
Structures and mechanisms in sustainable consumption research

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Abstract: In discourses related to sustainable development and consumption, one essential and also controversial field concerns the integration of macro- and micro-level structures into research. The question is to what extent these two levels can be combined and applied to sustainable development research. The question is also methodological, given that one of the most common ways to classify social theories is to divide them into those concerning holistic explanations (methodological holism) and individual actors (methodological individualism). This paper addresses the problem of the conceptualisation of structure and its relationship to sustainable consumption research. The purpose of the research is twofold. Firstly, the different aspects of the notion of structure will be examined. A special interest is taken in the relationship between the macro- and micro-level. Secondly, the role of structures in sustainable consumption research will be discussed. Also, an alternative way to integrate macro- and micro-levels will be introduced.

Keywords: sustainability; consumption; structure; interaction; consumers; mechanism; institutions.

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Biographical notes: Leena Haanpää is a PhD student in Economic Sociology at Turku School of Economics and is working with a dissertation project that addresses the relationships between environmental questions and consumption. The working title of the dissertation is "Dimensions of environmentalism: A comparative study of the structures of contemporary green consumerism". The empirical part of the work is based on the analysis of two datasets, the first related to Finnish consumers' consumption styles and the second to broader data regarding environmental issues; green knowledge, values, attitudes and behaviour. She has published conference proceedings and working papers about the different green consumer behaviour related issues.

1 Introduction

A normative requirement of sustainable development is that economic growth and social development should be such as to meet the needs of the present without denying the opportunities for future generations to meet their needs (Benton, 2002; Hobson, 2002).

In order to achieve this, we must take into account the fact that sustainable development and environmentalism¹ are dependent on the broader society including both its macro-elements, such as institutions and micro-level actors, individual agencies. The methodological and theoretical diversity concerning the relations between macro- and micro-level structures requires more explicit consideration, if we are to improve the conditions of ecological change agents that effect social transformations in contemporary society (Halkier, 2001; Jamison, 2001).

The focus of this study is to analyse the structures and contextual factors that influence social life. The concept 'structure' refers in this study to theoretical constructions of 'macrocosmos' and 'microcosmos'. Through the investigation of structures from the perspective of both methodological holism and methodological individualism, we try to bridge the agency/structure or the micro/macro relationship. The relation between macro- and micro-society becomes essential when approaching sustainable development – taking a specific interest in sustainable consumption – in the global context. The study of these relations is important in order to obtain more information as to why environmentally friendly attitudes do not translate into corresponding behaviour. According to previous studies, the link between attitudes and behaviour emerges only in some social contexts, such as recycling (Derksen and Gartrell, 1993).

The purpose of this paper is as follows: firstly, different aspects of the notion of structure will be examined. A special interest is taken in the relationship between the macro- and micro-levels. Secondly, the role of structures in sustainable consumption research will be discussed. The focus lies on three mainly sociological explanatory schemes, those of *institutions*, *social mechanisms* and *interactions*. By attending to these concepts, an attempt will be made to explain and understand the underlying structures of social action, whether those belong to macrophenomena or to individual practices.² The discussion endeavours to combine environmental studies with sociological theorising leaning on the discourse of sustainable development.

Some limitations concerning this work should be noted: taking the structural approach to environmental issues means that the analysis emphasises theoretical discussion based on different social structures. Structures are understood in this paper as institutions as well as social and economic micro-level structures that condition individual action. Therefore, the interest is mainly in understanding causal relationships, interactions and underlying mechanisms with the interplay of structural levels that makes it possible to explain sustainable consumption. Many other approaches have recently become oriented towards sustainable consumption research, such as situational and lifestyle-based explanations, as well as technology-oriented and user-centred approaches (Autio and Wilska, 2004; Heiskanen et al., 2005; Spaargaren and Van Vliet, 2000). An alternative and equally important means of analysis would be, for example, cultural: a process that takes the content more profoundly into account. Focusing on different approaches at the same time and within a limited space is, however, demanding, if not impossible. For this reason, types of approach other than structural will not be discussed here. The idea of this paper is to include structural explanations drawn mainly from social science disciplines to illuminate the discussion from many sides and to reveal the scope of different explanations.

2 Giddens and Lawson on the use of structure in social science

An explicit use of the term 'structure' appears in the writings of two well-known scholars, in Anthony Giddens's theory of structuration and Tony Lawson's ideas of routinisation of social life. Both theorists have received much criticism; Giddens's structuration theory has been accused of being too general and based overly on the traditions of structural linguistic theory (Ilmonen, 1990). Lawson's logical principles have been seen as theoretically inappropriate, since they operate always from the general to the particular. However, these discussions on the concept of structure provide bases for further theorising and the development of new ways of considering the macro-micro discourse.

Giddens has devoted much of his research to the formulation of what he calls the theory of structuration (Giddens, 1984a,b). The central aim in this theory is to abolish the dualism between structure and actor. For Giddens, structure is not something stable but represents rules and resources that bind time and space to social reproduction. When defining the concept of structure, Giddens wants to make clear that neither functionalism nor structuralism have been able to attend to this notion. He claims that structure has been naively conceived as "some kind of 'pattering' of social relations or social phenomena" (Giddens, 1984a, p.16). What is important is that Giddens wants to separate the concepts of structure and system. Social structures exist in society objectively but not directly, rather as structural features of social systems. Structure refers to the structuring properties which reproduce social systems. Social systems, for one, consist of the fixed relations of individuals and groups, which have the greatest time-space extension (Giddens, 1984a). Giddens speaks about structure as rules and wants to distinguish them from the dominant use of rules in the philosophical literature. Giddens's insights into rules and following them lean on Wittgenstein's philosophy. According to Wittgenstein, following the rule means knowing how to proceed with action; in other words, knowing how to play with the rules (Giddens, 1984a).

One of the key insights in Giddens's writings is that human practices are very much routine based, which, for one, are conditioned by structures. According to Giddens, structure exists in disappearing and repeating moments in the flow of time. As structure is bound to a time-space continuum it is also an inevitable part of everyday life or rather 'day-to-day social activity', the phrase that Giddens uses systematically in order to express its very literal sense in trying to encapsulate exactly the routinised character of social life (Giddens, 1984a, p.xxiii). Giddens tries to solve "the fundamental question of social theory" (Giddens, 1984a, p.35), the problem of order, by demonstrating that our events and routines in daily life are not one-way directed but the flow is something that does not lead anywhere.

Routinisation is also at the centre of Lawson's ideas of human practices (Bibow et al., 2005). According to Lawson, human practices and routines are, in a Giddensian spirit, in part an expression of preexisting social structures. This means that routines are products of actions taken and attributions made in the past, not in current situations. Structures (systems, relations) enable the everyday activities of speaking, consuming, moving, since these activities or routines are ready-made by the existing systems. According to Lawson's view, structures exist prior to the current exercise of the individual agent. Social structure is therefore relatively autonomous from current human action and thus able to exert its own causal influence on human agency (Bibow et al., 2005).

Such a limited viewpoint of interaction between structure and human agency is not unambiguously adopted in this paper. Structures are social because they depend upon the human actor. As Bibow et al. (2005) point out, this dependency upon human agency makes it social. In order to avoid under- and over-socialised explanations of social structure, this paper assumes the presence of a perspective that sees society as “a dynamic process of interaction between pre-existing social structure and current human actor, through which social structure is reproduced and transformed over time” (Bibow et al., 2005, p.522).

Understanding sustainable consumption in the given frameworks implies working with the concepts of structure and actor. It has been demonstrated that a structured, institutionalised programme determines decisively sustainable consumption practices, such as recycling (Derksen and Gartrell, 1993). The macro world’s social context affects human actors in the integration of sustainable consumption into their everyday lives. Such important issues as the consequences of consumption are present in individuals’ lives, but as consumption practices are very much routine based, new, more sustainable consumption practices are difficult to create without taking the structural context into consideration. Pursuing only micro-oriented research on sustainable consumption, for example behaviour-related trade-off situations consumers face in their everyday purchase situations, is not, however, adequate. Bridging the two levels requires paying attention to human agency and structures at the same time and within the same research.

3 The use of structures in social sciences

In social sciences, structures are interpreted in social frameworks. In traditional sociological approaches, for example, the core basis of the analysis is formed by social structures. There is no common agreement of what structure is. The review of academic literature reveals that structures are connected and used also as synonyms for both macro- and micro-level elements. In literature dealing with macrofactors, the idea of structures often exists in the form of institutions. These institutional structures can exist at a national or at international level covering all domains of political, social, cultural and economic life. Micro-oriented theories focus on different socio-demographic, economic or social factors that aim at providing individual level explanations.

In macrostudies, structures explain (inter-)national systems and institutions, for example governmental policy-making, the welfare state, mass market and other existing institutions. Institutions can be classified into different types: two known categories from Scott (2001) and Giddens (1984b) are viewed briefly here. Scott divides institutions into regulative, normative and cultural-cognitive classes. The regulative approach emphasises the role of institutions as social contracts and sanctions; the normative view leans more on the collective pressure that maintains the institutions; while the cultural-cognitive approach accentuates the idea that institutions are driven by cultural meanings, not by sanctions Giddens (1984b) defines the types of institutions as symbolic, political, economic and legal. The classification is based on the type of structure, that is, what kinds of rules and resources an action involves. The symbolic type refers to the formation of meaning. Political and economic institutions differ from each other, the former leaning on obligations and the latter on allocated resources. With regard to legal institutions, Giddens (1984b) refers also to societies where formally defined regulations

do not exist. Moreover, for Giddens, institutions represent social systems that exist for much longer than people. Whereas an individual human being has a limited life span, institutions last much longer.

Institutions or in a broader sense institutionalisms, follow diverse theoretical traditions in different disciplines. Among political scientists, institutions are considered governmental in form; emphasis is given to the ways in which the organs of government interact with one another (Jamison, 2001). For example, Esping-Andersen has demonstrated that there are significant differences among countries in regard to social policy-making. By comparing national similarities and differences in social welfare structures, he has been able to group countries into four welfare regimes (Esping-Andersen, 1999). In management studies, institutional theorists have defined institutions as sets of rules, predefined patterns of conduct generally accepted by the members of a social group (Hukkinen, 1999). Society is likened to a game where the players are members of a social group. The same metaphor is adapted to the theory of new institutionalism in economic sciences, according to which different forms of institutions represent certain kinds of rules of the game. The rules are based on a system of sanctions, which punishes actors if the rules are broken (Heiskala, 2003).

Social micro theories (individual methodologies) focus on individual features, such as knowledge, values, beliefs, norms, attitudes and behaviour. Sociological theorists have traditionally paid lot of attention to finding factors that could explain these individual traits. The assumption is that attitudes and activities – such as concern for the environment or recycling behaviour – are at least partly set in the surrounding structural conditions. Because individuals belong to different economic, social and cultural groups, they also think and act differently. These structural locations influence the ways in which resources are distributed in society (Räsänen, 2003b). The structural micro factors typically used as explanatory factors – invariables – are different socio-demographic determinants such as age, gender, income, type of household, class, education, marital status and place of residence. The use of such factors is especially common in quantitative research while in qualitative studies those are used to a lesser degree.

Despite the simple identification of micro-level factors it is not, after all, very clear what these socio-demographic, economic or social determinants in fact embody and whether they can be understood as structures, as well. For example, class can be understood as both an explanatory structure and descriptive category (Giddens, 1973). In other words, it can explain, for instance, why people belonging to the middle classes have greener values than working class people (Haanpää, 2004). On the other hand, class is a description of people's ranking in a given society. What makes the determinants structures is the assumption that they contain an explanatory mechanism, which the researcher should be able to specify in terms of structural conditions (Räsänen, 2003b). Therefore, it is possible to explain an individual actor's beliefs and activities by using, for example, social factors as an explanandum variable. With this type of analysis, the type of information obtained reveals, however, only which variables best explain certain observations, not *why* social processes occur as they do in society (both at the macro- and micro-level).

In trying to provide an answer to the above question, for what reason the processes occur, the pendulum needs to be shifted from the dichotomy between the macro and micro discourse. In the remainder of this section, a third level, a *meso*-level approach is introduced, aiming to link the macro- and micro-levels. The notion of meso refers to middle-range theorising, which seeks to capture the interplay between macro and micro.

This idea is concretised in the writings of Robert Merton (Hedström and Swedberg, 1996), who rejected the attempts to develop general systems of sociological theory and instead brought together the idea of mechanism with that of middle-range theories. The mechanism-based explanation seeks to provide a “fine-grained and tight coupling between explanans and explanandum” (Hedström and Swedberg, 1996, p.298). We return once again here to the discussion about the very essence of structures and to the assumption adopted of the relationship between structure and human agency. Thus, the meso-level functions as a theoretical field in which the structural mechanisms and the interactions between macro- and micro-levels can be observed. Since the concepts of mechanisms and interactions are the building blocks for the meso-level, those are discussed first.

Social mechanisms are explanatory social processes that can be used in the interpretation of empirical results (Esser, 1996; Hedström and Swedberg, 1996; Räsänen, 2003b). These processes are seen to be produced by structural factors; this means that systematic structures can be found in institutional systems and individual practices, for example using a private car instead of public transport. What is important is that mechanisms are revealing structures, which in themselves do not explain much. Therefore, it is of great significance to note that empirical analysis requires the *interpretation* of these explanatory processes, since empirical research can operate only with measures of particular observations. It is people and not variables that do the acting (Hedström and Swedberg, 1996; Räsänen, 2003a). This very idea is of great importance and takes the argument of social mechanisms in the direction of methodological individualism. It is, however, important to note that methodological individualism does not imply that macrolevel factors would be of no importance or inappropriate in a theoretical sense, rather that macrolevel entities are linked one to another via individual actions (Hedström and Swedberg, 1996).

If mechanisms can be viewed as elementary building blocks of middle range theories, interactions (associations, interdependencies, relationships) form the link between the independent and dependent variables. Interaction effects are important in the interpretation, in determining the relationship between variables. As Esser emphasises (Esser, 1996), sociological explanation should not be exclusively about reporting the interaction effect between dependent and independent variables but should be able to make this relationship apparent. The analysis should not end with the determination that interaction effects exist between variables but should interpret this interaction.

As mentioned earlier, the researcher should not take exclusively into account either the individual (micro-level structures) or the institutional (macro-level structures) context, but instead try to find such mechanisms and interactions between the two levels that help to explain the observed relationship or lack thereof. Implications for a number of current debates for sustainability can be found, for example in studies focusing on environmental awareness and attitudes where either the institutional or the individual context is taken into account. On one hand, it has been argued that the perception of environmental problems can be explained by macrofactors, such as the level of national wealth and post-material values related to it (Inglehart, 1995). On the other hand, the focal target of criticism which considers consumerism as the main source of environmental degradation in modern industrial societies has perceived individual agency as a passive actor which substitutes social relations by commodities (Baudrillard, 1998) and acquiesces in the given structure of society.

However, individuals, when organising their lives, have to move between different fields of social life that affect their life-processes. These fields concern individual inputs, such as skills, commodities and environmental resources and different type of institutions: the market, the state and the rules of society, to mention but a few (Cogoy, 1995). It becomes, therefore, evident that the search for reasonable explanations for environmental issues cannot be limited to one or the other level of social life alone, even if clear interdependence and positive correlations could be found. In order to be able to strive for significant elements that influence on the interdependency we should focus on the interaction between structure and human agency. It is suggested here that by concentrating on the meso-level mechanisms, one could reveal hidden interactions and underlying linkages between micro- and macro-level structures. We shall return to this theoretical contemplation later, but first the structural features of sustainable consumption are analysed.

4 The structural features of sustainable consumption

Drawing together the various ideas discussed above and placing them into a sustainable consumption research context, requires some theoretical examples from all three structural levels, macro, micro and meso. The goal is to show the relevance of structural factors in explaining sustainability or environmentally friendly consumption and also to discuss the related problems. The orientation towards quantitative studies is adhered to here when considering the macro- and micro-levels but when examining meso-level, the scope is more open in order to achieve a broader analysis of its elements. Firstly, a two-way thesis of global environmentalism is briefly discussed as an example of a macro-level approach to explain sustainability problems in the consumption context. Secondly, a micro-level approach to the issue is introduced. This discussion is based on a green attitude-behaviour relationship. Thirdly, meso-level orientation to environmentally friendly consumption research is introduced. The meso-level approach is discussed via mechanism-based orientation.

A two-way thesis of global environmentalism has been presented in the environmental literature. The thesis is based mainly on Inglehart's post-material value thesis (Inglehart, 1997) and on the criticism it has received (Brechin, 1999; Dunlap and Mertig, 1997). The central theme of the two-way thesis is that there are two basic varieties of global environmental concern, divided between rich (Northern) and poor (Southern) societies (Guha, 2000; Guha and Martinez-Alier, 1997). The first is explained with a *post-materialist values thesis*, according to which global environmentalism is seen as a derivation of post-materialist syndrome (Yuchtman-Ya'ar, 2003). Environmental concern is a manifestation of typical post-material (-modern) values in wealthy countries, such as self-expression and quality of life (Brechin, 1999; Dunlap and Mertig, 1997; Guha, 2000; Lee and Kidd, 1997; Martínez-Alier, 1995). The second, *objective problems thesis*, suggests that the citizens' real experiences of environmental hazards in poor countries motivate them to protect the environment (Brechin, 1999; Inglehart, 1995).

According to critics of the theory, the use of postmaterialist values thesis (rich North) and objective problems thesis (poor South) in describing environmental concern is seen as too simplistic (Brechin, 1999; Brechin and Kempton, 1997; Dunlap and Mertig, 1997). Rather than this dichotomy, Dunlap and Mertig (1997) suggest concentrating on revealing the ways in which people perceive environmental problems. According to

Brechin (1999), global environmentalism is a complicated phenomenon, a mixture of regional environmental perceptions and international influences. In posing the two questions How should global environmentalism be described? and How can it be explained? Brechin (1999) implicitly addresses the problem of mechanisms and interactions. Brechin suggests we should try to find conceptual differences at a national level and then compare the results with other countries. As Brechin states, environmentalism is most likely a complex social phenomenon, which cannot be explored without generating more systematic research on the social bases of environmentalism worldwide, both at country level and regional level. He continues that more in-depth analyses of citizens' values and perspectives are needed as well (Brechin, 1999).

The discussion on the two-way thesis points out that there are several driving forces or structural macrolevel factors behind global environmentalism, not only the economic dimension but also the north-south division between countries and the social, political and cultural aspects. However, no other serious attempts in addition to post-material theory and objective problems thesis have been introduced to explain the perception (values, attitudes) of environmental problems in a global context, although the weaknesses of the two-way thesis are acknowledged. One of the main criticisms that Brechin and Kempton (1997) identified from the thesis concerned post hoc explanations, speculations on the possible reasons for people's attitudes and they argued that the explanatory framework should go beyond the two-way thesis. The authors did not, however, reveal the nature of this explanatory framework.

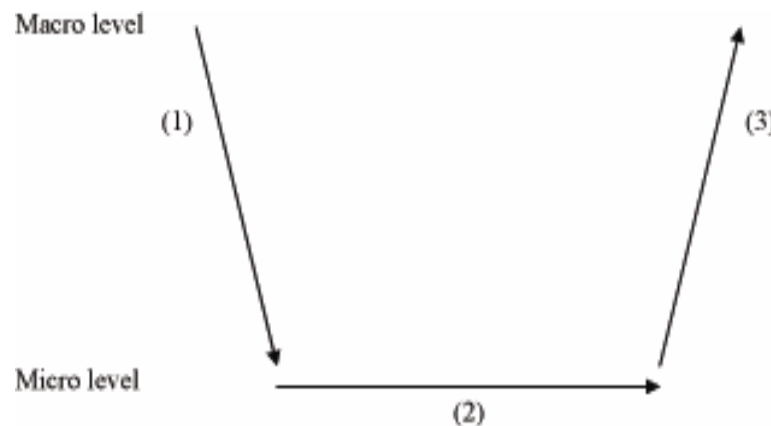
A study on the relationship between environmental attitudes and behaviour is now introduced in relation to micro-level research on environmentalism, in which Diekmann and Preisendörfer (2003) leans on a low- and high-cost hypothesis. The basic idea of the hypothesis is that environmental attitudes influence green behaviour primarily in situations and under conditions connected with low costs and little inconvenience for the individual actor. According to the hypothesis, the lower the cost of an actor's behaviour in a situation, the easier it is for the actor to put the actual behaviour into practice, behaviour that is influenced by similar attitudes. If costs are high, an individual attitude, such as concern for air pollution, is not likely to turn into corresponding behaviour, that is to cease private motoring and start instead to use public transportation.

The discussion related to environmental attitude-behaviour interaction is of crucial importance, especially when the empirical analysis is based on a large scale data, which usually consist of individual attitudes, values and questions concerning behaviour. It must be noted that self-reported behaviour is often biased towards 'ecological correctness', that is, people tend to answer in a socially acceptable way. Behaviour may also mean an intention, not the respondent's actualised behaviour. Consequently, it is known that individual behaviour is the sum of many structural, lifestyle and situational elements as was discussed earlier in this paper. In their paper about Germany, Diekmann and Preisendörfer offer an interaction mechanism, low-cost hypothesis, to explain how attitudes in fact affect behaviour and what are the costs of adopting a certain practice. As they state (Diekmann and Preisendörfer, 2003), the cost of behaviour has much stronger effects on behaviour than environmental concern. In other words, the willingness of the individual to make sacrifices for the environment by cutting down their standard of living (cost) can be explained in terms of low-high-cost hypothesis. For example, whether or not one is willing to go shopping without a car depends on the distance to the store: the further away the store, the larger becomes the cost and the more

likely it is that the car is used for reasons of convenience (Diekmann and Preisendörfer, 2003). The writers suggest that the low-cost hypothesis predicts that environmental attitudes are more important for low-cost activities and under low-cost conditions. For this reason it is also easy to understand why most people recycle paper, at least in the Finnish context. Over 90% of people living in Finland recycle paper often or always.³ The cost of recycling paper is low, because most local authorities have organised the system in such a way that people (households) have their own paper bin in their yard or near where they live. The situation changes, however, if the distance to this paper bin becomes greater, because the cost also becomes higher. As the authors point out, a structural and/or economic approach to the explanation of environmental behaviour is clear (Diekmann and Preisendörfer, 2003).

The relevance of structural elements for sustainable consumption is lastly approached from the meso-level view point. An attempt has been made in this paper to make it explicit that the context of the research, the social framework, is of crucial importance. While it has become even more apparent that there are significant national differences in the ways how societies function (Jamison, 2001), it must be kept in mind that in real life consumers are not uniform entities and their behaviour can be inconsistent and even contradictory (Räsänen, 2003a). Sustainable consumption research is, hence, a study on the interplay between structures and the individual. But how to combine these two levels into one theoretical framework that would function also in empirical research? One proposal offered here is the general mechanism-based approach already discussed earlier in this paper. The typology offered is based on Coleman's model (Coleman, 1986) of how to conceptualise social action. This so called macro-micro-macro model is presented in Figure 1. The proposal is also inspired by Hedström and Swedberg (1996) and Toivonen (2004) who have conducted a wide review of social mechanisms.

Figure 1 Macro-micro-macro relations



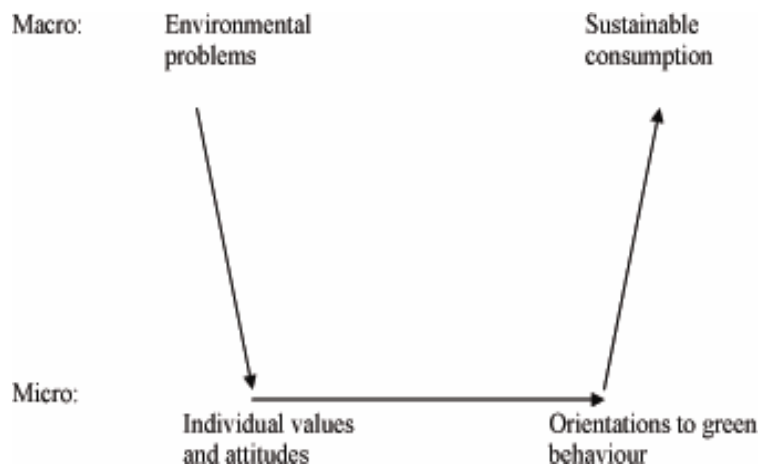
Source: Coleman (1986).

The figure illustrates the three steps or types of mechanism: macro-micro, micro-micro and micro-macro. The first step covers the macro-to-micro transition showing how macrolevel transformation entails changes at the micro-level. Hedström and Swedberg label this step *situational mechanism* (Hedström and Swedberg, 1996). The second step involves micro-to-micro, an *individual action mechanism* and it shows how psychological factors, such as individual desires and values, are turned into a specific

action. The *transformational mechanism*, as Hedström and Swedberg name it, represents the third step and it describes how these individual actions are transformed into a collective outcome, at the micro-to-macro level.

One concrete example that Coleman has used to illustrate how the mechanism functions is the way in which Protestant religious doctrine has, via macro-micro-macro transitions, come to change the economic system into the capitalist system. Motivated by this example, sustainable consumption is described in the same terms, as a structural mechanism which moves from real world problems and transfers from macrolevel to individual perceptions causing changes that finally can be observed in changes occurring at the macrolevel again (Figure 2).

Figure 2 Sustainable consumption according to Coleman's model



The first of these three transitions involves the recognition of environmental problems. How the mechanism works here is that the environmental changes in macrostate affect the formation of individual values and attitudes. Thus, the awareness of environmental problems increases and this awareness affects people's attitudes and in the long run, values. A macro-to-micro step occurs in this stage.

In the second phase, the micro-to-micro transition is illustrated, in which individual attitudes and values are strengthened sufficiently to generate new orientations in consumer behaviour. The behaviour becomes greener and more responsible. This case is about the individual's realisation that their values and attitudes also imply a change in orientation towards greener practices, followed by action to corresponding behaviour.

The last step covers the micro-to-macro transition, which shows how people's interaction with one another generates a collective outcome, sustainable consumption. Several theories could illustrate these specific transformational mechanisms, but such theoretical discussions fall outside the scope of this paper. Instead, the last stage of this paper discusses the suitability of this type of theorising for sustainable consumption research. The aim of Figures 1 and 2 is to present concrete ways in which to approach the multifaceted problem of sustainable development, especially when it comes to linking macro- and micro-level together.

Other sustainable consumption researchers have also reflected on these linkages or mechanisms. Røpke (1999) has demonstrated that behind the growth of consumption there lies a number of driving forces or mechanisms. Røpke divided these mechanisms

into three groups: economic, socio-psychological and historical and socio-technological explanations. What specifically interests us is the way in which the division was made. Røpke points out that the economic explanations in particular focus on macro or systemic aspects, the socio-psychological explanations are more micro-oriented and historical and socio-technological explanations belong to the meso-level. In terms of the meso-level, Røpke refers to everyday practices where structure-actor interplay becomes concrete. Tangible examples of this interplay are the car and television. Both products stand out as important agents of change in relation to everyday life.

“these commodities – as well as other ones – do not have their impact as single products, but as components of socio-technological systems. In the beginning they are introduced as single commodities, but gradually they are integrated in systems of related commodities, infrastructure, social practices and institutions. Such systems gain their own momentum and bring them lock-in effects as well as ‘technological paradigms’ in consumption” (Røpke, 1999, p.417).

The understanding of how the car has become a part of everyday life helps to explain why giving up private motoring is not easy. From a mechanism-based perspective, it can be argued that the spread of private motoring and the car becoming a must involves a value-formation mechanism, which means that when an adequate number of people perform a certain act (possessing and driving the car) they signal to others the likely value or necessity of the action (the car becomes a must), which for one influences other individuals’ choice of action (Hedström and Swedberg, 1996). Car driving or other consumption practices are always embedded in social frameworks that is, in macrostructures. As Røpke (1999) states, the relationship between framework (macro structure) and individual acts (micro structure) is dialectical, there is interaction between the two.

Numerous analogous examples could be given concerning the interaction between the macro- and micro-level via mechanisms. The analysis of mechanism-based sustainable consumption is concluded with the example of environmental behaviour from Halkier (2001), who has pondered the relation between private consumption at household level and institutional dynamics. According to Halkier, private consumption forms an important part of everyday life. Everyday life is connected with social space where people act, by creating and reproducing meaning for their different roles and experiences of life. Apart from the social context, everyday life is also “embedded in larger, ambivalent social dynamics, such as enhanced individualisation and enhanced institutionalisation” (Halkier, 2001, p.27). From that it follows that existing systems and structural elements condition environmental behaviour and, in addition, hinder alternative, more sustainable consumption processes. For this reason, structural and mechanism-based prerequisites of sustainable consumption must be recognised.

5 Conclusion

In this paper, certain conceptual terms have been discussed according to which structural factors can be understood as having effects on social practices. The starting point of the discussion was a central discourse dominating social sciences, the dichotomy between institutions (macro) and individual people (micro). On the one hand, theories connected to methodological holism see society through social structures. According to an alternative perspective, all social explanations are to be based on individual actions.

This theoretical disagreement is suffused with methodological debate. Quantitative studies attend to and try to explain both institutional and individual factors, aiming to find structures in people's actions. A qualitative approach, on the other hand, sees social action mainly as a dynamic interplay between actors (individuals) and thus behavioural patterns of individuals are characterised by contingency, not structures. In order to resolve this juxtaposition, a mechanism-based approach to viewing social phenomena and in this case sustainable consumption, was introduced. The idea is that social life is conditioned both by macro-level, institutional structures and by micro elements, individual practices. In other words, if we analyse the individual level, the context of the action should not be ignored, that is, the driving forces that generate certain outcomes. Conversely, if the institutional, society level perspective is adopted then no comprehensive, proper sociological explanations can be offered without taking the individual actor into account.

The first part of this paper dealt with conceptual meanings of structure. Based on the two well-known views, those of Giddens and Lawson, social structure is understood in this study not only as a mechanism that influences social behaviour but also as one influenced by the human actor. After the conceptual definition, different structures were discussed and their explicative power pondered. It was concluded that structures can explain social processes as variables to a certain extent, but without a mechanism-based approach they cannot explain the deeper, underlying connections between the macro- and micro-level. Thereafter, the meso-level approach was introduced and via examples from theory, the applicability of the meso-level as a concrete working method for a mechanism-based approach was discussed. The most essential theoretical example concerned Coleman's macro-micro-macro model, a model of social mechanisms, which conceptualises social action. This example was then adapted to the context of sustainable development, which was explained in the same mechanism-based conditions. The central intention was to illustrate how sustainability has become a macro-level phenomenon through social mechanisms between structures and individuals.

Finally, sustainable consumption-related examples were combined in order to make clearer the idea of social mechanisms. Although this paper has leaned on the structural approach, the importance of other kinds of approaches with different types of explanations and interpretations is acknowledged.

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Notes

¹With the term 'environmentalism' I try to combine available terminologies related to environmental studies. Environmentalism thus refers as well to socio-economic as to cultural discourses around sustainable development.

²There is a great controversy surrounding the very purpose of sociological theories. According to some scholars, sociology should pay less attention to explanation and more to discourse, while others see the role of theorising merely in its capability to explain (Hedström and Swedberg, 1996).

³The result is based on ISSP 2000. Source: International Social Survey Programme: Environment II, 2000 (Electronic data). Köln: Zentralarchiv für empirische Sozialforschung (producer, distributor), 2003. Yhteiskuntatieteellinen tietokanto (distributor): Tampere. 2004.