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Practices and infrastructures for sufficiency-oriented lifestyles

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Jana Kühl

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PRACTICES AND INFRASTRUCTURES FOR SUFFICIENCY-ORIENTED LIFESTYLES

Contents

- 1 Introduction
 - 2 Social transformation – context and aims
 - 3 On the path towards a post-materialistic society
 - 4 Sufficiency and social transformation
 - 5 Shaping sufficiency as a social innovation
 - 6 Empirical focus
 - 7 Conclusions and outlook
- References

Abstract

Limiting the anthropogenic environmental impact as part of the ‘great transformation’ is one of the central challenges of our time. However, ambitions to broaden sustainable ways of living are at odds with the consumeristic self-image of Western societies. In order to initiate a transformation, practices of sufficiency, which can already be found in nascent forms, can be used as exemplars for shaping social innovation processes. Based on alternative concepts of housing and living, resource-saving lifestyles which diverge from established ways of living can be identified. These can lead to mental infrastructures that motivate alternative lifestyles, as well as the need for infrastructures that enable sufficiency.

Keywords

Sufficiency – sustainable lifestyles – social innovation – everyday practices – go-along

1 Introduction

Containing climate change is one of the central debates of our time. However, this debate scarcely seems to have any impact on lifestyles in our society. Whether it is frequent meat consumption, frequent car journeys and flights or a generally constant compulsion to consume, activities with climate-changing and environmentally damaging impacts are usually a normal part of the daily lives of those who can afford them. By contrast, a sustainable lifestyle on the part of mainstream society is precisely what is needed in order to minimise environmentally damaging and climate-changing anthropogenic influences (WBGU 2011: 84). The concept of sufficiency can provide an orientation to promote appropriate lifestyles. Sufficiency is an approach and solution based on predominantly Western-oriented sustainability strategies which have arisen as a continuation of the Brundtland report (WCED 1991). The approach

gives substance to the normative aspect of sustainable lifestyles by emphasising responsible consumption as a necessary measure for climate protection, and provides a guideline for putting this into practice. The aim of sufficiency is to consume no more than necessary and to refrain from straining the environment and its natural resources in avoidable ways (Sachs 2015). While these aims are at odds with Western consumer societies, niches are frequently formed in which largely sufficient lifestyles are practised. They provide ideas and role models which can help others to imagine a sufficiency-oriented lifestyle. They can also stimulate social innovation processes in which both society's image of itself and everyday life are transformed in favour of more environmentally compatible lifestyles.

This article aims to contribute to the discussion of transformation research by addressing the notion of sufficiency in the context of the 'great transformation' according to the German Advisory Council on Global Change (*Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen*, WBGU). First, the notion of a post-growth society will be used to expand the aims of social transformation. On this basis, the concept of sufficiency indicates lifestyles that are aspired to as part of a social transformation and shows how sufficiency, as a social innovation, can be disseminated. To this end, sufficiency-oriented lifestyles will be proposed as exemplars of alternative practices, and a research design to identify these practices and use them as a stimulus for social innovation will be outlined.

2 Social transformation – context and aims

In the social sciences discourse on climate change, the work of the German Advisory Council on Global Change is particularly relevant in the German context. Its statements demonstrate that a drastic reduction of climate-influencing emissions is necessary in order to limit the negative effects of climate change and to protect the natural basis of human life. Crucial climate-changing factors are anthropogenic emissions which are continually increasing due to a resource-intensive economic system and way of life. In order to reduce these influences to the necessary extent, we not only need technological climate change measures but, above all, economic and social change. As a result, the German Advisory Council on Global Change is calling for a 'great transformation' to a climate-friendly society (WBGU 2011: 420). The transformation is described as a great transformation because it attempts to change global trends and aims at a new form of anthropogenic activity consisting of a decarbonised and resource-efficient (global) economy and society (WBGU 2011: 87). This requires a 'comprehensive change which envisages the restructuring of national economies and the global economy in order to avoid irreversible damage to the earth system, as well as to ecosystems and their effects on humankind' (WBGU 2011: 417). The addressees are predominantly Western industrialised countries. The lifestyles in such countries here leads to above-average consumption of resources in global terms, as well as an extreme strain on the environment which is largely at the expense of countries of production and resource exploitation outside the Western world. The German Advisory Council on Global Change (2011) calls for a socially just and ecologically responsible handling of natural resources and for the preservation of the aspects of nature which form the foundation for the life of humankind. It declares

social change to be a necessity which affects everyone. Transformation refers here to a socio-ecological transformation which pursues socially fair and ecologically sustainable economic systems and lifestyles (Schiemann/Wilmsen 2017: 8). In order to achieve this, 'not only must production and consumption patterns change, but also incentive systems, institutions, normative maxims and academic disciplines (first and foremost economics)' (WBGU 2011: 98). Thus, a transformation can only take place in the interaction between technological innovations and economic, socio-cultural and political changes, which lead to new practices as well as to new infrastructural and institutional frameworks of action. While it is largely accepted that a transformation is needed, there is disagreement in the scientific discourse about how such a transformation should take place. It is decisive for the success of a transformation that societies take active responsibility for sustainable economic systems and lifestyles (WBGU 2011: 84). Currently, however, it seems that a departure from consumer society and its growth characteristics is being pursued neither socially nor politically, with the result that there is no impetus towards active change (vgl. Welzer 2011). The German Advisory Council on Global Change (2011: 84) does identify a change in worldwide values in favour of sustainability and environmental protection. Likewise, surveys by the German Environment Agency (*Umweltbundesamt*, UBA) identify a growing environmental awareness in the German context (*BMUB* [Federal Ministry for the Environment, Nature Conservation and Nuclear Safety]/UBA 2017). However, this is not generally reflected in an environmentally aware lifestyle. The desired transformation necessitates changes to routines, which are usually difficult to make (vgl. John 2013). It requires changing resource-intensive consumer behaviour, which entails limiting the conveniences which are based on consumer goods and material prosperity. However, knowledge of the 'right' action, on its own, does not seem to generate sufficient pressure to act. These changes seem uncomfortable and will presumably only be implemented by the majority if individual threats can be averted and there is a discernible individual incentive for doing so (e.g. for the enactment of one's own lifestyle and the acquisition of social capital), or if changes become necessary due to the behavioural expectations of one's own social reference groups and ordinances. Psychological and anthropological research predominantly deals with questions of individual behavioural change (vgl. u.a. Hübner 2012), whereas spatial planning and sociological spatial research are focused more on considering social and political processes and the action-relevant contexts of a transformation.

In current Western society, climate protection achievements can already be identified, such as the use of renewable energy. Changes in social consumer practices can also be observed, such as a growing market for fair trade and organic products (Wenzel/Kirig/Rauch 2008). However, these individual adaptations do not constitute a comprehensive solution. The consumption of sustainable products, for example, can partially limit consumption-driven environmental damage. However, the causes of ecological problems – the pursuit of growth on the part of capitalist economic systems and a social striving for happiness, self-worth and satisfaction by means of consumption and always wanting more – remain intact (cf. Paech 2016). Even the strategy of the German Advisory Council on Global Change seems to persist in the logic of this consumerism. It propagates the consumption of sustainable products which create a 'moral added value', as well as 'the (self-)awareness of doing something useful and good for the environment and posterity and of being recognised by others for this' (WBGU 2011:

274). Here, satisfaction ('moral added value', 'something useful and good') and social recognition ('(self-)awareness', 'being recognised') are pushed via consumption, thus suggesting a partial modification of consumption habits, but not a transformation towards a consistently resource-saving, environmentally friendly and socially responsible lifestyle. Accordingly, critics see the necessity not of a transformation but of a fundamental transition in the sense of overcoming capitalist economic and social systems and the associated social relationships with nature (Brand 2014; cf. e.g. Jonas 2017). Approaches to a post-materialistic society offer indications of how to overcome this path dependency on a capitalist logic.

3 On the path towards a post-materialistic society

In many respects, the lifestyles that are common in society are guided by socially shared ideas of a good life. A good life refers here to a successful or satisfying way of shaping your life, and is expressed in personal happiness in the sense of fulfilment. At the same time, the good life is understood as 'an action, an activity guided by reason and feeling' (WBGU 2011: 84). How a good life is shaped can vary greatly depending on attitudes, value systems and convictions. Moral principles also serve as guidelines and boundaries within which the aspiration towards a good life is shaped (vgl. Ott/Voget 2013). In Western consumer societies, the good life is predominantly defined by material prosperity; this goes hand in hand with a social status which is expressed in material terms. Here, 'activity' is directed by individual utility, as well as by the aspiration to increase personal happiness by means of consumer goods (vgl. Haubl 2009). In contrast to this, the aim of a resource-saving and environmentally compatible economic system and way of life can be thought of as a post-materialistic attitude which highlights alternative paths to thinking in terms of capitalist growth.

The concept of post-materialism originates in Inglehart (1977) and stands for a value system which departs from a consumer orientation and the striving for material wealth. Fromm (1976) speaks in a similar way about a post-materialistic lifestyle. This and its underlying values form the core of a post-growth economy. They formulate an economic system which does without growth and which strains natural resources as little as possible (Jackson 2009; Schulz 2012; Paech 2016). At the same time, it proposes an understanding of a good life which is based on findings from happiness research. According to this, an accumulation of material prosperity does not, per se, lead to an increase in personal satisfaction (Haubl 2009: 4 f.). Consumer society is an affluent society in which the majority possess more than is necessary and new consumer needs are permanently being suggested (Paech 2016: 110 f.). Following this suggestion, members of a consumer society invest their individual resources in gainful employment in order to be able to afford consumer goods and thus create fulfilment. However, fulfilment remains elusive as long as other consumer goods remain unattained, and with them unfulfilled promises of the attainment of social status, happiness and satisfaction (Haubl 2009: 5 f.). Even more income is needed in order to acquire these. At the same time, business optimisation processes mean that more tasks often have to be performed in working life, resulting in time pressure and a pressure to perform which results in overstraining (Böhle 2018: 77 et seq.; Haubl/Hausinger/Voß 2013). This strain exacerbates symptoms such as frustration, but also depression

and burnout, stress-related health problems, and social tensions and resentment. Gainful employment therefore becomes more of a physical and psychological burden rather than resulting in prosperity (Best/Hanke/Richters 2013: 2). Stengel (2011: 16) describes this as a 'pathology of modernity'. A post-materialistic way of life aims to break through this cycle and locates fulfilment precisely in freedom from consumption and possessions. Accordingly, freedom from superfluous consumption enables freedom from the unsatisfying search for fulfilment through material goods and, at the same time, lessens the dependency on earnings. Instead, capacities for self-realisation are opened up by shaping a lifestyle with as much freedom as possible. Here, self-worth and social status are measured not by possessions but by immaterial wealth such as social relationships, self-efficacy and deceleration, freely available time and leisure for personal development (time sovereignty) (Paech 2016: 126). Equally, fewer possessions liberate people from burdens and the fear of material loss. To paraphrase Fromm (1976), fulfilment lies not in 'having' but in 'being' – being liberated from material possessions and status symbols.

The German Advisory Council on Global Change also cites the ideal of a good life which is oriented towards post-materialistic values: 'It is not solely or predominantly based on a large number of material goods, on conveniences or pleasures, but on the fulfilment of humankind in a comprehensive sense which is beneficial to fellow humans and the environment. This includes self-development, i.e. the development of the possibilities available to a person, as well as public spirit, the assumption of responsibility for the general good, and a range of principles of justice. "Good living" is generally dependent on the fulfilment of certain basic needs, and also on the existence of an individual's space for manoeuvre and options which must be secured by material standards. Beyond this – and across cultures – immaterial factors play a role in the pursuit of happiness, such as acknowledgement by others, embedding in communities and networks of various, but above all familial, types, but also the fulfilment of aesthetic and hedonistic pleasures' (WBGU 2011: 85). A social transformation can therefore be guided by an image of the good life which is oriented towards a post-materialistic value system. According to this argument, the concept of sufficiency can highlight how this vision can be transferred to lifestyles in society.

4 Sufficiency and social transformation

Sufficiency (Latin *sufficere* = to suffice) refers to using natural resources in moderation by means of a modest, less materialistically oriented lifestyle (cf. Kleinhüchelkotten 2005). The concept originates in the sustainability strategy triad, according to which the interaction between sufficiency, efficiency and consistency leads to the implementation of sustainability goals (Huber 1995). Efficiency in this context means an increase in resource productivity. Consistency aims at the use of more nature-compatible technologies and substances, as well as the optimisation of material flows in production, in order to reduce negative environmental influences. Sufficiency, consistency and efficiency are used above all in the context of economic interests, in order to decouple economic growth from resource consumption and emissions and to enable ecologically friendly growth (Huber 2000). Sufficiency serves here as a complement and corrective to the effects of consistency and efficiency. In contrast,

approaches which promote a post-growth economy emphasise that economic growth is not compatible with the requirements of climate protection (Linz 2002; Paech 2005). Resource consumption and the emissions caused by production and consumption practices are increasing globally to a greater extent than they can be reduced by measures taken within the efficiency and consistency strategy (Stengel 2011: 134). Thus, sustainable development within the natural limits of growth can only be achieved by a consistent saving of resources (cf. Schiemann/Wilmsen 2017). Following this, sufficiency is emphasised as the prerequisite for the achievement of ecological goals, and as a contribution to the promotion of global distributive justice. 'The criticised efficiency principle can be countered by the concept of sufficiency, i.e. the question of how (particularly in the "Global North") material consumption can be reduced without negatively impacting people's satisfaction or well-being, and at the same time contributing to a fairer resource distribution to improve living conditions in economically disadvantaged population groups and regions' (Schulz 2012: 266). Here, sufficiency encompasses two things: 'In the narrower understanding, it forms the counterpart to efficiency, is directed towards a lower consumption of resources and is therefore quantitative in nature. The broader understanding is directed towards a new sense of prosperity and to the cultural change which is both its prerequisite and its result' (Linz 2002: 13). Sufficiency is also seen as a macro-social task: 'It addresses the insight and behaviour of individuals, groups, bodies and institutions. It affects political planning as much as the action of individuals' (Linz 2002: 12). Sufficiency is not explicitly mentioned in the strategies of the German Advisory Council on Global Change, although an ecologically responsible, resource-saving way of life is among the core objectives of transformation. If sufficiency is understood to be a concept that not only demands sustainable lifestyles but also realises them in practice, it can be used in pursuit of bringing a social transformation to fruition.

Practising sufficiency requires a voluntary restraint which is guided by a sense of responsibility for nature and the environment and is based on a post-materialistic understanding of prosperity and quality of life (Ott/Voget 2013). The concept therefore converges with the voluntary simplicity movement (*voluntary simplicity*) (cf. e.g. Elgin/Mitchell 1977). Without wishing to operationalise sufficiency (cf. Kleinhüchelkotten 2005), sufficiency means 'avoiding or reducing particularly resource-intensive types of goods (e.g. TV, meat), doing with less in terms of size, functions and convenience (a smaller flat, a car without air conditioning), replacing goods with qualitatively different ones (bicycle instead of car), extending the operating life of products, using products less frequently (e.g. of electrical appliances), making or producing things on one's own or sharing use' (Fischer/Gießhammer 2013: 9, Herv. i. Orig.). However, at least one question remains largely unanswered: How can this way of life become established? Critics designate sufficiency, in the sense of post-materialism, as idealistic and not feasible (Linz 2002); they argue that it is human nature to strive for more (Lütge 2013). The guiding principle of dematerialising one's lifestyle is interpreted as a restriction which entails a loss of the existing standard of living (Kleinhüchelkotten 2005: 56 f.). In today's society, consuming less and having fewer consumer goods is also regarded as a social decline (Linz 2002: 8). Proposals for ecologically responsible practices are scorned as 'eco-dictatorships' and rejected, particularly by political conservatives and economical liberals (cf. Adler/Schachtschneider 2010). Anyone who practises sufficiency in a society oriented towards

consumption and status acquisition breaks with the social mainstream and provokes social exclusion (Jackson 2009). Overcoming this consumerism within society means an 'inner reversal' of the existing logic of action and therefore a rethinking which is tantamount to a cultural rupture (Best/Hanke/Richters 2013: 107). Approaches to this might be to de-legitimise the established logic of consumerism and to overcome a 'mental, habitual and emotional attachment' to the established behavioural patterns of consumer society (Welzer 2011: 34). Such a transformation requires 'new structures that provide capabilities for people to flourish, and particularly to participate fully in society, in less materialistic ways' (Jackson 2011: 161). This realisation, in turn, leads to a search for ways to implement this change. According to the German Advisory Council on Global Change, for social change to happen, 'suitable narratives of change should be developed, so that these can be fed them into everyday discourse through creative forms of knowledge communication, and develop further scope there' (WBGU 2011: 24). This task seems complex: 'The daily opened journal of all the available things forms a self-evident universe which is difficult to narrate against, particularly because the majority of mental infrastructures are in fact not reflexive, not a question of choice or decision and certainly not an offer, but simply a massive pre-existing world into which one is born and the history of which one constantly continues to tell through one's own biography, one's values, consumer decisions and career' (Welzer 2011: 32). According to this view, the dissemination of sufficiency requires narratives with the quality of a mission statement by outlining a desirable antithesis to the pursuit of consumerism and showing an alternative direction of development. However, in order to break up established modes of action along these lines, these narratives must also be translated into actual lifestyles. The consideration of sufficiency as a social innovation can be discussed as an approach to this.

5 Shaping sufficiency as a social innovation

Social innovations are viewed, alongside technological innovations, as the main path towards a transformation (WBGU 2011: 23). They encompass 'new ways of achieving goals, and in particular new organisational forms, new regulations, new lifestyles which alter the direction of social change, which solve problems better than earlier practices, and which are therefore worth being imitated and institutionalised' (Zapf 1994: 33). The process of social innovation goes hand in hand with restructuring, re-organisation or even re-creation, which is conceived, negotiated and adopted in social processes and is ultimately reflected in a reconfiguration of social practices (Howaldt/Schwarz 2010: 89). However, this reconfiguration cannot be achieved solely by a growing environmental awareness (cf. section 2). Knowledge of the 'right' way to act reaches 'only the cognitive part of our orientation apparatus; the far greater share of our orientations, which is organised by routines, interpretive patterns and unconscious references – in short, by habit – remains completely unaffected by this' (Welzer 2011: 38). Accordingly, social innovations only take place by changing those habitual orientations which implicitly guide social practices (Howaldt/Schwarz 2017: 240). According to Welzer, (2011) these habitual orientations can be described as mental infrastructures. They are the reflection of social disposition and value systems as well as cultural contexts, and instruct routines, habits, and perceptual and interpretive patterns (Welzer 2011: 30). In order to stimulate social innovation towards a sufficien-

cy-directed lifestyle, specific orientations for this must therefore be initiated. But how can this work?

Social innovations are social processes which occur as a change in specific social practices (Howaldt/Schwarz 2017). These practices may be guided in a meaningful way by specific orientations of mental infrastructures. At the same time, mental infrastructures themselves are formed, disseminated and reproduced in social practices. In order to change mental infrastructures, practices which serve as exemplars for the practices of others must therefore change (Welzer 2011: 39). Schwarz/Howaldt/Kopp (2015) refer here to social innovations by means of alternation between inventions (new practices) and emulation. In the conceptualisation of social transformation processes, the exemplar function intended for emulation is held by the pioneers (WBGU 2011: 256 ff.). Pioneers are individuals or small groups who initiate and shape changes by rethinking existing conditions and trying out alternatives. They also participate in the dissemination of new ideas (WBGU 2011: 419). Subcultural groups which pursue alternative living concepts in social and spatial niches and thereby practise aspects of sufficiency may be regarded as such pioneers (Adler 2016: 16). They are not only crucial players who 'can plausibly demonstrate the limits of the established social concept (in this case, an economic system largely based on the use of fossil fuels, known as the high carbon economy) and have at their disposal (attractive) guiding principles (narratives) towards which social change can be oriented' (WBGU 2011: 90). Their practices are exemplary on an abstractly meaningful level, and could be described as action-driving mental infrastructures in the narrower sense. In their activities, they demonstrate certain motivations and moral guidelines which can be adapted by others. Thus, for example, a visibly responsible relationship with the environment may be taken as a moral benchmark for the orientation of social lifestyles. Their efficiency, their zeal and ultimately their ability to make a successful (alternative) lifestyle concept visible can also help to exemplify a lifestyle geared towards sufficiency in a way that appears feasible and desirable. Thus, through exemplars for a fulfilling way of life, sufficiency can be liberated from its associations with restriction and sacrifice (Best/Hanke/Richters 2013: 8). Furthermore, they have developed expertise about how sufficiency can be put into practice, and therefore provide orientation for realising sufficiency-orientated lifestyle. (Adler 2016: 4). Bringing these practices to fruition, in turn, requires not just expertise, motivation and moral guiding principles but also appropriate conditions for action. Here, the experiences of the pioneers enable conclusions to be drawn regarding institutional infrastructures as formal frameworks which enable sufficiency and offer options for acting in different ways.

Based on these conceptual assumptions, the shaping of social innovation processes can be understood as the task of shaping social desires and practical abilities. This can in turn be transferred to the shaping of infrastructures. Infrastructures refer, in this context, to 'the entirety of material, institutional and personal facilities and circumstances which are available to the collaborative economy (companies, households, authorities)' (Frey 2005: 469). Infrastructures shape functions in the social and economic interest. In this capacity, they also contribute to the 'practical ability' to live a sufficiency-oriented lifestyle. Social innovations take place within particular material and institutional framework conditions, which open up a space of

opportunities with regard to social practices. Among these, infrastructures which offer a type of physical use and other tools or aids enable or facilitate sufficiency-oriented lifestyles (Shove/Pantzar/Watson 2012: 121). These infrastructures can also invite people to adapt to a sustainable lifestyle. For example, the expansion of cycling highways as a transport infrastructure both enables and recommends fast cycling on new routes. Likewise, cycling highways structure the possibilities of cycling and exclude other mobility practices such as personal car use. At the same time, the creation of these infrastructures is a formal recognition of the value of cycling and emphasises it symbolically. Just like material infrastructures, institutionalised regulations such as ordinances, requirements and prohibitions can promote, demand and socially legitimise the dissemination of sufficiency. Taking a further look at how infrastructures work, the shaping of 'desires' can be substantiated with the aid of orientations and patterns of meaning for mental infrastructures. Mental infrastructures enable certain practices by first making them conceivable and then meaningfully legitimising them. They structure practices along socially shared orientations and imply that particular practices are desirable or appropriate. This structuring and orientation capacity of mental infrastructures is inspired by role models of successful sufficiency-based lifestyles; these role models can also be used for strategic social dissemination. At the same time, an ability requires the adaptation of practical expertise in order to realise a lifestyle geared towards sufficiency, which can also succeed by means of practical role models.

6 Empirical focus

Role models which inspire social innovation towards sufficiency-oriented lifestyles demonstrate specific practices in which sufficiency can be observed and thus practically imitated (Howaldt/Schwarz 2017: 241). According to a broad understanding, those practices which save resources or replace them by more environmentally compatible solutions can be understood as sufficiency-oriented lifestyles. These practices are a result of practical learning processes about how sufficiency can be realised. The experiences gained here become visible through empirical observation and therefore enable social adaptation processes (Schwarz/Howaldt/Kopp 2015). In the process, sufficiency touches on a change in all areas of life, such as leisure time, working life, goods provision, diet, energy usage, mobility and housing (Howaldt/Schwarz 2017: 241). For an empirical observation of these practices, the housing situation could be selected as the starting point for various other aspects of life. This is usually where the course of practical life begins, which means that practices from different areas of life can often be traced back to the housing situation. At the same time, the housing situation itself forms the centre of local living environments in which alternative practices can be implemented (Best/Hanke/Richters 2013: 112). In order to identify sufficiency-oriented lifestyles, it is appropriate to choose local living environments which can be described as places of specific or real utopias of post-materialistic societies (Howaldt/Schwarz 2017: 243). This means places in which lifestyles are practised which, at least in part, defy consumerism and in which fewer material resources are used. Alternative housing initiatives can be suggested hypothetically as places of lived utopias for this purpose. They represent stereotypes of an alternative way of life which must then be empirically verified. The selection of

typical housing initiatives serves as a heuristic in order to seek out sufficiency-oriented practices and lifestyles. These should reveal possibilities for social adaptation and enable conclusions to be drawn about infrastructures which can promote sufficiency. Equally, the selected forms of housing and lifestyles make the spatially structured conditionality of sufficiency in practice tangible. Specifically, housing initiatives are considered whose initiators pursue shared socio-ecological objectives and exercise practical social/system criticism. It is assumed that people who choose such forms of housing at least partially share socio-ecological ideals as an action-driving orientation, while the form of housing and lifestyle implies a more moderate use of natural resources. The heuristic types of housing initiatives are characterised as follows:

- > In the 'socio-ecological cooperative' type, settlements which are ecologically constructed and cooperatively organised serve as indicators of socio-ecologically aligned ways of life which are realised in an institutionalised context. These include ideal and typical cooperative settlements in apartment buildings which adhere to ecological building standards and have joint use of gardens and usable space. They provide material arrangements and social settings for a potentially ecologically responsible way of life. Equally, institutionalisation as a cooperative as well as the practice of a solidarity-based sliding scale of rents indicate a sense of social responsibility and a departure from capitalist logic.
- > The 'alternative housing' type considers initiatives and projects which exist without legal legitimation, are tolerated, and/or temporarily granted legal permission. The peculiarity of this type is that the chosen form of housing embodies a protest against the capitalist economic system and practises initiatives for affordable housing. The participants thus practise alternative ways of living which are differentiated from the social mainstream. Characteristic of this is a simple life which results in reduced consumption of resources in comparison with the societal average. As an indication of this, the examined forms of housing are only partially connected to the public supply infrastructures (especially electricity and water). The technological devices such as household appliances and entertainment electronics are also below the societal average.
- > The 'opt-out' type considers provisionally and autonomously created informal accommodation as an indicator of alternative ways of life. This includes secluded, isolated dwellings with a simple standard of fittings, whose inhabitants are typically described as persons who opt out, reject the usual employment patterns of capitalist consumer society, and attempt to practise alternative life strategies. Ideally/typically, they pursue a life without regular financial income, restricted to a minimum of material furnishings. This type is primarily located in non-German countries in Southern Europe and South-East Asia.

Places constructed in this way serve as the basis for ethnographical *go-alongs* (Kusenbach 2003; Kühl 2016). Inhabitants of these places are potential pioneers of sufficiency who are accompanied by others who seek to get to know their lifestyle and thus to identify mental, material and institutional infrastructures which promote sufficiency. Table 1 operationalises the sought-after indicators in promoting sufficiency.

	Object	Aim	Empirical view	Structural level
Desire	Mental infrastructures	Identification of activity-driving orientations	Convictions Motivations Emotions	Lifestyle
Ability		Practical knowledge transfer	Visible know-how	
	Material infrastructures	Creation of beneficial usage options	Materially conveyed possibilities	Living environments
	Institutional infrastructures	Impetus from incentives and constraints	Regulations and ordinances	Binding frameworks

Table 1: Empirical indications – the options for shaping sufficiency-based lifestyles /Source: the author

In the observed practice of the accompanied pioneers, orientations which drive action are identified which provide indications of mental infrastructures which can bring a changed way of life to fruition. These include convictions, motivations and emotions which show how a ‘desire’ can be stimulated. Likewise, the practices of the pioneers constitute performative role models for the reorientation of routines, as well as for the adaptation of practical know-how as to how sufficiency can be lived out. Alongside these, the material infrastructures which enable sufficient practices are demonstrated. This can also indicate the institutional frameworks which enable and legitimise sufficiency. Using this insight into the infrastructures underlying the desire for and ability to live in a sufficiency-oriented way, alternatives to the mainstream of consumer societies can be revealed. It is also possible to determine what hinders sufficiency. The objective is not so much to name specific practices of sufficiency as to raise awareness of alternative ideas and to demonstrate options and possibilities as to how they can be adapted to everyday life.

7 **Conclusions and outlook**

The approach described here illuminates possibilities for the strategic implementation of a social transformation based on the sufficiency principle. Specifically, the observation of existing practices of sufficiency-oriented lifestyles can be used to formulate political programmes and spatial planning measures which provide an impetus to change social practices by means of the strategic shaping of suitable infrastructures. At the same time, the aim should be to soften social consumerist self-images. Many approaches which are pursued in the context of a transformation start with a small change, for example when projects are tested locally to sound out the

potential for their dissemination. On the other hand, few approaches and initiatives aim to change existing social systems and the self-images and practices established in them (Howaldt/Schwarz 2017: 243). This, however, is precisely what seems to be necessary in order to overcome the trajectory of non-sustainable lifestyles. Some authors, such as Jonas (2017), go a step further and demand a redefinition of the anthropocentric human/environment relationship as the starting point for social change. The discussion of strategies and solutions for this is largely still in its infancy. The approach presented here can help to identify role models for unconventional ways of living which can be used to develop ideas of what a sufficiency-oriented lifestyle actually looks like. It is precisely possibilities for overcoming the mainstream in favour of post-materialistic ways of thinking and acting that are sought, in which the environment is treated as an object of protection.

The extent to which post-materialistic ways of thinking and acting are disseminated is subject to social negotiations. It was not possible to consider this aspect in this article, but it is of central importance for the dissemination of such alternative lifestyles. For example, it should be asked how a practice directed towards sufficiency can achieve the same normality which is inherent in currently established practices (Link 2013; Jaeggi 2014). Decisive for this are, in particular, coalitions of interests, power relations and regimes which enforce social structures and create patterns of meaning which drive actions. Thus, the self-image of a largely non-sustainable lifestyle must firstly be overcome in order to establish sufficiency. In the process, mental and material infrastructures offer the potential for revealing – in addition to objective arguments – emotional incentives and practical possibilities for sustainable lifestyles. However, change will be unlikely to succeed without a ‘policy of sufficiency’ which provides the institutional and infrastructural framework necessary for this (Best/Hanke/Richters 2013: 110 ff.).

References

- Adler, F. (2016): Transformation zur Postwachstumsgesellschaft – ja, aber wie und wer? Jena. = Working Paper of the DFG Research Group Post Growth Societies 3/2016.
- Adler, F.; Schachtschneider, U. (2010): Green new deal, Suffizienz oder Ökosozialismus? Konzepte für gesellschaftliche Wege aus der Ökokrise. Munich.
- Best, B.; Hanke, G.; Richters, O. (2013): Urbane Suffizienz. In: Schweizer-Ries, P.; Hildebrand, J.; Rau, I. (Eds.): Klimaschutz & Energienachhaltigkeit. Die Energiewende als sozialwissenschaftliche Herausforderung. Saarbrücken.
- BMUB – Federal Ministry for the Environment, Nature Conservation and Nuclear Safety; UBA – German Environment Agency (Eds.) (2017): Umweltbewusstsein in Deutschland 2016. Ergebnisse einer repräsentativen Bevölkerungsumfrage. Berlin/Dessau-Roßlau.
https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/umweltbewusstsein_deutschland_2016_bf.pdf (17 Jul 2018).
- Böhle, F. (2018): Arbeit und Belastung. In: Böhle, F.; Voß, G. G.; Wachtler, G. (Eds.): Handbuch Arbeitssoziologie. Volume 2: Akteure und Institutionen. 2nd Edition. Wiesbaden, 59-98.
- Brand, U. (2014): Transition und Transformation: Sozialökologische Perspektiven. In: Brie, M. (Ed.): Futuring. Perspektiven der Transformation im Kapitalismus über ihn hinaus. Münster, 242-280.
- Elgin, D.; Mitchell, A. (1977): Voluntary simplicity. In: Planning Review 5 (6), 13-15.
- Fischer, C.; Gießhammer, R. (2013): Mehr als nur weniger. Suffizienz: Begriff, Begründung und Potenziale. = Öko-Institut Institute for Applied Ecology Working Paper 2/2013.
www.oeko.de/oekodoc/1836/2013-505-de.pdf (01 Aug 2018).

- Frey, R. (2005): Infrastruktur. In: Ritter, E.-H. (Ed.): Handwörterbuch der Raumordnung. Hanover, 469-475.
- Fromm, E. (1976): Haben oder Sein. Die seelischen Grundlagen einer neuen Gesellschaft. Munich.
- Hauß, R. (2009): Wahres Glück im Waren-Glück? In: APuZ – Aus Politik und Zeitgeschichte (32/33), 3-8.
- Hauß, R.; Hausinger, B.; Voß, G.G. (Eds.) (2013): Riskante Arbeitswelten. Zu den Auswirkungen moderner Beschäftigungsverhältnisse auf die psychische Gesundheit und die Arbeitsqualität. Frankfurt am Main.
- Howaldt, J.; Schwarz, M. (2010): Soziale Innovation – Konzepte, Forschungsfelder und -perspektiven. In: Howaldt, J.; Jacobsen, H. (Eds.): Soziale Innovation. Auf dem Weg zu einem postindustriellen Innovationsparadigma. Wiesbaden, 87-108.
- Howaldt, J.; Schwarz, M. (2017): Die Mechanismen transformativen Wandels erfassen. Plädoyer für ein praxistheoretisches Konzept sozialer Innovationen. In: GAIA – Ecological Perspectives for Science and Society 26 (3), 239-244.
- Huber, J. (1995): Nachhaltige Entwicklung durch Suffizienz, Effizienz und Konsistenz. In: Fritz, P.; Huber, J.; Levi, H.W. (Eds.): Nachhaltigkeit in naturwissenschaftlicher und sozialwissenschaftlicher Perspektive. Stuttgart, 31-46.
- Huber, J. (2000): Industrielle Ökologie. Konsistenz, Effizienz und Suffizienz in zyklusanalytischer Betrachtung. In: Simonis, U.E. (Ed.): Global Change. Baden-Baden.
- Hübner, G. (2012): Vom Wissen zum Handeln. Strategien zur Förderung naturverträglichen Verhaltens. In: Erdmann, K.-H.; Schell, C. (Eds.): Natur zwischen Wandel und Veränderung. Ursache, Wirkungen, Konsequenzen. Berlin, 193-212.
- Inglehart, R. (1977): The silent revolution. Changing values and political styles among western publics. Princeton, NJ.
- Jackson, T. (2009): Prosperity without growth. Economics for a finite planet. London.
- Jackson, T. (2011): Societal transformations for a sustainable economy. In: Natural Resources Forum 35 (3), 155-164.
- Jaeggi, R. (2014): Kritik von Lebensformen. Berlin.
- John, R. (2013): Alltägliche Nachhaltigkeit. Zur Innovativität von Praktiken. In: Rückert-John, J. (Ed.): Soziale Innovation und Nachhaltigkeit. Wiesbaden, 103-132.
- Jonas, M. (2017): Transition or transformation? A plea for the praxeological approach of radical socio-ecological change. In: Jonas, M.; Littig, B. (Eds.): Praxeological political analysis. London.
- Kleinhückelkotten, S. (2005): Suffizienz und Lebensstile. Ansätze für eine milieuorientierte Nachhaltigkeitskommunikation. Berlin.
- Kühl, J. (2016): Walking Interviews als Methode zur Erhebung alltäglicher Raumproduktionen. In: Europa Regional 23 (2), 35-48.
- Kusenbach, M. (2003): Street Phenomenology. In: Ethnography 4 (3), 455-485.
- Link, J. (2013): Versuch über den Normalismus. Wie Normalität produziert wird. Göttingen.
- Linz, M. (2002): Warum Suffizienz unentbehrlich ist. In: Linz, M. (Ed.): Von nichts zu viel: Suffizienz gehört zur Zukunftsfähigkeit. Über ein Arbeitsvorhaben des Wuppertal Instituts. Wuppertal, 7-26. = Wuppertal Papers 125.
- Lütge, C. (2013): Suffizienz aus Sicht einer modernen Ethik. Keine sinnvolle Idee. In: Politische Ökologie 135, 33-38.
- Ott, K.; Voget, L. (2013): Suffizienz: Umweltethik und Lebensstilfragen. In: Beckers, J.O.; Preußger, F.; Rusche, Th. (Eds.): Dialog – Reflexion – Verantwortung. Zur Diskussion der Diskurspragmatik; Dietrich Böhler zur Emeritierung. Würzburg.
- Paech, N. (2005): Nachhaltigkeit zwischen ökologischer Konsistenz und Dematerialisierung: Hat sich die Wachstumsfrage erledigt? In: Natur und Kultur 6 (1), 52-72.
- Paech, N. (2016): Befreiung vom Überfluss. Auf dem Weg in die Postwachstumsökonomie. Munich.
- Sachs, W. (2015): Suffizienz: Umrisse einer Ökonomie des Genug. In: uwf UmweltWirtschaftsForum 23 (1-2), 3-9.
- Schiemann, C.; Wilmsen, F. (2017): Umsetzungsmöglichkeiten postwachstumsökonomischer Suffizienz- und Subsistenzansätze in der urbanen Praxis? Bremen.
- Schulz, C. (2012): Post-Wachstums-Ökonomien – (k)ein Thema für die Wirtschaftsgeographie? In: Zeitschrift für Wirtschaftsgeographie 56 (4), 264-273.
- Schwarz, M.; Howaldt, J.; Kopp, R. (2015): Soziale Innovation im Wechselspiel von Erfindung und Nachahmung – Eine praxistheoretische Perspektive mit Rekurs auf die Sozialtheorie von Gabriel Tarde. In: Österreichische Zeitschrift für Soziologie 40 (4), 411-428.

- Shove, E.; Pantzar, M.; Watson, M. (2012): The dynamics of social practice. Everyday life and how it changes. Los Angeles.
- Stengel, O. (2011): Suffizienz: Die Konsumgesellschaft in der ökologischen Krise. Munich. = Wuppertaler Schriften zur Forschung für eine nachhaltige Entwicklung 1.
- WBGU – German Advisory Council on Global Change (2011): World in Transition. A Social Contract for Sustainability. Flagship Report. Berlin.
- WCED – World Commission on Environment and Development (1991): Our common future. (Brundtland Report). Oxford.
- Welzer, H. (2011): Mentale Infrastrukturen. Wie das Wachstum in die Seelen kam. Berlin.
- Wenzel, E.; Kirig, A.; Rauch, C. (2008): Greenomics. Wie der grüne Lifestyle Märkte und Konsumenten verändert. Munich.
- Zapf, W. (1994): Über soziale Innovationen. In: Zapf, W. (Ed.): Modernisierung, Wohlfahrtsentwicklung und Transformation. Berlin, 23-40.

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