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Theories of practice – new inspiration for ecological economic studies on consumption

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Abstract

The dynamics behind the ever increasing consumption has long been a core issue of ecological economics, and there is a tradition of drawing not only on insights from economics, but also from disciplines such as sociology, anthropology and psychology. In recent years a practice theoretic approach has emerged in sociological consumption studies, as part of a general wave of renewed interest in practice theory emanating from a desire to move beyond dominant dualisms as the structure-actor opposition in sociology. The purpose of this paper is to introduce the practice theoretic approach in relation to studies of everyday life, domestic practices and consumption and to argue that this approach can be fruitful for ecological economics and other fields with an interest in the environmental aspects of consumption. The approach combines well with studies on the coevolution of production, modes of provision and consumption, a topic attracting increasing interest in ecological economics.

Introduction

Ecological economic studies have, for a long time, focused on the background and the environmental consequences of ever increasing consumption. Since the formulation of the IPAT equation it has been clear that the quantities of consumption ought to be high on the environmental agenda, and the many discussions on rebound effects and limits to technological solutions have emphasized that efficiency must be supplemented with sufficiency to improve the chances for a more sustainable development path. Furthermore, it has been argued that increasing overall consumption hardly leads to improvements of quality of life in already rich societies so there would be little sacrifice involved in putting a halt to overall consumption growth (Jackson, 2005). However, studies also illuminate the dynamics behind the increase – the competitive forces of the market economies, the “global sweatshop” and the “cheap banana” (Schor, 2005), technological change, advertising, lock-in in institutional structures like the work-and-spend cycle (Schor, 1991), search for identity, status competition, individualization, domain conflicts, the family dilemma, and so on (Røpke, 1999; Røpke, 2001). These dynamics prove a large challenge to the achievement of a more sustainable development.

Ecological economic work on the dynamics behind the ever increasing consumption has drawn not only on an economic tradition, but has been much inspired by sociological, anthropological, and

psychological studies. Not the least, this was due to a wave of consumption research in the humanities and the social sciences since the mid 1980s (Campbell, 1991; Miller, 1995), which proved relevant for the study of environment-related problems. In recent years a new trend has emerged in sociological consumption studies – the application of a practice theoretic approach to the study on consumption – and this approach promises to be highly relevant for ecological economics.

In brief, the point of departure is that people in their everyday life are engaged in practices – in doings – they are cooking, eating, sleeping, taking care of their children, shopping, playing football, and working (covering a variety of different practices). Practices are meaningful to people, and if asked about their everyday life, they will usually describe the practices they are involved in. The consumption – which is interesting from an environmental perspective – comes in as an aspect of practices: to perform a practice it is, generally, necessary to use various material artefacts such as equipment, tools, materials, and infrastructures. However, this aspect does not make people think of themselves as users of resources in their daily doings. People are, first of all, practitioners who indirectly, through their performance of various practices, draw on resources.

The application of practice theoretic approaches in consumption studies is part of a general wave of renewed interest in practice theory – some even identify a “practice turn in contemporary theory” (Schatzki et al., 2001). Practice theories emanate from a desire to move beyond dominant dualisms as the structure-actor opposition in sociology, but the endeavours differ between disciplines, and the theories are very heterogeneous. The history of practice theories thus includes philosophers as Wittgenstein and Charles Taylor, sociologists as Bourdieu and Giddens, and cultural theorists as Lyotard. Although there is no unified approach, practice theory can be articulated as a loose, but nevertheless definable movement of thought (Schatzki et al., 2001):13), and it can be argued that the recent work of the philosophers Theodore Schatzki (Schatzki, 1996; Schatzki, 2002) and Andreas Reckwitz (Reckwitz, 2002) has contributed to the formulation of a more coherent approach to the analysis of practice. Beyond the highly abstract philosophical accounts, the increasing interest in practice theory can be detected in a variety of fields, such as science and technology studies, geography, media studies, and design. The work of Alan Warde (Warde, 2005) has been crucial for bringing the perspective into consumption studies, and Elizabeth Shove and her collaborators have played an important role in developing a research programme in relation to both consumption and other fields through empirical studies (references to this work follow below).

The purpose of this paper is to introduce the practice theoretic approach in relation to studies of everyday life, domestic practices and consumption and to argue that this approach can be fruitful for ecological economics and other fields with an interest in the environmental aspects of consumption. I thus share the ambitions of Randles and Warde (2006) who promote practice theories in relation to consumption studies within industrial ecology. My account is much influenced by the accounts of Reckwitz (2002), Warde (2005), and Shove and her collaborators (Shove and Pantzar, 2005a; Shove et al., 2007), but the present outline is condensed and does not do justice to the complexities of the issues. In general, the sociological and empirically applicable insights are emphasized at the expense of philosophical subtleties. The account starts with the basic perspective and then elaborates on structure and agency, stability and dynamics before turning more specifically to consumption. In relation to the focus on consumption and domestic practices, a brief outline is added on the interplay between consumption and the modes of provision and, more broadly, with wider “instituted economic processes” – a perspective that combines well with practice theory. Finally, the relevance for ecological economics is emphasized.

Bridging the structure – actor dualism

A core topic of social theories concerns the relationships between individual and society, and the question of how to explain social order and how to conceptualize the social. Traditionally, the responses of social theories are grouped according to a basic opposition between two extremes: on the one hand, theories based on a structuralist perspective where the social system and structures exist as a given reality and to a large extent determine the actions of individuals, and on the other hand, theories taking their point of departure in self-contained individuals and reducing society to the sum of the individuals and their actions. Ever since this opposition was formulated, efforts have been made to bridge or dissolve it, for instance, by the thought figure of dialectical interplay between structures and actors: structures can only be established through the actions of individuals, and these actions are, simultaneously, formed by the prevailing structures. Giddens' theory of structuration (Giddens, 1984) brought these efforts further through a subtle and elaborate formulation of the interplay where social practices become the mediating concept between action and structure (actually so subtle that pedagogical versions are useful, such as (Kaspersen, 2000)). Society is seen as constituted by social practices that are produced and reproduced across time and space:

“The basic domain of study of the social sciences, according to the theory of structuration, is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time” (Giddens, 1984):2).

In Giddens' account agents are knowledgeable about their day-to-day activities, and most routinized activities are carried out based on a practical consciousness that does not require conscious reflection. Instead of conceiving of actions as isolated events, agency is seen as a flow of activities in an ongoing process, and accordingly, also intentionality is seen in a processual perspective rather than relating specific motivations to specific actions. However, reasons for actions can be discursively formulated, for instance, when agents are asked, and reflection can open for change, implying that agents are far from passive “slaves” of structural pressures. Through social practices that are reproduced across time and space, agents generate patterns of social relations, characterized as social systems. Social systems are thus relations between actors organized as repeated social practices and reproduced and transformed by the actors. The systems are said to have structural properties or institutionalized features, giving ‘solidity’ across time and space (p. 24). The structural properties involve elements of meaning and communication, control and power relations, and legitimation, and they offer rules and resources that agents draw on in their practices, such as the rules of language and various procedures for action. The rules and resources are both enabling and constraining for the agents' social practices, and they only have virtual existence since they can only emerge in practices and are, simultaneously, reproduced and transformed by practices.

Characteristic for the theory of structuration, as well as for other theories of practice, is that social practices become the site of the social – practices are the basic ontological units for analysis. This implies on the one hand that individual actions are constituted by practices, and on the other hand, that social order, structures, and institutions come into being through practices. Social life thus consists of a wide range of practices such as negotiation, political, cooking, banking, recreation, religious, and educational practices (Schatzki, 2002): 70). The work by Schatzki contributes to an elaborate understanding of the constitution and change of practices.

Practice theory is based on the idea that, in the continual flow of activities, it is possible to identify clusters or blocks of activities where the coordination and interdependence make it meaningful to

describe them as entities. In Schatzki's terminology, a practice is an organized constellation of actions – an integral bundle of activities – a set of interconnected doings and sayings (Schatzki, 2002): 70ff). An organized set of activities is seen as a coordinated entity when it is recognizable across time and space: a practice is a relatively enduring, relatively recognizable entity (Shove et al., 2007): 71). Such an entity can only exist when the activities involved are performed by people – practices have to be enacted. This enactment always differ slightly and may transform the recognizable entity over time. To make the distinction between the entity and the enactment clear, Schatzki applies two different notions of practice: practice as a coordinated entity (in the following: practice-as-entity) and practice as performance (in the following: practice-as-performance). Individuals face practices-as-entities as these are formed historically as a collective achievement, and through their own practices-as-performance individuals reproduce and transform the entities over time. Individuals thus act as 'carriers' of practices.

Practice-as-entity

Different scholars approach the more specific characterization of the practice-as-entity concept in different ways. Schatzki emphasizes that doings and sayings are linked and identifies three major avenues of linkage. He defines practice-as-entity as follows:

“a temporally unfolding and spatially dispersed nexus of doings and sayings. .. To say that the doings and sayings forming a practice constitute a nexus is to say that they are linked in certain ways. Three major linkages are involved: (1) through understandings, for example, of what to say and do; (2) through explicit rules, principles, precepts and instructions; and (3) through what I will call “teleoaffective” structures embracing ends, projects, tasks, purposes, beliefs, emotions and moods” (Schatzki, 1996): 89).

The focus is here on the linkages that make practices cohere as entities. In a more recent text he also emphasizes that the nexuses of activity are materially mediated, as people use artefacts to shape the connections that make a practice into an entity (Schatzki et al., 2001): 11).

Warde (2005) “translates” the avenues of linkage into components and refers to Schatzki's three components as understandings, procedures and engagements. In the same vein, Reckwitz applies the concept of elements in his definition of practices:

“A ‘practice’ ... is a routinized type of behaviour which consists of several elements, interconnected to one another: 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. A practice ... forms so to speak a ‘block’ whose existence necessarily depends on the existence and specific interconnectedness of these elements” (Reckwitz, 2002): 249-50).

Here a practice becomes a set of interconnected heterogenous elements, and artefacts are included as elements in the constitution of practices. As Reckwitz argues: “Carrying out a practice very often means using particular things in a certain way. It might sound trivial to stress that in order to play football we need a ball and goals as indispensable “resources”... but it is not” (p. 253). As Shove and Pantzar (2005a) note, the earlier versions of practice theories like those of Bourdieu and Giddens “are thoroughly social theories in the sense that material artifacts, infrastructures and products feature barely at all” (p. 44). Following the more recent formulations of Schatzki and Reckwitz, it is thus a core programmatic point of Shove and Pantzar to materialize social theories of practice. Simultaneously, they intend to develop a framework that can inspire empirical investigations, now reflected in a number of publications. In their account a practice is a

configuration of three elements: material, meaning, and competence – or in other terms, equipment, images, and skills. The linkages between the components are provided by the practitioners who integrate the elements in their performance of the practices.

Forming a practice-as-entity is about glueing activities together. Whereas Schatzki applies the concept of linkages for this “glue”, the other accounts apply the concept of components and reserve the concept of linkages for the active integration undertaken by practitioners when practices are performed. However, the basic understandings do not differ. In the following, I will apply the concept of components which seems easier to handle as a heuristic device. The accounts of the practice-as-entity concept also differ with regard to the listing of the components to be included. Here I follow the suggestions by Shove and Pantzar to rationalize the long list of components into a small number of categories and to include explicitly the material component. So a practice-as-entity is a set of bodily-mental activities held together by material, meaning and competence. In other words, a practice can be seen as a configuration of heterogenous elements.

Each of these three components should be understood as broad categories covering a variety “aspects”. The components do not have clear boundaries in relation to each other, and they are partly embodied in the practitioners. Take first the competence component which covers the skills and the knowledge needed to carry out the practice. Skills and knowledge are often learned by experience and training, and they become an embodied part of the practitioner. Some knowledge may be codified in formal rules, principles, precepts and instructions whereas other parts remain tacit in the form of know how. Some competences are generic in the sense that they are used in many practices, such as the abilities to read and write, while others are more specialized. Although the competences are partly embodied in the practitioners, the practice perspective implies that they are seen as part of the practice (which only exists through the performances) and thus as social in the sense that they are shared.

The component of meaning is about making sense of the activities. This includes ideas of what the activities are good for (or why they are considered problematic), the emotions related to the activities, the beliefs and understandings. Also meanings can be generic in the sense that they are shared by many practices, such as the idea that doing something is healthy. The practitioner becomes the carrier of the practice-related beliefs, emotions, and purposes when performing the practice, but these aspects of meaning are seen as “belonging to” the practice rather than emerging from self-contained individuals. Again, this is what makes meaning social.

The material component includes the objects, equipment, and bodies (or body parts) involved in performing the practice. Objects can be generic or specific. Note that the body appears not only in relation to the material component as similar to an instrument, but also related to the other components as embodied skills and as the bodily site for emotions. Performing a practice contributes to shaping the body, implying that widespread practices in a society or social group can develop characteristic features.

Some practices can be carried out by individuals, such as reading a book or taking a stroll, but many activities involve some sort of interplay with others, like playing football or socializing in different ways. This interplay is part of the bodily-mental activities held together by the components (it should be noted that Shove and Pantzar do not explicitly include the interplay in their account, but it seems important to me to do so). Sometimes all participants have parallel roles, while other activities involve the playing of different parts, maybe even characterized by unequal power

relations or exploitation. When the parts differ, it may sometimes make most sense to say that the practitioners are involved in different practices although they meet in a common situation. For instance, teacher and student meet in a situation combining teaching and learning practices, and doctor and patient have different perspectives on a consultation. In particular, practices involving exploitation make it obvious that they have to be understood in relation to wider social patterns, but the point has general relevance as argued in the following section.

Structure and agency

As the practice theoretic approach places the analysis of the history and development of practices at the centre of research, agency and, in particular, structure are relegated to more subordinate roles. It can be discussed whether a structural perspective should be conceptualized only as relationships between practices. As already mentioned, practices are related through the meanings, competences, and objects that are shared across practices, and practices are also related in other ways. For instance, some are complementary, like cooking and shopping for food items, or sports activities and transport, while others can replace each other like different travel modes. Practices can also relate to each other in clusters or complexes like all the activities involved in driving and maintaining a car. However, these observations do not sufficiently highlight the interplay between practices and wider social systems, their institutionalized features and material infrastructures (to add the material aspect to Giddens' account, also at the systems "level"). As Randles and Warde note: "Practices do not float free of technological, institutional and infrastructural contexts" (2006: 229). Social patterns such as the division of labour, gender relations, and unequal access to resources, as well as political, economic, legal, and cultural institutions are constituted by practices, but also provide a context for the performance of practices which is necessary to include in empirical analyses.

Agency is directly visible in practice theory, as human agents are carriers of practices, and they are seen as knowledgeable and competent practitioners who are able to link and integrate the elements of meaning, material, and competence necessary to perform practices. But the agents are not the starting point of the analysis, as practices logically and historically precede individuals, implying that practices, so to say, recruit practitioners. Practice theorists thus dissociate themselves, on the one hand, from models based on self-contained individuals, such as *homo economicus* who is engaged in the calculation of self-interest, and on the other hand, from models based on over-socialized individuals such as *homo sociologicus* who internalizes social norms, or *homo aestheticus* who is preoccupied with the presentation of self (Randles and Warde, 2006): 228). In practice theory individuals are seen as "the unique crossing point of practices" (Reckwitz, 2002): 256). But this leaves the question of how practices "recruit" practitioners – and from the perspective of the individuals, how people handle the combination of practices in everyday life.

As time is limited, practices can be said to compete for the attention of practitioners. When new practices emerge, they can only be taken up by pushing aside existing practices. From the perspective of the individual, it may seem obvious to present the problem as a question of choosing a combination of practices on the basis of some sort of criteria. However, this approach amounts to reintroducing an individualistic account rather than sticking to practice theory. This is, for instance, what Giddens does in his later book on modernity and self-identity where he defines lifestyle 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). As Warde (2005: 136) notes: "Giddens appeared to lay aside the arguments of *The Constitution of Society* (1984) when discussing lifestyles (1991: 80-7), where he

offered a thoroughly voluntaristic account of individual action”. In line with Giddens, Spaargaren combines a form of practice theory with the application of the lifestyle concept in his work on sustainable consumption (Spaargaren, 2004). In these accounts, the individual focus on self-identity and lifestyle becomes the background for the combination of practices in everyday life.

In economics, the theory of Linder (Linder, 1970) can be said to have a certain familiarity with the question discussed here, as Linder focuses on the complicated task that individuals face when they allocate their time between different activities. In his account an individual gets a yield of “utility” when spending time on a particular activity, and in accordance with basic neoclassical ideas, individuals are supposed to maximize the yield per time unit. This optimization idea differs from the idea of self-identity as the basis for combining practices, but the approaches share the application of methodological individualism which is at odds with a practice theoretic perspective.

In practice theory, time and space are seen as constituted by practices. First, practices shape time, or “practices *make* time”, as Shove formulates it (Shove, 2009). For instance, people distinguish between weekdays and weekends because they do different things on different kinds of days. Second, time is an integral aspect of practices: it takes a certain time to carry out a practice in what is considered to be a proper way. In addition to the duration, other aspects of time can be characteristic of a practice: things have to be done in a particular sequence, and the ability to time various activities correctly can be an important part of the competence involved in the performance of the practice. When time is seen as constituted by practices, an individual’s experience of time can, consequently, be seen as resulting from his or her performance of practices. These observations do not contradict that practices are competing for the time of practitioners, but they question the understanding of time as a resource with an outcome that can be maximized.

The observations do not offer any kind of organizing device in relation to the individual’s combination of activities. Being captured by a practice implies being captured by meanings, considerations and motives – implicating an image of everyday life as a puzzle of many considerations rather than any kind of optimization task. To get closer to how practices are organized in relation to each other, Shove et al. suggest to apply the concept of projects: “In everyday life, projects, which take many forms, are significant devices deployed in bounding and in making sense of the temporal flow, and in actively orchestrating and interweaving complexes of practices” (2007: 144). They made this observation in relation to a study of DIY-activities, but they argue that it has more general relevance. The same study highlights the importance of path dependency in practices as experiences lead to ever more advanced projects. In more general terms, it seems relevant to suggest that experience with various practices is important for which practices an individual is open to be recruited by. In addition, it is obviously important which practices an individual actually meets and has access to – sometimes quite accidental, as a study on floorball illustrates (Shove and Pantzar, 2007).

Still, time sets a limit to the number of practices it is possible to perform, and people in modern societies face the issue of coping with what is conceived as scarcity of time. Various strategies are applied to cope with time pressure, such as multi-tasking and having periods of rush to create periods of calm (Southerton, 2003). In general, the result is a high activity-intensity per unit of time (Røpke and Godsken, 2007). In the competition between practices, time-consuming leisure activities demanding much training as well as activities requiring coordination of schedules tend to loose out (Russell, 2005): 355, (Southerton, 2005), but such trends reflect a complexity of tensions,

commitments and considerations that cannot be reduced to maximization of “utility” or to the management of self-identity or lifestyle.

Stability and dynamics

Practices are considered recognizable entities across time and space and thus presuppose some degree of regularity and repetition. Maybe for this reason, practice theorists tend to have a preference for focusing on routines in everyday life. The stability is supported by a view of human behaviour focusing on the importance of practical consciousness and the embodiment of skills applied in everyday practices. Although actions are intentional, and the practical consciousness can be expressed discursively, if people are asked to do so, this seldom takes places as many actions are carried out as routines.

On the other hand, practices obviously change over time, new practices emerge, and others die out when practitioners can no longer be recruited. The dynamics of changing practices attracts increasing interest, and in particular, Shove and her collaborators have achieved new insights through empirical studies. In the following, I deal with some of the points made in this research and relate to other literature that can inform further development of the approach. But first a few comments regarding empirical studies on practices.

The philosophical accounts of practice theory are abstract so the application in empirical studies raises new questions. For instance, it is not so obvious how to delimit a practice. The point of departure must be phenomenological in the sense that defining something as a practice must make sense to people, but apart from that, there is little guidance. Practices relate to each other, for instance, when some practices can be considered sub-practices in relation to a more general heading, such as washing the car can be considered an element in car driving. In general, the research purpose of a study must be decisive for the actual delimitation. Another issue relates to the given condition that practices can only be studied in the form of practice-as-performance, and performances will always differ between individuals and between social groups, making it easy to lose sight of the practice-as-entity. Again, the research purpose must be decisive for whether to distinguish between different practices-as-entities when performances differ among social groups. Finally, practice studies involve the classical problem of setting the boundaries between the elements considered to be constitutive for the practice and the context in which the practice unfolds. And again, there are no general guidelines that can be applied. With these conditions in mind, a few ideas on the dynamics of practices are presented.

The emergence of a new practice requires a process of innovation where agents configure a set of bodily-mental activities by integrating elements of meaning, material and competence. If such a configuration diffuses by being taken up by others, a new practice can emerge as a provisionally stable and recognizable entity. A practice can thus be seen as an emergent phenomenon based on self-organizing processes, to use a thought figure well-known to ecological economists. Practice innovation is about making new links between existing or new elements. In an exemplary analysis of the emergence of Nordic walking, Shove and Pantzar (2005a) show how well-known components of walking, sticks, fun and health considerations are connected in the construction of a new practice. In general, they argue that dynamics emerge when components travel and migrate between practices, such as for instance health considerations appear across many practices, and competences related to computer use become integrated in various practices.

In the analysis of emergent practices, it seems obvious to apply concepts known from the economics of technological innovation. For instance, the first phase of configuration of a new practice can be expected to be characterized by experiments before a “dominant design” stabilizes and charts the course of gradual future changes (Dosi, 1982; Utterback, 1994). Innovation economics also points to the importance of the “selection environment” which for a practice innovation can be the context of other practices, macrosocial trends, infrastructure and institutions which provide more or less fertile ground for the new practice. Recent research emphasizes that the selection environment is open to active transformation by the actors (McMeekin, 2001), a point that can also be relevant for practice innovations.

When practices diffuse they can still be recognizable entities, but they also change like chameleons according to the context of the practitioners. While the elements of the practice circulate, the integration is undertaken by local practitioners, giving rise to modifications of the elements and the practice, as Shove and Pantzar (2005a) exemplify with the change of Nordic walking when it spread from Finland to the UK, and with the diffusion of floorball in different social settings (Shove and Pantzar, 2007). Interestingly, a game like baseball can take on very different meanings in different national contexts, but the game can be played between teams from two different nations although they, in a sense, play two different games (Wang and Shove, 2009). In the same way, practices can be differentiated when they travel across the social spectrum, as playing golf has done. This issue is central for Warde’s (2005) discussion of the relationship between practices and social differentiation. Practices also differ according to the engagement of the practitioner. A practitioner can be said to have a career with a practice as experience and learning-by-doing develop the skills, attaches new meaning to the activity and maybe calls for more advanced or supplementary equipment. Inspiration for the study of such careers can be found in the literature on leisure where devoted practitioners are said to be engaged in “serious leisure” (Stebbins, 1992; Stebbins, 1999). As the career of practitioners unfold, the cumulated experience and the modification of the elements can influence the trajectory of the practice-as-entity over time (Shove and Pantzar, 2007) (Shove et al., 2007): 92).

Technical change is often central to changing practices over time. Shove et al. (2007) study digital photography and do-it-yourself activities as examples of technologically induced change. The case of do-it-yourself illustrates, for instance, how competence can be seen as distributed between the skills of the practitioner and the tools, materials and instruction manuals used for performing a task. Recent development of materials and equipment has reduced the need for traditional skills and enabled new groups of practitioners to perform previously too demanding tasks, thus illustrating that the boundary between the elements of material and competence is fluid and subject to change. Also the digital camera implies a redefinition of the competences needed for the practice of amateur photography. Interestingly, however, not all elements in the configuration change simultaneously. For instance, the conventions regarding what a good picture is and the preferred motives seem to have survived the reconfiguration, at least in the short term.

The interplay between technological change and everyday life has been the focus of science and technology studies and, in particular, studies on domestication (Lie and Sørensen, 1996). Shove et al. (2007) draw on insights from these studies, but simultaneously argue that it is more fruitful to have practices rather than technologies at the centre of analysis. The practice approach emphasizes image (meaning) and competence to be just as important as artifacts which distances the approach from the concept of scripting in science and technology studies (Akrich, 1992). Furthermore, the practice approach considers the ongoing transformation of practices while the concepts of

domestication and closure suggest that the processes come to an end; and the focus on individual objects in domestication studies is replaced by a focus on assemblages of things that are integrated in practices.

Over time practices die out when they can no longer recruit new practitioners to perform them. Then remnants of the old practices can be found in the form of artefacts no longer in use, characterized by Shove and Pantzar as social fossils (Shove and Pantzar, 2005b). Shove and Pantzar suggest that studies on practice innovations should be supplemented by studies of the processes of killing practices – of breaking links between the components that held the practices together. Not the least in an environmental perspective, the killing of practices can be important.

Consumption in a practice theoretic perspective

In a practice theoretic perspective, people are basically seen as practitioners engaged in the practices of everyday life. Practices are what makes sense to people in everyday life, and their reputation, decency, self-respect and so on depend on being recognized as competent practitioners (Randles and Warde, 2006): 228). Most practices involve consumption in the sense that the appropriation and use of goods, services and ambience form an integral part of carrying out the practices, but people think of themselves as being involved in meaningful practices rather than being involved in consumption. Consumption as such is seldom meaningful, and it does not make sense to say that people have a desire to consume. Motivations and wants are the outcome of practices, and the conventions and standards of practices steer behaviour (Warde, 2005): 137). In this way consumption can be seen as deduced from practices.

When people sometimes think about themselves as consumers, they usually do so in relation to shopping where the role of the consumer is to be part in a market exchange. However, this view does not cover consumption in the sense that is interesting to ecological economics, partly because consumption in the sense of transforming resources into waste takes place over a longer period and not in the instant of the market transaction (Boulding, 1945), and partly because other forms of provision are important as well (see next section).

The practice theoretic perspective emphasizes aspects of consumption that tend to be underexposed in traditional theories of consumption. For instance, the focus on practices draws attention to doing rather than having in relation to consumption, and to the use rather than the display of products (Shove et al., 2007: ch. 2). When people consider acquisitions they are thus seen as motivated by images of the doings in which the products are implicated. As Shove et al. formulate it in relation to a study on kitchen practices: “things are acquired, discarded and redesigned with reference to culturally and temporally specific expectations of doing *and* having – not of having alone” (p. 37). Often, new things are acquired in order to induce new practices (p. 34) – although, in spite of the acquisitions, the imagined practices are not always realized (Sullivan and Gershuny, 2004).

The emphasis on doing implies attention to the competence of consumers as things are only useful to those who have the skills to use them. This aspect calls for acknowledgement of the pleasure of being a skillful practitioner. Large intrinsic rewards can be related to the pursuit of an activity where skills and knowledge are acquired and expressed, as the literature on “serious leisure” demonstrates (Stebbins, 1992) (Russell, 2005): 61f). In the same vein, Shove et al. (2007) find that some practitioners enjoy the process of do-it-yourself activities – not only the result of the process is important (see also (Campbell, 2005) on craft consumption and (Csikszentmihalyi, 1997) on the flow concept). The career of practitioners in DIY often involve ever more complicated projects, the

further development of skills and the need for a wider variety of tools and materials. This account thus views consumers as “knowledgeable actors whose consumption is in some sense an expression of their capabilities and project-oriented ambitions” (Shove et al., 2007: 43). In this way competences can work as consumption dynamics.

In various ways, the practice theoretic perspective contrasts with traditional images of consumers and consumption. Cultural theories of consumption tend to focus on consumers as manipulators of symbols, engaged in expressing their identity through visible signs. In accordance with this view, cultural theorists have taken most interest in consumption categories suited to signalling such as clothes, home decoration, and taste in music and other arts products. In contrast to this focus, practice theory encourages studies of the ordinary and routine practices of everyday life – also characterized as “inconspicuous consumption” (Gronow and Warde, 2001; Shove and Warde, 2002). This consumption is particularly interesting in an environmental perspective because a large share of the use of energy, materials and water is related to routine practices (Christensen et al., 2007; Shove, 2003). Good examples are the diffusion of airconditioning (Shove, 2003) and the emergence of daily showering (Hand et al., 2005). Often consumers are not aware of the environmental impact of routine practices as only a limited number of actions serve as symbolic indicators of environmental awareness and behaviour.

The practice theoretic approach is, obviously, at odds with the mainstream economic conceptualization of the consumer as an agent optimizing utility as a buyer in the market. As already noted, it is possible to note a certain familiarity with the perspective of Linder (1970), and also of Winston (Winston, 1982), (both inspired by (Becker, 1965)), who focus on the use of goods in household production processes, and who are aware of the “process benefits” (intrinsic rewards) related to the activities. However, Winston and Linder apply the idea that consumers optimize their time use – combining activities so as to maximize utility – and for practice theorists such an aim for self-contained individuals does not make sense.

Some environmentalist accounts of consumers – like the accounts of the earlier critiques of the consumer society (the Frankfurter school and others) – tend to portray consumers as dupes or victims of market forces and advertising persuading them to buy things that they do not really want. Although acknowledging the influence of advertising etc., practice theorists attach greater importance to the competence of practitioners, suggesting that they are not so easy to allure. Other environmentalist accounts emphasize lock-in of consumers by labour market and other institutions (Schor, 1991). This can be combined with a practice theoretic perspective acknowledging the importance of the macrosocial context of practices, but empirical studies inspired by practice theory tend to focus more closely on the development of specific practices.

Modes of provision and “instituted economic processes”

Practices in the domestic domain usually require material inputs and supporting services. For instance, eating practices require the input of meals provided by the supporting practice of cooking based on the input of primary produce. In some cases, the inputs are provided within the domestic domain itself as when household members do the cooking themselves, sometimes even based on primary produce from the household’s garden. But often inputs of goods and services from other domains are required: primary produce can be bought through the market, or received as a present from neighbours and friends; and also the cooking work can be provided commercially, through acquaintances, or by public provision. In general, four modes of provision are identified: market, state, communal, and domestic.

The configuration of a domestic practice is closely related to the predominant mode of provision for the inputs needed for performing the practice. Over time configurations change, for instance, when new technologies make it possible to carry out activities without having specialist knowledge. As mentioned above, the study by Shove et al. (2007, also reported in (Watson and Shove, 2008)) on do-it-yourself activities demonstrate how various new tools and materials have brought previous specialist tasks within the reach of ordinary do-it-yourself practitioners at home. The changes of domestic practices thus coevolve with changes in the mode of provision as more stuff is bought from DIY centres for the work done at home while fewer services are bought from skilled craftsmen. Historically, such coevolving changes in technologies, domestic competences, and modes of provision have been highlighted in Cowan's studies on household technologies (Cowan, 1983), Gershuny's identification of the "self-service economy" (Gershuny, 1978), and more recent studies on the history and present use of the freezer (Hand and Shove, 2007; Shove and Southerton, 2000). The environmental importance of the changing configurations of practices and modes of provision are highlighted in a collection on sustainable consumption (Southerton et al., 2004).

The market is the dominant mode of provision in modern societies, but markets work in very different ways, and their changing inter-linkages and institutional characteristics coevolve with changing domestic practices. This interplay is central to a Polanyi-inspired research programme on "instituted economic processes" (Harvey et al., 2001; Harvey, 2007). Harvey (2007: 170f) suggests to distinguish between four economic processes defined as different forms of transformation:

- Production: transformations of qualitative characteristics of objects and activities
- Exchange: transformations of property rights
- Distribution: transformations of activities and objects in time and place
- Consumption: transformations of use – where objects and activities are no longer involved in further changes in appropriation.

Each of these four process domains has their distinctive characteristics and their own dynamics, and simultaneously, they are mutually dependent and configured in relation to each other. The configurational complex changes over time as changes in one domain affect processes in the others, but the relations can also become stabilized for a longer period of time. Together these processes constitute the economic domain which interacts with other causal domains such as politics, culture, and biology (p. 174). Harvey prefers to talk about complex causality between domains that have their own specificities rather than applying the concept of embeddedness to explain that economic processes are never exclusively economic. His argument is that "The concept of embeddedness often fails the question of what is embedded in what, the legal in the political, the fiscal in the legal, or just the economic in a mush of all these" (p. 173). For ecological economists, I think this is a relevant point calling for reconsideration of our tendency to apply the concept of embeddedness relatively uncritically in relation to the embeddedness of the economic in the social. Harvey's use of the thought figure of complex causality, where there is no over-arching causal system at any level, has much in common with Norgaard's coevolutionary framework (Norgaard, 1994): Ch. 3-4) although Harvey distances himself from systems thinking and evolutionary explanations (pp. 171, 179). In my view, Harvey's account fits well with an evolutionary formulation saying that the different domains exert selective pressure on each other, and with a complex systems thinking where the systems themselves are open to change, thus dissolving a strict exogeneity/endogeneity dichotomy.

In the presentation of a research programme on consumption and demand, the instituted economic process perspective is combined with a practice theoretic perspective on consumption (Harvey et

al., 2001): 60). In the economic process domain of consumption, the consumption aspects of domestic practices so to say meet with changes in production technologies, supply chains, transport infrastructure, exchange institutions, retail systems, and so on – and domestic practices codevelop with these changes. Harvey and others have applied the instituted economic process approach to empirical studies of long-term changes of production and consumption, in particular, in relation to food. A study on the tomato (Harvey et al., 2002) follows the changing configurations over several hundred years of production technologies, transport systems, wholesale and retail markets, the biological characteristics of the tomato itself, the various tomato products, and the ways the tomato is incorporated in meals. In contrast to mainstream economic theory, the interdependence between supply and demand is emphasized – a point that is supported by other historical studies on the emergence of “the British cup of tea” and of “fish and chips” (referred in (Harvey, 2002)).

Relevance for ecological economics

The core points in the survey above can be summarized as follows:

- Practices are sets of bodily-mental activities, held together by a configuration of meanings, materials and competences. Practices are what makes sense to people in everyday life, and it is important for people to be considered competent practitioners.
- Consumption is related to practices since objects, tools, materials and use of energy are adjuncts to practices. The motivations for consumption thus emerge from practices – and not from any direct link between consumption and pleasure or between consumption and the fulfilment of functional requirements.
- Although people actively reflect on their practices, there is no overall aim that people pursue through their practices. Practices involve many different considerations and meanings, and the involvement in practices constitute people’s lives. People are recruited to new practices, but a certain path dependence is involved when people combine practices.
- Different forms of practice (legislative, business, educational etc.) constitute the wider institutional and material framework in which other practices unfold. Domestic practices unfold in an interplay with a wider framework of social systems, institutions (regulative, normative, cognitive) and material structures.
- From an economic perspective, it is particularly interesting to follow the interplay between domestic practices and modes of provision, including the changes in the wider complex of instituted economic processes. “Consumption” in the sense of transforming resources to waste takes place all the way through the chain of connected activities that lead to consumption as an integral part of domestic practices. From an environmental perspective, it is important to consider the impacts of the whole chain.
- Practices are constantly changing as practitioners make new configurations of meanings, materials and competences. Technical change plays an important role in providing new objects to include, but many other aspects of change are involved. The practice approach emphasizes the multi-causality of change, including changes of social systems, thus obscuring the endogenous/exogenous distinction.
- The complexity opens for many points of intervention, but also implies great difficulties with regard to predicting the consequences of intervention. These difficulties call for piecemeal institutional experimentation. Intervention should not only focus on the potential for environmental improvements, but also on the avoidance of problematic developments that tend to go unnoticed.

Practice-oriented studies of consumption and everyday life are interesting to ecological economics for several reasons. First, the approach fits well with basic thought figures and ideas in ecological

economics: the rejection of methodological individualism, the interest in institutions, and the focus on coevolution, multi-causality and complex systems rather than simple cause-effect relationships.

Second, the practice approach lies in continuation of ecological economic studies on consumption attending to the embeddedness of consumption and the need to include the structural conditions of individual choices. The practice approach qualifies these studies by getting closer to the junction for the interplay between structures and actors, opening for more elaborate exploration of the shaping of consumption. The perspective departs from moralizing in relation to consumption: consumption is embedded in practices that are often carried out for all the best reasons, and people have a legitimate interest in being competent practitioners. When the related consumption is environmentally problematic, there is a real dilemma because valued practices have to change. Hopefully, other valued practices can replace them, but the transformation is a real challenge. This is reinforced by the phenomenon that the development of ever higher normal standards related to routine practices in everyday life tends to proceed relatively unnoticed although the standards are costly in environmental terms.

Third, ecological economics has seen increasing interest in studying the interplay between production, systems of provision and consumption, partly in relation to the environmental aspects of global supply chains (Princen et al., 2002; Schor, 2005), and partly in relation to the potential for environmental improvements related to product-service systems (Tukker et al., 2006). Ecological economic studies on this interplay can find new inspiration in the work with instituted economic processes in combination with the practice approach. Furthermore, the idea of consumers as practitioners may inspire the more specific discussions on product-service systems which tend to focus on functionality in a relatively narrow way.

Finally, the emphasis on multi-causality highlights the need for policy responses combining a variety of interventions – both to encourage more environmentally-friendly configurations of practices and modes of provision and to promote the phasing-out of the more undesirable ones. Here the practice approach can line up with the increasing literature on transition theory (Elzen et al., 2004) which shares the basic thought figure of coevolution and applies a long time perspective. In spite of the warning that transitions are very difficult to manage (Shove and Walker, 2007), there is no other option than to try.

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