

SI-DRIVE
Social Innovation: Driving Force of Social Change

SOCIAL INNOVATION AND ITS RELATIONSHIP TO SOCIAL CHANGE

Verifying existing Social Theories in reference to Social Innovation and its Relationship to Social Change

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SI-DRIVE

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1 INTRODUCTION

The harder task for social innovation research is to understand the place of social innovation in much bigger processes of social change. (Mulgan, 2015, xiii)

The task of understanding and unlocking the potential of social innovation is on the research and policy agenda alike: While “in recent years, social innovation has become increasingly influential in both scholarship and policy” (Moulaert et al. 2013a, p. 1), there is still no sustained and systematic analysis of social innovation, its theories, characteristics, and impacts. “Recent work on social innovation has been mostly practice oriented” (Choi/Majumdar 2015, p. 7) and practice led. A plethora of vastly diverging subject matters and problem dimensions as well as expectations for resolving them have been subsumed under the heading ‘social innovation’ without making distinctions between different social and economic meanings, the conditions governing its inception, its genesis and diffusion, and without clearly distinguishing it from other forms of innovation (European Commission 2013). Often, social innovations were studied quite comprehensively, but without being labelled as such.

Today, there are countless approaches and successful initiatives that illustrate the strengths and potentials of social innovations in the area of social integration through education and poverty reduction, in establishing sustainable patterns of consumption, or in coping with demographic change (cf. Yunus 2010; Rey de Marulanda/Tancredi 2010; Murray et al. 2010; Moulaert et al. 2013). At the same time, social innovations are gaining in importance not only in relation to social integration and equal opportunities, but also in respect to the innovative ability and future sustainability of society as a whole. “Although social innovation is widely recognised as an important development phenomenon, it has traditionally been perceived as being limited in scope” (Millard 2014, p. 35). One key reason for this is that for a long time, the social innovation discussion focused predominantly— and still is in many parts of the world - on concepts of social entrepreneurship (cf. Nicholls 2012; Phills et al. 2008; Short et al. 2009; Young 2012). Yet, such a limited understanding is not sufficient for developing the potentials of social innovation for the purposes of human and sustainable development (cf. Davies 2014; Howaldt et al. 2015). Instead, it is necessary to develop a concept of social innovation that is, on the one hand, grounded in social theory, which, on the other hand, looks at its various manifestations, actors, and cultural contexts and, hence, frees the term from the narrow confines of an economic orientation that is focused on the concept of social entrepreneurship (Howaldt et al. 2014b).

Developing a theoretically grounded concept of social innovation is the essential condition for meeting the demand for an integrative theory of socio-technical innovation in which social innovation is more than just a precondition for, concomitant phenomenon with, and consequence of technological innovations or an idea to compensate for shortcomings in (social) policy (cf. Elsen/Lorenz 2014, p. 2).

While theories of social change have been at the core of sociology since its beginnings (cf. Meulemann 2013) the report “Social Innovation and social change” focusses on a sociological perspective and therefore verifies existing social theories in reference to Social Innovation and its relationship to social change.

Social innovation from a sociological perspective

As can be seen in the international debate that treats social innovation as a separate type of innovation and has made it more accessible as an object of empirical investigations, social sciences have been catching up with the development of a theoretically grounded concept of social innovation (cf. Moulaert et al. 2005, p. 1973ff.; Howaldt/Schwarz 2010, p. 36). Currently, a new generation of EU-funded projects is working on a sound theoretical understanding of social innovation and its relation to (transformative) social change, on the economic underpinnings of social innovation, its incubation, and other foci of the topic.¹

While culminating social and economic problems identified in public discourse are increasingly prompting a call for extensive social innovation, the relationship between social innovation and social change remains a largely under-explored area within the social sciences as well as government innovation policies. Whereas –

¹ See e.g. SI-DRIVE (www.si-drive.eu), SIMPACT (<http://www.simpact-project.eu/>), TRANSIT (<http://www.transitsocialinnovation.eu/>) and CrESSI (<http://www.sbs.ox.ac.uk/faculty-research/research-projects/cressi>).

based mainly on Ogburn's theory – a specialised sociology of change has developed (Schäfers 2002), with few exceptions social innovation as an analytical category is at best a secondary topic – both in the classical and contemporary social theory approaches and concepts of social differentiation and social integration, social order and social development, modernisation and transformation. This is all the more astonishing given that Ogburn (1969) not only makes 'cultural lag' – the difference in the time it takes for the comparatively 'slow' non-material culture to catch up with the faster-developing material culture – his starting point and systematically differentiates between technological and social innovations (and inventions) as critical factors in social change, but also emphasises that the use of the term 'inventions' is not restricted to technological inventions also including social inventions such as the League of Nations (Ogburn 1969). "Invention is defined as a combination of existing and known elements of culture, material and/or non-material, or a modification of one to form a new one. [...] By inventions we do not mean only the basic or important inventions, but the minor ones and the incremental improvements. Inventions, then, are the evidence on which we base our observations of social evolution" (ibid, p. 56ff.). Thus, Ogburn is convinced that in the interplay of invention, accumulation, exchange, and adaptation, he has discovered the basic elements of "cultural development" (ibid, p. 56) and, hence, – like Darwin for biological evolution – has developed a model to explain social evolution.

However, if transformative social change refers to the reconfiguration of practices from which sociality arises, in this perspective it cannot be perceived as the result of an evolutionary process but a reaction in the shape of processes of reflexive social learning towards existing ways of life and forms of practices becoming obsolete (Jaeggi 2013). In this sense, social change is driven by changing social practices and stimulating social innovations based on continuous new adaptation and configuration anchored in social practices themselves, which means real experiments with the participation of heterogeneous actors understood as carriers of social practices and in the context of an unequally self-organised co-evolutionary process (cf. Shove 2010, p. 1274; Shove et al. 2012, p. 162ff.).

Against the background of the emergence of a new innovation paradigm² from the viewpoint of sociology, it becomes more important to devote greater attention to social innovation as a mechanism of change residing at the micro and meso level. Why? First, the shortcomings of older models of social change and of an economically and technologically focused innovation model become increasingly apparent when dealing with the key social challenges. Second, new forms of governance and social self-management, of protest movements that aim to shape society (Marg et al. 2013), and new social practices in social life and related governance – understood as necessary social innovations – are increasingly established. In the context of the broad societal debate surrounding sustainable development and necessary social transformation processes (Geels/Schot 2007), the question of the relationship between social innovations and social change arises again: how can processes of social change be initiated which go beyond the illusion of centralist management concepts linking social innovations that emerge within society to the intended social transformation processes?

Social innovation from an economic perspective

An excursus by Doris Schartinger/Matthias Weber

In economics, a discussion about social innovation (using exactly this label!) has first arisen in the literature on service innovation, as most social innovations are, in essence, service innovations with a social purpose. The line of argument that relates the literature on service innovation to social change follows along three steps: First, the service innovation literature develops the special properties of services and – as a consequence – of service innovations, thus, providing a general analytical foundation for this discussion. Second, in this stream of literature, innovation scholars are mainly concerned with the challenge of grasping the differences between service innovation and social innovation as a particular form of services. Third, this has implications for the discussion on social change, which is actually not part of the service innovation literature because it is not concerned with social change as such. In this regard, the literature is usually restricted to matters of the diffusion of service innovations.

² In innovation economics, the emergence of a new innovation paradigm can be traced back to the late 1980s, when the interactive model of innovation described by Kline and Rosenberg (1986) was presented in opposition to the then still prevailing linear model of innovation as presented in V. Bush's famous contribution "Science the endless frontier" (1945).

Discussion of innovation in services in contrast to manufacturing

After generations of economists viewing services as non-productive activities peripheral to manufacturing, which was considered the true engine of growth and welfare (cf. Baumol 1967), in the 1990s innovation scholars started to emphasise the conceptualisation and assessment of innovation in services (Griliches 1992; Miles 2002), for an overview see Gallouj and Savona (2009). Here, the most pervasive analytical challenge is the fuzzy nature of services due to their immaterial content (immateriality). Service output is not tangible because it is not embodied in anything physical. Services are processes, sequences of operations, formulas, protocols, or solutions to problems. A consequence of their immateriality is that normally they cannot be stored or easily transported, although this implication needs to be reconsidered today in light of the growing importance of web-enabled services (e.g. online support centres in India, banking services, etc.). A second analytical challenge is that services are not provided in clear-cut separable units (e.g. is the service in having a haircut, the process of having hair cut or the final haircut? And when does this service end? When the hair is cut again or when the customer leaves the salon?). Their unit and (additional) quality is thus often unspecifiable. A third important feature is the involvement of users. In services, delivery and consumption often take place at the same time, i.e. services are interactive per se. The user or customer has to interact, either by being present (e.g. physicians' services or by interacting over distance (e.g. digital services like health appliances and related services). Co-production means user involvement to the extent that the service is actually not only delivered by the supplier but requires more resources like additional knowledge and learning, or cooperative efforts on part of the user.

The literature on service innovation is grouped around three basic approaches (for an overview see Gallouj/Savona 2009):

- 1) The technologist or assimilation approach: innovation in services in this view is limited to the adoption and use of technology (e.g. ICT). Innovation processes in this view do not differ substantially between services and manufactured products. Special features of services are not considered in their own right (e.g. Barras 1986; 1990).
- 2) The service-oriented or demarcation approach: This stream of literature strives for a specific framework for service innovation, while attempting to identify all the particularities in services and delivery processes (Howells/Tether 2004; Sundbo 1997; Sundbo/Gallouj 2000).
- 3) An integrative or synthesizing approach: This goes back to the Lancasterian (and post-Lancasterian) characteristic-based approach to the definition of products. It argues that the distinction between goods and services is artificial in the end, as any product has good and service elements. Thus, it provides the theoretical basis for a much richer set of innovation modes than would be possible with the assimilation or demarcation approaches alone (Gallouj/Weinstein 1997; Saviotti/Metcalfe 1984; Windrum/Garcia-Goni 2008).

Discussion of service innovation in general in contrast to social innovation in particular

Although social innovations are basically new services, and services incorporate person-to-person interaction in development and/or delivery (note: services may also integrate the interface of technology-to-person interaction), the term social innovation is rather reserved to services that have additional qualities. The OECD LEED Forum on Social Innovations (OECD n.d.) and the European Commission (2011) emphasised the connection between services and social innovation. Social innovators seek to develop new services that improve the quality of life of individuals and communities in labour market integration, social inclusion, health and wellbeing, education, and environmental challenges. In other words, social innovations are a sub-type of service innovation with a specific purpose. Still, service innovation and social innovation remain rather separate subfields (Gallouj/Djellal 2010; Harrison et al. 2010; Reinstaller 2013). It makes sense to elaborate on the special features of social innovation, instead of arguing all service innovation equals social innovation because it is interactive in some form.

Windrum, Schartinger, Rubalcaba, Gallouj, and Toivonen (2016) identify three areas in which the conceptual

understanding of social innovations is further specified beyond that of service innovations:

Incentives. In the service innovation literature social innovation is a special type of service that does not conform to business rationality in that it is not driven by profit motives, but by principles of inclusion and well-being. This does not imply that commercial service innovations do not induce well-being, yet they are incentivised by expected profits whereas social innovation is incentivised by value created to society as a whole rather than to private individuals (i.e. externalities) (see also definition by Phillips et al. 2008).

Empowerment. Social innovations differ from commercial service innovations in that they seek to empower citizens. Where the consumption of commercial services is driven by demand based on prices, income, and preferences, the use of social innovations is more based on needs (which are different from demand, see Hodgson (2008)). Social innovations attempt to assign new roles and relationships (e.g. between the citizens and the state) to individuals or groups in need, they develop assets and capabilities and/or the more efficient and environmentally sustainable use of existing assets and resources (cf. Chiappero/Von Jacobi 2015; Science Communication Unit 2014).

Imitation. In innovation economics it is seen as given that fast imitation undermines economic returns of innovators. Hence, low appropriability regimes provide disincentives for innovators to engage in innovative activities, which results in less innovation and, therefore, a loss to society. In contrast to that, social innovators often seem to encourage imitation and the rapid dissemination of their problem solutions. The key to this problem is probably that weak competition and the scarcity of solutions in the areas of social innovation needs to be compensated for: When needs of a group or parts of society are overwhelming, and solutions to solve the needs are scarce, ideas to solve the needs are rather promoted (once they finally exist) by the actors, instead of being withheld for better commercial exploitation.

Implications for the discussion on social innovation and social change

It seems that especially these three additional qualities of social innovations compared to service innovations in general, also yield special conclusions for the connection between social innovation and social change.

First, considering the direction of social change it is worthwhile thinking of innovation projects that are explicitly set up to solve social problems (e.g. of marginalisation, of social determination etc.) encounter barriers in a systematic way instead of viewing them as the product of singular achievements and pure chance. Intentionality is important considering that many innovation projects have some social impact as a wider effect.

Second, the very active roles of empowered citizens strengthened by social innovations may have an impact on new social practices guiding social change.

Third, imitation is a key aspect in the rapid dissemination of new service ideas and practices which may accelerate social change. In practice, the dissemination of new ideas and practices is challenging. This is due to two characteristics of social innovations. First, they tend to be very local in nature. Second, there is often a lack of codification (Harrisson et al. 2010; Windrum 2014).

Moving towards an integrated approach

Against that background, the main objective of the SI-DRIVE project is the development of a theoretically sound concept of social innovation as a precondition for the development of an integrated theory of socio-technological innovation in which social innovation is more than a mere requirement, side effect, and result of technological innovation. It is possible to comprehend the systemic connections and interdependence of social and technological innovation as driving forces in the overall processes of social change only by taking into account the unique properties and specifics of social innovation in different contexts.

While the *Critical Literature Review (CLR)* provided a general depiction of how social innovation resonates within the wider frameworks of existing innovation theory and research, the concepts and perceptions of social change, and of societal and policy development, the purpose of the *present report* is to verify existing social theories in reference to social innovation and its relationship to social change.

The report is important part of the Theory Work Package (WP 1). WP 1 forms the core element of SI-DRIVE and provides the conceptual framework that underpins all the other WPs. Hypotheses for further research will be verified and developed by analysing the empirical data across sectors and countries within the mapping exercises. WP1 examines the conditions under which social innovation takes place, unpacking and developing the concepts that are associated with this phenomenon, and explores and explains the variety of processes and networking through which social innovation occurs. This theoretical endeavour provides a general depiction of how social innovation resonates within the wider frameworks of existing innovation theory and research, the concepts and perceptions of social change, and of societal and policy development.

The CLR provided an overview of the current state of international research on social innovation explicitly including studies on technological and business innovations. The overview confirmed the lack of a theoretically sound concept of social innovation which is able to describe commonalities and differences and thereby coherently interlinks the different policy areas and research fields in which social innovation is already playing a prominent role. Innovation in general and social innovation in particular are conceptualised in many different ways. This relates to the mostly problem-driven and intervention-oriented type of research tailored to understand and finally overcome strategic challenges in the before mentioned policy fields.

At the same time, the CLR revealed that there is *no clear understanding of how social innovation leads to social change of existing structures, policies, institutions, and behaviour*. Obviously, phenomena of social change have been consistently looked at in innovation research conducted within the social sciences. Especially in areas such as energy, mobility, or health, which are all defined as distinct policy fields of the SI-DRIVE project, and in which social and technological elements of innovation are closely interwoven and, for the sake of describing their influence on social change, can hardly be separated. Still, the new paradigm of innovation, reflecting the transition from an industrial to a knowledge- and service-based society, calls for social innovation to be considered as an independent field of innovation and innovation research within sociology, following its own rules. This takes a new perspective on social innovation which so far has been focusing predominantly on the social preconditions, effects, and processes relating to technological innovations and the technology-centred innovation paradigm of explaining social change. From such a perspective of a distinct type of innovation there is no shared and theoretically coherent understanding of the relationship between social innovations on the one hand and social change on the other.

In order to target the overall goals of the project it is imperative in theory and praxis to comprehend how social innovation relates to social change. To achieve these goals, this report changes perspective and examines well-established theories of social change with regard to their potential contribution to a better understanding of the relationship between social innovation and social change. It places particular emphasis on concepts for analysing far-reaching social transformation processes. Based on a survey and synthesis of the state-of-the-art and with reference to the international debate on the role of social innovation in shaping transformation processes, the aim is to further develop the *conceptual foundations* for understanding social innovation, and use these for further analysis of the relationship between social innovation and social change in the context of theoretical and empirical research for the SI-DRIVE project.

Given the vast variety of approaches and concepts as well as the long tradition of scientific research into phenomena of social change, this report focuses on those approaches which are compatible with the concept of social innovation grounded in social theory, as defined in the SI-DRIVE project.

Social innovation is seen as a new combination or figuration of practices in areas of social action, prompted by certain actors or constellations of actors with the goal of better coping with needs and problems than is possible by the use of existing practices. An innovation is therefore social to the extent that it varies social action, and is socially accepted and diffused in society. Depending on circumstances of social change, interests, policies and power, social ideas as well as successfully implemented SI may be transformed and ultimately institutionalised as regular social practice or made routine (cf. Howaldt et al. 2010; Hochgerner 2012).

A key difficulty is that it is usually not possible to find any explicit indications of the required compatibility. One reason for this is that the social sciences, if they use the concept of social innovation in the context of phenomena of social and technical change at all, use it less as an analytical term and more as a kind of descriptive metaphor (cf. Howaldt et al. 2014a, p. 10ff.) The significance of the concept in processes of social change receives little attention and therefore remains largely unexplained.

In light of this, after producing a meta-analysis that gives an overview of the broad lines of social science discussion of social change and its key trends, as the next step the report gives priority to examining those theories which are compatible with an understanding of social innovation that is grounded in social theory. Thus we focus on concepts which choose a

- process-oriented,
- endogenous,
- relational and
- micro-founded perspective,

and which specifically also consider the dynamics of change themselves and the inbuilt reflexivity (instead of 'only' describing phenomena of (structural) change with the aid of indicators), and which therefore at the same time tie in with current trends in the theoretical examination of the topic.

While the classical sociologists of the 19th century focused on the immanent order of change itself, attention shifted during the 20th century to the question of the stability of social order (cf. Elias 2009, p. 123ff., p. 162f.) "Even the term 'social change' is often used as if it referred to a state" (ibid, p. 124). In contrast, Elias distances himself from theories of social change that regard it as a sequence of seemingly stable states. Instead, he sees "society" in "figurations whose usual peculiarities include changing" (Elias 1977, p.LXX), and which are therefore constantly in motion. Accordingly – so his central thesis goes – one can gain a "far better understanding of the facts which sociology concerns itself with, if one does not abstract from the movements, from the process character, and [if one] uses terms that include [...] the process character of societies and their various aspects" (Elias 2009, p. 123). Social innovation in the above sense is just such a term. Social innovations relate to the change (of social practices) in "society", and social change relates to the change of "society". Social innovation is the mechanism by which "society" changes.

The structure of this report follows the described line of argument. A look at the debate concerning the relationship between social innovation and social change in social innovation research forms the starting point (chapter 2). The following chapter gives a meta-theoretical overview of the broad lines of theories of social change and their central trends (chapter 3). The key finding is that the prevailing macro-sociological paradigm of social change has increasingly come under criticism and is being replaced by a theoretical and empirical perspective on partial and local transformation processes and the network of interdependencies that is relevant in each respective case. This yields key compatibilities in respect of a theoretical conceptualisation of the relationship between social innovations and processes of social change. In light of the above, the fourth chapter is devoted to selected approaches which are compatible with a definition of social innovation that is grounded in social theory, and which adopt a process-oriented and micro-founded perspective when examining

social change (chapter 4). Subsequently, chapter 5 summarises the results of the analysis and chapter 6 reflects on and develops the conceptual foundations of the SI-DRIVE project concerning the relationship between social innovation and social change as a core element of a theoretically grounded concept of social innovation. These conceptual considerations at the same time form the basis for further empirical research as part of the planned case studies in 'Mapping 2'. The final chapter describes further steps on the way to developing a theoretically grounded concept of social innovation in the context of empirical and theoretical work within the SI-DRIVE project.

2 SOCIAL INNOVATION RESEARCH AND CONCEPTS OF SOCIAL CHANGE

Before we proceed in the following chapters to gain an overview of the current academic discussion concerning theories of social change, and analyse selected approaches in terms of their potential contribution to the development of a concept of social innovation that is grounded in social theory and which centres on the relationship between social innovations and social change, it is first necessary to refer (back) to the present state of debate in social innovation research, which was covered in the critical literature review (CLR). The main focus here is the various attempts to conceptualise social change.

Though there is widespread recognition of the need for social innovation, there is no clear understanding of how social innovation leads to social change. Phenomena of social change are often looked at in connection with technological innovation, but without paying sufficient attention to elements of social innovation. In many areas (including several of the policy fields studied by the SI-DRIVE project such as energy, mobility and health), the social and technological dimensions of innovation are strongly interconnected and can hardly be separated from each other in explaining social change. Nonetheless, there are also examples of social innovation which are largely independent from technological innovations and which can lead to social change by themselves. Overall, the technology-centred paradigm of explaining social change, shaped by the industrial society, seems outdated and needs to be replaced by a paradigm which assigns appropriate prominence to social innovation. On the one hand, this paradigm should be able to describe and analyse social innovation as an autonomous field of research. On the other hand, it should also be able to reflect the intimate links between the social and the technical sphere.

And although the importance of a well-founded understanding of the relationship between social innovation and social innovation is emphasised time and again³, to date social innovations have only been discussed “with few if any references to a theory of change, which is relegated to context or background” (Godin 2012, p. 35).

Despite some large-scale international projects on the topic, so far the conceptual weaknesses in the development of a theoretically grounded concept that centres on the relationship between social innovation and social change have not been overcome. Thus, in their analysis of European projects of recent years, Jane Jenson and Denis Harrisson reach the following conclusion: “Although social innovations pop up in many areas and policies and in many disguises, and social innovation is researched from a number of theoretical and methodological angles, the conditions under which social innovations develop, flourish and sustain and finally lead to societal change are not yet fully understood both in political and academic circles. However, in particular in the current times of social, political and economic crisis, social innovation has evoked many hopes and further triggered academic and political debates” (Jenson/Harrisson 2013, p.7).

Critical turn in social entrepreneurship scholarship

One reason for this is that in particular the Anglo-American discussion about social innovation was for a long time strongly focused on social entrepreneurship (cf. Davies 2014, Howaldt et al. 2015). This discussion concentrated on an understanding which regards social innovations as micro-phenomena, which following Schumpeter’s entrepreneur concept (may) contribute through diffusion and scaling-up processes via the central figure of the social entrepreneur to the much larger process of social change (Mulgan 2015, p. xiii), although if this is the case it is extremely hard to understand where the ideas in question come from, and why some spread while others don’t (cf. *ibid.*) In her critical analysis of the debate, Davies refers to the “critical turn in social entrepreneurship scholarship” that is currently taking place (Davies 2014, p. 72), which revolves precisely around the point of the social entrepreneur’s contribution to social change and its conceptual foundations. “Clearly then, there is an important strand of thinking within social entrepreneurship that sees it as intimately connected to processes of social change. But what is the theory of change inherent in social entrepreneurship? This is often somewhat unclear.” Having discussed Mair’s reflections (Mair 2010), she arrives at the conclusion: “This suggests perhaps that social entrepreneurship plays a key role in the early stages of

³ Sound evidence of this can be found in the key publications in the field of social innovation research in recent years (Howaldt et al. 2010; Howaldt et al. 2014b; Nicholls et al. 2015; Klein et al. 2016).

the social innovation life cycle, but that for scaling and diffusion of an innovation, we will require different actors, namely governments and the private sector. However, this is only hinted at in Mair's work and is not set out as an explicit theory of change for social entrepreneurship" (ibid., p. 65).

In the summary of her survey of the state of current literature relating to social entrepreneurship, Davies concludes: "The brief overview above suggests that though many scholars understand social entrepreneurship to be intimately connected to processes of social change, the theory of change underlying this view is often not well explained or developed. However, there is an increasing acknowledgement of this gap and of questions around the ultimate purpose of social entrepreneurship in the literature" (Davies 2014, p. 70)⁴.

Associated with this is a critical reflection on the concept of the *life-cycle of social innovation*, which was developed in the context of the work of the Young Foundation and the Open Book of Social Innovation. "However, even if we acknowledge that this model is intended as a helpful framework rather than a representation of reality, it raises other significant questions" (Davies 2014, p. 61).

Social innovation and resilience – Frances Westley

In their examination of the concept's limitations, Frances Westley and her colleagues at the Waterloo Institute for Social Innovation and Resilience adopt a wider perspective by focusing on the potential contribution of social innovations to increasing the resilience of modern societies. "For Westley (2008), the concepts of social innovation and resilience, namely, the '*capacity to adapt to shocks and changes while maintaining sufficient coherence for identity*' (p. 3), are closely tied together. Indeed, for Westley, '*social innovation is an important component of being resilient – new ideas will keep a society adaptable, flexible and learning*' (Moore et al. 2012)" (in Davies 2014, p. 57). In this context, the authors work with a broad understanding of social innovations, "including products as well as deliberative processes and policies that are transformative in their outcome with respect to greater social resilience" (McGowan/ Westley 2015, p. 54). At the same time, in their analysis of historical social innovation cases, they emphasise a system shift "towards greater inclusion, greater resilience and greater prosperity [...]" (ibid. 54).

They therefore follow an understanding of social innovation that sees social innovation as an integral part of human history, and at the same time as a core element of social change. "Despite the apparent novelty of social innovation as a construct or set of discourses, humans have experimented and achieved disruptive and durable social change repeatedly over time. This research suggests that social innovation is a common dynamic of human history [...]" (ibid. 54). Thus they widen the perspective and propose – as Davies says – a new understanding of scaling processes. "Westley et al. (2011) suggest that we should be most interested in scaling understood as attempts to bring about whole system change, not just organisational growth. They make a distinction between the concepts of 'scaling up' and 'scaling out' [...]. Westley and Antadze (2010) point out that the transition from 'scaling out' to 'scaling up' can cause difficulties because the former requires very different skills to the latter. If the social entrepreneur is the critical figure in 'scaling out', then in contrast, scaling up requires 'system entrepreneurs' – '*individuals committed to and skilled in changing broader systems*' (p. 7). In particular, they argue that system entrepreneurs are able to '*recognise and seize an opportunity without the ability to control it directly*'" (ibid.) (cf. Davies, 2014, p. 60).

Also in their analysis of historical innovation cases, McGowan and Westley refer to the significant role of agency. Following North (1990) and MacCallum et al. (2009), they point out that: "The social innovation process is often the result of the interaction of agency and institutional dynamics" (McGowan/Westley 2015, p. 56). At the same time, they come back to the question of the functions that various actors assume in the process of social innovation. In developing the distinction between social entrepreneur and system entrepreneur, in their most recent publications they introduce the roles of the *poet*, *designer* and *advocate*: "The poet shapes or expresses the new idea or social phenomenon, the designer converts the phenomenon into an

⁴ Ziegler, for example, attempts to bring the capability approach - as a specific approach to a theory of change - to bear for a conceptual perspective on social entrepreneurship and a specification of 'the social' in social innovations and social change that go beyond the Schumpeterian approach to entrepreneurship (Ziegler 2010).

innovation (a policy agenda, a programme, a product, etc.) and the debater advocates either the innovation, the phenomenon, or both” (McGowan/Westley, p. 56f.) Given the complexity of social change and social innovation processes, the questions raised here about the variety and function of the actors involved and the significance of institutional dynamics are core questions for a better understanding of these mutually dependent processes.

Broadening the perspective

Other approaches broaden the perspective, depending on whether social innovations are incremental, institutional or disruptive, to far-reaching objectives that go as far as system change, supported by social movements and strong political actors and networks (cf. Nicholls et al. 2015a, p. 3f.)

It was with just such a perspective on disruptive social innovations and political change that Lapierre, at that time, described social change as an adjustment and as not innovative. In contrast, he wrote, social innovation changes the entire system, is revolutionary, transforms social roles and structures, and allows new political systems and a new organisation of the social world to emerge. He defines social innovation entirely in the sense of social movements as “le processus de transformation des rapports sociaux par l’action collective de groupes qui mobilisent les ressources de certaines catégories, couches ou classes sociales, et qui finissent par imposer à la fois de nouveaux rapports de production, de nouveaux besoins, un nouveau discours, de nouveaux codes, un nouveau régime politique, une nouvelle organisation de l’espace social” (Lapierre 1977, pp. 310-11). On the other hand, there is another widespread view that does not even differentiate between social innovations and social change, and states for example that “social innovations are changes in the cultural, normative or regulative structures of society” (Hämäläinen/Heiskala 2007, p. 59).

Social innovation and regional development – Frank Moulaert and CRISES

One of the most prominent areas in which the concept of social innovation has increasingly become a research focus in the social sciences is local and regional development. It is the urban context in which challenges such as the effects of the economic crisis, demographic or climate change become directly visible as pressing social demands. And it is the cities where unlikely collaborations emerge to tackle problems when new competences are handed down from national or regional levels without corresponding budget allocations.

In Europe, a series of research projects delivered important findings on the role of the local level for social innovation; the latter mainly viewed under the perspective of the social economy. For example, the project Integrated Area Development (IAD) dealt with challenges faced by neighbourhoods and provided “an alternative to the more prevalent forms of market-led economic development” (Moulaert et al. 2013b, p. 19). Another important project in order to better understand the role of social innovation in community building was SINGOCOM (Social Innovation, Governance and Community Building). Findings from SINGOCOM also essentially contributed to the understanding of governance processes on the local level. For example, by focusing on the governance structures of neighbourhood management, it was possible to describe and analyse how a direct link between the needs and demands of excluded groups and the resources to tackle them can be established (Moulaert et al. 2005, p. 1970). It showed that social innovations involve different dimensions – such as the relation to culture, social connection and identity – going beyond material and economic issues (Moulaert et al. 2013b, p. 9).

The “International Handbook on Social Innovation” (Moulaert et al. (eds.) 2013), which was published by a group led by Frank Moulaert, presents a research perspective on social innovation that has been developed cooperatively over the last thirty years, which is intended to be a coherent methodological perspective that deals both conceptually and practically with structural, political and cultural forces that generate social exclusion, but also have the potential for social change and socially innovative initiatives, and that combine societal well-being with the shaping and organisation of society. It centres on a three-dimensional frame of reference that consists of the mutually associated defining characteristics of social innovation: satisfying needs in the sense of human development, reconfiguration of social relationships, and empowerment or political mobilisation. At the same time, the aim is to develop and demonstrate a specific type of SI research that seeks to find the right balance between “research on action”, “action in research” and “research through and by

action” (cf. Moulaert et al. 2013a, p. 6), and that illustrates the extraordinary importance of social innovation as a field both of research and of action and social change (cf. *ibid.*, p. 5).

“Several chapters in the book address the (need for) theorization of social innovation” (*ibid.*, p. 3). One contribution expressly deals with the return to the ‘old’ theories of social change that is regarded as necessary for this purpose. Otherwise, from a theoretical point of view, on account of the firmly normative orientation, it is mainly references to concepts of human development that are predominant, however these also form the conceptual lynchpin in the article by Jessop et al. (2013) which is considered more closely below. Jessop, Moulaert, Hulgård and Hamdouch (2013) argue that combining theories of social change by such classics as Weber, Durkheim or Schumpeter with a practice-oriented analysis of developments in recent decades is essential in order to give a coherent epistemological status and methodological fundament to social innovation analysis. In this context, they advocate analysing social innovation in light of social change and not as a part of a multi-dimensional innovation system. According to the authors, social innovation is about a completely new ontology, which has to do with socialised change practices instead of organisational efficiency and an optimised use of knowledge. This notion of a different ontological perspective and an orientation towards a constitutive, performative role of social practices and their transformative potential is an interesting idea which would be worth further development.

Functioning as an important point of reference for their analysis is Polanyi and his argument about various forms of social reaction to the commodification of land, labour and money in the 19th century and to the emergence of mass production in the 20th century. In Fordism, firstly the existing socio-economic institutions are anchored in the system, and at the same time, all kinds of different emancipatory movements spring up from the ground. The crisis of Fordian development models in the 1970s and 1980s led on the one hand to a neo-liberal transformation, and on the other to a rising interest in arrangements beyond the anarchy of the market and control by the state. In this context, the link between social economy and social innovation was rediscovered. At the same time, a breeding-ground was prepared for non-class-antagonistic path-changing struggles and utopias of social transformation. A congruence of the development towards post-Fordism and social-economy dynamics can be seen in three trends: (1) the search for new forms of economy and corresponding market niches, (2) the growth of the service sector and flexible production systems, and (3) the rationalisation of the welfare state resulting in new opportunities for the social economy and the search for non-capitalist alternatives. A balanced and recalibrated social economy against the logic of capital ultimately delivers the basis for being able to resist the increasing hegemony of capital over society as a whole. In form and content, this is a social innovation, including an innovation of social relationships and consideration of the issues of human development and empowerment. For all types of actors and institutions of social innovation, new forms of social learning through sharing and cooperation that are based on solidarity, and an associated reorientation of innovation away from the prioritisation of profit-orientation, are crucial for success. This depends on a large number of bottom-up initiatives, but also on their institutional support. Primarily, this is about a multi-spatial model of subsidiarity with as much local initiative and autonomy as possible, and as much supra-local support as necessary, in order to develop a sustainable social order globally – put more simply, one could say: act locally, think globally. This is both the biggest challenge and the biggest opportunity for a reorientation of our economic, political and social arrangements.

In the authors’ view, this results in massive implications for SI research, which differs from an economic approach in that it is concerned with promoting human development by transforming social relationships and emphasising justice and solidarity and forms of social economy, and overcomes the proclaimed moral neutrality of research. From this perspective, a methodological frame of reference is proposed, which corresponds with the tradition of understanding social innovations in the light of social change instead of as part of a multi-scalar, multi-dimensional innovation system. SI research begins with an ontology that sees society not as a predetermined social reality, but rather as a horizon for action, defined by one or more “social imaginaries” (*ibid.*, p. 124). This is relevant because it emphasises the constitutive, performative role of social practices and their transformative potential, when they are combined with new economic, political, social or other burgeoning projects. An understanding of contingent social development opens up space for innovative connections between micro-meso-macro innovations. In such an approach, particular attention falls upon those relations and practices which promote human development through the satisfaction of fundamental needs and innovations in social relationships, community empowerment and the governance of social structures. This

ontology of socialised change practice (124) overcomes the ontology that attaches to innovation systems and is always linked to organisational efficiency and the improved application of knowledge in various sub-systems.

SI initiatives and processes are placed in a meta-theoretical frame of reference – which admittedly is not fully developed – which makes it possible to identify their structural and institutional aspects, and their significance in the context of social transformation. Such an advanced neo-structuralist analytical frame of reference, strongly inspired by reflection on social change and the role of social innovations, serves to analyse opposing forces of human development, as well as past and future spatially and institutionally embedded SI processes and initiatives. Here the agency dimension cannot be detached from society, institutional configuration, and space. With loose reference to Max Weber and Emile Durkheim, it can be assumed that actors are guided by non-material motives or collective conscience and a strong spatial connection. Social innovations occur on various spatial levels as well as on societal micro, meso and macro-levels, and they cannot be isolated from aspects such as local integration, mobilisation of many different types of resources, and learning on the part of actors. In this sense, social innovation is an arena for a deliberating kind of decision-making with a transformative power, based on political negotiation at local/regional level by publics created by the political power of social movements. In this arena, SI researchers can be active actors, that is, action researchers, but they should reflect on their various roles in the process with regard to the meta-theoretical frame of reference. The transdisciplinary ability to reflect as a methodological principle here means: an interactive process of research and action, starting from a collective discussion and decision by a transdisciplinary group regarding the problems of human development that should be addressed and which questions explored, what the composition of the team should be, and what the meta-theoretical frame of reference should look like.

Contributions made by Moulaert and his colleagues regarding the question “how institutional and social networks and interactions between levels of governance can work to enable or constrain local innovation” can hardly be overestimated (Moulaert et al. 2013b, p. 20). In particular, their findings on process dynamics of social innovation, especially concerning empowerment dynamics of social movements and initiatives, have significantly contributed to a socio-theoretically sound concept of social innovation. Such a focus goes beyond the perspective of social entrepreneurship-oriented approaches, foremost common in the U.S. and UK, which have dominated the social innovation discourse for years. Hence, this concept opens up new perspectives on social innovation.

However, the claim to advance the theoretical analysis of social innovations with recourse to theories of social change, and thereby give it a coherent epistemological status and a necessary methodological basis, remains unfulfilled.

Conclusion - Why We need a Concept of Social Innovation based on Social Theory

The preceding discussion sheds light on the problem that the debate is centring more and more on the theoretical underpinnings of a conceptualisation of social innovation within the context of social change at the same time proving its progress. While the here discussed concepts give insight into the desiderata for a development of a concept based on social theory, it sheds light on prevailing gaps.

Despite the significant progress made, the discussion highlights that social innovation is still an uncodified field without a common set of theoretical underpinnings, datasets, or proven causal relationships (Howaldt/ Schwarz 2010; Franz et al. 2012). Although there is an increasing body of literature on social innovation, the demand for categorising the field is growing (Rüede/ Lurtz 2012; Choi/ Majumdar 2015). We currently lack a theoretically sound concept of social innovation beyond the different policy areas, research fields and regional perspectives (Howaldt/ Schwarz 2010; Moulaert et al. 2013a, p. 4). There is a need for robust models for the creation, roll-out and diffusion of social innovations, as well as more knowledge and understanding about how they relate to social change. Considering the complexity of innovation processes we need a broader concept than the social innovation cycle to understand the process dynamics of social innovation and the process dynamics of the relationship to social change that is focused more on social practice and the process of institutionalisation. This will open up a new perspective on the relationship between social innovation and social change. At the same time it will be necessary to put a stronger focus on the social mechanism of innovation processes (e.g. social learning, imitation). A theoretically sound concept of SI is a precondition for the development of an integrated theory of socio-technological innovation in which social innovation is more

than a mere requirement, side effect and result of technological innovation. Only by taking into account the unique properties and specifics of social innovation in different contexts is it possible to comprehend the systemic connection and characteristics of social and technological innovation as driving forces in the overall processes of social change.

Referring to the results of the CLR we emphasise that recourse to Tarde highlights the importance of social innovation as a central element of a non-deterministic explanation of social change and a key element of social transformation processes. Since Tarde places the practices of imitation at the centre of his theory of social development, reference to the associated micro-foundation of social phenomena provides vital input into an integrative theory of innovation. As a consistent scientific conception of active social life (Toews 2013, p. 401) it enables us to discover how social phenomena, conditions and constructs come into being and transform.

A theoretically sound innovation theory must therefore examine the manifold and varied imitation streams, and decode their logics and laws. From this perspective, the focus is always on social practice, since it is only via social practice that the diverse inventions etc. make their way into society and thus become the object of acts of imitation. Social practice is a central component of a theory of transformative social change, in which the wide variety of everyday inventions constitute stimuli and incentives for reflecting on and possibly changing social practices. It is only when these stimuli are absorbed, thereby leading to changes in existing social practices which spread through society and construct social cohesion via acts of imitation, that they drive social transformation. Thus new perspectives open up on an understanding of innovation which adequately captures the diversity of innovations in society.

In reference to practice theory and Tarde's social theory it is possible to develop a sound and comprehensive concept of social innovation and the relationship to social change. It also allows us to analyse the relationship between social and technological innovation and to better understand the most appropriate conditions for introducing, implementing, diffusing and establishing social innovation as a new social practice (cf. Howaldt et al. 2015a).

Before pursuing the discussion in chapter 6, we change the perspective. First, we provide a general overview of the current state of the discussion of theories of social change beginning by an examination of the importance of social innovation as a concept within the given context (chapter 3.1). In the following (chapter 3.2), we will trace the general trends regarding the prevalence of the subject within scientific debates. In chapter 4, we analyse a selection of theories of social change against the background of their potential contribution to the development of a social-theory-based understanding of social innovation and social change.

3 THEORIES OF SOCIAL CHANGE – AN OVERVIEW

In light of the above, we change perspective in the following chapters. To begin with, as a first step, we inquire about the significance of social innovations in theories of social change, and then, as a second step, we go into the basic concepts and central trends in the discussion about theories of social change⁵.

3.1 SOCIAL INNOVATIONS IN THEORIES OF SOCIAL CHANGE

To date, social innovations have played only a subordinate and isolated role in theories of social change. The few *theoreticians of social change* who *explicitly* deal with social innovations include Zapf and Ogburn.

Zapf

In the context of his modernisation theory approach, Zapf explicitly makes the connection between social innovation and social change. He believes that social innovations are “*new ways of achieving goals, especially new forms of organisation, new regulations, new lifestyles, which change the direction of social transformation, solve problems better than earlier practices, and which are therefore worth imitating and institutionalising*” (Zapf 1989, p. 177 – emphasis in original). The associated normative orientation of the terms is due to the modernisation theory perspective. Social innovations are not identical with social and political reforms. Only fundamental and lasting reforms “from the bottom up” come into consideration as social innovations. They are also not identical with revolutions, however revolutionary situations consist of whole “clusters of social innovations” (ibid.) In so far as social movements rebel with new purposes and using new means, they are “a rich source of social innovation” (ibid.) And lastly they are more permanent than fashions. They are a subset of processes of social change or of the modernisation of society, and “a suitable means [...] of meeting social challenges, namely through material, time-based and social sharing of (social) problems so that they lose their overwhelming dimension” (Zapf 1997, p. 39).

Thus, in this view, social innovations are not identical with social change. However, the way in which the two phenomena relate to each other is only hinted at in terms of a definition; it is not systematically developed with regard to the relevant processes and mechanisms. Although key analytical terms here such as practices, imitation and institutionalisation have a programmatic ring about them, this is more about the attempt to systematise social innovations – in the form of an overview – as a phenomenon that is simultaneously entangled with technological innovations either as a condition, consequence or concomitant phenomenon, and yet is a specific phenomenon, and to discuss the perspectives associated with their investigation for the social sciences.

Because social innovations to a special extent need successful communication, cooperation and knowledge integration between heterogeneous actors, both the occasion and the opportunity arise for the discipline to redefine its role in the modernisation process, and reposition itself where necessary. The requisite know-how to achieve this can be found in the sociology of technology, economic sociology, organisational sociology and the sociology of knowledge, and methodologically in action research. In researching, developing and testing social innovations, the social sciences do not have to limit themselves to a critical accompaniment of and commentary on innovation processes. If they exploit and develop their potential to integrate heterogeneous and highly distributed knowledge, then in connection with social innovations they may “be able to play a role similar to that played by the natural sciences for technical innovations” (Zapf 1989, p. 182).

⁵ Theories of social change is a topic that cannot be covered in its full breadth. Almost all disciplines make assumptions about social change, while at least implicitly using diverse theoretical approaches that are usually informed by diffused sociological knowledge, which becomes transformed and reconstituted in the process (cf. Beck/Bonß 1989, p. 27). For sociology, social change is a constitutive core topic.

Ogburn

For Ogburn, inventions and/or innovations⁶ – “a combination of existing and known elements of culture, material and/or non-material, or a modification of one to form a new one. [...] Inventions, then are the evidence on which we base our observations of social evolution” (Ogburn 1969, p. 56f.) – are the most important cause of change, with mechanical inventions having priority. Thus Ogburn is convinced that in the interplay of invention, accumulation, exchange and adaptation, he has discovered the basic elements of “cultural development” (ibid.) and hence has developed a model to explain social evolution and social change. In his theory of social change, Ogburn, the pioneer of the technology assessment, sees social change as a process of adoption of a (technological or social) invention by others (cf. Meulemann 2013, p. 398ff.) or as an emergent innovation process, where social innovations are primarily ascribed the function of a (delayed) adaptation in the sense of a “cultural lag” (Ogburn 1969, p. 64).

However, it is mostly overlooked that in his later work, Ogburn referred to an important misunderstanding of his concept: “In most of the examples I gave at that time, the starting point was a technological change or a scientific discovery, and the lagging, adaptive cultural element generally was a social organisation or an ideology. These examples led some researchers to think the cultural lag theory was a technological interpretation of history. Yet when the cultural lag theory was published, I pointed out that the independent variable could just as well be an ideology or other non-technological variable. [...] So the fact that the technological changes always came first was simply due to the fact that at a particular point in time, only certain observations were available; but it is not an inherent part of the theory” (Ogburn 1969, p. 139).

Duncan also highlights this clarification in his introduction to Ogburn’s works: “It is wrong to characterise Ogburn’s theory of social change as a ‘cultural lag theory’. He did not regard the cultural lag theory as a ‘fundamental element of the theory of social evolution’” (Duncan 1969, p. 21). He goes on to state: “Ogburn makes it quite clear that one should in no way assume that all lags are initiated by technological inventions, to which social forms must subsequently sooner or later adapt. This statement results only from a generalisation of empirical findings for a particular historical period, and even for this period it is not said to be valid without exception” (ibid., p. 22).

Yet precisely these aspects of Ogburn’s conception, which could have formed the basis for a systematic treatment of the relationship between social innovations and social change, remained largely ignored – as did Zapf’s purely definitory approach – in a setting in which there was a one-sided focus on the sociology of technology in discussions about and in the development of theories of social change. Ogburn himself lists all manner of social inventions, but he does not investigate them in detail from the point of view of their genesis and institutionalisation as social innovations, and the relevant processes and mechanisms. A theoretically grounded integration of social innovations into a theory of social change – analogously to technological innovations – is proclaimed to be possible and necessary, but is not developed further.

Further conceptualisations

The same also applies to Drucker’s emphasis of social innovation as a special type of innovation, which – as e.g. Meadows et al. (1972) say later – we currently need more urgently than technological innovations. Like Zapf later on, he too differentiates between reforms and revolutions on the one hand, and social innovation on the other, which he defines in a highly topical way: “it aims at using traditional values, beliefs and habits for new achievements, or to attain old goals in new, better ways that will change habits and beliefs” (Drucker 1957, p. 45).

Brooks later attempts to bring clarity to the relationship between social and technical innovations, with regard to their respective significance for processes of change. In an essay written in 1982 against the backdrop of an innovation gap in the United States and the astonishing economic strength of Japan, Brooks (1982) differentiates in an innovation typology between almost purely technical innovations (e.g. new materials), socio-technical innovations (e.g. transport infrastructure), and social innovations. The latter are further classified in distinction from a wide and unspecific definition. Brooks distinguishes the following types of social

⁶ Ogburn uses both terms largely synonymously.

innovations: market innovations (e.g. leasing), management innovations (e.g. new working-time arrangements), political innovations (e.g. summit meetings) and institutional innovations (e.g. self-help groups). Regarding the relationship between social and technical innovations, he states: "The supermarket has resulted in the invention of new types of check-out counters, stackable grocery carts, optical labeling of cans for automatic check-out, etc. McDonald's developed a whole host of minor but important inventions such as a special scoop and bag of French fries. The thrust however, comes from the market, and the technology is usually incidental and rather mundane in technical terms though no less ingenious. The organisational invention comes first, and technical innovations are gradually introduced to improve it, rather than the reverse" (Brooks 1982, p. 10).

We discussed elsewhere in more detail the goal-driven proposal by Mensch and Schroeder-Hohenwarth (1977), which is based on equilibrium theory and conflict theory, but is neither fleshed out nor taken up and pursued further, for a theoretically underpinned analysis of social innovations "that drive social change" (ibid., p. 128), and which "explains" the occurrence and spread of social innovations quasi-deterministically based on a process model of social change, or to be precise the economic-technical dynamics (cf. Howaldt et al. 2015a, p. 14f.) Let us here merely point out again that this approach emerged from an interdisciplinary context which was centrally concerned with the reconstruction of the relationship between social conflict, social innovation and social change in the 19th century (cf. Neuloh 1977). It was conceived of as a circular relationship, in which social innovations can be both the result and the cause of social conflicts, as well as being significant for their resolution, and which leads to social change (cf. Howaldt et al. 2015a, p. 14ff.) Yet how this relationship is to be theoretically captured and analysed is not explained further. Even if it can be assumed that social conflicts, social stability and social dynamics are interrelated, that they have a mediating function between invention and imitation (cf. Tarde 2009a:69), which can only be investigated in detail empirically, this does not mean that with respect to the explanation and analysis of social change processes, as a matter of principle and un-factorially, "the conflict of interests is the decisive factor" (Mensch/Schroeder-Hohenwarth 1977, p. 129). In some processes and situations it plays a role, but in others it does not (cf. also section 3.2). In theoretical respects it plays a subordinate role and is only of "temporary utility" (Tarde 2009a, p. 5).

To sum up, it can be said that to date, the concept of social innovation in theories of social change remains a largely isolated, and unspecified aspect that is not systematically integrated. Little light has been shed on its significance in processes of social change, which remains systematically unclear.

3.2 THEORIES OF SOCIAL CHANGE IN SCIENTIFIC DISCOURSE

Ever since the term sociology was introduced by *Auguste Comte*, it has been associated with the view that it is about the science of society. Comte focuses on two questions in equal memarchartasure: the question of social stability, and the question of social dynamics, i.e. what is and how it changes. Sociology, in addition to recording the structure of society, should also investigate how it comes into being and changes. According to Schimank, however, sociological theory of society to date has had only a very unspecific concept of society and, seen as a whole, is less interested in a general definition of society "than it is interested in concepts for characterising specific social systems" (Schimank 2013, p. 15). "Society [...] is in each case the widest system of human coexistence. There is no agreement on further limiting characteristics" (Luhmann 1973). Thus society stands as a general term for "the unit of the entirety of the social realm" (Luhmann 1984, p. 55) or for a particular social construct or system (Parsons 1951).

In contrast, there are concepts which instead of society place sociality itself, i.e. the *social relations or interlinking relationships* (Elias) at the centre of consideration, and concern themselves less with social constructs or facts (Durkheim) than with the processes and mechanisms of their creation and change, or rather changeability. In this perspective, there is no society, but merely processes of socialisation, that is, forms of interaction between people (Meulemann 2013, p. 160). If society the "impossible object" nevertheless serves sociology as a basic concept, then it is not "because it provides a stable, uncontroversial foundation, but precisely because its disciplinary identity has mainly developed in the argument over its contours, indeed over its necessity or superfluity" (Marchart 2013, p. 21).

There are three key questions in social theory which are central here, and which are (or can be) addressed via different theory perspectives: the question of the characteristic pattern of order, of its effects on life opportunities and social integration, and of the *driving forces of change* for a given or previous pattern of order, via which – so the associated expectation goes – ultimately the dynamics of social development can be explained and predicted ex post, and on this basis organisational competence can be provided (cf. Schimank 2013, p. 17f.) With reference to the sobering track record of corresponding efforts to achieve a theoretical generalisation of simple causal relationships to explain or predict societal dynamics through primarily external factors and events, approaches of this kind – along with the optimism regarding the ability to shape developments that is based on them – contrast with the position that “there can be no sociological theories of social change” (Nisbet, quoted from Boudon 1983), since the laws that sociology seeks simply do not exist in social practice. As a consequence of this, Boudon (1983) advocates a strict “no-theory of social change”.

But which theories of social change can be found between these extreme poles, and contribute to a better understanding of social change as a result of endogenous processes? In this question, the reference that it contains to theoretical pluralism is key. Just as and because there is no fully developed theory of *society*, “there is no adequate theory of social change” (Etzioni/ Etzioni 1964), “a general theory of the processes of change of a social system is not possible [...]. The reason is very simply that such a theory would imply complete knowledge of the laws of process of the system and this knowledge we don't possess” (Parsons 1951, p. 486). “The possibility of a singular theory of change” is a myth (Moore 1963, p. 23).

The tasks and problems associated with the analysis of social change are so complex, that a specific ‘*sociology of social change*’ has developed, based on the work of William F. Ogburn. “The sociology [...] of social change enquires into the causes of, the course of, and forecastable (i.e. predictable on a scientific basis) change in the social structure of societies or individual social systems.” (cf. Schäfers 2002, p. 10). In fact, however, the relevant definitions of social change vary greatly with the respective underlying units “whose change is referred to as social change” (Zapf 1971a, p. 13f.), i.e. with the respective underlying area of study. They range from changes in social relationships, in types of society, positions of power and value systems (cf. *ibid.*) to changes in the demographic structure, social stratification, economic and political structures, changes in attitudes and dispositions to act, in individual social sub-systems, to the transformation of culture (cf. Schmid 1982, p. 13ff.) Social change is observed at various social levels, “at the *macro-level* of social structure and culture, at the *meso-level* of institutions, corporate actors and communities, at the *micro-level* of persons and their life courses.” (Weymann 1998, p. 14).

The spectrum of theories of social change is correspondingly broad and heterogeneous. It ranges from Marxist theories of change, conflict theories and regulation theories to modernisation and differentiation theories (cf. Hradil 2000); from individualistic and structural theories to theories of structuration and practice theories (cf. Jäger/Weinzierl 2011 and Schmid 1982). Appelbaum (1970) distinguishes four types of change theories: evolution theories, equilibrium theories, conflict theories and cyclical theories. Randall and Strasser differentiate theories of endogenous and exogenous change. Standing “by the cradle of theories of endogenous change [they see] the empirical development and the conceptual representation of the industrial society” (Strasser/Randall 1979, p. 51). From here have come important inputs for Marxist and non-Marxist conflict theories, cyclical or circulation theories, classical evolution theory, and neo-evolutionary and modernisation theory (*ibid.*, p. 55). Among theories of exogenous change they count the classical diffusion and cultural contact theory (*ibid.*, p. 87ff.), the equilibrium theory (*ibid.*, p. 100ff.), and approaches that take the influence of events and crises into account (*ibid.*, p. 97ff.)

Thus, although it has been a *core topic for sociology* from its beginnings (cf. Meulemann 2013), the understanding of social change is completely heterogeneous. “Up to the present time, various theoretical traditions of social change have remained influential; there is no unified and paradigmatic theory. In particular, theory has difficulties with social change that is not continuous and linear. Thus we do not know in what ways and under which conditions social systems respond to fundamental continuity breaks, whether with disintegration, innovation, or the restoration of the former state. Since there is no universalist theory of social change whose explanatory claim is unchallenged in sociology, we have to deal with a large number of theories and theoretical traditions that contribute to an understanding and explanation of social change.” (Weymann 1998, p. 17f.) “As far as the logical status of their statements and the definition of their subject matter is

concerned, theories of social change are as diverse as the spectrum of modern social sciences. Social change is an inflationary term” (Zapf 1971a, p. 18).

A macro-sociological perspective on social change that concentrates with a structural and systemic bias “on the conditions for stability, potentials for change and directions of development of societies, units comprising whole societies, and supra-national or international units” (ibid.) by definition centres on the analysis of precisely these constructs themselves, on social change *affecting whole societies*, on modernisation and international transformation. Therefore, both in its analytical scope and in respect of the level of aggregation of the objects and units, it categorially lacks a conceptually integrable perspective on social innovations in terms of a reconfiguration of social practices.

Nevertheless, as McLeish showed back in 1969, social innovations interestingly have a *key function in the comparison of theories*. In his didactic comparison of relevant theories of society at that time and their embedded theories of social change – the dialectics of change influenced by Marxism, Malinowski’s functionalism, psycho-analysis and Parsons’ action theory – the term social innovation is used throughout, without being explicitly defined. Social innovations are here understood as being the *concrete form in which social change appears* and finds expression, and as such they possess a key function in determining the respective scientific status of the theories that are compared with one another. For this status can mainly be determined by whether and to what extent a particular social situation or social innovation can be made comprehensible based on the theory (cf. McLeish 1969, p. 14, p. 72ff.) From this perspective, McLeish finally comes to the conclusion that all the theories of change that were referred to, on account of their high level of generality, are suitable for the *analysis of trends, but not for explaining specific details of historical and social events*. Instead, “each has its own particular ‘escape clauses’ which enable special explanations of why particular social innovations do not proceed in accordance with the general model” (ibid., p. 72). The theories are not suitable for the analysis of social innovations from the perspective of and with regard to social change. As they all similarly use so many limiting clauses and conditions to formulate their applicability from case to case, ultimately nothing is left of their core statement either; they are not falsifiable. Furthermore, they are all deterministic in concept and diminish the status and significance of social actors and their individuality (cf. ibid., p. 74ff.), they operate with what are ultimately uni-factorially dominant sources of change, and therefore with nearly oppositely corresponding resistances (cf. ibid., p. 77ff.)

Especially in light of modernisation theories, from a *diagnosis-of-the-times perspective* theories of society are developed which boldly emphasise the identifiable trends of change, and continuously declare “new” societies, such as, for example, the post-industrial society, the post-modern society, the Second Modern Age, the individualised society, the single society, the world society, the globalised society, civil society, the risk society, the experience society, the knowledge society, the information society, the media society, the multi-cultural society, the post-growth society, etc. (cf. Hradil 2000; Bogner 2012). Social change in the sense of fundamental transformations at macro-level, which sweep over us as mega-trends, or as a sequence of phases separated by (epochal) upheavals, belongs to the field of sociological “diagnosis of the times” (*Zeitdiagnostik*), which can manage completely without social theory and at the same time is often mistaken for it (cf. Osrecki 2011). New technologies, mentalities, forms of economic activity or dominance relationships – whether looked at retrospectively or prospectively – form the basis for uni-factorial and hence stylising lag theories of change, and corresponding discourse strategies. Even if talk today relating to this genre focuses more on diagnosis of society than on diagnosis of the times, both terms can be used synonymously (cf. Bogner 2012, p. 7). Through a “one-sided *emphasis of one or of some points of view*” (Weber 1988, p. 191) they seek to explain the central characteristic of society and perspectives on society’s development, and therefore operate in the mode of over-generalisation and an inadmissible reduction of complexity (cf. Honneth 1994, p. 7f.) There is an inherently speculative element in diagnoses of the times (cf. Schimank 2007, p. 17; Jäger/Meyer 2003, p. 207); this is a kind of “limited liability sociology” (Müller/Schmid 1995, p. 15), whose output by now has probably far exceeded that of sociological theories (Jäger/Meyer 2003, p. 207).

“Diagnoses of the times function to some extent according to a ‘pars pro toto’ logic, that is, the changes identified in a particular area of society are extrapolated into a fundamental change in the whole of society. In short, the (new kind of) individual phenomenon is taken for the whole – micro becomes macro. [...] Diagnoses of the times are mono-factorial constructs. They are based on the identification of a single, integral factor that marks the difference between the old and the new society. Diagnosis of the times is generally linked to a

theory that an era is ending. It is the present in which something completely new is happening. In this construct, the past appears as a bygone and outdated phase, of which not much remains in the present (Osrecki 2011, p. 306f.) In this way, history becomes a linear succession of self-contained time-entities. [...] They claim to have identified a basic problem, to have found a development trend, that characterises society as a whole” (Bogner 2012, p. 14ff.) Based on diagnoses of breakdown and crises, they mostly contain alarmist findings or suggestions, with corresponding proposals for remedies, and are therefore functionally similar to social movements (cf. *ibid.*, p. 16ff.) On the other hand, diagnoses of the times are poorly suited as a social-theory basis for analysing mechanisms of change, and should therefore be excluded here. As part of the socio-cultural context in which change processes take place, they may be significant as a “narrative of change” (Avelino et al. 2014), as they make “contributions to the continuous self-understanding debate which first open up the possibilities for self-organisation.” (Jäger/Meyer 2003, p. 208).

Multi-dimensional theories of social change can be differentiated from uni-linear and teleological theories of development, evolution and progress. The introduction of the term ‘social change’ and its use as an alternative to the concept of evolution, which is mostly associated with teleological assumptions and positive values such as progress or higher development, by Ogburn (1922) should open up precisely an understanding of an open-ended, non-deterministic and non-teleological evolution that also comprises setbacks and errors (cf. Esser 2000, p. 307).

The research programme of (theories of) social change is therefore broadly based. The evolutionary perspective that prevailed from the beginnings of sociology began to lose importance from the 1970s onwards – to which, aside from the multi-facetedness of the object of study, the subsequent confusion of approaches can be attributed (Schmidt-Wellenburg 2005, p. 9). Given that the search for laws of societal development ceased to serve any purpose long ago because, as macro-sociological constructs, they are always incomplete, without sense or meaning, and therefore remain incomprehensible, social change according to Esser (2000) can only be interpreted and explained as the result of situational action (*ibid.*, p. 309). It is “a process of genesis of particular sequences of change in social structures” (*ibid.* 329), where social structures including their reproduction and their change are themselves nothing other than social processes (*ibid.*, p. 310). The logic of social change does not consist of laws of any kind, but rather of the situational logic of action, that is, the complex interdependencies between actors, the process of linking itself (Marchart 2013, p. 346).

3.3 DEMANDS ON THE ANALYSIS AND EXPLANATION OF PROCESSES OF SOCIAL CHANGE

If one accepts and needs to assume that there are in principle infinitely many processes and forms of social change (Esser 2000, p. 339), then according to Esser, with reference to Hernes and Boudon, there is still “a basic tool” for analysing processes of social change. Based on a specific input – process parameters – and output constellation, Hernes (1976) distinguishes four typical process types: simple reproduction, extended reproduction, transition, and transformation of the system:

- With *simple reproduction*, neither the process nor output changes.
- With *extended reproduction*, only the output changes.
- In the case of *transition*, the output and the process function parameters change, e.g. mortality and fertility in the case of demographic change is a typical example of this type of process.
- When the system undergoes *transformation* into a different system, all components change.

In Boudon’s model (1980), social change happens on three interdependent levels that are linked via recursive mechanisms: the system’s outputs, the actors’ interaction and interdependency system, and the environment (institutional rules, symbolic orientations, material opportunities) in which the actors’ interdependency system is embedded. According to Boudon, social change, even at macro-sociological level, can only be understood if the analysis reaches as far as the most elementary social actors that form the interdependency systems.

On this basis, three social change process types are distinguished:

- with *reproduction*, there is a linear, constantly repeating relationship between the environment, interdependency systems, and the outputs;
- with *accumulation* or attenuation, there are repercussions from the outputs on the interdependency system, and
- with *transformation*, there are additionally repercussions on the environment emanating from the outputs and from the interdependency system.

These models form “a heuristic for how one should proceed when it comes to analysing social change” (Esser 2000, p. 348), and they show that reproduction and change each rely on a specific constellation of mechanisms in the inner process of the respective systems, and may exist endogenously as well as being influenced exogenously. At the same time, emanating from feedback mechanisms, changes once they have begun can accumulate, attenuate, or also oscillate.

“Real” social change always takes place across all possible forms, concepts, types and models, all of which may steer in a completely different direction (ibid., p. 368f.) In contrast, the remaining “‘approaches’ of the so-called sociology of social change” “look a bit pale” (ibid., p. 376). According to Esser, the concept of “open-ended multi-linear evolution” (ibid., p. 399) which corresponds to the “concept of correct sociological explanation” (ibid., p. 396) has proven to be solely suitable, or rather how things ultimately are. According to this concept, social change “is an event that can now only be understood as the result of complex ‘poly-contextoral’ processes of actors who are interlinked in ‘figurations’, who produce social change [...] independently and also against their intentions” (ibid., p. 396). — As a consequence, interestingly, this corresponds strongly with requirements and challenges which Moulaert et al. (eds. 2013) see as being associated with the theoretical capturing of social innovation: the fact that social innovations are found in all kinds of different practical contexts increases the need for theoretical particularity when analysing the phenomenon. Each context-specific case of social innovation requires its own epistemology, if it is to be correctly understood.

Boudon (1986) himself is also concerned with the structure of an explanation of social change. He subjects the existing theories of social change to a critical scientific-theoretical inventory from a micro-sociological perspective, in order then on this basis to formulate requirements for a scientifically sound theory construction. Although he does not systematically reflect on the relationship between social innovations and social change, regarding the former more as a form of change, important conceptual points do result from his work, including for the analysis of social innovation processes. In a nutshell, he advocates and outlines an analytical programme that does not place itself above macro-sociological theories and general statements, but instead takes into account spatially and temporally clearly defined and empirically determinable clearly situated transformation and innovation processes that are made up of small parts, using a theory construction which is adapted to their respective specific features. Theoretical explanatory models or paradigms of social change cannot simply be applied to different processes. Instead, they should always be suitably specified and qualified — and hence changed. Only partial and local transformation processes can be validly captured theoretically and empirically. To a very large extent this corresponds to what Merton calls a medium-range theory, and what Esser identifies as the “one special task” of sociology, “which it — and *only* it — can fulfil” (cf. Esser 2000, p. 29).

In his critical inventory of theories of social change, Boudon at first identifies the following, in some cases interdependent, four-and-a-half theory types (Boudon 1986, p. 10ff.; 1983, p. 2ff.) as being the current programme of sociological theories of social change (id. 1983, p. 4):

- (1) the search for more or less general and irreversible trends, that is, historical laws (e.g. Parsons' trend towards universalism, Comte's three-phase model, Rostow's stages of growth);
- (2) the proposition of:
 - a) conditional laws (e.g. concerning the relationship between industrialisation and the nuclear family in the case of Parsons, between industrialisation and the disappearance of class conflicts in the case of Dahrendorf) or
 - b) structural laws (e.g. Nurske's vicious circle of poverty, or the continuance of semi-feudal relations of production with Bhaduri); if a structure is defined and isolated, then the laws of its development are interpreted as being determined by it.

These two types deal with the content of change and in this respect they can be described as empirical.

- (3) The third type deals with typical forms or patterns of change (e.g. Kuhn's scientific revolutions and Parsons' differentiation processes), and
- (4) the fourth with the causes of change, such as values (e.g. Weber's Protestant ethic), ideas, world-views, conflicts, productive forces, technological change).

Boudon maintains that theories of social change are possible if one accords to the sociology of agencies (id. 1986, p. 28) or action theory and their underlying principle of methodological individualism (ibid., p. 222) their appropriate importance and takes them seriously, but above all if one reflects critically on the logical status of the theory. This then results in the following consequences for the theory formation (ibid., p. 28): It is dangerous to try to propose conditional relationships with regard to social change. It is risky to draw conclusions from structural data about dynamic consequences, as in most cases there is neither a logical nor a structural explanation for the causes of social change, such as e.g. technical innovations. Statements of such a kind are utterly meaningless. Precisely because it is problematic, from the scientific theory and methodological point of view, to make general valid empirical statements about social change, it is necessary always to reflect critically on the logical or epistemological status, the scope, the validity and the reliability of the theory and its dependency on particular interests with regard to different processes of change that are being investigated – it is necessary to “return to a critical reflection on the limits of knowledge in the area of the macroscopic changes” (ibid., p. 222). And exactly this is Boudon's main interest, which he expresses pointedly with the concept of “a no-theory of social change” (1983, p. 1). Any such theory is concerned not with laws and regularities, but rather with the strategic and innovative dimension of individual action and “systems of action” as the ultimate reality that sociology deals with (ibid., p. 17).

The reasons why there is no general theory of social change and also why there cannot be one (id. 1986, p. 189) lie mainly in the non-rationality (of which no account is taken) of social reality, i.e. in the empirical facts of non-determined, open-ended processes. Processes of change can only be understood if the openness or closedness of the situation is taken into account as an essential factor in the analysis. Actions do not necessarily have the form of a choice between predetermined options. They may be innovative instead (ibid., p. 166ff.) At the same time, different ideal types of innovations should be distinguished: the prevailing structuralist view of innovation as a response to an explicit or implicit endogenous need, as a structural or functional requirement, or the interactionist and strategic view, in which innovation (with reference to Schumpeter) does not follow mechanically from the environmental conditions; for these merely provide an abundance of opportunities which are either taken up or not.

This distinction – which is also key for the analysis of social innovations – has great consequences with regard to the simplifying and false interpretation of transformation processes such as industrialisation or the emergence of capitalism, which are not responses to a need, but rather the outcome of a long and complex process of making use of specific opportunities (ibid., p. 172), or a chain of social innovations which are interwoven with each other in many and diverse ways (cf. e.g. also Kocka 2013). Any analysis that aims at a spatial and temporal location for some kind of large-scale process and sees this as the consequence of particular dominant factors or innovations is usually nothing but an illusion (Boudon 1986, p. 173). The so-called industrial revolution, for example, is not a break or event that can be traced back to a few particular causes. Rather it is a process that extends from the 13th to the 19th century. Any theory that reduces processes of social change to dominant factors such as dependency, cultural change, expanding markets, class struggle, the specific features of political organisation or the like, can be ruled out. Chance and its scientific consideration play a crucial role in the analysis of many change phenomena.

Boudon advances a programme in which it is not the postulate of science or the condition of knowledge which is to decide on the analysis of processes, but rather the characteristics (to be observed) of the respective processes themselves. Thus the importance of values and of determinacy / non-determinacy is a function of the observed process, or not, as the case may be. The same applies to the significance of social conflicts. In certain processes and situations they play a crucial role, but in others they do not. Class does not necessarily imply class struggle, and many major change processes come about without any conflict. Likewise, social transformation processes are not necessarily either endogenous or exogenous; often they are both.

Like Boudon, starting from the paradigm of social change which has come under criticism because of the identifiable weaknesses in its descriptive and explanatory function, but also in the evaluative persuasiveness of the associated metaphor of progress, Müller and Schmid (1995) bring up for discussion indispensable standards for and approaches towards a paradigmatic reorientation that offers a fruitful heuristic for the dynamics of social change, which are also significant for the development of a theory of social innovation. Firstly there is the need to search for a social-theory foundation and specifically an action-theory foundation (cf. ibid., p. 31f.) Then it is a matter of the explanatory logic. In modelling the logic and dynamics of the specific processes being investigated, their respective agents, their forms of relationship and the environmental factors relevant to the process should be identified, and in view of the wide variety of options for action, the model should be based on selection theory and therefore should be open to undirected and chaotic processes. With regard to precisely localised partial processes, the abstract formal model should now be formulated as a tailored content-related theory, in which no course of change should be favoured or excluded as a result of thoughtless requirements and specifications (cf. ibid., p. 37). Only on this analytical basis is it then possible to tackle a theory of transformative social change or “a transformation theory in the narrower sense, which reconstructs courses of transformation and development in an empirically controlled way” (ibid.) – which however is not discussed further here.

With this paradigm shift, it is not only the idea of a unified theory of social change that becomes less important. Apart from an increasing pluralism and mix of theories, with regard to social innovations those approaches and analysis models gain importance which aim to overcome the weaknesses of uni-factorial approaches, which reductionistically conceptualise social capacity for action – neither in a structurally determinist way, nor in voluntaristic action theories – as a prerequisite for the *generation of new social practices*, and which are open to *capturing endogenous mechanisms of change*.

4 SELECTED APPROACHES TO RECORDING PROCESSES AND MECHANISMS OF SOCIAL CHANGE

The stated paradigm change in the field of theories of social change and the associated requirements for the theory construction and analytical programme as well as the turning away from general and macro-sociologically based concepts (laws) or “unfolding models” of change which finds expression therein (Giddens 1995b, p. 180ff.) in favour of a theoretically and empirically stronger micro-foundation⁷ of different transformation processes can also be used *to integrate social innovations conceptually to a greater extent than before as a specific form, expression, driver or mechanism of change across the various approaches, and to establish a theoretical foundation for social innovations.* The approaches outlined below should be examined in terms of their potentials and connecting factors in this regard. Here we explore in more detail those theories which are compatible with a concept of social innovation grounded in social theory, as is pursued in SI-DRIVE.

Thus we focus on concepts which choose a

- process-oriented,
- endogenous,
- relational and
- micro-founded perspective,

and which specifically also consider the dynamics of change and inbuilt reflexivity itself, and which therefore at the same time tie in with current trends in the theoretical examination of the topic.

4.1 SOCIAL CHANGE FROM A STRUCTURATION THEORY PERSPECTIVE

For Giddens, “the sources and the essence of social change [...] can be seen in conditions which result in the routinised course of social interactions being impeded or broken up” (ibid., p. 177), in traditional practices corroding or being questioned (cf. ibid., p. 178); and the influences which are aimed towards this should be considered central. As a form of heuristic, Giddens distinguishes analytically three types of circumstances “faced with which traditional practices are undermined” (p. 178): firstly external factors such as ecological changes, natural disasters, conflicts between societies, secondly the development and clash of diverging interpretations of existing norms, “wherein evidently [lies] a fundamental stimulus for the emergence of social movements, which may become carriers of an emphatic change potential” (ibid.), and finally the questioning of prevailing practices, “which is actively out to break down social institutions” or transform them “as a result of deliberate social innovation” (p. 179). Here the distinction between social practices and institutions cannot always be clearly made, and should always be interpreted situationally. Those social practices which have the greatest spatial-temporal dimensions in any social systems are characterised as institutions (cf. Giddens 1984, p. 17) – formulated in terms of practice theory these would be forms or formations of practice (cf. Hillebrandt 2014) or bundles or complexes of practices (cf. Shove et al. 2012). The definition of the system concept here relates explicitly to reproduced practices and not to action (cf. Giddens 1984, p. 3). Social practices describe the ordered, regular aspects of social activities, which are stable across space and time (Giddens 1976, p. 75). “Social practices can be understood as skillful procedures, methods, or techniques, appropriately performed by social agents” (Cohen 1989, p. 26). Social practices become existent solely in action. Because the majority (or at least a relevant number) of actors refer time and again in their situational action to particular social practices, these are produced and reproduced as social practice. At the same time, social action is based on the existence

⁷ Micro-foundation in Coleman’s sense (1986; 1990, p. 6ff.) insists that all theories about macro-phenomena should have a solid foundation in the form of a theory of targeted action. On this point, see the comments below concerning the mechanism approach in analytical sociology, in section 4.3.

of social practices, as an understanding is possible only through the collective reference of the actors involved to these shared practices. “In and through their activities agents reproduce the constitutions that make these activities possible” (Giddens 1984, p. 2).

Giddens’ structuration theory as a *specific variant of practice theory*⁸ and its central theorem of the “duality of structure, by means of which the recursive order of social life is achieved” (Giddens 1995b, p. 173) has the potential not only to explain this “problem of order” itself, but also to investigate precisely the relationship between social stability and change. For recursive “structuration indeed means that although structures require action [...], action and only action produces social structures in the first place, which then again require and moreover restrict and enable action. Recursiveness [...] contains [...] all possible gateways for change”, i.e. for the deroutinisation and reconfiguration of social practices. “Action refers back to structures” which only “exist precisely for the reason and to the extent that action refers back to them, but it can, indeed must in situ fill, complement, [...] sidestep, avoid, undermine and even replace [...] the inevitable emptiness of structures [...]. All of this is meant by ‘refer back to’” (Ortmann 1997, p. 27), and leads under particular “kinds of circumstances” (see above) to an innovation of social practices.

Giddens defines as social structures not only rules and procedures, but also resources of action, which he takes centrally into account in his social theory. Accordingly, structure is a “recursively organised mass of rules and resources” (Giddens 1995a, p. 68). Giddens understands resources to be all means which actors can mobilise to generate power, where power means the possibility to change social practices based on capabilities or transformative capacities. Allocative resources “refer to capabilities – or, more accurately to forms of transformative capacity – generating command over objects, goods or material phenomena. Authoritative resources refer to types of transformative capacity generating command over persons and actors” (Giddens 1984, p. 33). Thus structuration theory stresses that it is ultimately the acting subjects and their transformative capacities who generate, reproduce and change social practices. In distinction to holistic concepts, Giddens starts by assuming a fundamental but – in contrast to individualistic concepts – limited “agency” of social actors. He defines “action or agency as the stream of actual or contemplated causal interventions of corporal beings in the ongoing process of events-in-the-world” (Giddens 1979, p. 56). By means of transformative capabilities, actors through their social action can bring about intended consequences for social practices, which would not occur without their action. Agency in this sense results from participation in social practices.

“Giddens conceptualises social change as discontinuous, contingently determined and overlapping transformations that do not follow any overarching developmental logic” (Jäger/Weinzierl 2011, p. 21). Recursive structuration enables and comprises both the stability of social systems, institutions and practices, and also an exogenously and/or endogenously triggered reconfiguration of social practices which result in a fundamental social change. “The linkages between the theory of structuration and empirical research lie [...] in filling in the core concepts of ‘action’ and ‘structure’ with content, that is, in the specification of the content of abstract concepts such as ‘rules’ and ‘resources’” (ibid. 22) and in the process-specific modelling of their specific relations.

Burns and Dietz then see the main achievement of Giddens’ structuration theory as being also the attempt to come to grips with the problem of ascertaining the *capacity for action* between the poles of completely unlimited and therefore unpredictable on the one hand, and completely determined and therefore uncreative and predictable on the other (cf. Burns/Dietz 1995, p. 371). Following on from this, they propose tracing the human capacity for action from the perspective of modern cultural or evolution theory, via which the “considerable influence of actors capable of acting for example in innovation processes and the generation of cultural variety” (ibid., p. 376) can be observed, as can structural limitations. A dynamic instead of a categorial concept of the capacity for action points to the variability in action owing to (rule) interpretation flexibility and errors in the implementation of rules. “If an action which deviates from the cultural rules” – i.e. from established social practices – “is regarded by the actors as advantageous, then possibly it will be copied” (ibid., p. 372). Whether this deviating or new practice becomes a social innovation depends on its supposed desirability, the difficulties associated with its adoption, maintenance and its gaining acceptance, and resistance on the part of established practice, i.e. “the traditional rule system” (ibid.) Restrictions on the capacity for action result firstly from nature and the available technical repertoire, and secondly from the scope

⁸ We have discussed in detail elsewhere the significance of sociological practice theories for a theory of social innovation (see introduction and conclusion).

and rigidity, which can only be empirically ascertained, of “cultural structures” or “rule structures” (ibid., p. 374), as well as from the reactions of co-actors and their positive and negative power to sanction (ibid., p. 375) “The existence of capacities for action constitutes a mechanism for generating change which is many times stronger than error and migration, and which precisely captures the dynamic, creative and often playful character of human life” (ibid., p. 377). When it comes to the introduction of innovations, “that is, of new rules and their expression in new patterns of action or physical artefacts (such as technologies), then (from an evolution theory perspective) various types of selection processes play a crucial role” (ibid., p. 353ff.), in so far as they “decide on the absolute or relative reproductive success of institutional arrangements, cultural forms and rules” (ibid., p. 357). A distinction should be made between conscious and that means power-mediated (rule) selection, selection via the social structure or social-structural arrangements such as markets (p. 358), and incomplete, indirect selection via reactions of the material and natural environment (p. 359f.)

The transmission or more precisely the acquisition of social rules takes place through education, observation, and *imitation or in other words through social learning* (Bandura 1977) *as the key mechanism*. This involves both passive imitation and imitation based on suggestion (cf. Burns/Dietz 1995, p. 362f.) What are the conditions that need to be fulfilled so that a change or an innovation can become established? It needs to be understandable within the corresponding social frame of reference, i.e. it needs also to be communicable and teachable, it needs to be implementable by agents in the social group concerned, and the change has to be normatively and politically acceptable and compatible with the existing principles or capable of being sealed off from these, and finally the innovation in question should be able to ensure successful results under specific conditions. Successful new practices spread when they are adopted by an increasing population and they “diffuse in social networks in which other populations adopt them from their initial users through imitation” (ibid., p. 366). This “cultural transmission” comprises a certain autonomy, which can separate it from practical requirements or a substantive rationality. Accordingly, social practices are not necessarily optimally adapted to their respective environments, nor is social change necessarily geared towards optimisation. Many social transformation processes do not have exogenous causes, and instead can be traced back to social competition and power struggles over beliefs and corresponding initiatives, or initiatives triggered as a result, to change established practices. The adoption of new practices ultimately depends crucially on their structural compatibility (p. 368ff.) and the ability or the capacity for action to influence their adaptation and implementation. Accordingly, “cultural dynamics [imply] the exercise of power and the occurrence of conflicts” which – taking the transformations in Eastern Europe as an example – “in a certain way [are] more fundamental than economic conflicts or regular political competition” (ibid., p. 370).

4.2 MORPHOGENESIS AND MECHANISMS APPROACH

To localise the conditions for stability and change, and identify the relevant mechanisms, Margaret S. Archer takes up Walter Buckley’s morphogenetic approach. In distinction to morphostasis, *morphogenesis* refers to those processes in a complex system-environment exchange which work towards developing or changing the existing form, organisation and states of the system (Buckley 1967, p. 58f.)

Archer (1995) develops a systems-theory concept of the process character which finds expression therein as being a self-transforming cycle of cultural conditioning, socio-cultural interaction and cultural development, and she investigates the mechanism that leads to cultural and social change. From the point of view of identifying “generative mechanisms transforming the social order” (Archer (ed.) 2015), it is a matter of a causal explanation of that which leads the social formation of the late modern period to change into one which is very different in its relational organisation. Uni-factorial approaches that explain change via a hegemonial aspect are here just as unsatisfactory as multi-variable approaches which in place of causal relationships identify correlations between variables. Instead, generative mechanisms are required in order to explain such connections, i.e. how they arise and operate, and they should be robust enough to cover cases and times in which no constant circumstances can be found (cf. Archer 2015b, p. 2), but which rather generate processes of change in the relational organisation of social order. Each of these tendencies can be paralysed, cancelled or deformed by the coexistence of other opposing mechanisms and by the intervention of unpredictable contingencies. This means that *generative mechanisms explain without predicting*, as is necessarily always the case in an open-ended system such as social order. Social order, seen as relationally contested organisation, is

shaped between support for and opposition to the function of mechanisms concerning a particular aspect in a generative complex. Social contexts lead to different motives, more so than acting differently. The mechanism explains *how* a given correlation functions, and not merely that such a connection is significant. Mechanisms always exist in the plural, as complexes of generative mechanisms. In interaction with each other, they produce that which is currently happening in the world. It is a matter of capturing the multiple conditionality, i.e. specifically a matter of theoretically integrating structure, agency and culture (SAC). Archer identifies precisely this as being specific to this approach as compared to other mechanism approaches, which in her view each pay too little attention to one of these dimensions. Thus *analytical sociology* (cf. Hedström/Bearman (eds.) 2013) is said to be structurally weak (Archer 2015b, p. 5f.) Mechanisms here, Archer argues, are understood only as heuristic tools or analytical constructs, which in the tradition of individualism and positivism supply hypothetical links between observable events. Based on a structureless concept of situation, macro-structures and macro-mechanisms are seen only as the product of smaller units. The underlying concept of desires-beliefs-opportunities (DBO) takes no account of the extent to which and how macro-phenomena influence the scope for action. Yet if macro-forces are not taken systematically into consideration, generative mechanisms are improperly restricted and the theoretical programme is hamstrung.

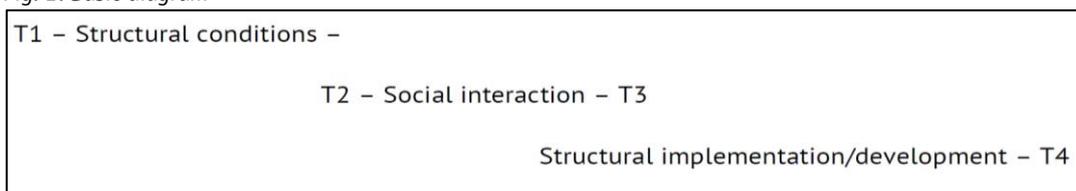
This characterisation of analytical sociology does not do justice to the approach, which is indeed micro-founded, but does not therefore necessarily leave structure out of consideration, which is why this approach is briefly outlined here. Hedström and Bearman themselves describe the explanatory model of their approach as a kind of “structural individualism” in the tradition of Weber, Merton, Coleman and the “analytical Marxists” (Hedström/Bearman 2013, p. 8). Accordingly, suitable explanations identify the units, activities and relations that together generate the collective output that requires explanation. All social facts, their structures and their change are in principle “explicable in terms of individuals, their properties, actions, and relations to one another” (ibid.) The micro-macro link, which is specific to the approach, is comprehensively set out (cf. ibid., p. 9ff.) and at the same time it is clearly shown that and how “macro-level properties” such as relational structures are integrated into the explanation. Macro-properties are defined as properties of a collective or a set of micro-properties that cannot be defined for a single unit at the micro-level such as typical actions, beliefs, desires among members of a collective, inequality, spatial segregation or networks. Micro-macro relations are not regarded as causal *per se*, but rather as constitutive relations. However, they can be causal relationships, as is expressed for example in socialisation or decision-making processes. To understand collective dynamics, one should consider the collectivity as a whole, but not as a collective unit. “Only by taking into account the individual entities, and most critically the relations between them and their activities, can we understand the macro structure we observe. Predicting and explaining macro-level dynamics is one of the most central goals of analytical sociology” (ibid., p. 13). To be able to explain social change, it is necessary to specify the social mechanisms which bring about change, and to show how macro-states influence actions and how these actions cause new macro-states (cf. Hedström 2008, p. 20). This is a matter of an explanation strategy which attempts to explain social change (ibid., p. 16), an alternative to variable-based empiricism (ibid., p. 11) and to a big theory, a micro-foundation of sociological theory (ibid., p. 64), and of the dynamic interplay between the individual realm and the social realm (ibid., p. 22). The social realm relates to “collective properties” – one could also say to social practices. Social phenomena, complex social processes should be dissected as a way of making sense of the mechanisms that explain why things happen like they do.

A social mechanism is a constellation of entities and activities that are associated with each other in such a way that they regularly generate particular types of consequences in the sense of social phenomena. Social reality does not take place on different ontological levels. Social phenomena are emergent phenomena that are generated by social processes (ibid., p. 103). Small, apparently trivial changes at the level of action can lead to large changes in the social realm (ibid., p. 104). Individuals possess powers which enable them to generate changes and transcend social expectations (ibid., p. 107) (= capacity for action). Imitation is key for the diffusion of knowledge and practices, and is therefore crucially important for sociological theory. At the same time, various social mechanisms of imitating behaviour should be distinguished, also taking the respective intentionality of the actors into account. The most important task for sociology is to analyse in detail how actors who interact with each other under conditions which continue to have an effect from the past, generate major social phenomena (ibid., p. 141). Therefore, social dynamics in combination with the dimensions that constitute the action, such as emotions, beliefs, preferences, opportunities, heuristics, norms and trust, are the central theme of analytical sociology. Although most analytical sociologists to date have come from the network and/or mathematically computer-assisted modelling tradition, this does not mean that future work on

this frame of reference has to be tied to these methods. Rather, the approach is compatible with a variety of other research traditions (cf. Hedström/Bearman 2013, p. 21). Analytical sociology, with strong explicit reference to Merton's concept of medium-range theories, is about a "toolbox of mechanism-based theories" "capable of partially explaining phenomena observed in different social domains" (Hedström/Udehn 2013, p. 40ff.), such as social innovations as generative mechanisms of social dynamics, or "social dynamics from the bottom up" (Macy/Flache 2013).

To make the SAC components manageable in a methodologically integrated way, a phase model or cycle is assumed. The individual phases can be analytically separated and investigated accordingly:

Fig. 1: Basic diagram



Source: Archer 2015c, p. 136

T4, the end of the morphogenetic cycle and hence the beginning of a new one, differs in form, organisation and state from T1, but this never takes places as a clear break. Social change on a large scale can never be explained as a clear break. Even when structural change is on the way, the structural conditioning does not stop. Any generative mechanism that is transforming the social order also inevitably sustains or transforms prior groupings and corporate agents. Corporate agency, in its attempt to sustain or transform the social system, is ineluctably confronted with transforming the categories of corporate and primary agents themselves. This will be decisive for whether or not T4 can be reached in the sense of a morphogenic society, i.e. a transformation of the social order (cf. *ibid.*, p. 139).

The conditions for substantive social change are to be found in the relation between system integration and social integration. Both date back to late modernity. The generative mechanism of late modernity is constituted by the necessary synergy of market competition and the diffusion of digital science with the consequence of increasing social and system disintegration. Economics and science push society in different directions. As it were as a bottom-up effect of digital diffusion, an anti-copyright and cyber-commons movement develops that intensifies morphogenesis and at the same time maintains the potential of increasing social integration (cf. *ibid.*, p. 148): based on collaborative production and products that are open to further elaboration and sharing, and are difficult for large firms to control, an open source movement emerges, which stimulates further morphogenetic diversity, which without binding forms of normative self-regulation may have ambivalent effects. Commons-based peer production (cf. Benkler/Nussbaum 2006) not only shows that non-commercial phenomena and cross-fertilisation between disparate fields are indeed possible, it also leads to information diffusion and contributes to the integration of diversity; it is not simply pro-social but rather morphogenic and socially integrative. Virtual communities (Archer 2015c, p. 150f.) help support new actors who create reciprocity and counter individualism, and therefore influence mainstream practices morphogenically. The digital tendency to produce new corporate agents who promote direct democracy and fight individualism through relational integration of heterogeneity intensifies morphogenesis. The meso-level is densely populated with these new forms of corporate agents as agent-related effects of the double morphogenesis induced by digital science.

The increase in heterogeneity in poverty, falling numbers of members in established institutions, and a lack of interest in participation among passive actors is seen against an increase in voluntary connections and growth of the tertiary sector in general. The actors who are responsible for the growth of the blogosphere promote the diffusion of information and the accountability of elected politicians. At the same time, however, it is also home to primary agents who benefit from the situational logic of opportunities and generate significant effects together with others. Yet although they have changed the environment in which all collective actors operate, the question remains of the extent to which their direct action is cumulative in its aggregated effects. The synergies of the generative mechanism prevent a radical double morphogenesis by developing network analysis software for acquiring data about the demographic details and interests of voluntary users as a big

business (ibid., p. 153), and social networks tend to pursue commercial purposes rather than create new corporate agents, and they reinforce the passiveness of primary agents (ibid., p. 155). The challenge is therefore to specify conditions under which synergies do not strengthen the status quo and generate an ever greater pool of passive actors (p. 156), but under which, instead, the prevailing form of double morphogenesis can be turned around. To do this, a realistic analysis of the mechanisms of morphostasis (cf. Porpora 2015) and morphonecrosis (cf. Al-Amoudi/Latsis 2015) is also necessary. The power of intensified morphogenesis results from the institutional configuration of contingent complementarities and the associated logic of the favourable opportunity and a corresponding shaping of organisations and large institutional complexes into new social forms. These in turn have their own structurally and culturally developed characteristics, and they influence the quality of social life in the emerging morphogenic society.

That which is developed here with the concept of morphogenesis as *a transformation-theory* analytical framework allows social innovations to be located analytically within a generative mechanism via which social practices and their agents are themselves transformed in the course of pursuing social transformations. The extent to which this is successful, taking opposing movements and inertial tendencies into account, decides on whether a transformation of the societal order, i.e. transformative social change, can be achieved or not. When this approach is set out in detail, it is apparent that, like any transformation research, it has a strongly normative character and a normative point of reference which has clear similarities to the capability approach. Therefore, and seen as a whole, this “experiment in social theory” (Archer 2015a, p. iv) turns out to be not so much a social theory, but rather an attempt to satisfy conceptually at a very general level the requirements which Müller and Schmid lay out for a transformation theory having in the strict sense a technological interest: “The [...] selected normative point of reference serves a transformation theory as the start and end point of a directed evolution. [...] If the normative goal is known, then ways and means can be sought to reach it. At the same time, however, a transformation theory will not be able to avoid exactly defining both the reference society and the investigation period, in order firstly to be able to recognise specific barriers to transformation and obstacles to development in good time, but secondly also to identify processes and mechanisms which serve the goal” and in this context “include the different transformation rhythmic of individual sectors of society [...] such as the existing configuration of institutions and power relationships between the actors.” Without corresponding “model and theory building”, “the investigated societal transformation [can] neither be compared with similar processes nor evaluated from a diagnosis-of-the-times perspective” (Müller/Schmid 1995, p.38 f.)

Archer sees the simultaneous decrease in system and social integration that can be observed in the developed countries as fulfilling the preconditions for radical social change, although its direction is open. In this light, she argues that value neutrality is unacceptable, and instead of the “transcendental question” of what needs to be the case in order to make a morphogenic society possible in the sense of a wholly new global social formation, one should focus on the question of what needs to be the case in order to make a morphogenic society possible that is orientated towards successful life (cf. Archer 2015b, p. 22). This would require a specific normative morphogenic utopia, models of alternative ways of life and a corresponding use of sociological imagination, i.e. to define ‘the good society’ in relation to an anticipated continuous increase in the variety of resources, and moreover in a way which allows this variety to translate into a spread of opportunities, which provide the social conditions for a good life for all members of society, and asserts resistance against the current state of relationships. Contrary to any simple optimism or idealism, a normative standard should be set in order to evaluate the extent to which particular forms of relational organisation produce any kind of new but specific social formation, which more or less corresponds to this. This normative perspective, which is to be developed further in the future, is provisionally, as a priority, about “unity in diversity” or “integration of diversity”, about the orientation towards protecting and strengthening the relationally good, which the actors themselves generate via relational reflexivity, and about common good as the sole formula which provides for everyone. Accordingly, the announced next step for protagonists of the morphogenic approach is the attempt to present the morphogenic road that leads to eudemonia; one could also say the roadmap of the successful life.

This *normative orientation* not only brings the morphogenic approach close to concepts of social innovation that are likewise normative, such as those that are pursued for example by the EU, but also to development and transformation approaches which they relate to such as human and sustainable development, and it is conceptually compatible in particular with the so-called Capability Approach (see section 4.3).

Archer classifies the morphogenic approach and structuration theory as two *conflicting perspectives* which, building on attempts by the general functionalists and interactionists in the 1960s to reunite structure and action – in contrast to the positions of structuralists on the one hand and interpretive sociology on the other, which were largely polarised up to that time – directly address structure and action (cf. Archer 2010). Thus both approaches agree that action and structure are mutually dependent, and that social practice is inevitably shaped by conditions of action and generates unintended consequences that form the context of subsequent interaction. They also both share the conviction that “the escape of human history from human intentions, and the return of the consequences of that escape as causal influences upon human actions, is a chronic feature of social life” (Giddens 1979, p. 7). But they are extremely different in how they conceptualise this and how they deal theoretically with the structuring and restructuring of social systems (cf. Archer 2010, p. 226), and hence in their theoretical usefulness (cf. *ibid.*, p. 229).

The main reason why the morphogenic approach is superior in this respect, in Archer’s view, is that Giddens does not make any specific statements about which mechanisms decide whether or not to use the potential for social change that results from the relationship between enabling and restricting structures. Archer argues that although Giddens recognises the relevance of the time dimension, it is not really a variable in his theory. In contrast, with regard to social change it is pivotal for morphogenesis that structure and action operate on different periods, as structure precedes the actions that transform it, and transformation follows these actions (see the ‘basic diagram’ above). This goes hand-in-hand with a *multi-level perspective* which analytically disentangles the micro-macro connections and concerns itself with the continuing interplay between micro and macro, in which the wider context conditions the actors’ environment, their responses then transform the environment, and both of these together in a multiple feedback model generate both mutual development and changes. This can only be recorded completely over time, since feedback takes time. The constant adaptation and counter-adaptation finds its expression in a dialectic pattern of social change, from which much is lost if the analytical focus is improperly limited to certain tensions that are assumed to be primary.

The analytical separation of structure and interaction on the time axis permits theoretical statements about structuring and restructuring, that is, it makes it possible to capture the influence of people on society and vice versa, and at the same time avoid the hopeless incorporation of society in people (cf. *ibid.*, p. 247). “The morphogenetic perspective [...] concentrates on the socio-cultural system in its own right, identifying and explaining the real and variegated structures which have emerged historically and theorizing about their concrete elaboration in the future” (*ibid.*, p. 248). At the same time, the main concern of the morphogenetic perspective is to specify the mechanisms that are involved in the further development and changing of structures. However: “It should be clear [...] that the analytical dualism” as a construction principle of the morphogenetic approach “is artificial and methodological” (p. 247). And precisely therein lies the problem with regard to capturing the relationship between social change and social innovations.

The multi-level perspective, which Archer emphasises here as a key differentiation criterion compared with structuration theory, also forms the core of the MLP approach of the same name, which is discussed in more detail in section 4.6 and examined in terms of its analytical reach. Steffen Sigmund (2001), in his essay “Morphogenesis or Structuring”, discusses the approaches of Archer among others and Giddens as being promising attempts to resolve the question of the desiderata of social theory in respect of an aggregated concept of society, as well as the relationships between structure and action with regard to the analysis of the development dynamics of contemporary societies. In both, it is a matter of disaggregating the concept of society, and of identifying the mechanisms which are significant for the stability and change of social structures of order. However, Sigmund believes it is fruitful to link these two social-theory reflections with newer institution-theory considerations (cf. *ibid.*, p. 105 and here section 4.4).

4.3 CAPABILITY APPROACH AND SOCIAL GRID

The Capability Approach (CA), which stems from the work of Sen and Nussbaum, is a philosophically underpinned, ethically normative (political-)science approach for evaluating and measuring welfare – and guaranteeing it via (social) policy – i.e. a good, successful, self-determined life in the sense of well-being, quality of life, equality of opportunity etc., which can be brought about via people's capabilities and opportunities. It has an evaluative aspect (measurement of welfare, poverty, wealth based on advanced indicators for a "good life"), and an agency or action-related aspect: It aims to provide indications as to which capabilities should be improved for the sake of "positive" human development, and what the fundamental capabilities are for a successful life (cf. Nussbaum 1999; 2006). It provides an analytical tool for researching individual social marginalisation, but does not provide either a developed theory of social change or a methodology for formulating and implementing policy.

The strong prevalence in policy-making circles of the CA "as an alternative to neoliberal globalisation" can itself be called "one of the greatest social innovations" (Elsen 2014, p. 235). "It is [...] about a concept of what makes a good life" – i.e. about a new normative idea coming from particular actors, an intentional reconfiguration of social practices. "Today it determines global discourse in politics and science and forms the basis for the Human Development Index (HDI) – the welfare indicator developed in 1990 [...] – which shows e.g. access to education and life resources in a country comparison" (ibid.) In this respect, therefore, it concerns the imitation and adaptation of a normative idea and a related intentional reconfiguration of social practices in the area of government and governance. With regard to the analysis of social innovations, the CA – as a social innovation – in itself does not lead us any further, and instead requires a grounding in social theory, i.e. it needs to be linked to theories of change⁹. It cannot simply be assumed as given that there are recursive interactions between social practices, social change, capabilities and welfare. Rather it is necessary to investigate their nature and the extent to which social innovation processes are the expression of underlying capabilities¹⁰.

In precisely this perspective, Ziegler (2010) defines social innovations as the implementation of new combinations of capabilities and hence as capability innovations or as innovations in doings and beings, and he makes this the central hypothesis of a "specific approach to the theory of change" that is based on the CA (ibid., p. 269). If, for Schumpeter, innovation understood as the new combination or production factors, i.e. resources and goods, is the crucial factor for economic development, then with regard to social change in the sense of human development, (social) innovation is about the implementation of new combinations of capabilities, understood as a specification of the social aspects in terms of a set of doings and beings. The formation and establishment of new and effective links between doings (e.g. participation in community) and beings (e.g. being in good health) are the core of social innovations as drivers of "social change in terms of human development" (ibid., p. 268), while the CA provides the explicit normative and evaluative frame of reference with regard to the values that this implicitly invokes. "Social change as human development offers a rich, ethically articulated framework for the intended and unintended effects of social entrepreneurs and social innovation" (ibid.)

With regard to a theoretically grounded concept of social innovation, the strengths of the CA can be found when it comes to the question – to be empirically clarified – of which values and goals find expression and achieve impact in what ways in (new) social practices. In contrast, its explanatory force regarding the constituting conditions and dynamics of social practices is very limited from a social-theory perspective. In this respect, the practice-theory approach to the emergent dimension of the social realm, which is based on social theory with Tarde's concept of imitation, offers a suitable frame of reference. Normative indicators of well-being and associated functionings or minimum standards for basic capabilities in the sense of fundamental political principles (cf. Nussbaum 1999; 2006) cannot settle the question of the respectively specific relationship between the dynamics and stability of societal order; rather they can at best be put to use in the context of an "evaluation framework" that "helps specify 'the social' of the social mission" (Ziegler 2010, p. 263). "This [...] can articulate and accommodate, if not solve, major challenges regarding 'the social': conflicts

⁹ The EU-funded project "CRESSI" therefore relates to what is commonly referred to as Beckert's grid model (see below) and Mann's power theory (1986 and 2013). Further details about the CRESSI (Creating Economic Space for Social Innovation) project are available at: <http://www.sbs.ox.ac.uk/ideas-impact/research-projects/cressi>.

¹⁰ On the significance of the concept of 'capabilities' in innovation-related management research cf. Dhondt/Oeij 2014, p. 126f.

of interests, value diversity and public inclusion” (ibid., p. 268). From this perspective, the CA can help to imbue with scientific spirit the many and varied social searching, experimentation, learning and negotiation processes in respect of their benefit in categories of “desired social outcome” (ibid., p. 30), their intended and unintended effects (cf. Ziegler 2010, p. 268), that is, their “potential to improve either the quality or the quantity of life” (Pol/Ville 2009, p. 881), and to identify “desirable” and “pure social innovations” (ibid., p. 882f.)

In this respect, the normative analytical framework of the CA and its inbuilt empirically underpinned criticism of established welfare concepts might not only “provide a broad information base so as to create the necessary basis for individually effective political measures and reform concepts which are at the same time oriented to the common good” (Rahner 2014, p. 26), but also contribute to mobilisation of capabilities in this regard, in the sense of the capacity to achieve something or a potential for viable lifestyles (cf. Arndt/Volkert 2006)¹¹. At the same time, however, from a sociological perspective it would be crucial to direct the individual perspective of the CA to the discussion of established social practices (cf. Jaeggi 2015, p.10) and the capabilities of new social practices. Here it is not be a matter of “spelling out a perfectionist theory of the good life, which would inevitably attract accusations of paternalism” (ibid.), but rather of a criticism of ways of life, understood as an ensemble or bundle of social practices (ibid., p. 14) and “historically situated problem-solving processes” (ibid., p. 11), which directs attention to “the conditions for the possibility of individual and collective self-determination” and shows “that the interest in and discussion of ways of life is itself one such condition” (ibid., p. 10). In this respect, the CA can as it were discursively stimulate, and following on from the morphogenesis approach help to operationalise the normative standard that this approach calls for.

With its normative agency concept, it can in the same way build bridges to sociological practice theory such as Tarde’s concept of imitation. It is true that practice theory approaches focus on the stability and dynamics of interconnected social practice as the ultimate element of sociality, and see ‘the social’ as being founded not in action based on norms or communication but rather in the collectivity of behaviour patterns and in constantly re-forming regularity which are held together by a specific practical ability. But although they are always already present, practices are reproduced and changed by active subjects. Thus the problem of determining the capacity for action or of agency as a dimension of the recursive relations between practices, sociality incorporated therein and objectified sociality is addressed. For Tarde it is the many small individual inventions and interventions which first become socialised through acts of imitation guided by particular desires and beliefs.

Relating to this, the “essentially [...] ‘people-centered’ capability approach, which puts human agency (rather than organizations such as markets or governments) at the centre of the stage” (Drèze/Sen 2002, p. 6) can investigate “what a person is free to do and achieve in pursuit of whatever goals or values he or she regards as important” (Sen 1985, p. 203). But this does not yet explain what follows from this ability in terms of the reproduction or reconfiguration of social practices, or why some inventions and interventions spread while others do not. This requires an analysis of the relevant relationships and mechanisms in the reproduction and innovation of social practices, of the interplay between imitating repetition, difference and adaptation.

The CRESSI project is based on a working definition of social innovations that borrows from the CA, and which states that “the development and delivery of new ideas (products, services, models, markets, processes) at different socio-structural levels [...] intentionally seek to improve human capabilities, social relations, and the processes in which these solutions are carried out (CRESSI, p. 6 part B). The definition comprises individual returns (human capabilities) and social returns (relations and processes) among the motivations that drive social innovation. Therefore, while individuals might on one hand participate in some type of social innovation action because of a personal interest, they also defend some sort of collective goal which aims at altering *relations and processes*, or in other words some element of some social structure.” (Chiappero-Martinetti/von Jacobi 2015, p.8).

To analytically ground the CA and make it productive with regard to the economic aspects of social innovations for marginalised people, the attempt is made to integrate it into the social grid model developed by Beckert (Beckert 2010). Based on the field or arena concept, Beckert devises a frame of reference that aims to integrate the “structural types” of networks, institutions and cognitive framings – which so far have been identified in economic sociology but largely treated separately – for a perspective on the social structuring or markets and

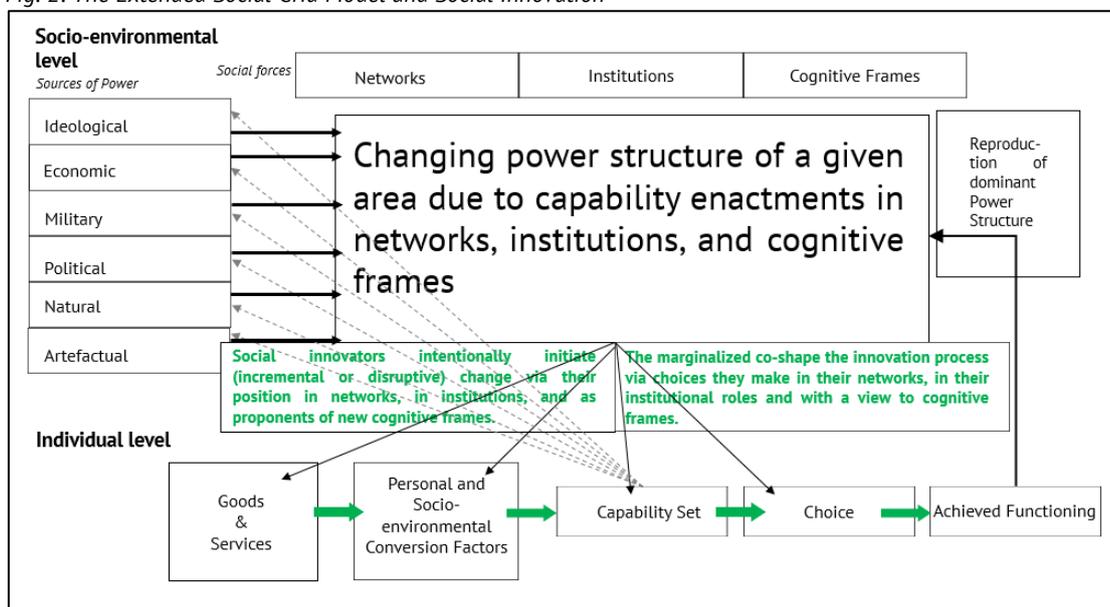
¹¹ On this point, see also the section on ‘Development Theory’ in the CLR (Millard 2014).

their dynamics, with a focus on the respective relations as sources for market dynamics. The main interest here is in categorising the mechanisms of the mutual influencing of structures (see diagram, *ibid.*, p. 612). In this approach, the structures are non-reducible social forces which shape action and hence the dynamics of social change. Action is a product of these social forces and connections, which enable actors to reproduce, modify or transform the social grid.

With regard to change, frictions between the three structures prove to be particularly significant. Thus changes in the mental environment can lead to a delegitimisation of institutions and different perceptions of the opportunities provided by institutions and network structures. Institutional transformations can influence network structures and allow other cognitive orientations to become relevant. And the reorganisation of network structures provides new actors with the power to influence institutional structures and prevailing cognitive frames of reference. “By bringing in simultaneously social networks, institutions, and cognitive frames, we have the chance, on the one hand, to understand the mechanisms through which social structures reinforce each other. On the other hand, it becomes possible to understand the mechanisms through which actors employ resources gained from one of these structures to reconfigure other parts of the social structure in a way favorable to their goals. While some institutional theories, network studies, and cultural approaches have incorporated the role of ‘other’ structures for the purpose of understanding processes of change in market fields, this has not been done systematically.” (*ibid.*, p. 620).

Focused by Beckert himself on the analysis of market dynamics, the CRESSI project sees in the social grid model a “meta-framework: while these forces are studied for the market in economic sociology, they are likely to play a role outside of the market, too”. With its perspective on (market) dynamics, it is seen in the CRESSI project as being particularly relevant also in order to identify the emergence of opportunities for social innovation processes. For this purpose, supplemented with reference to the CA by the individual dimension and forms of power, it becomes an “Extended Social Grid Model as an analytic and explanatory model of macro-level conditions that are translated via types of power into the conditions that cause marginalization analyzed in terms of human capabilities that impact on the individual micro-level” (Nicholls/ Ziegler 2015, p. 12).

Fig. 2: The Extended Social Grid Model and Social Innovation



Source: Nicholls/Ziegler 2015, p. 11

Focused on the process and impacts of social innovations in the context of marginalisation and inclusion processes, the CA – more additively than systematically integrated – here provides the normative concept for analysing evaluation processes. With regard to the associated economic aspects, the extended social grid model offers a heuristic – even if it is difficult to operationalise. Yet the interpretation that is alluded to in the direction of non-economic relationships as well (see above) overlooks the fact that this comes up against immanent limits of Beckert's model, which, focused on market dynamics and the structural embeddedness of economic action, and ultimately based on a pragmatic theory of economic action, contains no clues as to how economic relationships impact on non-economic relationships, and does not systematically integrate the question of reflexive capacities for action (cf. Giddens)¹². It remains merely an attempt to tie together three dominant threads of discourse in economic sociology. The polarisation into a structuralist and an individualistic, behaviour-oriented perspective is not visibly emphasised in the extended social grid model; rather these two perspectives are only combined. Nevertheless, this approach can be read as an indication of the importance that is attributed to neo-institutionalistic perspectives in conjunction with practice-theory approaches to social change and social innovations.

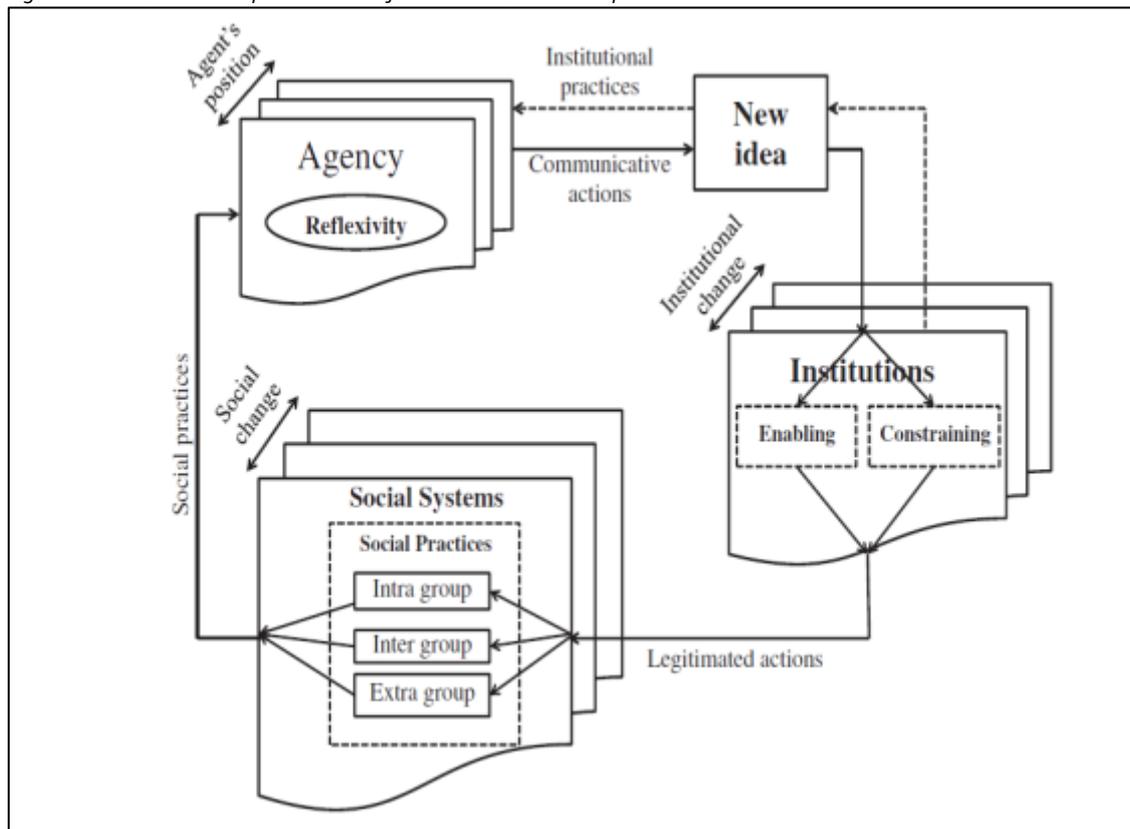
4.4 INSTITUTION-THEORY PERSPECTIVES ON CHANGE

Starting from the lack of theoretical certainty concerning social innovations, Cajaiba-Santana (2014) proposes bringing together structuration theory and institution theory, thereby developing a new conceptual frame of reference for capturing social innovations “as a driver of social change” (ibid., p. 42). The foundation consists of an understanding of social innovations as new social practices, created by collective, intentional, goal-oriented actions, which aim at social change and are ultimately institutionalised (cf. also Howaldt et al. 2014a). This forms the basis for overcoming the predominant polarisation into a structuralist and an individualistic, behaviour-oriented perspective. The institution-theory perspective sees social innovations as the result of the exchange and the application of knowledge and resources by actors, mobilised by legitimisation activities. It focuses beyond technical environments and strategic decision on the socially constructed world, and explain how social institutions influence the understanding of the structuring and the transformation of societies. Structuration theory can show how social innovations are created by the interactions between actors, institutional structures and social systems as a transformative force. It is argued that the combination of the two approaches enables an analysis of how actions by actors stand in relation to the structural functions, and how social institutions can both promote and restrict the emergence of social innovations. It helps to grasp the fundamental interactions between actions and the elements that favour or restrict the activities for the development of social innovations. The emphasis on reflexivity allows structuration theory to go beyond the limits of individualistic behavioural theories and structuralist theories.

This results in the proposal for a process-methodological frame of reference which is able to capture the processual development of the different elements that are repeated in the social construction of social innovations, and can therefore show how change unfolds over time. This process is highly complex and iterative, and develops from the dyadic relationship between actor and structure. His research is centrally concerned with the real experiences of the acting persons who participate in the development of social practices and institutions, the key elements of social innovations. One needs to know not only how people act, but also what importance they attribute to their action.

¹² For an extensive discussion of Beckert's neo-pragmatic market sociology, see Sparsam 2015.

Fig. 3: A schematic conceptual model of the social innovation process



Source: Cajaiba-Santana 2014, p. 48

In practice, it is centrally a matter of promoting social innovations by empowering actors towards reflexive action and thought in the development and implementation of new ideas which drive social change (the U.S. Social Innovation Fund and Social Innovation Europe are cited as good examples of this). Instead of focusing on analytical skills, here it is a matter of developing creativity, facilitating bricolage and collaboration as the basis for the mobilisation of other actors' resources. In the overall consideration, however, this interesting proposal for a conceptual frame of reference that is extended via institution theory ultimately remains highly rudimentary and simplistic, as well as having little theoretical underpinning.

The "Social Theory" (Howaldt et al. 2014a) contribution to the Critical Literature Review develops the idea that a translation of institution-theory concepts into the concepts of practice theory and actor-network theory (ANT) based on Gabriel Tarde's concept of imitation appears to be promising because social innovation can be understood as the establishment of a new institution that guides new forms of social practice, and that therefore institutionalisation and de-institutionalisation are key concepts for describing the dynamics of social change (cf. Howaldt et al. 2014a, p. 10). Following Giddens, institutions are here described as: "rule systems which reproduce social practices (relatively) independent from individual persons, time and space (Giddens 1984). The term institution thus denotes the long-term stability of a social practice. With Giddens we can say that institutions as structural elements enable and restrict social practices. Institutions are reproduced by conform behaviour often in the form of non-questioned routines and may be challenged by non-conform behaviour. Institutions usually are connected to mechanisms which either reward conform behaviour or sanction non-conform behaviour. [...] What once may have been a result of power struggle or negotiation and consensus making becomes unquestioned and in its concrete history intransparent routine behaviour. [...] There must be a *process of institutionalisation* which comprises different [...] degrees of institutionalisation. [...] Institutionalisation and de-institutionalisation are parallel processes – new social practices relate to existing social practices. Newly institutionalised practices may challenge and finally substitute existing institutionalised practices. Institutionalisation and de-institutionalisation are therefore key concepts to describe the dynamics of social change" (Howaldt et al. 2014b, p. 10).

Different dimensions and degrees of stability or instability of social practices can be differentiated in the process of institutionalisation. Furthermore, the way in which new social practices relate to existing and institutionalised practices is highly relevant for the chances of their institutionalisation. Interdependent processes of institutionalisation and de-institutionalisation constitute social change. Therefore, different institutionalistic theories should be developed into a comprehensive approach; those mentioned are Max Weber's institution theory, institutional economics and neo-institutionalism, and their complementary contributions to the four general aspects of institutions: rule, acceptance, motivation and sanction (cf. *ibid.*, p. 21ff.)

Although change has now become a topic of sociological institutionalism, so far a developed theoretical concept for understanding institutional change processes has been lacking. At core, the challenge consists in conceptualising the relationship between institutions and actors' autonomy of action. This is not possible either on the basis of holistic macro-sociological (cf. e.g. Meyer/Jepperson 2000) or individualistic (social-)theory approaches, such as e.g. that of institutional entrepreneurship (cf. DiMaggio 1988), which have prevailed to date in neo-institutionalism, but it is possible as part of a structuralist concept (cf. Beckert 2008, p. 6). "Structuration theory provides a promising basis for investigating phenomena of institutional change" (Schiller-Merkens 2008, p. 173), which overcomes the limits of individualistic and holistic positions (*ibid.*, p. 175ff.) When doing this, first of all it is important to get rid of the unfounded assessment that Giddens' structuration theory is primarily devoted to the question of social order and stability. It would be more true to say that his concept of the *continuity* of social phenomena and specifically the reproduction of social practices generally includes change. Just as in Tarde's concept of imitation, Giddens with reference to the contextuality of action and actors' relative autonomy of action or the open-endedness of the outcomes of social processes, sees "the seed of change [...] in every act which contributes towards the reproduction of any 'ordered' form of social life" (Giddens 1976, p. 108).

Social change means the *de-routinisation and transformation of institutionalised practices*. Because of the contingency and situational dependency of social action, there cannot be any generally valid theory of social change; this can only ever be recognised *ex post* and investigated on the basis of episodes, each of which has a specific "conjuncture of circumstances" and agency of actors (cf. Schiller-Merkens 2008, p. 183f.) Giddens sees potential conditioning factors for social change in modern industrialised societies as being grounded in the increasing disembedding of local contexts towards ever more complex relational settings and a greater variety of social practices, as well as an associated tendency towards increasingly reflexive action control in the sense of intended social change (*ibid.*, p. 185ff.) Associated with this is the increase in structural contradictions between given social practices, their rules and resources, and resulting micro-political conflicts. Accordingly, agency becomes another crucial conditioning factor of social change (*ibid.*, p. 189).

Giddens thinks that modern societies are characterised by "a kind of historical awareness that is actively out to break up and transform social institutions" (Giddens 1995b, p. 179). Building on this and based on the model by Clemens and Cook (1999), Schiller-Merkens develops a structuration-theory model of the conditioning factors of institutional change (cf. Schiller-Merkens 2008, p. 192ff.), which are located on the interdependent levels of rules or of resources. At the same time, a distinction is made between triggering conditions and those which support the spread of new practices. Triggering conditions on the rule level lie in their internal inconsistency, their mutability and their diversity. At the level of resources which actors have at their disposal, the subsequent course of change decides. Resources in the form of "knowledge about social practices" (*ibid.*, p. 197), "knowledgeability", and capacity for action, "capability", and accompanying positionings of actors and the corresponding unequal distribution of instruments of power and agency can however themselves be a triggering condition of institutional change.

Having set out this network of conditions and when compared with the findings of investigations into processes of institutional change, the result shows that structuration theory provides a conceptual framework by means of which various conditioning factors of institutional change understood as the transformation of social practices, which factors are mostly only analysed in isolation, can be modelled and captured in an integrated manner (*ibid.*, p. 246). By overcoming the separation between a micro and a macro-level via the duality of structure, social action and institution are seen as interwoven with each other in social practice. On the one hand, actors always act in the context of given institutions and of temporally and spatially far-reaching social practices. On the other hand, exogenous factors only play a role if and to the extent that the actors react

to them and this consequently entails a change in institutionalised practices. With the help of a structuration-theory model of conditioning factors, contextual conditions can be investigated to see whether they are more likely to produce reproduction or change. In keeping with the process orientation of structuration theory, institutions should be understood as process phenomena and as institutionalised social practices, and hence defined as the constantly changing outcome of social action. This opens up an analytical approach to the endogenous change of institutions (ibid., p. 248), which neither individualistically exaggerates nor deterministically reduces the agency of actors.

Eder points to the reorientation accompanying the new institutionalism, via which sociology attempts, in his view, to win back its practical function (cf. Eder 1995, p. 267). He writes, however, that “the *institutional impact and function of social movements* in the restructuring of the institutional framework of modern societies” (ibid. – emphasis added) and the associated intensification of public communication and acceleration of change processes have so far not been adequately captured theoretically.

With the emergence of new social movements as a new collective actor (cf. also Rucht/Neidhard 2007), the construct of the corporative state has become outdated and a new kind of public sphere and of the institutionalisation of increased communicative power has emerged, wherein the key to explaining change can be found. This is associated firstly with a permanent conflictualisation of topics and a severing of ties between state and society (“*Entstaatlichung der Gesellschaft*”, cf. Eder 274 ff.), which goes beyond the utopia of a civil society and a political public sphere, and uses discourse not in a way that is without practical value, but strategically. Secondly, as a result, social learning processes accelerate, and accordingly the self-organisation of diverse communication processes should be placed at the centre of theoretical analysis, and the notion of sole historical actors and uni-linear developments should be abandoned. And finally, associated with this also, is the fact that the dynamics of collective action should be regarded as relatively detached from social-structural inequalities or class statuses, and instead as linked to the mechanisms of production and reproduction of communicative power, that is, the class question needs to be formulated (ibid. 279ff.) The institutionalisation of social movements not only forces the abandonment of traditional notions of social order, it also reveals the central importance of communication in the production and reproduction of society, adjusts the relationship between structure, culture and agency (cf. also section 4.2), explains the acceleration of social change, and has therefore become a key to the analysis of contemporary society (cf. Eder 1995:287). But it is therefore itself the expression of a far-reaching social change which results in the given institutions and established practices being under permanent pressure to change, while the production speed of social innovations is increasing.

4.5 POST-STRUCTURALISM AND ACTOR-NETWORK THEORY

The conceptualisation of the relationship between institutionalisation and de-institutionalisation (of social practices) and actors' autonomy of action also plays a central role in French post-structuralism with regard to the question of the intentional changeability of the social realm. Deleuze and Guattari address the “transformation possibilities and creative potentials” (Antoniolo 2010, p. 13) in society and search “for the conditions of the genesis and production of the new in all areas of life” (ibid., p. 14), “for possibilities of collective innovation through transversal transitions between the individual and the collective” (ibid.) They highlight that the “social field [... is] incessantly crossed by divergent and heterogeneous currents, like a metastable system whose creative potentials generate unforeseeable transformations” (ibid.) According to the concept of micropolitics which builds on this, new behavior patterns – explicitly following Tarde – arise “through the creative dynamics at microscopic level” (ibid., p. 15, footnote 7). *Micropolitics as a driver of social change* has an active reshaping impact on macropolitical formations, socio-economic processes and institutionalised forms of power (cf. ibid., p. 25), and rejects “the primacy of institutionalised politics” (Krause/Röllli 2010, p. 140). “Whenever conflicting trends call practised behaviours into question, this produces [...] the impulse for innovation” (ibid., p. 130), or for a new action structure (*Handlungsgefüge*). To adapt their dogmas, regulations, customs, laws and morals to their knowledge and needs, individuals permanently make efforts which become many small inventions. Thus the concept of micro-politics focuses on the continuous “differentiations of social practices”, on “the large number of differentially determined, interacting currents which run through the individual and society as a whole” (ibid., p. 131) and which are able “to produce new

affects and associations which imply something more than the existing social conditions” (ibid., p. 132). Thus micropolitics generates new action structures which can overturn “the historico-social reference and representation systems” (ibid., p. 138) and institutionalised power structures. Hence “the micro-political project” corresponds to “the updating of an always already implicit surplus of possibilities for action and expression” (ibid.), via which “new collective scope for action can be opened up” (ibid., p. 139). The capacity to act “grows from structures whose connections are produced by actors of all different kinds” (ibid.) Micro-political analysis focuses on these structures and the property of being entangled in structures, or in other words on the relational structures at the micro-level. From the post-structuralist perspective (cf. Moebius 2003, p. 92ff.), systems, structures, systems of meaning or texts are characterised by the fact “that they live because of repetitions” (Moebius 2009, p. 261), which at the same time – with the concepts of iterability and performativity that originate from Derrida – points to the otherness that is always associated with them, i.e. the significance of reiterative or subversive practices within a regulative system (cf. Butler 1990).

As Hillier (2013) notes in respect of a “Deleuzian-inspired methodology of social innovation research and practice”, the ontology of difference in conjunction with emergence is a core topic that can help us to understand how social change arises (cf. ibid., p. 171). Here the question of the possibility of production of the new, of innovation, is central. Difference and differentiation are always creative and indicate social dynamics, open up the possibility for change, and create new social forms. Emergence describes the continuous production of differences in events and practices, and activates the dynamics of change. Accordingly, from this perspective, it is not a matter of units or elements themselves, but rather of the transformation and reconfiguration of the relations between them. This involves rhizome-like networks of intersecting connections, which connect units, people and also things, so that “a line of flight or flow [...] along this [...] things come to pass, becomings evolve, revolutions take shape.” (Deleuze 1995, p. 45). These transversal causal and/or chance connections intensify difference and create new possibilities for new practices which place the existing institutions – in the sense of institutionalised practices – under legitimisation pressure in an environment of constant transformation.

From a methodological perspective, Deleuze and Guattari develop a *cartography of change* with four central components (cf. Hillier 2013, p. 173): the generative component, i.e. tracing what has happened and what might possibly emerge from it; the transformational component, i.e. the mapping of social systems and their innovation opportunities; the schematic or diagrammatic component, i.e. recording the relational forces which are either potentially or visibly in play; the outline of plans from which new connections could emerge.

In the “Social Theory” contribution, we pointed out that the theoretical positions of practice theory, of the post-structuralist (cf. Wieser 2012) actor-network theory that was developed in the field of science and technology studies, and of Tarde’s theory of imitation are conceptually related to and linkable with each other (cf. Howaldt et al. 2015a, p. 27ff.). ANT also focuses on the relations between human and non-human entities, and systematically connects the perspective on the emergence of actor networks with the emergence of ‘the new’, understood as new associations of heterogeneous elements. This is precisely what (scientific-technical and social) innovation consists of as the *expression and driver of social change*. Actor-network – and not “society” – stands for the whole, i.e. for groups of associations that change into each other and that are linked with other associations via a wide variety of relationships of translation. *Translations* are all (re-)definitions of the identity, characteristics and behaviours of any kind of entities which are aimed at establishing connections between them, i.e. forming networks (cf. Callon 1986, p. 203). “In a universe of innovations [...], the operation of translation becomes the essential principle of composition, of connection, of recruitment or of enrolment. But because there no longer exists any external standpoint from which we could determine the degree of reality or success of an innovation, we can only arrive at an assessment by relating the actors’ many standpoints to one another” (Latour 1995, p. 124).

Such processes of network formation are always based on a double innovation: the establishment or changing of relationships between the components of the developing network, and the construction or changing of the components themselves. In the process of network formation, the identity of the components as well as the manner of their mutual linking become a possible object of redetermination or modification: the characteristics and behaviours of the animate or inanimate nature concerned, those of the technological artefacts involved, and those of the respective social actors, norms or institutions – these are all the object and result of the

mutual interrelations in the network. And at the same time they are all of them regarded as the (potential) active subjects of such processes.

Proponents of ANT claim explanatory powers that go beyond the field of science and technology research in the narrow sense, as all transformation processes are processes of the connection of heterogeneous elements, and human sociality, nature and technology are mixed together in such a way that it is not possible to understand one aspect without taking the other into consideration. The relevance to social theory of the actor-network theory in the form of a “new sociology for a new society” (Latour 2010) consists precisely in the fact that it is centrally about “the pursuit of new associations and the recording of their structures, their assemblages” (ibid., p. 19) from the perspective of “reassembling the social” (ibid., p. 22), and that it analyses all social connections as the co-evolutionary or rather co-constitutional (cf. Schulz-Schaeffer 2011) result of society, technology and nature, while avoiding any kind of reductionism. Thus social change is the micro-founded result of the linking of heterogeneous elements to form new or changed associations, networks and practices. Methodologically it follows from this, in a nutshell: “Whenever one wants to understand a network, one should look around for the actors, and if one wants to understand an actor, one should look at the network that he has created” (Latour 2009, p. 55). Thus if here it is not a matter of explaining the social realm via the social realm and an absolute frame of reference, but rather of following the actors, then at the same time this requires “following behind their sometimes wild innovations” (Latour 2010, p. 28).

If ANT adds the dimension of objects to the social dimension, and therefore, as Latour puts it, expands “the spectrum of actors” (ibid., p. 111), that is, ascribes also to objects or artefacts or non-human beings an actor function in the actor network, or makes “objects participants in the action” (ibid., p. 121), then this does nothing, however, to change the fact that the new association and re-assembly of elements are ultimately social innovations, which includes re-association involving objects. These objects are “participants in the sequence of actions, which are waiting to be given a social figuration. Of course this does not mean that these participants ‘determine’ the action”, and nor “that objects do something ‘instead of’ the human actors” (ibid., p. 123f.), that is, that they are subjects of social practices. Material objects can at most “empower, enable, offer, encourage, suggest, influence, prevent, authorise, exclude and so forth” (ibid., p. 124) – i.e. open up or restrict scope for action.

Seen in this way, this argument, which asks “which are the new institutions, processes and concepts for assembling and recombining the social realm” (Latour 2010, p. 26f.) is less a radicalisation of the socio-technological approach (cf. Degelsegger/Kesselring 2012), but rather is compatible with theories of social practice. Here too, human actors and non-human things/objects always ‘assemble’ to form new associations with each other and re-assemble the elements to generate a different way of dealing with the things *and* the actors. If, with Latour, things “do not do something instead of human actors” (Latour 2010, p. 124), but at most enable or restrict a wide variety of options for action (degrees of freedom), then for the social world as for social change, nothing but social practices – also on the level of using objects – are decisive. Not individuals, but innovations as key elements of change with a life of their own.

As a relational social theory or general network theory, ANT is helpful in order “not to assume social networks of relationships to be already given *ex ante* [...], but instead [to investigate] the really existing specific interaction [or interdependency] relationships (cf. Boudon 1980) between people and also between people and things or organisations” (Pries 2014, p. 158 – emphasis in original), i.e. the stability and dynamics of social practices.

4.6 MULTILEVEL PERSPECTIVE (MLP)

The MLP, which which plays an important role in innovation studies, on the one hand, and the theory of social practice on the other have developed into *competing approaches to understanding the complexity of socio-technical change*. The two approaches came into being in two different theoretical research groups. They differ extensively in their understanding of how lasting innovations come about, or not (cf. Hargreaves et al. 2013, p. 402).

Innovation or transition studies focus on *system innovations* in social functional areas such as transportation, the energy supply, food, housing, communication (cf. Geels 2005). These functional areas are each equipped with specific socio-technical systems. System innovation is the change from one socio-technical system to another – such as from horse-based transportation to automobiles or from extensive to intensive farming – through a co-evolutionary process on various levels, which includes technological change as well as changes in regulation, consumer practices (consumption habits), cultural significance, infrastructure, and supply and delivery networks. In a heuristic multi-level perspective, it is retrospectively investigated – in the form of a four-phase model – how new technologies arise, are developed further, become established and change the corresponding socio-technical system before finally replacing it. System innovations consist of interlinked developments on different levels; there is no one cause or driver. Thus, with an outside-in perspective, the MLP focuses in a descriptive, mapping and long-term analytical manner on the social contextualisation of technology and the co-evolution of technology and society. Different societal sectors, actors, practices, (learning) processes, routines, abilities, and rules play a role here, but always with respect to the question of their influence on the emergence, development and establishment of new technologies and socio-technical systems or regimes that are shaped by them. Socio-technical regimes are actively created and maintained, produced and reproduced, by various “social groups” in a dynamic relationship. Social practices and social innovations appear in this context as prerequisites, consequences or phenomena concomitant with technological innovation (cf. Zapf 1989), but not as an independent phenomenon to be explained or as an object of enquiry. Instead, the central social and cultural aspects in transformation processes are played down (cf. Genus/Coles 2007, p. 7).

Based on the interplay of the three levels of technological niches (micro), socio-technical regime (meso) and landscape developments (macro), certain patterns of system innovations can then be identified. These include – *among others* – actor-related patterns, as the linking of developments on the different levels needs to be carried out by actors. Therefore, it is argued, the MLP’s outside-in perspective needs to be enriched with detailed actor-related patterns on the micro-level as a form of inside-out linking, and “more systematic research is needed on this topic” (Geels 2005, p. 692). A first step in this direction differentiates between patterns relating to businesses, users, culture and politics. However, this is always only ever about the model-based connection to technology, and not about the topic (of the changing) of social practices itself. Therefore, and owing to a lack of grounding in social theory, science, technology and innovation studies remain limited to a socio-technical system perspective.

With explicit reference to the criticism of the dominance of the MLP in the transition discourse at the expense of other social science theories (cf. e.g. Shove/Walker 2007), and starting from the criticism of an insufficient theoretical foundation, Geels attempts to position the MLP theoretically with regard to seven relevant social-theory approaches, and to identify directions for further theoretical development. He characterises the MLP not as a grand or unifying theory but as a medium-range theory that has connections to some social theories but not to others. It is an open “framework”, a heuristic and not a precise model, which synthesises all available theories (ibid., p. 508) in order to understand socio-technical transitions, “socio-technical” because they entail not only new technologies but also changes in markets, consumer practices, and political and cultural meanings (ibid., p. 495).

Ultimately it is stated that the MLP is based on an *overlapping of evolution-theory and interpretative, constructivist approaches*. It originates from the quasi-evolutionary theory of the Twente School of Management and Governance, which seeks to make the general development mechanisms of variation, selection, and maintenance/stabilisation “more sociological” (ibid., p. 504) by linking them with constructivist perspectives. Thus variation is guided by expectations, visions and beliefs, which are the cognitive substance for innovations by intentional actors. Selection takes place in a multi-dimensional environment which contains not only market and regulation, but also social, cultural and political requirements. Maintenance/stabilisation takes place through technological regimes, conceptualised more as a rule system than as routines, which is creatively interpreted and applied by knowledgeable actors: an interpretative and controversial negotiation process of institutionalisation.

The linking of both approaches allows the MLP to combine the long-term evolutionary pattern with the interpretative interest in social implementation, interpretation and cognitive learning, as a result of which social, political and cultural dimensions also come into play. However, it is stated that this still needs to be

extended by integrating economic dynamics (strategic management and dynamic capabilities) (ibid., p. 505). Possibly the MLP could also be usefully enriched with perspectives of power theories and structuralism (ibid., p. 508). However, it cannot and does not seek to incorporate all social theories. But these, for their part, may generate alternative frameworks for transitions and through other crossovers may generate potentially relevant analysis perspectives.

When it comes to sustainable transitions, the analytical perspective of innovation studies needs to be extended – in a reflected sense – with additional dynamics connected with civil society, social movements and consumer behaviour. This requires crossovers to cultural studies, political economy, economic sociology and consumer research. In addition, the respective underlying mechanisms of co-evolutionary processes should be identified in greater detail and more precisely. This requires better operationalisation of the MLP than an open-ended framework (Geeels 2010, p. 508). Thus a more far-reaching design and specification of the MLP model becomes necessary.

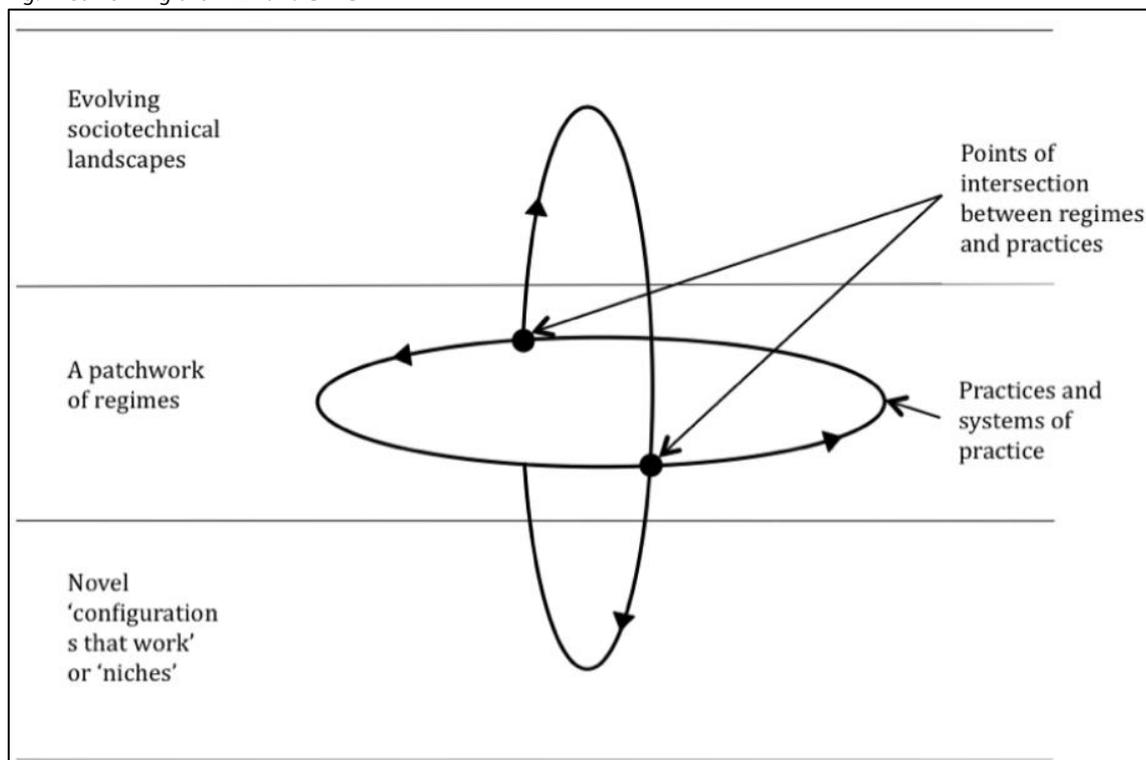
In this context, Hargreaves et al. (2013) propose *bringing together the MLP and practice-theory approaches*. They aim to show that analyses which are based either only on the MLP point of view or on that of practice theories (SPT) risk blindness to critical innovation dynamics. They identify various points of overlap between regimes and practices that prevent or enable lasting transitions, and from this they draw conclusions for further research which focuses on overlaps of this kind. None of the approaches, they argue, can in itself explain how transitions into regimes and transitions into practices develop in conjunction with each other (ibid., p. 409) how regime innovations are set in motion by practices that cut across regimes, or how changes in practices contribute to regime transitions. Therefore, they recommend combining the two approaches with each other, as a result of which each approach could contribute more to the understanding of sustainable innovation processes (ibid., p. 418). The vertical perspective of complete exploration of the regime as well as the horizontal perspective of practices will each come across the other, and therefore should investigate it also.

This perspective of linking approaches appears earlier on in an article on the role of civil-society groups in transformative change process (id. 2011). As an important point of reference for the analytical linking of transitions into regimes on the one hand and transitions into practice into the other, reference is made here to Shove (2003 ; 2003a). The criticism that the MLP insufficiently conceptualises actors is rejected (with reference to Geels). However, it is said that there is a predominant overemphasis of market and state actors, while neglecting civil-society actors (cf. Hargreaves et al. 2011, p. 4). The MLP always focuses on a single regime or system, whereas civil-society activities pursue an overarching approach, linking them to each other in new ways, and attempting to redraw the boundaries. Civil-society activities are aimed directly at (changing) everyday practices. However, the MLP says nothing about the change dynamics of social practices (ibid., p. 5), concerning itself rather with transitions in socio-technical regimes and systems; in contrast, practice theory focuses on the unit of analysis of transitions in social practices (ibid., p. 7). However, the focus of analyses so far, it is said, has been placed on the routinisation and reproduction of practices instead of on their reconfiguration. Civil-society activities can be interpreted as attempts to intervene in the dynamics of practices (ibid., p. 9), either on the side of the material (e.g. consumer boycott), the image (e.g. awareness-raising campaigns), or via experiments with new combinations of elements in order to generate new complexes of practice. Innovation of practices is always a collective activity. In this respect, practice theory goes beyond the MLP:

- a) It emphasises the diverse dynamics and loops of reproduction – but in contrast is not well equipped for the sources of the new.
- b) It calls into question the boundaries around particular regimes and systems.
- c) It relates to the horizontal “cross-cut multiple regimes and systems” relationships between practices as distinguished from the vertical relationships between the MLP levels.

In relation to specific empirical cases, both approaches are usually required in order to understand the role of civil-society activities in transformative social change (ibid.) Shove's framework (2003) brings the two approaches together:

Fig. 4 Combining the MLP and SPTS



Source: Hargreaves et al. 2011, p. 18

Here – with reference to Geels (2010, p. 503) – it is not a matter of integrating MLP and STP into an all-encompassing universal theory, but rather of the interplay: what can SPT offer the MLP complementarily by way of “added value”, and vice versa (Hargreaves et al. 2011, p. 16). Both are medium-range approaches which instead of either structure or action focus on recursive structuration dynamics (Giddens); with heterogeneous actors, non-linear processes, co-evolutionary and emergent dynamics with various path-dependencies and lock-ins, and they therefore require tailored reflexive governance. The main difference which stands in the way of integration is the different unit of analysis in each case (regime vs. practices) (ibid., p. 17). “The MLP is ‘not designed to understand the dynamics of social practice’” (ibid., p. 18). The diagram above proposes not only analysing the transitions into regimes and practices, but also investigating how they crisscross and collide with each other in the temporal and spatial dimension (ibid., p. 17).

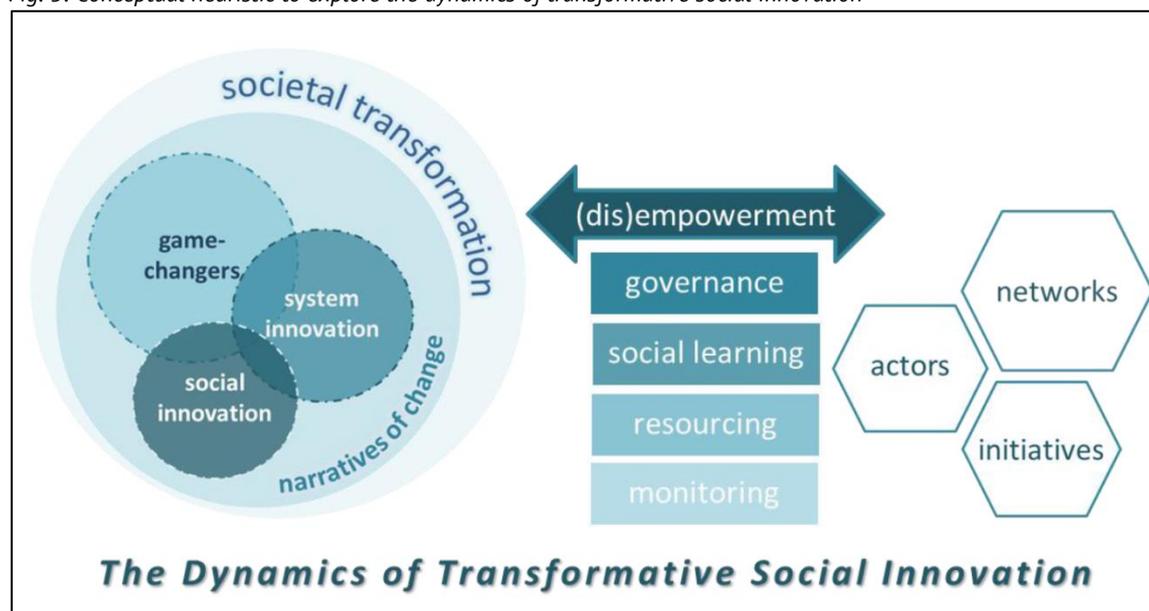
Back in 2003, Shove developed an approach that goes beyond previous concepts from science and technology studies and the MLP, and focuses on social practices (Shove 2003a). Then, in 2012, this approach was developed into an original systematic social-theory analytical framework, and the focus was placed on (theories of) social practices as being *the* relevant unit of investigation, via which the occurrence of social conditions and of transformative social change can be understood. On this basis, it is shown that the dominant “ABC paradigm”, which is based on Attitude, Behaviour and Choice, and therefore on an individualistic understanding of both action and change, in which both the problem and the solution appear as a question of individual behaviour (however that is to be influenced), is insufficient to promote transitions in practice. In contrast, the aim is to show that practice theories provide a conceptual framework for programmes and political interventions specifically with regard to challenges such as how more sustainable routines and habits can be generated; not as a blueprint or action programme (ibid., p. 163), but rather as a social-theory foundation for a policy based on a more systematic description of the social world and how it changes (ibid., p. 146).

In the Transit project¹³, first of all the MLP perspective was taken as a basis in order to conceptualise different levels of transformative change – talk here is of “transformative social innovation” (cf. Avelino et al. 2014). At the same time, true to the strict micro, meso and macro-levels view, social innovations are situated on the micro-level of niches, system innovations on the meso-level of regimes, and game-changers as exogenous developments are situated on the macro-level. Narratives of change configure the communication between these levels. During the course of the project, it quickly became clear that this model is too closed for an analysis of *processes* of change, and therefore needed to be opened up more and as it were dynamised, i.e. essentially the hierarchy of levels contained within it and macro-theoretical evolutionary perspective needed to be *replaced* with a more strongly relational process perspective.

As a result, an *alternative heuristic* was developed that is intended to avoid specifying determining factors in advance, and which allows the central research question, “*how does social innovation interact with other forms of change and innovation, and how are actors (dis)empowered therein*” (ibid., p. 8), to be dealt with empirically and theoretically:

“The conceptual heuristic [...] implies our hypothesis that societal transformation is shaped and produced by particular patterns of interaction between social innovation, system innovation, game-changers and narratives of change. Individual actors, initiatives and networks, are empowered (or disempowered) to contribute to this process through different forms of governance, social learning, resourcing, and monitoring” (Haxeltine et al. 2013, quoted from Avelino et al. 2014, p. 8).

Fig. 5: Conceptual heuristic to explore the dynamics of transformative social innovation



Source: Avelino et al. 2014, p. 8

“The conceptual heuristic serves to empirically explore how these different shades of change and innovation interact” (ibid., p. 9). To analyse the processes, one can begin from different starting points.

The authors themselves describe this heuristic as based on hypotheses, and consider integration into meta-theoretical perspectives on social change and innovation to be necessary (ibid., p. 20). Grounding this model in social theory is a task that still largely remains to be done, yet it is necessary if change – from the perspective of the relevant mechanisms – is ultimately to be understood as the result of complex ‘poly-contextoral’ and recursive processes by interdependent actors, that is, as a transformation of social practices. Thus the further development of this model is quite logically associated with the prospect of a medium-range theory that places the focus on the actor level and new governance forms. In this respect, further development in terms of practice theory practically suggests itself (cf. ibid., p. 20f.)

¹³ Transformative Social Innovation Theory - <http://www.transitsocialinnovation.eu/>

4.7 TRANSFORMATION RESEARCH AND TRANSFORMATIVE RESEARCH

With the broad social debate surrounding sustainable development, interest has focused on the necessity of social transformation processes (WBGU 2011). As a result, in recent years, a series of approaches to investigating and shaping societal transformation processes have been developed.

Transformation can be generally understood, as already shown with reference to Esser, Boudon and Hernes (cf. section 3), as a specific type of social change (cf. Kollmorgen 2005; Reißig 1994), in which one social system – to be defined in more detail – transitions to another one. “[...] [T]ransformation can be viewed as a decisive change in one or more of that system’s defining characteristics” (Merritt 1980, p. 14), as an “intentional and targeted activity of elements of a system or its environment, to influence its stability and balance in such a way that the significant and fundamental organisational principles and structural patterns can no longer be maintained” (Weihe 1985, p. 1013).

4.7.1 Transformation Research

The concept of transformation – as distinct from Hernes’ term which is often used synonymously with transition – found its first prominent formulation in Karl Polanyi’s research approach (cf. Kollmorgen et al. 2015a, p. 14). *The Great Transformation* (Polanyi 1978) describes with a social reform interest (cf. Beckert 2007) the first industrial revolution as the transition from an integrated society to a non-integrated, liberal market economy society with all of its (negative) consequences. Its failure is “the core of the great transformation” (Polanyi 1978, p. 292). Polanyi clearly shows that the great transformation is the result of mutually reinforcing developments on different levels, and that, correspondingly, ecological, social, economic and socio-political developments should be considered in their context.

“The concept of transformation [...] stands here synonymously for secular social change. Transformation is understood as [...] the substantial change of social systems. It can take place spontaneously in an evolution process, or it can be initiated by the impact of intentionally acting actors. [...] Society or system transformations are characterised in summary as a specific type of social change. They are aimed at changing the order and institutional structure of society as a whole. These are sudden, intentional, chronologically dramatised revolution processes with nameable actors, in which the relation between control and internal dynamics within the process shifts in favour of the latter, and the process as a whole therefore takes years if not decades” (Kollmorgen et al. 2015a, p. 14ff.) Any transformation of the fundamental social institutions creates only the pre-conditions for a change in the realm of the informal institutions, mental models and attitudes, ways of life, culture and all structures resulting from this conglomerate; this change will be far more complex and protracted, and hence the transformation opens up a broad spectrum of different theoretical approaches to social change processes.

Transformation is the central focus particularly of evolutionary modernisation theories and their embedded modellings and policy recommendations (cf. Kollmorgen 2007). With the post-socialist upheavals, current transformation research has found its main research field (cf. Kollmorgen et al. 2015a, p. 18). On the other hand, the boom in transformation studies in this regard is attended by an increasingly inflationary use of the term ‘transformation’; whereas previously there was talk of change, development, transformation, reorganisation or modernisation, today there is a fondness for indiscriminately calling this ‘transformation’ (cf. *ibid.*)

“A varied use of the term ‘transformation’ can be observed, which leads to conceptual uncertainty and raises further questions: Is transformation synonymous with sustainable development, or what is the relationship of the two terms to each other? Associated with this, there is also a lack of distinction between transformation research and environment and sustainability research as well as environment and sustainability policy” (Aderhold et al. 2015, p. 135).

4.7.2 From Transformation Research to transformative Research

Alongside transformation research concentrating on the reconstruction of societal upheavals and on the resulting (re)organisation issues mostly in the sense of a catching-up modernisation, another branch has formed which builds on current diagnoses of the times and is predominantly critical of modernisation and

growth. This branch is mainly concerned with the possibilities and conditions for the realisation of viable, sustainable and/or human development, corresponding designs for society, and accompanying transformation processes (for a more extensive treatment of this subject cf. e.g. Schwarz/Howaldt 2013; Elsen et al. 2015; Elsen/Lorenz 2014). In situations characterised by the emergence of new uncertainties or challenges and the questioning of existing certainties, the perspective of social-science analysis shifts from the question of the determining influence of social structures to the “possibility of social change” (Evers/Nowotny 1987, p. 303) beyond a predetermined direction of social progress and following a corresponding change in “social practices” (ibid., p. 304). An interest in society as an “expression of changing orders” is accompanied by “attention to newly invented forms of individually and collectively tested security”, to a society “which began long ago to regulate itself as a whole” (ibid., p. 318), and in which a behaviour is increasingly in demand which “is able innovatively and by itself to develop new, adapted solutions” (ibid., p. 323). This is accompanied by the development of “innovative forms of organisation and cooperation that comprise a greater degree of social integration” (ibid., p. 322), as well as the initiation of “social experiments, especially at local level”, of “new trials from the bottom up” (ibid., p. 326).

The associated system transformation or transition perspective goes beyond linear models of (technical) innovation and has as its goal the reorganisation of society itself via participation, empowerment and social learning (cf. BEPA 2010, p. 26ff.; Elsen/Lorenz (eds.) 2014), via drastic institutional reforms and new forms of governance (Minsch et al. 1998), via a comprehensive concept of social change (cf. Brand 2006, p. 61) or a major transformation of the basic institutions of society and a new social contract (WBGU 2011), all the way to major global transformation (Minsch 2015, p. 280). This viewpoint based on the active shaping, initiation and implementation of social transformation processes is informed firstly, implicitly or explicitly, by (borrowings from) theories of social change, and at the same time, as a result, there is increasing interest in the significance of social innovations for substantial transformative social change as opposed to the ‘dispute over dogmas’ (Schneidewind 2013, p. 139) concerning the competition between a technological-economic, institutional and cultural transformation paradigm (cf. Paech 2012). The concept that is called for in Agenda 21, using the term ‘sustainability’, of a directed, rapid and far-reaching change in the consumption patterns of industries, governments, households and individuals, even at that time referred sustainability research to further inter- and *transdisciplinary development of political-science and historical transformation research* in the direction of identifying options for sustainably shaping contemporary society(-ies). From a sociological perspective, this is centrally a question of how this transformation process takes place and can be brought about, i.e. it is about the associated social searching, learning, negotiation and decision-making processes or methods (cf. Lorenz 2014).

Transformative social change here is not understood to be a largely uncontrolled outcome of gradual evolutionary developments (cf. Osterhammel 2011), but rather as something which can in principle be shaped by society, i.e. “by the actors and their innovations” (Schneidewind 2013, p. 123). The question of the generability and shapeability of change refers to a “transformative literacy”¹⁴ – in the sense of the ability to gain a comprehensive, multi-dimensional understanding of change – “to enhance society’s ability to reflect in observing and actively shaping transformation processes” (Schneidewind 2013, p. 139), and becomes the central theme in conjunction with criticism of established management concepts. Thus heterogeneous, more or less theoretically informed approaches (to shaping) change come to the fore, which elevate investigating and shaping the transformation process itself as well as the increasing importance of social innovations in this connection to the status of the actually relevant theme.

4.7.2.1 Social-ecological Research

The topic area, research area and action area of “social-ecological transformations and social innovations” (Becker et al. 1999, p. 27 ff.) was outlined back in 1999 in the framework concept for the new funding priority of the German Federal Ministry of Education and Research (BMBF). Here the focus is on “social and institutional innovations for social search, learning and decision-making processes” (ibid., p. 32), namely e.g. civil society self-organisation, network-building, process management, participation processes, but also new cultural practices in diverse, particularly ecologically relevant areas of need such as food, mobility, housing etc. Social-ecological research assumes that technological-economical potentials (e.g. in the area of energy usage) can

¹⁴ For Schneidewind, following Scholz (2011, p. 540f.), transformative literacy can be understood as “the ability to read and utilize information about societal transformation processes, to accordingly interpret and get actively involved in these processes” (Schneidewind 2013, p. 120).

only be exploited in a sustainable way if social practices also change accordingly. In this regard, the respective institutional, habitual etc. obstacles should be identified, and to remove the obstacles, suitable innovations that have a corresponding guidance effect on the social practices should be initiated. Accordingly, it is centrally a question of “the targeted changing and shaping of social rule systems as a condition for sustainable problem solutions” (Voß et al. 2002, p. 82). Research promotion aimed at sustainability with a view to “a fundamental modification [...] of socio-economic foundations [...] would need to proceed from a concept of innovation that emphasises the priority of social innovations” (Döge 1998, p. 63): “For a sustainable research and technology policy, the primacy of social innovations as a whole means giving up the technology-push concept in favour of a *needs and field-based* orientation of research and development promotion” (ibid., p. 63f.; emphasis in original).

At least to some extent, this point of view was taken up and implemented in the BMBF funding priority “social-ecological research”, which in contrast to and, as it were, as a complement to technologically orientated innovation research, focuses on “social action” (Wächter/Janowicz 2012, p. 306). To this extent, this funding priority can itself be called a social innovation, “since through new forms of organisation it treads new paths to achieve goals” (ibid., p. 307). Specifically, this means “the creation of conditions for problem-oriented, inter- and transdisciplinary research” with a view to “a social transformation towards more sustainability” (ibid., p. 306). In this context, social innovations are to be understood as necessary “steps in the process of shaping social change” (ibid.) Social-ecological research has also become established outside of the BMBF funding priority of the same name as a branch of sustainability-oriented transformation research.

4.7.2.2 *Social Contract for a major Transformation*

Starting with the description of the current phase of human history as Anthropocene (Crutzen/Stoermer 2000) and the associated danger of exceeding the planet’s limits, the German Advisory Council on Global Change (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen, WBGU) considers that the only possibility of ensuring (future) prosperity is through a “great transformation”, which – following Polanyi (see above) – comprises not only change processes at the technological, economic, institutional and cultural level, taking their interaction into account, but also an understanding of equitable prosperity. The necessary transformation – which is already beginning to emerge in many areas, yet at the same time is also comprehensively blocked – needs to be shaped by society and is dependent on a modern, organising and activating state with extended participation, and demands new concepts of welfare, diverse social innovations and an as yet unattained level of international cooperation (cf. WBGU 2011). The specification of the details of the challenges of sustainable development gives this transformation a direction, i.e. its normative point of reference.

The interconnected dimensions of a great transformation – infrastructures/technologies, capital, institutions, cultural values and practices – with recourse to Giddens are understood as structural dimensions which we refer to in our action, and can thereby produce and reproduce them; and as key elements for transformation processes we can also change them. This is a matter both of an interdependent structure and of independent approaches to promoting transformation processes, e.g. through changed consumption practices. The technological dimension offers on the one hand the best understood and best calculated options, while on the other it presents the great danger of problem-shifting and rebound effects, and it ultimately always remains static – taken in isolation – with regard to implementation questions. The economic dimension is confronted with ambivalent market dynamics, which challenge institutional framework conditions as the decisive influencing factors. The great transformation can therefore “be understood particularly as a comprehensive institutional reform project”, in which new patterns of management and rule-setting gain importance along with civil-society initiatives, change laboratories and real-life experiments. Institutions ultimately reflect the structure of established practices and values. The reconfiguration of social practices according to changing values and lifestyles is therefore essential for the great transformation.

Schneidewind (2013, p. 136ff.) with recourse to Paech (2012) sees three “transformation dogmas” that each attempt to determine sustainability discourse with a specific one-sided perspective: the techno-economic transformation perspective, the perspective of institutional change, and the growth-critical perspective of a “comprehensive bottom-up ‘cultural change’” as is expressed e.g. in the transition town movement and similar social innovation projects (ibid., p. 139). In reality, however, he argues that transformation processes already currently and in the future also will take place on all three levels, which needs to be taken into account systematically in the context of a transformative literacy (see above). It is “about the development of theories,

empirical observations, but also about the active shaping of (social and institutional) experiments” (ibid., p. 140). This exactly describes the transformation approach of the WBGU and the centrally integral importance of social innovations. Transformation is a deeply social challenge. This implies far-reaching social innovations that depart from the prevailing “mental maps” in politics, business and society (Leggewie/Welzer 2009; Messner 2011). At the same time, two important new actors should be taken into account: the self-organised civil society and the scientific expert community.

With recourse to insights from transition research, social change is to a large extent shaped by identifiable constellations of actors, who appear as drivers of change and who possess power, resources, creativity and a willingness to innovate and reform in order to overcome existing blockages. The speed of a transformation (or whether it can succeed at all) depends substantially on whether the actors involved know how to use existing opportunity structures. Yet the investigation of current and historical transition and transformation processes also shows not only that actors can benefit from opening windows of opportunity, but that they are often themselves actively involved in pushing these windows open (Grin et al. 2010).

The interest in and reflection on the role of key actors that this gives rise to has a long tradition especially in innovation and diffusion research and specifically in strategic (organisational and network) management. The “classics” here include the “opinion leaders” and “change agents” within a diffusion process whom Rogers (2003) identifies as being particularly relevant. “Change agents have a convincing idea for change, and an initial idea for its implementation. They network with each other and gain important fellow campaigners. In this way, they manage to acquire the critical mass for the changes. Subsequently, they develop the idea in steps together. The changing of routines, of framework conditions, the formation of new institutions, a paradigm shift or suchlike conclude the process.” (Kristof 2010, p. 38). “Change agents” or pioneers of change spread innovations by questioning a policy of “carrying on as usual”, creating an alternative practice and thereby calling established world-views and paths into question, challenging patterns of attitudes and behaviour, and creating lasting motivation for self-supporting change among new like-minded people. Pioneers of change therefore not only bring about changes selectively, i.e. in their own area of experience, they also initiate comparatively extensive transformation processes in a decentralised way and “from the bottom up”; mostly these are locally embedded and in niches. They find imitators and stimulate others to change their behaviour in practice. In an extensive collection of examples of current social innovations, it is shown “where and how pioneers of change are already shaping transformation” (WBGU 2011, p. 260ff.)

Pioneers of change can be understood as specific actors / groups of actors (“inventors”), and the associated social innovations as preparing the way for social change. Ultimately this is about telling stories, which – in the sense of a transformative literacy – (can) range from an early, at first mostly marginal innovation idea via initial more precise specifications and collectivisations (Weber 1984) to general habituation (Bourdieu 1987; Elias 1987; Veblen 2007). These would be, with reference to Tarde, those “extremely instructive narrative monographs” via which the “most important truths” (Tarde 2009a, p. 101) come to light, important both for the analysis and for the shaping of change processes. It is not only in this respect that this laying of the foundations for a great transformation turns out to be – in terms of content and conceptually – highly compatible with efforts to date towards a grounding of social innovation in social and practice theory, with a view to analysing and shaping social change and transformation processes. With the approach that underlies the great transformation, WBGU is deliberately not developing a master plan and also not a management model or design concept for change, but rather a conceptual attempt to gain a better understanding of transformation processes in their multi-dimensionality and ambivalence, and hence provide guidance for actors who help shape the processes (cf. Schneidewind 2013, p. 140).

4.7.2.3 *Transition Management*

The concept of transition¹⁵ management (TM) (Kemp/Loorbach 2003; Loorbach/Rotmans 2006) is understood as a new kind of governance mode (cf. Loorbach 2007) in the sense of a specific policy design for shaping socio-technical change, which focuses on the complexity and unstructured nature of sustainability problems, and with a view to a “goal-oriented (teleological) transition” aims “to better organise and coordinate transition processes at a societal level, and tries to steer them in a sustainable direction” (Geels 2006, p. 5) and hence

¹⁵ Transition is a “long-term process of change during which a society or a subsystem of society fundamentally changes” (Loorbach/Rotmans 2006, p. 2).

“does open new avenues for long-term policy design” (Voß et al. 2009, p. 294). The central idea that underlies transition management is to create, through new coalitions, partnerships and networks, a kind of social movement that makes it possible to continuously build up pressure in the political arena and the market arena in order to safeguard the long-term orientation and goals of the transition process (Loorbach/Rotmans 2010, p. 139). Transition management uses the three coordination mechanisms of markets, plans and institutions. It is about anticipation (macro-vision of sustainability) and adaptation of the regime. Key elements of TM, in extensive methodological analogy with network-based roadmapping (cf. Schwarz 2014, p. 37) and social-innovation labs, are systemic thinking (multi-domain, multi-actor, multi-level) combined with the attempt to change the strategic orientation of regime actors, a long-term perspective, backcasting and forecasting, a focus on learning, an orientation to system innovation, a variety of options, stakeholder participation and stakeholder interaction. All of this is operationalised via so-called “development rounds”, which in a two to five-year process run through a TM cycle, in which they first establish a transition arena for a particular transition topic, then develop a long-term vision of sustainable development and a transition agenda, initiate transition experiments on this basis, and monitor and evaluate the transition process.

However, as a critical interim evaluation of application experience in the Netherlands shows (cf. Voß et al. 2009) – “transition management was adopted as Dutch policy in 2001” (Loorbach/Rotmans 2006, p. 18) – especially in connection with large-scale infrastructure projects and supply systems (ibid.), the practical implementation is confronted with numerous problems and stumbling blocks. Above all, a tendency for the implementation to deviate from the concept can be observed, due to the continuing dominance of established institutions and coalitions (cf. Kern 2006, p. 15). Even if this is perhaps to be expected (cf. Voß et al. 2009) with extensive planning and development projects, especially ones which (aim to) take seriously the complexity of the problems and environments of actors in processes of path change, and the fact of the associated uncertainties, and are designed for dynamic transformation or adaptation processes, the real interest lies in the fact that the transition management literature illustrates the limits and possibilities with regard to intervening in a goal-oriented way (from the outside) in complex cultural systems, social practices and structures (Shove et al. 2012, p. 162).

Political interventions can only have an effect if they are absorbed in and by social practices. And such effects are never stable, but rather are always the object of their continuous reproduction and change. If management is an illusion owing to the complexity of society and also the real social processes, and the attempt at a theoretical decoding aiming at completeness and consistency should be given up along with the belief in the possibility of constructive management models, then this does not at the same time also mean that all such efforts are in vain. Instead, this points to the need for projects as experiments with social reality, to “policies as experiments” (cf. Ostrom 1999, p. 519), as a test of actors’ intuition and imagination (cf. Wiesenthal 2006, p. 233ff.), to a kind of “intuitive decisionism” (von Beyme 1995, p. 71). The “empirical efforts of social self-management are not only exposed to the complexity-related risks of failure, but are also shaped by the individual interests of self-interested actors. The latter may in one case decisively improve the project’s chances of success, but in other cases stand in the way of realisation. In any case the actors’ organisational efforts retain the character of an experiment [...] with necessarily uncertain outcome.” (Wiesenthal 2006, p. 243).

From a practice-theory perspective, concerns should be raised about a policy of transition management or of “governing transitions” (Shove/Walker 2010) and the embedded idea of “remaking society by design” (Baumann 1991, p. 269), that is, the assumption “that deliberate intervention in pursuit of specific goals, like those of sustainability, is possible and potentially effective” (Shove/Walker 2007, p. 764) and above all that this is “the only possible (and do-able) way of achieving true sustainability benefits in the long term while maintaining short-term diversity” (Loorbach/Rotmans 2006, p. 18). This is a question of the understanding of transition politics, transition management, the significance of unsuccessful transitions and the difference between transition into regimes and transition into practices (cf. ibid. and id. 2010).

Precisely because these are large-scale technological designs, it is taken for granted that politics and corporative actors are the key actors. TM therefore has a narrowed perspective on systemic social change. Because it neglects the importance of social practices, TM cannot capture the dynamics, different periods and mechanisms of change that are associated with them. It provides no conceptual resources for this purpose. Where reference is made to forms of practical know-how and routinised practices as part of regimes, the chief

interest lies in how these arrangements configure the conditions of future technological innovations: “not in how they evolve themselves” (Shove/Walker 2010, p. 471). In other words, TM is not a model of how “managers” of change can (reflexively) intervene to shape and model processes of change. It operates with consensus assumptions that cannot do justice to participation processes, especially since key types and actors of change are ignored. “These include rampant innovations that slice through expected and desired pathways of change; trajectories of fossilisation and decay (as established sociotechnical systems are abandoned); and *fundamental* transformations in the ordinary routines of daily life” (Shove/Walker 2007, p. 768). If practices change, then they do so as an emergent outcome of the actions and non-actions of all who are involved. “It is misleading to imagine or suppose the existence of sources or forces of influence that are somehow external to the reproduction and transformation of practice. Instead of figuring out how to involve more or different stakeholders in an externalized process of design, the more substantial challenge is to understand how consumers, users and practitioners are, *in any event*, actively involved in making and reproducing the systems and arrangements in question” (Shove/Walker 2010, p. 475).

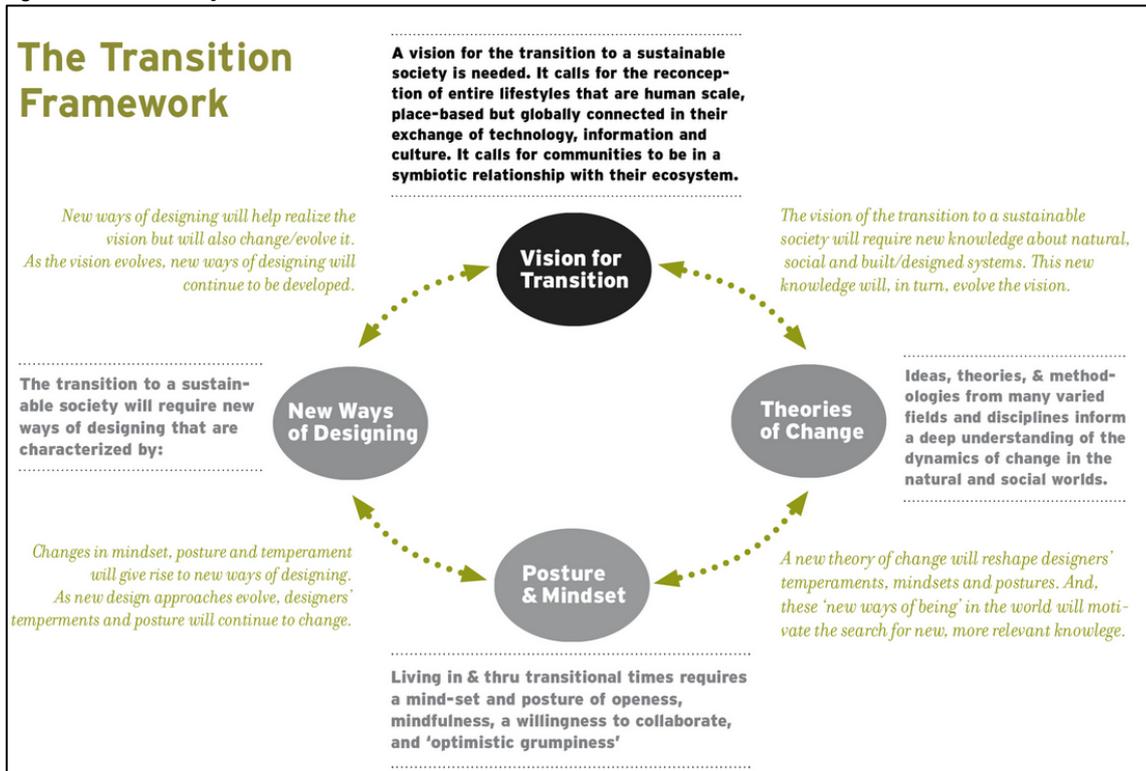
Accordingly, one should put aside the nested hierarchical MLP model in favour of other social-science theories of change which do not start by assuming the possibility of external control. Governance actors are part of the system and dynamics of change, and are necessary for the relevant related processes. Opportunities for effective intervention lie in the development and circulation of elements out of which different sustainable practices are composed.

4.7.2.4 *Transition Design*

One transition approach which with a view to sustainable development aims directly to transform social practices, instead of focusing on the problems of mostly unsuitable paradigms, and at the same time explicitly aims to include and develop theories of change in order to better understand the dynamics of change in the social and natural world, is transition design (cf. Hopkins 2008)¹⁶. It aims to mobilise existing change potential in a collaborative process, and emphasises transdisciplinarity and reintegration as well as the recontextualisation of knowledge. It is less about having a shaping influence on social phenomena, and more about a deeper understanding of specific environments (“ecosystems”), about the relations between its different parts, what the specific needs are, what works and what doesn’t, and how things could develop in the future.

¹⁶ We discuss the general significance of design thinking for processes of social innovation and social change in the CLR (cf. Scharper-Rinke/Wagner-Luptacik 2014): “Design thinking has become a dominant issue in contemporary design discourse and rhetoric, especially with the design thinking practice of the design and innovation firm IDEO, and with the application of its concept to design education at prestigious d.school, the Institute of Design at Stanford University (Bjogvinsson et al. 2012). The main characteristic of design thinking is its approach to think beyond the omnipotent designer and to overcome the obsession with artefacts, products, and things (ibid.). This is one of the interfaces between design thinking and social innovation approaches. Design thinking as part of design studies includes the complex social context of design to highlight the contradiction between uniqueness of design and designer as basis of business models in traditional design and the concept of transferable solutions as in social innovation concepts” (ibid., p. 97).

Fig. 6: The transition framework



Source: Irwin et al. 2015, p. 7

One prominent application of transition design is the transition town movement (<http://www.transition-initiativen.de>), which stems from Rob Hopkins, and the embedded transition research network (<http://www.transitionresearchnetwork.org>), which aims to bring together and promote transition initiatives and transition research. Around the world, some 500 transition initiatives are now registered, and have initiated diverse social innovations at local level (<https://www.transitionnetwork.org>).

The transition town movement can be interpreted as a concretisation of the post-growth economy and economy for the common good (cf. Pufe 2014, p. 276). Here it is not a question of theories, but of practice which itself “is the intellectual equipment for the process of transforming society as a whole, for an economy and a society that is on its way into and through the 21st century” (ibid., p. 291). This is also precisely the starting point in the transformation design by Sommer and Welzer (2014)¹⁷:

4.7.2.5 Transformation Design

In the German sustainability discussion, the concept of transformation design has gained importance in recent years. Transformation design begins with small transformation examples that affect only a limited number of people as exercises in path-changing and inspiration for similar path changes, and is here understood as shaping a necessary process of transformation of the capitalist growth economy, i.e. a change process that – with reference to Elias – includes changing social structures together with the corresponding power and control structures (Sommer/Welzer 2014, p. 55). The need for such a transformation process is justified based on the disaster theory, so to speak, that the dominant economic, social and cultural model is in any case gradually falling into decay, so that the crucial question is merely whether “by design or by disaster” (ibid., p. 27).

Elias is mentioned to here to hint at a (theoretical) understanding of change that has something to do with internal dynamics, contingency, path dependency, power and control structures, and complicated

¹⁷ This book marks the start of a series entitled ‘Transformations’, in which works are to be published “which also deal with social change processes in the context of climate change and sustainability” (Sommer/Welzer 2014, p. 12).

interconnection dynamics. Accordingly, every major transformation is always the result of interaction between numerous small changes at the micro-level, which cannot be planned either politically or administratively, and nor can they be decided at international conferences, or in other words the unplanned result of a complex “interconnection dynamics” (ibid., p. 60), a conflictual dynamics in which non-material motives are the crucial factor (ibid., p. 63). Conflicts and power shifts are key factors in social change processes (ibid., p. 107), that is, the central element of a transformation in the sense of change from an expansive to a reductive path. Transformation design acts not on artefacts but on practices of usage and their changeability (ibid., p. 115); it focuses not on new design or redesign but on democratic negotiation of what a good life is and what it requires. In contrast, technical substitution strategies are targeted not at a sustainable social practice, but at the product (ibid., p. 118). Usage innovations (reduce, reuse, recycle, upcycle) (ibid., p. 120ff.) and other sustainable practices are not necessarily social innovations, but rather revitalisations and context-specific modernisations of sustainable practices from the past. The better option becomes established not because it is better, but only when the conflicts surrounding its establishment are successfully resolved, and when it becomes deeply inscribed in the relations of production and reproduction. Transformation in the sense of path change¹⁸ is never a conflict-free affair; it is not a matter of technologies and scientific findings, but rather of surviving struggles and conflicts (ibid., p. 222).

With their “transformation design” based on disaster and conflict theory, Sommer and Welzer focus on critically differentiating transformation as a normative concept from the normatively “empty” concept of innovation, and rejecting the latter as belonging to the expansive development path of always more and always new. For this reason, the examples provided here of social innovation for sustainable development are also not referred to as social innovation. This is explicitly not about “the new”, but rather about the reactivation and reconfiguration or also the elimination of what always already exists. At the same time, this ignores the fact that the concept of social innovation hardly follows the unreflected innovation hype, but rather as an analytical concept means nothing other than the new configuration of (always already existing) social practices, that is, the systematic linking of imitation and invention, the changing force of repetition. ‘New’ here refers not to the simple exchange of old for new, but instead to the reconfiguration of social practices and their elements. Precisely this constitutes the innovative in social innovation.

In his book “Nachhaltiges Wirtschaften jenseits von Innovationsorientierung und Wachstum. Eine unternehmensbezogene Transformationstheorie” [Sustainable economic activity beyond innovation orientation and growth. An enterprise-based transformation theory], Nico Paech (2005) argues with regard to sustainability for a *coupling* of innovation with other change options such as renovation, exnovation and imitation. For Sommer and Welzer (2014), however, it is *not* a matter of coupling these change options, but of *replacing* innovation with the other three options. Yet just because it uses the term ‘innovation’, a concept of social innovation that focuses on the new configuration and reconfiguration of social practices does not follow the innovation dynamic which has mutated into an end in itself; instead, on the empirical and heuristic level, just like the concept of sustainability innovations (Fichter et al. 2006), it includes change options of this kind (cf. Howaldt/Schwarz 2010, p. 20f.) It does not just adapt the “empty” concept of innovation – it renovates and transforms it.

The normative focusing on reduction as a social-policy counter-term to innovation no doubt makes sense from the point of view of the search for practical approaches to sustainability transformations, but it cannot shed light on the question of the dynamics, stability, instability and innovation of social practices, and empirically, by definition, it takes only a limited set of social innovations into account. While this book devotes much attention to social practice and social practices – instead of technology – as the central point of reference for “necessary transformations”, what these are, and how practices reproduce and (re)configure, remains unclear. From a transformation theory perspective, the authors implicitly pursue a line of argument that touches on the mechanism of the imitating repetition of numerous small, initially often insignificant and nameless initiatives, and the associated interconnection dynamics, conflicts and struggles. With educational ambition, this can also be found implemented in the concept of the Futurzwei foundation, “which [has] set itself the task of communicating the strategies and concepts of alternative economic actors in stories – firstly so that the new

¹⁸ According to Paech (2009), transformation to the post-growth economy takes place in five steps: 1. Sufficiency in the sense of reduction of superfluity; 2. Subsistence in the sense of intensification of self-sufficiency; 3. Development and strengthening of regional economies; 4. Maintenance and revaluation of existing stocks of goods and infrastructures; 5. Institutional innovations. (cf. also Pufe 2014, p. 277ff.)

comes into the world and into the economy, and secondly so that a heuristic for a post-growth economy can develop” (Giesecke 2014, p. 551).

4.8 SOCIAL CHANGE AS A RATIONAL TRANSFORMATION OF WAYS OF LIFE

If we want to understand social transformation processes, we need an understanding of change that does not conceptualise it in the pattern of interpretation of socio-technical systems and regimes that comes from the sociology of technology, as this narrows our understanding. Rahel Jaeggi puts a wider perspective up for discussion with the concept of *the transformation of ways of life*. Based on a practice-theory reconstruction, Jaeggi (2014) develops a critical theory of the criticism of ways of life as a component of a *more comprehensive theory of social change*. To conclude, we now wish to examine this concept, which we will come to again in chapter 6.

Ways of life are conceived of as an ensemble of social practices, as a “slow-moving relationship of practices” (ibid. 94)¹⁹. Ways of life have their origin in practical performances and “mechanisms of sedimentation” and institutionalisation, they are institutable, changeable in principle, shapeable, negotiable, receiving and producing at the same time, they are – unlike lifestyles and fashions – aimed at solving problems via “rational” social learning processes and can be criticised and changed via these processes. Social learning processes, unlike evolution processes, are reflexive processes that take place neither inevitably nor by themselves, but instead are shaped by actors and are therefore open-ended and inconcludable. This hints “at the simultaneity of inertia and changeability which characterises ways of life [...] and hence also at the fact that they are firstly shaped by those acting in them, and secondly, however, that they can always already be found as authorities which enable our actions in the first place and determine them” (ibid.)²⁰. Ways of life are always a particular section from the field of possible practices, but also their organisational principle (ibid. 104). At the same time, Jaeggi writes, one can regard both extensive constructs such as modernity or the urban, and also the bourgeois nuclear family, as ways of life. “It is a question of perspective and context as to which group of bundles of practice one summarises as a particular way of life. Ways of life are interpretative and functional relationships” (ibid. 106ff.) as they always require a shared interpretation scheme and they relate to and mesh with each other practically and functionally.

Unlike terms and concepts such as system and regime, ways of life are variable relationships of practices, not self-contained and comprehensively integrated entities. And thus one can also “imagine the dynamics of change of ways of life in such a way that rebalancings and new constellations occur, but also the replacement and elimination of individual practices” (ibid. 118). “Here the relationship should be understood as a holistic relationship in a moderate sense, provided it ‘means’ something to these individual practices to stand in this relationship. That is, the fact that they stand in this relationship is not external to them, but rather it determines their character. Conversely, the relationship is constituted as an open interpretative relationship from these practices” (ibid. 119).

“Ways of life are each different solution strategies for problems that humanity [...] faces. With regard to problems, they ‘meet’ in their solution attempts with other ways of life, or differ from them in the manner of problem-solving. On this is based the comparability and differential evaluability of ways of life. The clash between them is then the debate about the best solution to the problem, and ways of life should allow themselves to be measured by their ability to solve the problems posed to them” (ibid. 252). A problem (for Hegel) is understood as a contradiction set up in the situation itself, i.e. not as something that happens to it or which it runs into. “Ways of life are not so much *confronted* [with problems ...], as they *pose* problems for themselves” (ibid. 383 – emphasis in original) and adopt them as their own. “In a conflict, a contradiction first needs to be perceived as a crisis – i.e.: *made* into a crisis” (ibid. 388 – emphasis in original).

¹⁹ For Jaeggi’s concept of practice, see Jaeggi 2014, p. 94ff.

²⁰ In this connection, Jaeggi notes that in her opinion, the social-theory concept which can best take account of this factor is Giddens’ theory of structuration (Jaeggi 2014, p. 94, footnote 48).

The standard for the criticism of ways of life lies in the problem and in the norms embedded in the social practices. This leads to a concept of social change as rational, problem-induced and crisis-induced social learning processes, and that means reflexive processes (cf. *ibid.* 321ff.) At the same time, the rationality criteria do not relate to externally set goals, “truths”, norms, but are inherently directed towards the transformation events themselves. If ways of life can learn, then they have a rationality of their own. The learning process itself can succeed or be deficient, i.e. be rational or irrational.

Thus social change is not an arbitrary growth in experiences and competences or an arbitrary variance, but rather a more or less successful reaction to existing ways of life and practices becoming obsolete. This “reaction” can then be examined to see whether it is a rational, dialectic and pragmatic learning process, or not. Accordingly, adequate solutions to problems are those which can be understood as the results of a successful learning process. What counts is the process and not the success of a problem solution. The dynamics of transformation processes run in a continuum in which the contradiction already contains the resources for the solution to its problem. From this follows a certain kind of continuity between the old and the new, a continuity of discontinuity (cf. *ibid.* 392). The emergence of the new as changes that are actively brought about, or in other words: the critical breaking through of imitation streams (Tarde), where new practices replace old ones, is an active sequence of events that depends on actions and develops that which already exists. Social change as a rational transformation is a self-enriching and open-ended learning process that emerges within practical performances – a learning process in the sense of changing reaction with unanticipatable consequences.

Contrary to a rationalistic optimism in the ability to shape developments, it is rather a case of understanding the complex relationship between the power to shape events, opacity, and the complexity of interlinked practices. Unsuccessful ways of life are not able adequately to resolve experiences of crisis, and therefore can be criticised on the basis of their problem-solving deficiencies. It is a matter of rational problem-solving ability and hence of a shift from ‘being good’ to rationality, of an understanding between that which we want, and that which we already do and are able to do, of criticism from the point of view of possibility and necessity, and hence of an experimental pluralism and a corresponding understanding of ways of life as experiments in problem-solving, that is, in transformative social change (cf. *ibid.* 447ff.) If ways of life “are complex structures of more or less accessible practices and more or less fixed factors”, then “their modes of transformation [follow] a more complicated pattern [...] than the rationalistic optimism in the ability to shape developments that is implied by Horkheimer would suggest” (*ibid.* 446). Ways of life can change and adjust to new conditions. “These new conditions may have arisen as normative expectations that have grown ‘from within’, but they may also be induced from the outside due to changing external conditions. In any case, however, any change dynamic encounters an already determined form and a historically developed horizon of expectations, that is, a problem situation whose character decides on the direction of a rational changing (of a learning process [...])” (*ibid.*)

This approach allows a theoretical merger of (social) problems, social practices, social innovations and (“rational”) processes of transformative social change, as well as an evaluation of ways of life and hence of social practices and social innovations beyond normative attributions, without ignoring the fact that ways of life are themselves “normatively composed constructs” (*ibid.* 137ff.) In terms of methodology, this requires starting with social practices and the mechanisms of their institutionalisation as well as the embedded learning processes, with the confrontation of ways of life with problems and problem-solving shortcomings as well as experiments in problem-solving.

5 SUMMARY – SOCIAL INNOVATION AS A KEY ELEMENT OF AN UNDERSTANDING OF SOCIAL CHANGE PROCESSES THAT IS GROUNDED IN SOCIAL THEORY

Looking at the international discussion on the topic of social innovation, it is clear that the question of the relationship between social innovation and social change is increasingly becoming the focal point of debate. Starting from the growing insight into the significance of social innovations in dealing with the major social challenges and the dysfunctionalities that are becoming apparent in an understanding of social change that is focused on economic and technological innovations, efforts to theoretically come to grips with this relationship have increased. Despite increasing attempts to conceptually grasp this relationship, attempts so far remain unsatisfactory (cf. chapter 2.)

Given this situation, this report has changed perspective and examined existing theories of social change with regard to their potential contribution to a better understanding of the relationship between social innovation and social change. It has placed particular emphasis on concepts for analysing far-reaching social transformation processes. It became clear first of all that, to date, social innovations play only a subordinate or isolated role in theories of social change (see chapter 3). The significance of the concept in processes of social change has received little attention and therefore remains largely unexplained.

However, we found that although a specific 'sociology of social change' has developed based on the work of William F. Ogburn, the relevant definitions of social change vary greatly with the respective underlying units "whose change is referred to as social change" (Zapf 1971a, p. 13f.), i.e. they vary with the respective underlying area of study as well as with the levels of society on which social change is investigated. Moreover, there is competition between different basic assumptions in social theory and theory types (cf. Boudon 1983, p. 22ff.; 1986, p. 10ff.)

Although it has been a core topic for sociology from its beginnings, the understanding of social change is broad and heterogeneous. "Since there is no universalist theory of social change whose explanatory claim is unchallenged in sociology, we have to deal with a large number of theories and theoretical traditions that contribute to an understanding and explanation of social change" (Weymann 1998, p. 17f.) The large number of concepts and theories that exist has contributed to scepticism as to whether it is even possible to devise a meaningful theory of social change (see chapter 3).

Thus, if it is not possible with recourse to the prevailing concepts to obtain any generally valid definition of social change, in order firstly to explain the relationship between social innovations and social change, and secondly to make it possible to describe the two terms as phenomena that are distinguishable from one another as our next step we examined selected approaches to social change in terms of their contribution to a better understanding of the relationship. In light of this, we then proceeded (see chapter 4) to examine as a priority those theories which are compatible with key aspects of the SI-DRIVE definition of social innovation, and which choose a process-oriented, endogenous, relational and micro-founded perspective, while also considering the dynamics of change and inbuilt reflexivity itself, instead of 'only' describing phenomena of (structural) change with the aid of indicators.

As described in chapter 3, the idea of a unified theory of society and of social change has increasingly lost importance since the 1970s. Instead, a pluralism and linking of theories – and modelling based on this – have increasingly become the focal point of discussion. At the same time, those approaches and analysis models gain importance which overcome the weaknesses of uni-factorial and socio-technologically narrowed approaches, which reductionistically conceptualise *social capacity for action as a prerequisite for the generation of new social practices*, neither in a structurally determinist way, nor in voluntaristic action theories, and which instead directly tackle the relationship between action or social practices and structure in a micro-founded way, and are therefore open to *capturing endogenous mechanisms and relational and reflexive processes of change*.

The *mechanisms approach* and specifically the morphogenic approach of Archer et al. as well as structuration theory turn out to provide a promising basis for resolving the question of the desiderata of social theory in respect of an aggregated concept of society, as well as the relationships between structure and action with regard to the analysis of social dynamics. These theoretical concepts are equally about disaggregating the concept of society and identifying the mechanisms which are significant for the stability and change of social order. These social-theory reflections can be analytically and evaluatively linked: firstly, with regard to the institutionalisation of new and deinstitutionalisation of established practices as key concepts for describing the dynamics of social change, they can be linked with more recent institution-theory considerations to form a process-methodological frame of reference; and secondly, with regard to the empirically relevant normative implications of social innovations, they can be linked with the capability approach.

The *recapitulation of post-structuralist approaches* yields important insights with regard to the conceptual grasp of the intentional changeability of the social realm and the conditions and possibilities for the genesis and production of the new in all areas of life along with the micro-politically relevant aspects of difference, differentiation and emergence, as well as the accompanying transformation and reconfiguration of intersecting network-like social relations. Actor-network theory, which develops this in terms of social theory, is helpful in order “not to assume [social networks of relationships (such as the community or national society)] to be already given *ex ante*, [...] but instead [to investigate] the really existing specific interaction relationships between people and also between people and things or organisations” (Pries 2014, p. 158 – emphasis in original). Actor-network – not “society” – stands here for the whole, i.e. for groups of associations or relations that change into each other and that are linked with other associations via a wide variety of relationships of translation. From this perspective, social change is the micro-founded result of the linking of heterogeneous elements to form new or changed associations, networks and social practices.

An important contribution to the understanding of the dynamics of innovation processes in the context of social change is provided by the evolutionary multi-level perspective (MLP), which is established in innovation and transition studies (cf. Butzin et al. 2014, p. 114). At the same time, Geels and Schot start from the assumption that a more differentiated understanding of transformation processes is needed and that it should be an issue of future research (Geels/Schot 2007). However, what is important with respect to the multi-level perspective for the research in SI-DRIVE is that the perspective allows a more fine-grained analysis of the relationship between social innovation on the one hand and social and institutional change on the other. In this respect, a central weakness of the approach lies in its focusing on change dynamics of the socio-technological regime. This is clearly reflected in the concept of transition management, which builds on the MLP and is fixated on technological innovations and transitions, and its narrowed perspective on systemic social change. In contrast, attempts at *combining MLP and practice-theory approaches* appear to be fruitful (cf. Avelino et al. 2014)²¹.

In order to be able to understand social transformation processes, there is a need – as has been shown – for theoretically grounded concepts which do not conceptualise social change in the pattern of interpretation of socio-technical systems and regimes that comes from the sociology of technology. A wider perspective is up for discussion with the concept of the criticism and transformation of ways of life (Jaeggi 2013), which can be regarded as an element of a more comprehensive theory of social change. According to Jaeggi, ways of life are aimed at solving problems, and in this way can be criticised and changed (ibid., p. 448). *Social learning processes*, unlike evolution processes, are reflexive processes that take place neither inevitably nor by themselves, but instead are shaped by actors and are therefore open-ended and inconcludable. Unlike terms and concepts such as system and regime, ways of life are “variable relationships of practices, not self-contained and comprehensively integrated entities” (ibid., p. 118) but rather experiments in problem-solving and hence at the same time elements of transformative social change. This leads to a concept of social change as rational, problem-induced and crisis-induced social learning processes, and that means reflexive processes (cf. ibid., p. 321ff.), where the rationality criteria are directed towards the transformation events themselves. Hence social change is conceived of as a more or less successful reaction to existing ways of life and practices becoming

²¹ In the CLR we come to the conclusion: “What we can find are approaches relevant for a better understanding of the relationship between social innovation and social change in social theory.... In combination with new approaches in innovation studies (e.g. the multi-level perspective on system innovation, MLP) they could build the basis for the development of a theoretically sound concept of social innovation as a driver of social change. And while the MLP is focusing on transitions in regimes, social practice theory (SPT) is contributing another relevant perspective by focusing on transitions in practice as the ultimate unit of analysis” (Howaldt et al 2014a, p. 146).

obsolete, as a self-enriching and open-ended learning process that emerges within practical performances – a learning process in the sense of changing reaction with unanticipatable consequences.

This approach allows a theoretical merger of (social) problems, social practices, social innovations and processes of transformative social change, as well as an evaluation of ways of life and hence of social practices and social innovations beyond normative attributions in the sense of “a perfectionist theory of the good life, which would inevitably attract accusations of paternalism” (Jaeggi 2015, p. 10). In methodological and analytical respects, this requires starting with social practices and the mechanisms of their institutionalisation as well as the embedded learning processes, with the confrontation of ways of life with problems and problem-solving shortcomings as well as experiments in problem-solving.

Whereas, for a long time, the concept of transformation was the domain of (*political-science, historical*) *transformation research that was primarily based on modernisation theory*, with its focus on political and social upheaval situations, today an undifferentiated usage of the term ‘transformation’ and a corresponding *conceptual uncertainty* can be seen. If one goes back to (meta-theoretical reflection on) theories of social change, then transformation is the transition from one system state to another by changing all process components: input, process functions, network of interdependencies and output, with corresponding impacts on the environment, and hence this is a specific type of social change. In association with increased awareness and discussion of and research into the major social challenges, a branch of inter- and transdisciplinary transformation research has formed that is predominantly critical of modernisation and growth, and which is mainly concerned with the possibilities and conditions for the realisation of viable, sustainable and/or human development, corresponding designs for society, and accompanying transformation processes, as well as the necessary transformative knowledge. With regard to a differentiated description of the relationship between social innovations and transformative social change, three complementary approaches can be identified (cf. BEPA 2010, p. 26 ff.):

- a) the perspective of the social need – here the focus is on solving social problems that cannot be or are not satisfactorily solved via traditional forms of provision via the market, the service sector, and state action;
- b) the wider perspective of the great social challenges such as climate change, demographic change, migration and the establishment of related new forms of cooperation between actors and sectors, as well as a redefinition of the relationship between social and economic value;
- c) the perspective of system change or transition towards sustainable development that goes beyond traditional linear models of technological innovation, and which has the goal of reshaping society itself via extended participation, empowerment and learning.

This viewpoint based on the active shaping, initiation and implementation of social transformation processes is informed firstly, implicitly or explicitly, by (borrowings from) theories of social change, and at the same time, as a result, there is increasing interest in the significance of social innovations for transformative social change.

Transformative social change is here understood not as a largely uncontrolled result of gradual evolutionary developments, but rather as being socially shapeable in principle via an increasing ability to reflect. With this perspective, social-ecological research has become established as sustainability-oriented transformation research. The German Advisory Council on Global Change (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen, WBGU), with recourse to a whole array of approaches to theories of social, institutional, political, organisational and systemic change, has with its Great Transformation presented a conceptual attempt to gain a better understanding of transformation processes in their multi-dimensionality and ambivalence, and hence provide guidance for actors who help shape the processes (cf. Schneidewind 2013, p. 140). Precisely this is also the underlying orientation of transition research, which apart from and on the basis of knowledge about complex social systems and about the complexity of social change and transformation processes, is also concerned with the generation of target knowledge.

This and other transformative research approaches share a focus on precisely nameable local and partial processes, and the relevant mechanisms of change, in which crucial importance is ascribed to social

innovations. Even if a corresponding theoretical particularity is required in the analysis owing to the multiple contexts of social innovations, there is still additionally the need for a grounding in social theory which makes it possible to thoroughly capture the dynamics of social practices between stability and transformation and the relevant networks of interdependencies and mechanisms, and at the same time overcome the limitations of determinist and socio-technical explanations of social change, and put the relationship between structure and action or the capacity for action, between social practices and social institutions, between social innovations and social change at the centre of attention.

A (social) theory of social change that is comprehensively set out and as it were adaptable in this sense does not exist; however social-theory reflections that are usable in this sense do exist. "Simple" theory sampling that is oriented to different analysis levels is just as unable to compensate for this desideratum as modelling that is more or less without theory. Instead, as consequences from the meta-theoretical reflection on theories of social change, it is a matter of transforming the existing theoretical approaches to disaggregating the concept of society and capturing the changeability of the social realm in terms of processes, along with the relevant categories that have been developed with regard to an understanding of processes of social change that is grounded in social theory, into a heuristic of the relational dynamics of social practices, social innovations and (transformative) social change as a key element for the development of a coherent theory of social innovation. The underlying definition of the SI-DRIVE project offers a suitable starting point for this. The following chapter examines how this can be achieved.

6 CONCLUSION – THE CONCEPTUALISATION OF SOCIAL INNOVATION AND SOCIAL CHANGE

In regard to to the 'practice turn' in the field of social sciences (cf. Schatzki et al. 2001; Reckwitz 2003), practice theories are an important component of a theory of social innovation (Howaldt/Schwarz 2010, p. 53ff.). In this sense, social innovation can be "interpreted as a process of collective creation in which the members of a certain collective unit learn, invent, and lay out new rules for the social game of collaboration and of conflict or, in a word, a new social practice, and in this process they acquire the necessary cognitive, rational and organizational skills" (Crozier/Friedberg 1993, p. 19). Social innovations encompass new practices (concepts, policy instruments, new forms of cooperation, and organisation), methods, processes, and regulations that are developed and/or adopted by citizens, customers, politicians etc. in order to meet social demands and to resolve societal challenges in a better way than possible with existing practices.

This perspective on social innovation enables us to better understand the multiplicity of drivers and initiatives engaged in the process of invention, creation, imitation, and adoption of technical and social innovation. What we are talking about here is – in comparison to action, system, and structural theories – a modified understanding of what social behaviour is and, for this reason, also of the 'social' as social practices (Shove et al. 2012). These can be found between routines and incalculability, closeness and openness for change. They open up a perspective on their reconfiguration as a core element of social innovation.

This perspective is in so far of importance, as the analysis of theories of social change has shown that a comprehensive and quasi transferable (social) theory of social change does not exist. Thus, we prioritised approaches, which provide connecting points for principal aspects of the SI-Drive definition of social innovation. Instead of an indicator-based pure description of phenomena of (structural) change, these approaches take a process-oriented, endogen, relational, and micro-based perspective and, further, emphasise the dynamic of change and its inbuilt reflexivity. This analysis revealed that within the context of the discussion on social change, a change of perspective increases the chances of social innovation becoming a starting point for an advanced understanding of social change. This is a vital step in overcoming the weaknesses of mono-factorial and socio-technical approaches by emphasising the relation between social action or social practices and structure and an open collection of endogen mechanisms, relational, and reflexive processes of change.

Against this background, the development of a concept of social change taking social practices as the central starting point, i.e. as a fundamental element of the social, and which, thus, sees the generation of new social practices and respective relational and reflexive processes and mechanisms as the core object of the analysis, is highly relevant. While it can be assumed that practices are carried out, the question of how they are carried out is answered by sociology of practice (Hillebrandt 2014); its task is to explore the underlying reasons for the emergence and reproduction of respective practice formations and their dynamics. The sociological practice theory is, thus, a sociological theory of change and dynamics (ibid.).

Drawing upon practice theory, we have taken another step in developing a theoretically grounded concept of social innovation, which we consider the essential condition for meeting the demand for an integrative theory of socio-technical innovation. Against this background, we further analysed and reflected upon the conceptual terminology of SI-Drive in relation to social innovation and social change as a core element of a theoretically grounded concept of social innovation. This analysis presents the basis for further empirical research within the planned case studies of *mapping 2*.

Such a concept of social change is grounded in SI-DRIVE's basic definition of social innovation. The SI-DRIVE approach defines social innovation as a new combination²² or figuration of *practices* in areas of social action, prompted by certain actors or constellations of actors with the goal of better coping with needs and problems

²² The term relates to the Schumpeterian terminology defining innovations as "new combinations of production factors" (Howaldt/ Schwarz 2010; Hochgerner 2012).

than is possible by using existing practices. An innovation is therefore social to the extent that it varies social action, and is socially accepted and diffused in society (be it throughout society, larger parts of it, or only in certain societal sub-areas). Depending on circumstances of social change, interests, policies and power, social ideas as well as successfully implemented social innovations may be transformed and ultimately institutionalised as regular social practice or made routine.

In reference to practice theory and Tarde's social theory (s. Howaldt et al. 2014a) and the approaches discussed above, it is possible to develop a sound and comprehensive concept of social innovation and its relationship to social change. *Social innovation is the establishment of a new institution guiding new forms of social practice*, often coinciding with the disruption of existing institutions. Institutions are rule systems which reproduce social practices (relatively) independent from individual persons, time, and space (Giddens 1984). The term institution Giddens thus denotes the long-term stability of a social practice. With Giddens we can say that institutions as structural elements enable and restrict social practices. Institutions are reproduced by conform behaviour often in the form of non-questioned routines and may be challenged by non-conform behaviour. Institutions usually are connected to mechanisms which either reward conform behaviour or sanction non-conform behaviour. What once may have been a result of power struggle or negotiation and consensus-making becomes unquestioned and in its concrete history opaque routine behaviour. However, as indicated already in the introduction, institutions themselves are part of society's figurations, which are in a state of permanent change (Elias 1977), and again, are constantly challenged by changing social practices.

It is clear that a social practice does not become an institution from one day to the other. There must be a *constant process of institutionalisation and de-institutionalisation* which comprises different 'layers' and may be expressed in different 'degrees'. Institutions are not a static final state – on the contrary, they still rely on reproduction, they may change 'silently' or they may be challenged by individuals and groups. And finally, institutionalisation and de-institutionalisation are parallel processes – as new social practices relate to existing social practices. Newly institutionalised practices may challenge and finally substitute existing institutionalised practices. Institutionalisation and de-institutionalisation are therefore key concepts to describe the dynamics of social change.

Referring to the SI-DRIVE definition, social change is the process in which *new social practices emerge*, become socially accepted, and diffused in society *by processes of imitation, adaptation, and social learning* (be it throughout society, larger parts of it, or only in certain societal sub-areas, transformed depending on circumstances and ultimately institutionalised as new social practice or made routine. Diffusion and institutionalisation²³ have to be understood as parallel processes determining the *stability or instability* (vulnerability) of a social practice. For the process of institutionalisation, we may differentiate *dimensions and degrees* of institutionalisation. The 'degree of institutionalisation' (relative stability or instability of a social practice) can be assessed based on criteria. The process dimension of social innovations concerns the creation and structuring of institutions as well as behavioural change (Hoffmann-Riem 2008, p. 591ff.), and the empowerment of actors (Crozier/Friedberg 1993, p. 19). The decisive criterion in a social invention becoming a social innovation is its institutionalisation or its *transformation into a social fact* (Durkheim 1984), in most cases through planned and coordinated social action.

In this respect, social innovation is a core element and generative mechanism of social change and, consequently, the process of social innovation has to be seen as a process of social change. In this perspective, the relationship between social innovation and social change is then a *question of breadth and depth* in which a social innovation spreads in society or the societal subsystems and fundamentally, yet temporarily, changes these by being institutionalised as a new social practice changing the existing structures, policies, institutions, and behaviour.

If we want to understand social innovation triggering social change, we have to analyse:

²³ Diffusion defined as the process in which SI spread in society and societal subarea (geographically; policy field related; overarching cultural patterns) whereas institutionalisation means the depth in which a new social practice is embedded in society or societal subareas and replaces existing practices.

- a. in how far social innovation is diffused in society and societal subareas (geographically, policy field related and according to overarching cultural patterns);
- b. to which degree it has been institutionalised (made routine, triggered or influenced new regulations, organisations, infrastructures...);
- c. and to which degree *established social practices* are challenged by these new contestants for becoming a dominate, co-existing or niche practice.

The way new social practices relate to existing and institutionalised practices is highly relevant for their diffusion and institutionalisation. This leads to the study of parallel and interdependent processes of institutionalisation and de-institutionalisation which constitute social change. Processes of diffusion and institutionalisation are very complex and cannot be seen as mere result of the intention of an actor or a group of actors. So while social innovation is associated with "*planned and coordinated actions*" (Greenhalgh et al. 2004, p. 1), the process of social change is much more complex.

Although most theories of social change assume that social change is not arbitrary, but follows patterns - maybe even regular patterns - only two basic patterns of change can be empirically observed in scientific and non-normative terms. First, the cyclical change pattern (daily, weekly, annually; business cycles; consumption patterns; recurrence of long waves; birth, growth, flourishing and decline of civilisations) and secondly, the one-directional change pattern (cumulative, implies growth or decrease; population density; size of organisations; linearity - the simplest type-; S-curve - another type). Of course, these patterns are underpinned at micro-level by non-linear interdependencies and mechanisms. Often the time span studied decides which pattern of change - cyclical or one-directional - is observed, as often they occur simultaneously (Wilterdink 2014).

Hence, the demand for a deeper analysis of the *mechanisms of processes of social change* (see chapter 4.n) came to the fore. Against the background of the emergence of a new innovation paradigm, a number of reasons to devote greater attention to the mechanisms of change residing at the micro and meso level revealed themselves. In the context of the broad social debate surrounding sustainable development and necessary social transformation processes (Geels/Schot 2007), the question of the relationship between social innovations and social change arises again: how can processes of social change be initiated which go beyond the illusion of centralist management concepts to link social innovations from the mainstream of society with the intended social transformation.

The following mechanisms of social change can be found in the literature (based on Wilterdink 2014):

Learning: Evolutionary theories (Dosi 1982; Nelson/Winter 1982) in social sciences stress the cumulative nature of human knowledge. Actors realize mistakes, apply new ideas and engage in processes of learning, which results in tacit and codified new knowledge (Cowan et al. 2000).

Variation: Variation can range from 1) new (collective) ideas to 2) single innovation projects which introduce novelty and hence variation. Ad 1) Collective ideas are the cause and consequence of social change. The spread of beliefs, values, value systems, of fashions, of religions, of cultural symbols, of rules of behavior. Ad 2) Single innovation projects are on the one hand incremental innovation projects that innovate along a given trajectory; on the other hand, radical innovations that deviate from the trajectory and may lay the ground for a new trajectory.

Selection: This incorporates processes of adoption, diffusion and imitation, but also processes of decline and death of initiatives.

Conflict: Group conflict has often been viewed as a basic mechanism for social change, these include revolutions, but also minor conflicts. Social change in this view, is the result of the struggle between a predominant class and a dominated class which strives for (radical) change. (conflict model of society by Ralf Dahrendorf 1989)

Competition: seen as a powerful mechanism of change as competition makes it more likely to introduce innovations in order to have competitive advantages.

Cooperation: Although competition as a driver dominates theories that put individualism, individual utility at the fore, where social change is the results of individuals pursuing their self-interest, other strands of literature have shown that cooperation (e.g. literature on innovation systems, game theory) or altruism (e.g. Ernst Fehr) also lay the basis for human action.

Tension and adaptation: In structural functionalism social change is seen as an adaption to some tension in the social system. Eg a gap between fast-changing technology and necessary associated institutional change of some type (see e.g. Ogburn 1922)

Diffusion of (technological) innovations: Some social changes results from innovations adopted in society, may be technological invention, scientific knowledge, but also new beliefs, ideas, values, religions, in short ideas. High uncertainty, most innovations disappear, those that survive follow an S-curve of adoption (cf. Geroski 2000).

Planning and institutionalisation of change: Social change may result from goal-directed large scale planning, by governments, bureaucracies, and other large scale organisations. The wider the scope, the more the competencies needed, the more difficult to reach goals and the more likely that unforeseen events interfere. Planning implies institutionalisation of change, but institutionalisation does not imply planning (Wilterdink 2014). Included here are changes in the organisation of the state, interstate relations, laws and directives, programmes etc.

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The mechanisms-approach and especially Archer's Morphogenetic Approach, as well as structuration theory proved themselves as promising foundations for an adequate understanding of social dynamics. These theoretical concepts disaggregate the notion of society and identify mechanisms that contribute to the stability and change of social order. In respect to the institutionalisation of new and de-institutionalisation of established practices as a key concept of the description of dynamics of social change, these social theoretical reflections can in connection with more recent institution-theoretical considerations be linked to a process-methodological framework.

For Tarde, imitation is the central *mechanism of social reproduction and social change*. "All similarities of social origin that belong to the social world are the fruits of some kind of imitation, be it the imitation of customs or fashions through sympathy or obedience, instruction or education, naïve or carefully considered imitation" (Tarde 2009, p. 38). Since imitation always involves variation as well, imitations simultaneously transform innovations into social structures and practices. Added to this are individual initiatives and rebellions against prevailing morals, customs, rules – interruptions or crossings of imitation streams – which are transferred and imitated from person to person, leading to social innovations.

In this sense, social change is a process of changing social practices and stimulating social innovations based on continuous new adaptation and configuration anchored in social practices themselves, which means real experiments with the participation of heterogeneous actors understood as carriers of social practices and in the context of an unequally self-organised co-evolutionary process (Shove 2010, p. 1274; Shove et al. 2012, p. 162ff.).

According to Tarde, it seems meaningful to creatively reconfigure the potential of existing inventions through imitation, rather than constantly producing new individual inventions. If we follow Tarde in pointing out the *social embeddedness of any invention in a dense network of imitation streams*, then social innovations are first and foremost ensemble performances, requiring interaction between many actors. As the opening of the innovation process to society is a key characteristic of the new innovation paradigm (Howaldt/Kopp 2012, p. 45), there is an accompanying increase in the experimental processes which take place not only in the separate world of scientific laboratories but also in society (Krohn 2005). Social innovations and their protagonists who critically, exploratively, and experimentally depart from the prevailing 'mental maps', the established rules, routines,

pathways, and models in politics, business, and society – such as the economisation of all areas of life including an inevitable link between prosperity and growth (Leggewie/Welzer 2009; Jackson 2012) – who call these into question and in a ‘competition of ideas’, lead the way to changing, alternative social practices and lifestyles as the basis and main drivers of transformative social change (cf. Jonker 2012).

At the same time, it becomes obvious that a new (social) practice must initiate self-organized processes of imitation and adoption in society or societal subareas. That is why scaling strategies of actors/or group of actors are not enough, even if they combine strategies for scaling out and scaling up (Westley et al. 2011). These strategies are an important part of the process of diffusion and institutionalisation that may be seen as a necessary condition or essential prerequisite for a social innovation. Yet, in order to successfully contribute to social change, a new social practice must trigger/initiate (self-organised) processes of imitation and adoption in society or societal subareas.

Practice theory approaches and especially Tarde’s concept of imitation provide important insights for analysing how practices are created and institutionalised. While the multi-level-perspective-approach (MLP) as another dominant view on social change (see Chapter 4.6) is focusing on transitions in regimes, in social practice theories (SPT) transitions in practice are the ultimate unit of analysis. With recourse to Reckwitz according to Shove et al. (2012), new practices form, change, or replace social practices by making, sustaining, changing, or breaking the link between their elements (ibid, p. 7). While the significance of artefacts and technologies is the core area of innovation studies, and a difference is usually made between innovation, development, and diffusion, the SPT approach allows to carve out the dynamic relation between producers and users in building and stabilizing new arrangements as well as the embeddedness of innovations in social practices. Novelty can originate in each of the elements, not only in the material dimension (ibid, p. 31). Innovations of social practices can be understood – also in terms of a methodological strategy – as processes of connecting the new with already existing elements (ibid, p. 15). Practices change through transformative effects of adoption and avoidance by practitioners (ibid, p. 66). This leads to *“multiple and varied cycles of change, simultaneously shaping the lives of practices and being shaped by them”* (ibid, p. 77).

The examination of the constitutional elements of practices, of bundles, and complexes of practices helps us to better understand processes of social change and transformation. By describing stability and mobility of the elements, one can show how contours of practices develop and change. In a sense, each new combination of elements and practices is an emergent result of previous practices. The subject matter of SPT is the relational interdependency between incorporated sociality, social practices, and objectified sociality respectively the practices generating relations. Systems of classes, power, states, and economies are constituted by nothing else than the repetitive performance of practices. Transformative social change refers to the reconfiguration of practices from which sociality arises, and therefore to social innovations. In this perspective social change is not the result of an evolutionary process but a reaction in the shape of processes of reflexive social learning towards existing ways of life and forms of practices becoming obsolete (Jaeggi 2013).

Social learning processes are in contrast to evolutionary processes reflexive processes, which neither occur inevitably nor by themselves, but are shaped by actors and as such open and interminable. In contrast to terms and concepts like system and regime, ways of life denote various correlations of practices instead of closed and fully integrated entities (ibid, p. 118), they represent rather experiments in problem solving and, at the same time, of social change. This results in a conception of social change as rational, problem- and crises-induced social learning processes, i.e. reflexive processes (ibid, p. 321ff.), whereby criteria of rationality focus on the transformation itself. Social change is, thus, conceptualised as a more or less successful reaction to existing ways of life and practices becoming obsolete; as a self-enriching and open learning process in the sense of a modified reacting to non-anticipatable consequences that emerges within practices.

This approach allows a theoretical combination of (social) problems, social practices, social innovations, and processes of transformative social change, and hence opens up the perspective of a critical reflection of ways of life and as such, of social innovations. In methodical-analytical respect, this calls for building upon the social practices and the mechanisms of their diffusion and institutionalisation, their inbuilt learning processes, the confrontation of ways of life with problems and deficiencies in their solutions, as well as experiments with the latter.

However, if social innovations could not sufficiently be separated in substance and functionality from aspects of social change, innovations in general or other specific innovations, 'social innovation' would not be useful as an analytical term or subject for empirical research.

A sociological theory of innovation, in our view, must examine the multiple and manifold imitation streams and must decode the principles and laws they follow. It is only via social practice that the diverse inventions etc. make their way into society and, thus, become the object of acts of imitation. Social practice is a central component of a theory of transformative social change, in which the wide variety of everyday inventions constitute stimuli and incentives for reflecting on and possibly changing social practices. Here, Tarde's social theory can be understood and developed further as a theory of the "innovations of society" (Rammert 2010), which is able to decode the relationship between social innovations and (transformative) social change. As a forceful scientific conception of active social life (Toews 2013, p. 401) this concept of innovation is free from the intense focus on the technological and economic reference context which has been dominant since Schumpeter. Such a theory will be sufficiently abstract for an all-embracing concept of innovation as social phenomenon and enable both a specification in relation to different reference contexts and an integrative examination of social and other innovations.

7 NEXT STEPS

The concluding chapter describes the next steps towards a theoretically grounded concept of social innovation within the scope of the empirical and theoretical work of the SI-DRIVE project. The here presented consideration form – in addition to the results of the CLR and Mapping 1 – a further basis for the conceptualisation, implementation, and evaluation of the in-depth case studies and will in relation to Mapping 2 be critically scrutinised. While Mapping 1 with a global selection and collection of 1.000 and more cases has led us to a comprehensive picture of world regions and policy fields', related cases in Mapping 2 will focus on detailed case studies. The focus of the case studies will be a better understanding of the process dynamics of social innovation and its relationship to social change, on the one hand, and the functions and roles of actors and network of actors alongside the innovation process, on the other hand.

Within mapping 2 there are two major objectives:

- 1) Identify and assess success/critical factors for Social Innovation alongside the Social Innovation process
- 2) Identify and assess factors in the process dynamics of Social Innovation that lead to social change

Therefore, it will be crucial to understand the modes of governance of social innovation. A focus should be on networks and their actor constellations, modes of cooperation and communication channels. To establish a systemic view upon social innovation, it is suggested to study the specific governance in different types of social innovation processes and assess the particularities as compared to other innovation processes.

Against the background of the objectives of the SI-DRIVE project it will be also crucial to understand why political intervention might or might not work in some fields of social innovation, and where or when prevailing trajectories of societal variance and respective policies exhibit impediments to social innovation. Social innovation requires also appropriate social innovation policies. The traditional framework for public administration of rules and regulations needs of new ideas and methods. Many potential social innovations (ideas) are hindered by traditional approaches in public policies. If Europe wants to tackle the challenges as documented through its Strategy for Smart, Inclusive and Sustainable Growth as well as its specific Flagship Initiatives, policy makers need to understand how to involve and make use of the participation of citizens to serve the public good (Bourgon 2011). Based on accurate integration of conceptual and empirical knowledge, SI-DRIVE will offer a coherent policy strategy platform for policy makers.

The report is important part of the Theory Work Package (WP 1) developing hypotheses for further research which will be verified and developed by analysing the empirical data across sectors and countries within the mapping exercises. It is an important contribution to examining the conditions under which social innovation takes place, unpacking, and developing the concepts that are associated with this phenomenon, and explores and explains the variety of processes and networking through which social innovation occurs. This report provides a general depiction of how social innovation resonates within the wider frameworks of existing theories of social change.

It is an important step for the development of a theoretically sound concept of social innovation as a precondition for the development of an integrated theory of socio-technological innovation in which social innovation is more than a mere requirement, side effect, and result of technological innovation. Only by taking into account the unique properties and specifics of social innovation in different contexts, is it possible to comprehend the systemic connection and interdependence of social and technological innovation as driving forces in the overall processes of social change.

In addition, the final report will be subject to discussion in a variety of scientific contexts. The empirical results as well as the scientific discourse will be used for verification as well as advancement of the presented conceptual considerations. They represent an important building brick towards the foundations of a theoretically grounded concept of social innovation and will, as such, infiltrate the final report of the project (Report 3).

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