices cannot necessarily be seen as a demarcated integrated field in the lives of the interlocutors and that as a consequence

they did not have one overall strategy to handle these concerns. On the contrary, there was no pre-existing hierarchy of concerns that the interlocutors acted upon, pro-environmental practices were rather part of a complex field of multiple concerns and rationalities which had to be compared and prioritised in each new situation. The learned social know-how of each situation can be seen as *practical knowledge*, embodied in actors and their practices (Strenger 2010) illustrating that '*practice has a logic which is not that of the logician*' (Bourdieu 1990:86). It was therefore the sum of these many – equally rational – considerations combined which provided the starting point for each interlocutor's pro-environmental practices, rather than an isolated intention or idealism.

## 8. The Knowledge-Related Uncertainties of Everyday Life

In line with the above theme, this fourth challenge describes the role of the large amount of information available to the interlocutors. The challenge described above highlighted how the interlocutors' everyday lives offered multiple practical concerns and rationalities, which influenced *which* (pro-environmental or other) practices they would ultimately carry out. This theme describes then, that the pro-environmental behaviour which the interlocutors *did* carry out was further complicated by the increasing amount of information available to them. While the third theme shows the *practical* impossibility of combining multiple concerns, this fourth theme further explores the role of *knowledge* by showing that within each possible concern the information available was experienced as overwhelming. The interviews clearly showed that the interlocutors did not lack knowledge on climate change, environmental degradation or what to do in relation to it, but, on the contrary, that they experienced an overload of information pointing in many different directions. As such, the interlocutors were not for or against acting in a pro-environmental manner, but expressed general doubts as to the *characteristics* of the problems and how best to deal with these. In other words, it was not a matter of whether pro-environmental practices were relevant to engage in; it was a question of *how* to do so. The high level of diverse information left each interlocutor with a feeling of inability to connect their everyday lives to the many elements of the stream of information. The following quote illustrate this element which ran across all of the interviews:

*And now this thing with meat. I read this article that if you do it the right way, then the current knowledge is actually a flawed calculation. And it argued that it was actually good to eat meat right. And this is where I think – ah! It is all the same, it doesn't matter. Because then we get to a level where it is difficult to follow. It is hard to see through some of those calculations, and sometimes one thinks 'I think that is true, or I don't think that is right' – but it remains speculative because even when you ask experts they will tell you different things. So, I do not lack knowledge – on the contrary I get way to much knowledge from too many sources.*

The background for this challenge and the above quote should be seen in the context of the level of information regarding climate change and environmental degradation which has continuously increased both in and outside Denmark during the last two decades. Especially since the Kyoto protocol was adopted in 1990 by most industrial countries, the environment and the climate have been themes which in one way or another have played an important role on the international political stage, be it either as something to consider or avoid. In Denmark this reached new heights during the United Nation's COP15 in Copenhagen in 2009 where an international group of leading politicians were gathered in Copenhagen to discuss climate change, along with the world press, leading environmental debaters, NGOs, scientists and activists. In addition to the official meeting there was moreover an alternative climate meeting where activists and scientists with alternative and more far-reaching visions for future climate policies gathered. Furthermore, the sceptical actors in the political landscape had arranged a meeting in the parliament, where the climate change problem were down-played and argued to be exaggerated. For analytical purposes then, the COP15 can be seen as an *illustration* of the conglomerate of the many different and multifaceted types of practices, forms of knowledge and points of views which apply to the subject. Despite the public debate at times seeming 'black and white', consisting only of people claiming that climate change is a fact and people arguing that this is not the case, reality reveals itself as being considerably more complex. In this way, the field is marked by an enormous amount of knowledge which does not only originate in different places, but which also points in different directions. The question the interlocutors posed in relation to



pro-environmental practices was, then, not *if* they should do something, but *what* should be done. An important inference from this is therefore that the mistrust towards, for instance, calculations of carbon emissions should not be seen as a scepticism towards the justification or relevance of the subject, but on the contrary, as an expression of the *crisis of legitimacy* (Lyotard 1979) which seems to be at stake regarding information about climate change. The suggestions for pro-environmental practices are endless, but in the proliferation of communication it is difficult to differentiate between the serious, the covert, the correct, the appropriate, the ineffective or indifferent, the political, the important, the effective ones, and so on. In a field where everyone says something all the time, the question the interlocutors were left with was what to believe and what strategy to follow. The subject of the climate and the environment can no longer be reduced to singular events such as industrial waste or holes in the ozone layer, but is rather a series of different interrelated processes, each demanding practices based in specific circumstances. What is good for reducing carbon emissions is not necessarily good for the environment. For the interlocutors this meant that pro-environmental practices could not be summed up in *one* unambiguous practice or strategy to be carried out in a simple way. Other studies, for instance from the UK, point to the same tendency of massive amounts of conflicting pieces of information about science making it difficult to know what to believe (Poortinga and Pidgeon 2003:16). As shown, the interlocutors felt over-informed and were hesitant towards receiving more and new information as a starting point for new practices. The interlocutors' reaction was inconsistency in their actions. What constituted the basis for one kind of act one day, might be exchanged for another the next. The 'truth' of what constituted pro-environmental practices was thus constantly being renegotiated and contested in everyday life, the result being a lack of stable sustainable patterns of practice.

## 9. Concluding Remarks

Often climate change mitigation initiatives, both applied and academic, focus on individual capacities to bring about change. It is therefore important to look at the logic of individual decision-making. This paper investigated the challenges people experience in relation to pro-environmental practices in their

everyday lives. Four challenges were identified as barriers to actual pro-environmental practices in everyday life. This has provided valuable specific knowledge on the complexities of everyday life practices. What the four challenges point to, is that pro-environmental practices should not be seen as one entity or well defined set of isolated practices one can either choose to do or not to do, but rather as part of many other practices and fields in peoples' everyday lives. These challenges show the importance on focusing on practices in and of themselves: how they form, how they are reproduced, sustained, stabilised and changed, rather than on attitudes or values in isolation. This requires methods that focus on actual practices rather than stated practices (Hargreaves 2011). The intersections between different practices and different practitioners are crucial in understanding pro-environmental patterns, and would easily be overlooked in an examination focusing only on explicit attitudes.

All four challenges point towards the fact that other social beings play an important role for the practices of the interlocutors. The challenge relating to the wishes and conditions of everyday lives shows how pro-environmental practices intersect with practices relating to social behaviour, such as being a good employee, a good husband or wife, a good friend and a good parent, the wishes for ideas of the good life thus creating heavy strains on the resources of time and energy. The occurrence of new practices is further closely related to the social character of shifts in life situations. The second challenge, consisting of the negotiation of actual actions similarly points toward a constant orientation toward social others, be it either directly or indirectly, while considering societal ideas of right and wrong. The same can be said for the third challenge the interlocutors face, were the many intersecting rationalities they must navigate between, all illustrate different collective ethics. In the last challenge, common understandings of environmental concerns and climate change play an essential role and the process of constantly judging pieces of information against another becomes a social process of relating to close social others as well as societal channels of information. What other people do is therefore highly important. On one hand, the interlocutors described a resistance towards, at times fear of, being categorised as a certain 'green' or 'redeemed' type. Being labeled a fanatic was the ultimate critique as it placed the person in question



outside mainstream majority. On the other hand, the interlocutors conveyed feelings of inspiration when they experienced others – organisations, public institutions or other citizens, who acted positively in relation to environment and climate, showing the importance of feeling part of a general and broader pro-environmental community.

Whether individual pro-environmental concerns are transformed to actual practices is thus a highly complex process closely related to both the everyday life of that individual, but also to social relations and societal infrastructures. In practice theory shared understandings between practitioners are essential when explaining maintenance of practices over time – and thus the reproduction and transformation of social life in general. Shared knowledge signifies that any practice has to be understandable not only to the person carrying it out, but also understandable to social others (Reckwitz 2002a:250). Shared understandings, or shared practices, is not just another way of saying that individuals are doing the same things but rather that human beings are oriented towards each other. Barnes formulates this well when stating:

*'Human beings can ride in formation, not because they are independent individuals who possess the same habits, but because they are social agents, linked by a profound mutual susceptibility, who constantly modify their habituated individual responses as they interact with others, in order to sustain a shared practice'* (Barnes 2001:23).

As such, practitioners are not merely guided by own habits nor by the same collective object. In this way, shared understandings of individual practices can be reproductive of social structures in ways that resembles the self-discipline technologies and governmentality concepts of Michel Foucault (1988,2000). This means that instead of understanding pro-environmental behaviour as what people have in common – beliefs, ideas and norms – it becomes significant to look at what they *do* in common in order to avoid granting beliefs and norms deterministic characteristics that individuals cannot escape or change. For instance, driving a car in inner city Copenhagen might not be the best individual economic or efficient strategy. However, it might fulfill ideas of freedom, independence, identity, childhood dreams, or negotiated processes in the household, or it might be facilitated by a strong

societal emphasis on mobility and the extensive development of road systems. As Jackson puts it:

*'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'* (Jackson 2005:iii).

Furthermore, the insight that the interlocutors related to pro-environmental concerns with ambivalence and contradictions, despite relevant information, strong principles and intentions of living in a pro-environmental manner, makes it difficult to establish demarcated and internally consistent segments of either 'green' or 'unaware' persons for instance. Instead, the interlocutors should be seen as carrying out pro-environmental practices as well as inconsistent practices alternatingly. As argued, the varying character of the practices carried out cannot be explained by flawed logic or irrational inconsistencies, however, but should rather be assigned to the fact that each practice constitutes the most rational and meaningful choice at a given time. This means that they did not have one holistic strategy for how to act in pro-environmental way. The logics guiding their practices were rather permeating all spheres of their everyday lives; they sought to be good citizens, good employees, and good family members – whatever that meant at any given moment. As such their actions were not consistent according to one kind of logic only. Everyday life practices and knowledges can thus be seen as a *bricolage* (de Certeau 1984, Bourdieu 1977) of interrelated and unpredictable interests, impulses, needs and influences which were produced, negotiated and evaluated through interaction with other social actors, phenomena and situations. In other words, it is imperative to understand the specific context of any given choice to understand its causality, and so, it is the assumption of this study that approaches to behaviour change need to be local and context-specific in order to deal with heterogeneous publics and to acknowledge the diversity of *knowledges* in society (Whitmarsh *et al.* 2011:8).

## Notes

- 1 Agenda 21 is an action plan of the [United Nations](#) (UN) related to environment and [sustainable development](#). Agenda 21 was a core work product from the [United Nations Conference on Environment and Development](#) (UNCED) held in Rio de Janeiro, Brazil, in 1992 and includes importantly, the need to work locally with sustainable development. In Denmark it is statutory for municipalities to produce a local Agenda 21 plan every three years. There are great variations between the characters of these however, for some the requirement is covered by a page in an LCP, and for others their Local Agenda 21 plans are more comprehensive with citizens' participation processes and multiple activities. The plan mentioned above belongs to the latter and is currently in public hearing. See the agenda plan for Copenhagen 2012-2015, *Green everyday life and quality of life* ('Grøn Hverdag og Livskvalitet').

## References

- Ajzen, I (1991): The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Processes* 50, 179-211.
- Barr, S. (2003): Strategies for sustainability: Citizens and responsible environmental behaviour. In: *Area*, Vol. 35, pp.227-40.
- Beckmann, S., Christensen, A. & Christensen, A. *Myths of Nature and Environmentally Responsible Behaviours: An Exploratory Study*. Presented at the 30th European Marketing Academy Conference, May 2001
- Bourdieu, P. (1977): *Outline of a Theory of Practice* Cambridge, Cambridge University Press.
- Bourdieu, P. (1990): *The logic of practice*. Stanford university press.
- Barnes, B. (2001): Practice as collective action. In: T. Schatzki, K. K. Cetina & E. Von Savigny (Eds.). *The practice turn in contemporary theory* (pp. 17-28). London: Routledge.
- Brannigan, F. (2011): Dismantling the Consumption-Happiness Myth: A Neuropsychological Perspective on the Mechanisms That Lock Us into Unsustainable Consumption. In: Whitmarsh, Lorraine, O'Neill, Saffron & Lorenzoni, Irene (eds.) *Engaging the Public with Climate Change. Behaviour Change and Communication*. London: Earthscan.
- Burgess, J., Harrison, C. & Filius, P. (1998): Environmental communication and the cultural politics of environmental citizenship. In: *Environment and Planning*, Vol. 30, pp. 1445-60.
- Butler, J. (1990): *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.
- Certeau, M. de (1984): *The Practice of Everyday Life*. Berkeley: University of California
- Charmaz, K. (2006): *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. London: Sage Publications.
- Conner, M. & Armitage, C.J. (1998): Extending the theory of planned behaviour: A review and avenues for further research. In: *Journal of Applied Psychology*, Vol. 28, pp. 1429-64.
- Defra (2007): *Survey of Public Attitudes and Behaviours towards the Environment*. Defra: London
- Dembkowski, S. (1998): The environmental value-attitude-system model understanding the divergence between stated environmental consciousness and overt consumer behaviour. In: *Eco-management and Auditing*, Vol. 5 (2).
- Festinger, L. (1957): *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Fishbein, M and I Ajzen (1975): *Belief, Attitude, Intention and Behavior: an introduction to theory and research*, Addison-Wesley, Reading, MA.
- Flyvbjerg, B. (2001): *Making Social Science Matter: Why Social Inquiry Fails and How it Can Succeed Again*. Cambridge: Cambridge University Press.
- Foucault, M. (1971 [2001]): Nietzsche, Genealogien, Historien. In: *Talens Forfatning*. København: Hans Reitzels Forlag.
- Foucault, M. (1978): *The History of Sexuality*. Vol. 1. Hammondsworth: Penguin.
- Foucault, M. (1988): Technologies of the Self. In: Martin, L.H. et al. (eds). *A Seminar with Michel Foucault*. London: Tavistock. pp.16-49.
- Foucault, M. (2000): Governmentality. In: Faubion, J. (ed). *Essential Works of Foucault, Volume 3, Power*. New York: New Press.
- Geertz, C. (1973): Thick Description: Toward an Interpretive Theory of Culture. In *The Interpretation of Cultures: Selected Essays*. New York: Basic Books, pp. 3-30.
- Giddens, A. (1984): *The Constitution of Society*. Cambridge: Polity Press.

- Gram-Hanssen, K. (2008): Consuming Technologies – Developing Routines. In: *Journal of Cleaner Production*, Vol.16, pp. 1181-9.
- Gullestad, Marianne (1991): The transformation of the Norwegian notion of everyday life. In: *American Ethnologist*, 18: 480–499.
- Halkier, Bente (1999): *Miljø til daglig brug? Forbrugeres erfaringer med miljøhensyn i hverdagen*. Frederiksberg: Forlaget Sociologi.
- Halkier, Bente (2010) *Consumption Challenged. Food in Medialised Everyday Life*. Surrey: Ashgate Publishing.
- Halkier, Bente & Jensen, Iben (2008): Det sociale som performativitet – et praksisteoretisk perspektiv på analyse og metode. In: *Dansk Sociologi* 3 (19)
- Hargreaves, Tom (2011): Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change. In: *Journal of Consumer Culture*. 11.
- Harrison CM and Davies G (1998): *Lifestyles and the environment*. Environment and sustainability desk study prepared for the ESRCs environment and sustainability programme. London: ESRC.
- Hastrup, Kirsten (ed.) (1999): *Viljen til Viden. En humanistisk grundbog*. Copenhagen: Gyldendals Forlag.
- Hobson K (2004): Sustainable consumption in the United Kingdom: The ‘responsible’ consumer and government at ‘arm’s length’. In: *Journal of Environment and Development*, Vol. 13, pp. 121–39.
- Holstein, James A. & Gubrium, Jaber F. (1995): *The active interview*. California: Sage Publications.
- Irwin & Wynne (1996): *Misunderstanding Science? The Public Reconstruction of Science and Technology*. Cambridge: Cambridge University Press.
- Jackson, Tim (2005): *Motivating Sustainable Consumption: A review of evidence on consumer behaviour and behavioural change*. Centre for Environmental Strategy: University of Surrey.
- Järvinen, Margaretha (2005): Interview i en interaktionistisk begrebsramme. In: *Kvalitative Metoder i et Interaktionistisk Perspektiv: Interview, Observationer og Dokumenter*. Copenhagen: Hans Reitzels Forlag.
- Københavns Kommune (2012): Agenda 21-plan ‘Grøn hverdag og Livskvalitet’ 2012-2015. Center for Miljø.
- Latour, B. (1993): *We have Never been Modern*. Cambridge: Harvard University Press.
- Lorenzoni *et al.* (2007): Barriers perceived to engaging with climate change among the UK public and their policy implications. In: *Global Environmental Change*, Vol. 17, pp. 445-459
- Lyotard, Jean-François (1979): *La condition postmoderne: rapport sur le savoir*. Paris: Minuit.
- Læssøe, Jeppe (1995): *Folkeoplysning – en vej til miljøansvarlig handlen?* Arbejdsrapport, Miljøstyrelsen nr 2. Miljø og Energiministeriet.
- Maniates, M. (2002): Individualization: Plant a tree, buy a bike, save the world? In: Princen T, Maniates M and Conca K (eds) *Confronting Consumption*. Cambridge, MA: The MIT Press, 43–66.
- Mannetti, L., Pierro, A. & Livi, S. (2004): Recycling: Planned and self-expressive behavior. In: *Journal of Environmental Psychology*, Vol. 24, pp.227-36
- Martin, M., Williams, I. & Clark, M. (2006): Social, cultural and structural influences on household waste recycling: A case study. In: *Resources, Conservation & Recycling*, Vol. 48, pp.357-95.
- Norton, A. & Leaman, J. (2004): *The Day After Tomorrow: Public Opinion on Climate Change*. London: MORI Social Research Institute
- O’Neill, S. J. & Hulme, M. (2009): An Iconic Approach for Representing Climate Change. In: *Global Environmental Change*, Vol. 19, pp.402-410.
- Olli, E, G Grendstad and D Wollebaek (2001): Correlates of Environmental Behaviors – bringing back social context. In: *Environment and Behavior*, Vol. 33(2), pp. 181-208.
- Owen, D. (2012): *The Conundrum. How Scientific Innovation, Increased Efficiency and Good Intentions Can Make Our Energy and Climate Problems Worse*. New York: Riverhead Books.
- Owens, S. (2000): Engaging the public: Information and deliberation in environmental policy. In: *Environment and Planning*, Vol. 32, pp.1141–8.
- Patterson, M. (2006): Consumption and Everyday Life. In: Elliot, A. (ed), *The New Sociology*. Oxon: Routledge.
- Poortinga, W. & Pidgeon, N. (2003): *Public Perception of Risk, Science and Governance*. Norwich: University of East Anglia/MORI
- Reckwitz, Andreas (2002a): Toward a theory of social practices: A developments in culturalist theorizing. In: *European Journal of Social Theory* 5:243-63.

- Reckwitz, Andreas (2002b): The status of the 'material' in theories of culture. From 'social structure' to 'artefacts'. In: *Journal for the Theory of Social Behaviour*, Vol. 32 (2), pp.195-217
- Schatzki, Theodor (1996): *Social Practices. A Wittgensteinian Approach to Human Activity and the Social*. Cambridge: Cambridge University Press.
- Schatzki, Theodor (2001a): Introduction: Practice Theory, In: Schatzki, T., K. Knorr Cetina and E. von Savigny (eds) 2001. *The Practice Turn in Contemporary Theory*, London: Routledge
- Schatzki, Theodor (2001b): Practice Mind-ed Orders, In: T. Schatzki, K. Knorr-Cetina & E. von Savigny (eds.) *The Practice Turn in Contemporary Theory*. London: Routledge.
- Schatzki, Theodor (2002): *The site of the social. A philosophical account of the constitution of social life and change*. Pennsylvania, PA: Pennsylvania State University Press.
- Schousboe, Karen (1998): *Det enkle liv*. Nordisk Forlag.
- Shove, Elisabeth (2003): *Comfort, Cleanliness and Convenience: The Social Organization of Normality*. Oxford: Berg.
- Shove, Elisabeth (2009a): Everyday Practice and the production and consumption of time. In: Shove, Elisabeth, Trentmann, F & Wilk, R. (eds.) *Time, Consumption and Everyday Life. Practice Materiality and Culture*. Oxford: Berg.
- Shove, Elisabeth (2009b): Beyond the ABC: Climate change policy and theories of social change. In: *Environment and Planning*, Vol. 42, pp.1273–85.
- Shove, E & Walker, G (2010), 'Governing transitions in the sustainability of everyday life', in: *Research Policy*, vol. 39, pp. 471-6.
- Shove, E., M. Pantzar & M. Watson (2012) *The Dynamics of Social Practice. Everyday Life and How it Changes*. London: Sage Publications.
- Southerton D., Warde, A. & Hand, M. (2004): The limited autonomy of the consumer: Implications for sustainable consumption. In: Southerton, D., Chappells, H. & Van Vliet, B. (eds) *Sustainable Consumption: The implications of changing infrastructures of provision*. Cheltenham: Edward Elgar, pp. 32-48.
- Spradley, J. (1979): *The Ethnographic Interview*. Belmont: Wadsworth.
- Stern, P. (2000): Toward a coherent theory of environmentally significant behavior. In: *Journal of Social Issues*, Vol. 56, pp. 407–24.
- Strenger, Y. (2010): *Conceptualising everyday practices: composition, reproduction and change*. Working Paper no. 6, Centre for Design, RMIT University.
- Strengers, Y 2011, 'Negotiating everyday life: the role of energy and water consumption feedback', In: *Journal of Consumer Culture*, vol. 11, no. 19, pp. 319-38.
- Thulstrup, J. et al. (1999): *Danskerne 2000 – På vej mod et nyt årtusinde*, Institut for Konjunktur-Analyse.
- Verplanken, Bas (2011): Old Habits and New Routes to Sustainable Behaviour. In: Whitmarsh, Lorraine, O' Neill, Saffron & Lorenzoni, Irene (eds.) *Engaging the Public with Climate Change. Behaviour Change and Communication*. London: Earthscan.
- Voxmeter (2010): *Gronne Københavnerne. Undersøgelse af københavnernes forhold til miljø*. Made by Voxmeter for 'Teknik og Miljøforvaltningen', the Municipality of Copenhagen, November 2010.
- Warde, Allan (2005): Consumption and Theories of Practices. In: *Journal of Consumer Culture*, Vol. 5, 131-53.
- Whitmarsh, L. (2009): Behavioural responses to climate change: Asymmetry of intentions and impacts. In: *Journal of Environmental Psychology*, Vol. 29, pp.13-23.
- Whitmarsh, Lorraine & O'Neill, Saffron (2010): Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *Journal of Environmental Psychology*, Vol. 30 (pp. 305-314).
- Whitmarsh, Lorraine, O' Neill, Saffron & Lorenzoni, Irene (2011): *Engaging the Public with Climate Change. Behaviour Change and Communication*. London: Earthscan.