Building Blocks of a Typology of Social Innovation – How do Social Innovations Interact with their Environment? [1]

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Up to now, endeavours to distinguish between different types of Social Innovation have remained sporadic efforts by single European initiatives. Building upon the empirical results of the SI-DRIVE project, this paper sketches the first characteristics of a typology distinguishing between different types of Social Innovation along their relation to the formal system or the social-cultural environment they are operating in.

1. Introduction: Social Innovation – an Emerging Field of Research

Innovation has many faces: It can be technological, it can concern the organisational level (Totzauer 2014) or the workplace (Oeij et al. 2017a), or its main characteristic may be that it is disruptive or incremental (Henderson/Clark 1990) (to name but a few of the most common types of innovation studied in innovation literature). Social Innovation, as a specific type can be placed among those main archetypes of innovation. The importance of Social Innovation for successfully addressing the social, economic, political and environmental challenges of the 21st century has been widely recognised, as "in recent years, social innovation has become increasingly influential in both scholarship and policy" (Moulaert et al. 2013, p. 1).

Definitions and understandings of Social Innovation are manifold depending on the context (Howaldt/ Hochgerner 2017). Since the typology presented in this paper is an outcome of the SI-DRIVE project (www.si-drive.eu), it follows the projects definition of Social Innovation as a new figuration of *social practices* "with the goal of solving problems or satisfying needs better than is possible based on established practices" (Howaldt/Schwarz 2010; p. 54). As a lived practice a number of initiatives tackle grand societal challenges like climate change, demographic change, or poverty all over the world (Howaldt et al. 2016a). This potential in solving societal challenges

[1] This paper is based on chapter seven of SI-DRIVE's final theory report. For the full chapter please refer to Rabadjieva, M./ Schröder, A./ Zirngiebl, M. (2017): Towards a Typology of Social Innovation. In: Howaldt, J./ Schröder, A./ Butzin, A./ Rehfeld, D. (Eds.) *Towards a General Theory and Typology of Social Innovation*, pp. 7-20. Retrieved from https://www.si-drive.eu/wp-content/uploads/2018/01/SI-DRIVE-Deliverable-D1_6-Theory-Report-2017-final-20180131.pdf [last accessed 09.05.2018]

finds its reflection in a number of (public) programmes initiating and supporting social innovations on the local, regional, national and global level (see also the SI-DRIVE Policy Field Reports: Schröder et al. 2017; Oeij et al. 2017b; Schartinger et al. 2017; Ooms et al. 2017; Butzin et al. 2017; Heales et al. 2017; Millard et al. 2017). This increasing number of success stories shared, as well as the growing recognition that technological innovations alone are not enough to drive sustainable development, and thus have to be accompanied by wider social transformation processes (Loorbach and Rotman 2010), support the potential of Social Innovation in shaping a more sustainable future.

Despite the growing public and academic interest in social innovation throughout the last decade (Moulaert et al. 2013; Moulaert et al. 2017), attempts to classify different social innovation initiatives and their contribution to transformative social change have so far remained sporadic efforts. In their review of European social innovation projects, Jane Jenson and Denis Harrisson (2013) conclude: "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" (p. 7). Yet, investigating these conditions is vital for creating an environment in which social innovations, can thrive and ultimately benefit sustainable development. Hence, the overarching question guiding this paper is: What is the relationship between social innovation and societal change? In specific: How can different types of social innovation be classified in regard to their relationship to social change?

To answer these questions, the paper first presents the empirical basis provided by the SI-DRIVE project and shed some light on what constitutes a typology. In a second step, the paper investigates already existing typologies and evaluate their insights on the relationship between Social Innovation and social change. Thereafter, the paper focuses on empirical insights of the global mapping of 1.005 social innovation initiatives (Howaldt et al. 2016a). Taking these insights together the paper sketches the first outlines of a comprehensive typology.

2. Empirical and Methodological Considerations

2.1 The Background: SI-DRIVE's Analytical Lenses

The paper builds on the rich data collected and analyzed within the European SI-DRIVE project (2014-2017; www.si-drive.eu). The global research project SI-DRIVE, funded within the 7th Framework Programme of the European Commission, looked at the theoretical concepts, areas of empirical research and observable trends in the field of Social Innovation, on both European and

global scales. SI-DRIVE involved 14 partners from 11 EU Member States and 11 partners from other states of all continents, accompanied by 13 advisory board members; in total covering 30 countries all over the world. Based on the understanding of Social Innovation as a new combination or figuration of social practices, the project developed its analytical focus elaborated on in the following section.

This definition does not only integrate the different (and sometimes conflicting) meanings of Social Innovation but at the same time offers a new perspective on the relationship of Social Innovation and social change. In that sense, "[a]n innovation is therefore *social* to the extent that it varies social action, and is accepted and diffused in society (be it throughout society, larger parts of it, or only in certain societal sub-areas)" (Howaldt et al. 2014, p.151). Starting from social practices as the central object of analysis, figure 1 presented below summarises the key dimensions affecting the potential of social innovations, their scope, and their impact. It ultimately facilitates the development of the relationship between Social Innovation and social change. Additionally, it aids in understanding the complexity and ambivalence of any innovation by looking at and analysing social innovations throughout their life cycles - from ideation and intentions to actual implementation and impact – which may turn out or may be discerned quite inconsistently (ranging from 'good' to 'bad') by different social groups, strata, or generations (Hochgerner 2013, pp. 17). The structure served as basis for applying the Social Innovation concept in theoretical and empirical research to all sectors of society (public, private, business, and civil society) as well as to European and other world regions.

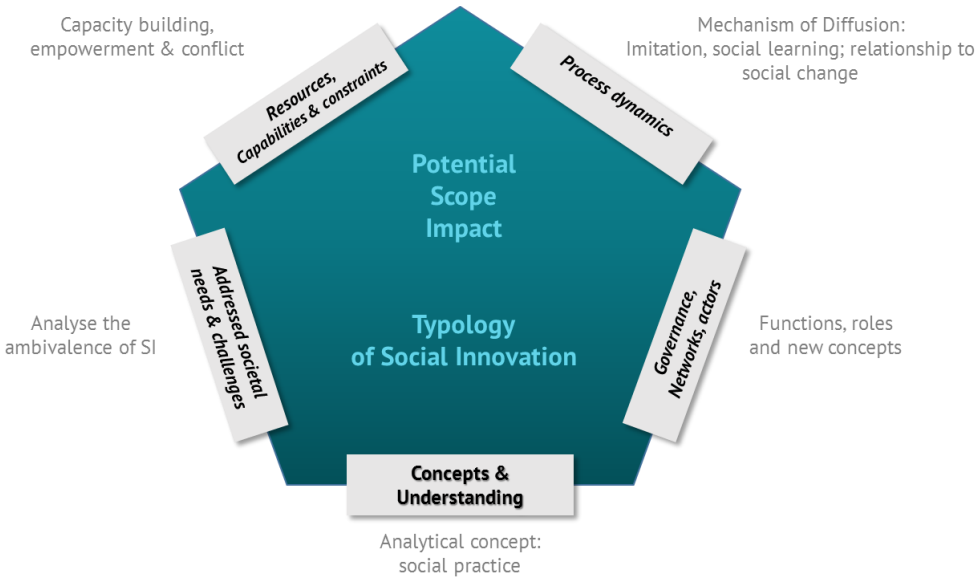

Figure 1. SI-DRIVE's five key dimensions

During the course of the project two major mapping exercises have been conducted at European and global level; a mapping of 1,005 social innovation initiatives of which 82 cases were selected for an in-depth case study[2]. The first provided an overview of various types of social innovations in the seven policy areas (Education and Lifelong Learning, Employment, Environment and Climate Change, Energy Supply, Transport and Mobility, Health and Social Care, as well as Poverty Reduction and Sustainable Development). The second included in-depth and detailed case studies of specific innovations in these policy areas. The results provided new insights about the variety of social innovation approaches in different parts of the world used by practitioners, researchers and policy makers. By taking a comparative approach across regions and policy areas, SI-DRIVE facilitated a comprehensive understanding of the roles and impacts of social innovations in different cultural contexts, including (unforeseeable) social consequences and ambivalence. The in-depth Case Studies (see the compiling report of Ecker et al. 2017) dealt with the mechanisms of Social Change identified in deliverable on Social Innovation and social change (Howaldt/ Schwarz 2016). The identified mechanisms included: Learning, Variation, Selection, Conflict, Competition, Cooperation, Tension and Adaptation, Diffusion of (technological) innovations and Planning and institutionalisation of change (Howaldt/ Schwarz 2016, p. 59/69).

2.2 Typology, types, and classification – choosing a methodological focus

The starting point of this paper is the assumption that the world of Social Innovation is full of different types. Yet, the very concept of the *type* is far from being clear-cut. Common notions are e.g. ideal types, empirical types, structure types, or prototypes (Kluge 2000). The multiple applications of the term *type* show that it is not reserved only for "grouping" as typology, but is also used interchangeably with the term class or category. Most confusion surrounding the concept of typology stems from it being used interchangeably with the term classification. Classification and typology are often referred to interchangeably as (ibid), "a grouping process [in which an] object field is divided in some groups or types with the help of one or more attributes" (Doty/Glick 1994, p. 232).

A typology can be seen as a specific type of classification being mainly distinct in the method used to construct it. In that sense, typology refers to a multidimensional conceptual classification used mainly in social sciences. It stands in contrast to other forms of classification such as taxonomy, which is a classification based on empirical data and used mainly in natural sciences such as biology (Bailey 1994). Moreover, while classifications focus on grouping items in homogenous sets, typologies are based on the concept of the ideal type – types developed with respect to a certain predefined outcome (Doty/ Glick 1994). The purpose of typologies lies in measuring the fit or

[2] For a comprehensive description of the methodology employed fort he global mapping, please refer to chapter 3 in Howaldt et al. 2016

deviance of variables of real entities to those of the ideal types. Accordingly, the typology may contain ideal types, which are not observed in reality, but describe a possible path for achieving an outcome. Therefore, typologies allow specification of non-linear relationships between constructs and explanation of complex phenomena (Doty/ Glick 1994).

Since typologies consist of two levels of constructs they can become quite complex. On the one hand, ideal types are built up from multiple dimensions characterising the studied phenomenon and represent unique combinations of these dimensions (first order constructs). On the other hand, the dimensions are described by specific variables and represent second order constructs (Niknazar/Bourgault 2016, p. 195). As abstract constructs the ideal types may exist in the real world, but do not necessarily have to. Therefore, a very popular method of defining ideal types is the theoretical specification, which is based on theory interpretation from the researcher (Doty/Glick 1994, p. 237). Still, ideal types may also be specified using a sample to encounter most common dimensions, however this approach is limited to the items included in the sample. Another valid approach is marking the two ends of a continuum of ideal types by defining two polar types at first and then specifying others in between. No matter how the ideal types are specified, the important difference to classification is that the studied items in a sample should not be assigned to any specific type with complete overlap (Doty/Glick 1994, p. 233). Ultimately, the purpose of typologies lies in measuring the fit or deviance of the second order constructs (variables of real entities) to those of the ideal types (Niknazar/Bourgault 2016, p. 195).

Analysing the advantages the typology approach, Doty and Glick (1994) point out that typologies are useful for specifying non-linear relationships between constructs. They represent the multidimensionality of attributes. They are not subordinated to empirical evidence and incorporate a high degree of equifinality, because each ideal type is defined with respect to the desired outcome, which shows that different paths can be taken (Doty/ Glick 1994).

- Classification and typology are both based on grouping objects into *types* with the help of certain attributes.
- In a classification, existing cases are grouped into *types* or *classes*, which are mutually exclusive, exhaustive and based on specified rules.
- Typology is a more complex variation of a classification consisting of abstract constructs called *ideal types*.
- The *ideal types* represent possible *paths* an entity can take to achieve a certain specified *outcome*. They may exist in the real world, but do not have to.
- On the contrary to classification, the entities studied in a sample do not have to completely overlap with an ideal type in a typology. The purpose of typologies lies in measuring the *fit*

	or deviance of variables of real entities to those of the ideal types.
•	Classifications help building *middle-range theory*; typologies contain *multiple levels of theory building*. Therefor they are a useful tool for studying a complex phenomenon.

Table 1. Classification vs. Typology at a glance

2.3 Implications for the Typology

Against the revealed background, the typology approach is as a useful tool and an enriching contribution to the development of a comprehensive theory of Social Innovation. SI-DRIVE's theoretical underpinnings (in specific the key dimensions and mechanisms of social change described in 2.1, see Howaldt et al. 2017) and the data collected during the two empirical phases (mapping 1 with 1,005 cases and mapping 2 with 82 in-depth case studies) provide an opportunity to analyse and group social innovations in many different ways. Before we elaborate on our approaches for classifying and defining types of Social Innovation, however, we reflect on lessons learnt from the research conducted so far and use it as another reference frame.

3. State of the Art: Social Innovation Typologies

As stated in the introduction, Social Innovation research to date has neither brought about one leading definition nor a guiding reference typology. Rather, attempts to set up a typology of Social Innovation can be traced back to other European research projects on Social Innovation. Hence, this section will present and discuss the following typologies:

- The distinction made between the intention of social innovations laid out in the BEPA report (2010)
- Types of Social Innovation identified by the FP7 research project TEPSIE (2014)
- The actor-centred typology developed by the FP7 funded SIMPACT project (Rehfeld/Terstriep 2017).

In the following, each of the aforementioned typologies - as well as the conceptual understanding of Social Innovation in which they are embedded - will be briefly described. In a second step, the presented typologies will be briefly discussed to gain an over-arching overview of the state of the art. Thereby, the respective typologies will be presented in a chronological order.

3.1 BEPA's Outcome- and Process-oriented Typology

In 2010, the Bureau of European Policy Advisers (BEPA) published the report "Empowering people, driving change – Social Innovation in the European Union" understanding Social Innovation as "Innovations that are social in both their ends and their means" (ibid., p. 42). However, this very basic understanding is complemented by a process dimension stating that social innovations comprise "new forms of organization and interactions to respond to social issues" (ibid., p. 43). The typology developed by BEPA distinguishes social innovations along three different types of outcomes:

1. The first type comprises social innovations that address *social demands*, which have so far not been adequately addressed by the market or institutions. This type of Social Innovation especially targets its activities towards vulnerable groups of society, such as elderly or migrants.
2. The second type addresses society as a whole by tackling "*societal challenges* in which the boundary between 'social' and 'economic' blurs" (BEPA 2010, p. 43). In that sense, the 'social' is seen as an opportunity instead of a barrier towards value generation.
3. The third type of Social Innovation comprises approaches that address broader *systemic change* aiming at a transformation of "society in the direction of a more participative arena where empowerment and learning are sources and outcomes of well-being" (BEPA 2010, p.43). Since many of these approaches depend on the re-organisation of a variety of stakeholders, they are established at a higher political level.

However, these three types of Social Innovation should not be seen as clear-cut single entities, rather they are interdependent. Social innovations with a focus on a specific social demand often simultaneously address a societal challenge (e.g. social integration of migrants through education measures or repair cafes for reducing waste as a part of mitigation of climate change). Since the process dimension describes that social innovations find new forms of organization and interaction, their implementation can be seen as a contribution to reshaping society aka systemic change.

These three dimensions shed light on what 'social' in Social Innovation is and what the purpose of Social Innovation is in general. Nevertheless, the distinction between three levels of scope: demand, challenge and systemic change is not exclusive for Social Innovation and has the potential to be used also for other innovation terms (e.g. sustainable innovation is more focused on challenges and system change while frugal innovation is demand driven).

3.2 TEPSIE's Types of Social Innovation

Another typology of Social Innovation developed by the FP7 research project TEPSIE (2014) defines "Social Innovation as new approaches to addressing social needs. They are social in their means and in their ends. They engage and mobilise the beneficiaries and help to transform social relations by improving beneficiaries' access to power and resources" (ibid., p. 14). *New* thereby relates to the context of the Social Innovation. The social needs aspect of this definition comprises the initiator's intention. The mobilization of beneficiaries is regarded as a guarantee for local ownership, which helps to meet this social need.

Since this definition refers to a variety of social innovation practices, TEPSIE developed an overview of different types of Social Innovation. Thereby the types are distinguished along their key activity. Yet, similar to BEPA's (2010) typology, the different types of Social Innovation identified by TEPSIE address different levels of intervention. Moreover, some social innovations might cut across the several types.

Type of Social Innovation	Description	Example
New services and products	New interventions or new programmes to meet social needs	Car-Sharing
New practices	New services which require new professional roles or relationships	Dispute resolution between citizens and the state
New processes	Co-production of new services	Participatory budgeting
New rules and regulations	Creation of new laws or new entitlements	Laws enhancing non-smoker's rights

Table 2. TEPSIE's typology of Social Innovation (own figure based on TEPSIE 2014, p. 15)

Closely connected to this typology is an analysis of how these different activities of Social Innovation can spread or grow. Nevertheless, since every social innovation is very context-dependent these conceptualisations of growth only show that growth strategies have to be designed according to the innovation's context and with respect to the unit of analysis. In that sense the growth of new services and products can be a conceptualisation as a replication or adoption of them elsewhere or as scaling up and mainstreaming activities. New practices can be adopted, replicated, mainstreamed or grown

as part of change processes. In TEPSIE´s sense, the spread of new processes is as well taking the routes of adoption, mainstreaming and change management broadened by the option of implementing them. In contrast, since the spread of new rules and regulations takes place on a policy-level, their spread depends solely on mechanisms of policy diffusion (TEPSIE 2014).

3.3 SIMPACT's Actor-Centred Typology

The project SIMPACT (2014-2016) focussed on the economic aspects of social innovations in the sense of social innovations' impact on social and economic transformation (Rehfeld/ Terstriep 2017). In the project's context Social Innovation was, thus, defined as "novel combinations of ideas and distinct forms of collaboration that transcend established institutional contexts with the effect of empowering an (re)engaging vulnerable groups either in the process of social innovation or as a result of it" (Terstriep et. al. 2016, p.6). SIMPACT's approach to developing a typology has to be seen in its efforts to build a middle-range-theory. Thus, SIMPACT does not address social change per se but looks at "institutional and related political change" in specific (Rehfeld/Terstriep 2017, p. 4).

SIMPACT based its typology on a variety of existing case studies with a focus on business case studies and additional social innovation biographies. Thereby, it became apparent that social innovations take place in a diverse social setting being steered by a set of different actors engaging in different organisational settings and equipped with differing ways of financing their activities.

The different types of Social Innovation are ultimately structured along the actor's societal level (micro, meso, macro) on the one hand, and along their focus on either economic or social objectives, on the other hand (see table 3).

The first column describes actors with a focus on the micro-level. Actors with a focus on economic objectives at the micro-level comprise traditional companies that implement e.g. corporate social responsibility (CSR) strategies or employ workplace innovations. Yet, their main focus remains an economic one. The second group of actors on the micro level, combining economic and social objectives, entail for example charities, social enterprises or cooperatives. In contrast, the last group bundles a broad range of hybrid business models with an outspoken focus on social objectives.

The second column presents actors that focus on the meso level. The ones with clear economic objectives are e.g. business associations or lobbyists while those with balanced economic and social objectives comprise foundations with a specific focus or policy. Yet, those purely pursuing social objectives are investing in networks in the form of forums or community building.

The third column describes actors with a focus on the macro-level of which the ones focussing on economic goals are e.g. think tanks or international organisations like OECD or the International Monetary Fund. The ones pursuing both economic and social objectives are mainly business organisations, whereas actors at the macro level that have primarily social objectives in mind are mainly international NGOs.

	ACTORS WITH FOCUS ON THE MICRO-LEVEL **(SINGLE IMPACT)**	**ACTORS WITH FOCUS ON THE MESO-LEVEL** **(INSTITUTIONAL CHANGE)**	**ACTORS WITH FOCUS ON THE MACRO-LEVEL** **(SOCIAL CHANGE)**
FOCUS ON ECONOMIC OBJECTIVES	- Selective use of specific competences - CSR - Workplace Innovation	- Business Associations - Lobbyists - Regulative Boards	- Think Tanks - OECD - International Monetary Fund
BALANCED ECONOMIC & SOCIAL OBJECTIVES	- Social enterprises - Charities - Associations - Cooperatives	- Associations - Foundations with a specific focus - Policy	- Business Organisations -ZEWO – Central Office for Charitable Organisations
FOCUS ON SOCIAL OBJECTIVES	- Broad range of diverse actors with hybrid business models	- Platforms - Fora - Imitation - Community building	- World Social Forum - NGOs

Table 3. SIMPACT's actor-centred typology (own figure based on Rehfeld/Terstriep 2017, p.10)

The different societal levels are seen as a contribution to change processes taking place on the respective level. While actors with a focus on the micro-level are unlikely to initiate change processes that go beyond having a local or single impact, actors with a focus on the meso-level aim for changing the institutional landscape and actors with a focus on the macro-level even attempt to bring about broader social change (Rehfeld/Terstriep 2017). Nevertheless, similar to the two typologies revealed before, the different types of Social Innovation presented here do not represent independent entities. Rather by scaling up and out, social innovations with a single impact bridge their activities to the meso level, organised in multiple networks and forums (ibid).

3.4 Conclusion: Typologies in Social Innovation Research

The above presented typologies share the observation that social innovations take place at different societal levels. For example, BEPA's (2010) differentiation along the outcome dimension determines social innovations' focus on the micro, meso, or macro level. Similarly, TEPSIE's (2014) distinction between different social innovation activities implies distinct foci of the levels addressed: While new services and products usually tackle a social demand on the micro-level, new rules and regulations are implemented at a meso or macro level. Obviously, one of the axes of SIMPACT's typology assigns social innovations directly to a societal level and correlates this with either economic or social objectives. This highlights the general observation that Social Innovation relates to processes of social change taking place on different levels - acting in a continuum from economic and market oriented solutions up to explicitly social value related activities. Hence, Social Innovation activities are adapted to the level approached and make use of different growth strategies in order to spread the activity in question.

SI-DRIVE's theoretical and empirical framework builds on many of the insights provided by other classifications and ideal types of Social Innovation. In this sense, the key dimension objectives also follows the assumption that social innovations either address social demands, societal challenges or aim for social change. The global mapping addressed these and other variables identified by afore-presented typologies, as well. For examples, the Comparative Analysis (Howaldt et al. 2016a) analysed which level social innovations address and found that many innovations do not focus their activities on one but several levels.

While supporting BEPA's (2010) observations, the global mapping presents the limits of this distinction, highlighting the ideal type character. Hence, SI-DRIVE's vast database offers the opportunity of first classifying social innovations and then to develop ideal types on basis of the empirically-led classifications. As the Comparative Analysis as well as the in-depth case studies reveal, social innovations also take a variety of different forms, containing different degrees of novelty. The typology thus builds upon the (social) innovation types identified in literature but tailors them to the SI-DRIVE's empirical findings.

4. Insights from the Global Mapping

The mapping results reaffirm the assumption that the concept of Social Innovation cannot be limited to one focus, be it social entrepreneurship or social economy (Howaldt et al. 2016b), and demonstrates that widening the perspective is crucial for understanding the concept in its entirety (Howaldt et al. 2016c). Given this broad concept, it comes by no surprise that a wide range of actors

from all societal sectors (civil society, public and private sector) is involved in the mapped social innovation initiatives. The global mapping clearly shows that the majority of mapped initiatives has been developed and implemented in a social network in which more than one sector is involved: Almost half of the initiatives constitute an involvement of *all three sectors* in a practice field[3] (45%); only 23% are related to just one sector. Combinations of two of the three sectors are found in 32% of the initiatives: public sector and civil society (12%), public and private sector (10%), private sector and civil society (10%). Hence, cross-sectoral collaboration of the public sector, civil society and the private sector plays a key role, and becomes even more important on the practice fields level. To overcome societal challenges cross-sector collaboration is crucial, actively involving public, economic and civil society partners - including active user or beneficiary involvement (as SI-DRIVE reveals in almost half of the social innovation initiatives). This shows that most of the initiatives develop new alliances, guarantee cross-sector fertilization and mobilize civil society (this is also proved by the high number of volunteers supporting the initiatives). Alongside with the growing importance of Social Innovation and the growing variety of actors involved within the innovation process we perceive a growing awareness of the complexity of innovation processes. In this regard, the question arises "which governance structures support the growth of social innovations that are set as combined actions" (Scopetta et al. 2014, p. 92). Yet, most of the SI-DRIVE Policy Field Reports confirm that the societal and governance systems, in which the social innovations are embedded, are complex and the problems addressed are deeply rooted in established practices and institutions.

5. Introducing the Typology: Social Change through System Innovation

Since SI-DRIVE is looking at the relationship between Social Innovation and social change, the ultimate pre-requisite for a SI-DRIVE typology of Social Innovation is to classify the different types of Social Innovation in relation to their approach to social change. Based on the conceptual framework (definition of Social Innovation, key dimensions, mechanisms of social change), the different contexts (regional-cultural, political, national, policy fields), as well as the empirical results of mapping 1 and 2, we will present a pre-typology classifications and one potential typology.

However, as stated above, social innovation initiatives and projects are diverse and complex in their aims and effects. Like any innovation, social innovations too, regardless of their protagonists' intentions, are in principle ambivalent in their effects, and new social practices are not per se automatically the "right" response to the major social challenges and the normative points of

[3] The practice field describes an approach which combines similar initiatives (micro level) under a common topic. This classification scheme will be described in more depth in section 5.1.

reference and goals associated with social transformation processes. With their orientation to the solution of social and ecological problems that cannot be sufficiently dealt with via traditional forms of economic and government activity, many social innovations - to a certain extent - carry out repair functions without fundamentally changing the prevailing practices and associated institutional structure. Moreover, many projects and initiatives do not develop the hoped-for impact on society, instead often are remaining limited to the local, experimental level (see Howaldt et al. 2016a, p. 153). Other initiatives adopt a wider perspective, and orientate their actions towards the major societal challenges and the establishment of related new forms of cooperation between different actors and across sectors, combined with a redefinition of the relationship between social and economic value.

Only a few initiatives have an explicitly transformative aim in the sense that they want to contribute to a fundamental change in practice formation and the institutional structure of society (Howaldt et al. 2016a, pp. 42; BEPA 2010, pp. 26). Given this, and the fact that the long-term impacts on existing practices and institutions have hardly been examined so far, the question of the relationship between social innovations and transformative change has now also become a key question for Social Innovation research (Howaldt et al. 2015; Nicholls et al. 2015; McGowan/Westley 2015). Yet, looking at the Social Innovation typologies presented, it becomes apparent that they assume processes of social change to take place when initiatives focus their activities on the macro level.

The first considerations laid out in the following section can be regarded as the first steps towards a complexity reducing typology to understand which social innovations are more fruitful for social change, and which are not. Given the diversity of social innovation initiatives all over the world, the aim is not to develop one central all-encompassing typology but to lay the ground for one that is able to answer this specific question.

5.1 Practice Fields: A Pre-typology Classification

In the following, a *pre-typology classifications* approach for grouping SI-DRIVE's social innovations is presented. Since it is not based on ideal types, but on classifying cases based on certain rules, it is understood as a classification. Due to its potential for further analysis to explore the connection between Social Innovation and social change, it has to be considered pre-typological, because of the possibility to develop different typologies based on this grouping approach.

The initial basis for typologies or better a first classification approach itself is the definition of practices fields as a meso level combining similar initiatives (micro level) under a common topic and related to specific policy fields (macro level). While an initiative is a single and concrete

implementation of a solution to respond to social demands, societal challenges or systemic change (e.g. Muhammed Yunus's Grameen Bank which lends micro-credits to poor farmers for improving their economic condition), a practice field expresses general characteristics common to similar projects (e.g. micro-credit systems). Only by taking the broader perspective of a practice field, we will be able to develop deeper insights into upcoming trends and emerging areas for social innovations and their impact on social change (Howaldt et al. 2016a). . The practice field approach allows to analyse the processes of diffusion beyond the micro-level of single small scale social innovation case studies and a data collection at a more societal level, where wider user groups and a certain societal impact has been reached and where moments of societal change are observable. At the same time, the approach allows to study the interplay between micro or small scale developments and their merger at the macro-level.

Looking at the social innovations' context and activities, SI-DRIVE has assigned the single initiatives to the seven policy fields and grouped similar initiatives in practice fields. All in all, about 90 practice fields have been defined on the basis of the theoretical frame and the definition of Social Innovation (see Figure 2 with the main practice fields representing two third of the mapped 1,005 cases). To classify the different initiatives, the practice fields mainly looked at the outcome variable. In that sense, initiatives that e.g. developed similar products or initiated similar processes were grouped in the same practice field. The defined practice fields are preliminary and have to be seen as a basis for further development, especially concerning a higher redundancy and better distinction from each other. This clarification and improved classification has to consider also the cross-policy field relevance of a significant number of practice fields (Howaldt et al. 2016b).

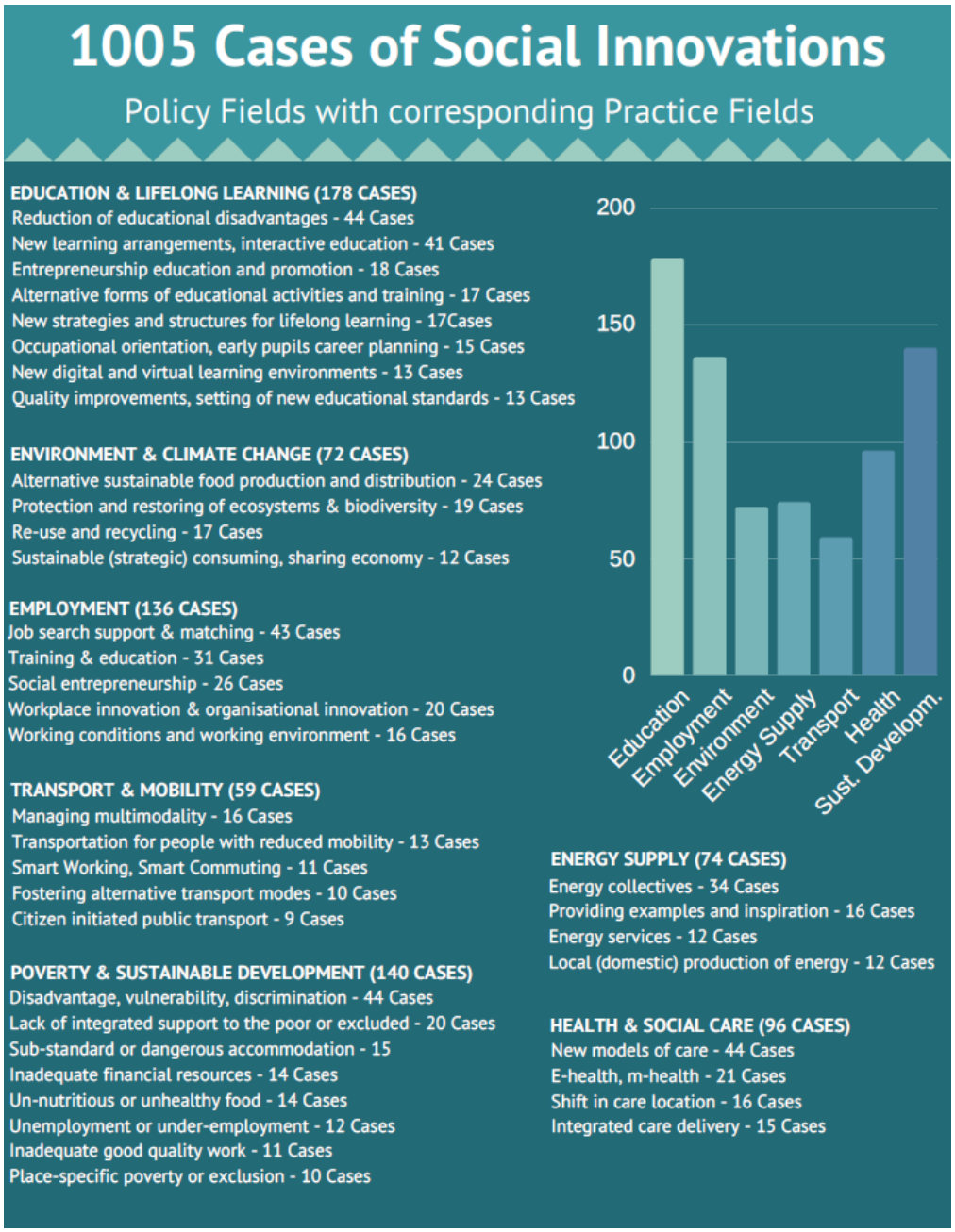

Figure 1. Social Innovations were assigned to seven Policy Fields and grouped in corresponding Practice Fields

5.2 Social Innovations' Interaction with the System

The SI-DRIVE results reveal that the initiative's overarching (world) regional, national, political and cultural context has to be taken into consideration. They further emphasize the importance of often complex alliances of actors (see section 4). This background finds its replication in condensed formal systems (e.g. education, health, transport, energy, employment, environment systems) characterising the range and possibilities of social innovations to develop, scale, diffuse and institutionalise, and in the end foster processes of social change. Looking at the empirical results (especially of the comparative analysis (Howaldt et al. 2016a) and the in-depth case studies (Ecker et

al. 2017)), it becomes apparent that there are four different ways in which social innovations interact with the (policy field related) systems it is operating in and using it as a lever for social change:

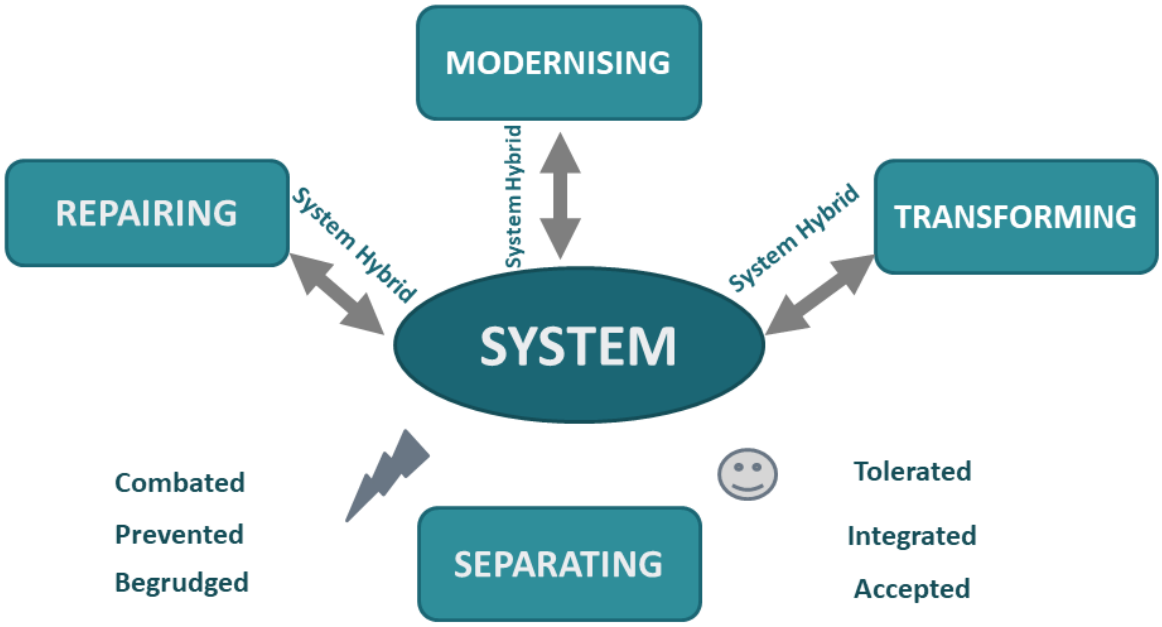

Figure 3. Social Innovation and its Interaction with the Formal System

The proposed typology (Rabadjieva et al. 2017) comprises the four ideal types **repairing**, **modernising**, **transforming** and **separating** which can take different forms of interaction with or distancing itself from the system. This typology sees social change as interplay between the social innovation at hand and the formal condensed system with its institutions, formal actors and routinized practices at hand. Thus, to grasp social change it is important to look at the system's reaction when dealing with a social innovation aka a new social practice. In the first type "**transforming"** social innovations change the system radically. **Transforming** the system through social innovation is often a kind of hidden agenda in the initiatives but not seen as realistic or actively

Example: Transforming Social Innovation

Agrosolidarity has innovated in community capacity building strategies, with direct participation from rural agriculture families. The organisational structure is built on concentric circles formed by families, associative groups organised by product, process or services, associative figures, sectionals organised by micro-regions, regional Federations, and finally the Agrosolidarity National Confederation.

done. However, there are some examples like *Uber* or *Airbnb* but also micro-financing and car sharing which affect the existing system with significant market impact. To transform a system a certain critical mass has to be reached, the practice field should have led to a lot of imitation, and imitation streams led to new social practices on a macro level, leading to social change.

In the second type "**modernising"**, social innovations are leaving the system's core identity untouched. **Modernising** the system is looking at the existing structures and is intending to improve the system. This type includes the improvement and supplement for instance of the existing health, education and employment system by digital solutions. For example, distant telemedicine like *Smart Elderly Care* (China) or *Care* (Russia) allow for the efficient and effective provision of home care for the elderly providing a digital service which older people can use to contact medical professionals in the event of emergency or when they need medical information. Another good example for modernising an existing system (i.e. education) across separated responsibilities is setting up new overarching structures for lifelong learning (*HESSENCAMPUS*, Germany) across adult and vocational schools, training institutions and different public responsibilities to manage existing institutions from a learner's perspective (Schröder et al. 2017).

Example: Modernising Social Innovations

Especially, in the field of environment and energy there are a lot of cases that modernise the existing system with cross-sectoral and cross-responsibility solutions. The project ***dynaklim*** set up a regional network spanning across several administrative institutions, civil society organisations and local businesses to design a roadmap empowering the Ruhr Region (Germany) and its actors to improve climate change adaptation.

The third type of social innovations, called "**repairing",** does not question the system as such either but repairs single subunits. **Repairing** the system is the main-represented type in the SI-DRIVE mapping, often carried out by grassroots initiatives and focusing on specific system gaps or failures and vulnerable groups. For instance in the education sector there are several groups, which are falling out of the system and where civil actors take care about: *Lernhaus* (Austria) is offering education measures for adult migrants because compulsory schooling is not formally responsible. Other activities focus on measures for structurally disadvantaged children (with a migrant background) like *Tausche Bildung für Wohnen* (Exchange Education for Habitation) in Germany. *Abuelas Cuentacuentos* (Storytelling Grandmothers) is an example from Argentina tackling insufficient reading abilities of boys and girls with the help of senior citizen volunteers

(grandmothers), in a programme that has expanded inter-generational dialogue and gives a leading role to elder people. In the policy field of Employment *Mama Works* (Russia) is supporting young mothers in improving their labour market competencies through training, job search and even creating their own business. *LIFETool* (Austria) demonstrates the use of computer based technology to support people with physical or mental disabilities, particularly such which make speech difficult.

Example: Repairing Social Innovations

Integrated Social Services (Servicios Sociales Integrados) is an initiative founded by about 300 women, working irregularly (without a labour contract or social security). The cooperative creates self-employment opportunities to provide social services to elderly people at their homes: a high quality service for elderly people that rather continue living at their homes and at the same time establishing a stable and prestigious job for the women. The initiative helps women to get out of the informal economy into a more formal and legal part of the labour market.

These first three types of social innovations act within or outside the system either transforming, modernising, or repairing it internally or externally. These types of Social Innovation could also appear as a hybrid form: Either the Social Innovation is initiated outside of the system and merges into it or it can be initiated by the system itself with institutionalisation taking place outside of it.

The fourth type of Social Innovation, "**separating",** acts completely isolated from the system. On the one hand, this can take the form of peaceful co-existence, i.e. the social innovation is tolerated or even accepted or (partly) integrated (becoming - mainly in a later stage - part of the system in a hybrid form). On the other hand, a social innovation can antagonise the system at hand, in result being combatted by it, prevented from the beginning or begrudged. However, the potential shift from formerly separated social innovations to system hybrids shows that social innovations are by no means stable, but dynamic, in principle changing their character and type during the innovation process, based on the acceptance, activities and attitude of the relevant system players. In that sense, different actors of the system or

Example:
Separating Social Innovations – Tolerated

Friluftsfrämjandet (Outdoor Association, Sweden) is an alternative education draft operating outside of formal education. It organises a wide array of outdoor activities based on local clubs for local communities with the purpose to learn about nature and team building by doing things together across age, religion, political opinion, etc.

in general actors taking part in the social innovation at hand might influence the relationship between a social innovation and the system. This can also lead to path dependencies. For example, in a system that is coined by strict regulations which do not allow any other practices to enter a social innovation will remain separated from it. System **separating** initiatives, e.g. Repair Cafes like the *Repair and Service Centre* (*RUSZ*) in Austria, are setting up an own separate service and a market element (in peaceful co-existence to the big electronic trade companies). *She Taxi* (India) is offering safe travel options for women because of apparent attacks on women in public and other means of transportation. Antagonistic examples could be found in political movements like *Anonymous* and the *Arab Spring*, but also in extreme types of self-supplies in energy und nutrition (dropout cooperatives like rural communes) based on antagonistic lifestyles to the mainstream. The shared economy might also be seen as an example, setting up an antagonistic model of consuming.

6. Conclusion

Because of the high process dynamics and the different development stages, it is evident that the same social innovation initiative might be related to different types in the course of its development. The typology described is one example that will help to define the relation of social innovations to the existing system and their strategies based on the chosen clarification. System (in)compatibility and relation is one of the main success or failure factors for the development, diffusion and institutionalisation of social innovation initiatives. Therefore, it is relevant to have a clear position and relation to the existing system structures. To unfold the potential of Social Innovation it is of high relevance to define and require leeway to act in or outside the formal system and its institutions, taking up social demands not covered by the system actors. However, the typology described here only presents one of the possible typologies. Social innovations are diverse in terms of the actors involved, their level of maturity, their intended outcome, and their sectoral alliances. All these aspects provide possible entry points for other typologies aiming to answer different research questions as the one of social change posed here. Ideal types, thus, might not only be constructed in relation to their interaction with the formal system, but can also describe the process dynamics or describe their role in the social innovation ecosystem (see Rabadjieva et al. 2017).

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