

Exploring the Innovative Practice of Social Innovations in Non-profit Organizations: An Analytical Framework

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Abstract—There are only vague ideas on what social innovations actually are, how they evolve and how they work in comparison to technical understandings of innovation management. In a comparative analysis of two case studies of two non-profit organizations advancing social innovation in Germany we investigate their innovative practice by reconstructing reflexive practices and their potential to disrupt societal routines. The first case study examines a nonprofit organization working with online-maps for people with special needs (Berlin, Germany), and the second study investigates a social non-profit project focusing on urban redevelopment (Chemnitz, Germany). We aim to identify synergetic effects from the two cases in order to generate a new approach for the understanding of social innovation. Building on the theory of path dependency and the concept of institutional reflexivity this contribution proposes three consecutive conceptual frameworks to investigate the characteristics and potential drivers of social innovation.

I. INTRODUCTION

Within the currently still technology-focused innovation research, social innovations often appear merely as a side issue, e.g. as basis, by-product or consequence of technological innovations. Moreover, innovation management scholars were for a long time disputing the conceptualization of social innovations as separate phenomena for theorizing and empirical investigation ([30], [12]). This stands in contrast to the increasing attention, social innovations are gaining a foothold in public as well as scholarly debates. There are only vague ideas on what social innovations actually are [23], how they evolve and how they work in comparison to classical understandings of innovation management.

However, the growing attention on social innovation can also be interpreted as an expression of an increasing economic interest in the commodification of social change [26]. The current subsumption of social change under the notion of ‘innovation’ as economic term for newness under the premise of its market diffusion might also give a hint on the prevalent reorganization of the social sector on the basis of for-profit principles of corporate organizations [21]. Challenging the rather classical perspective of business rationality on social innovations we suggest an analytical frame from a social science perspective as we basically conceptualize innovations as social phenomenon.

Resulting from this premise our contribution is of conceptual nature aiming to provide an alternative understanding of social innovation. We aim to give an answer to the basic conceptual questions for the analysis of social

innovations. First, we address the question when a social practice can actually be considered as a social innovation. Second, we ask how we can conceptualize which social paths are broken by social innovations. And third, we question which reflexive practices an organization uses in order to generate or modify new paths which we consider as social innovations.

In order to answer these questions we chose three consecutive analytical frameworks that are applied to our empirical data. First, we build on basic characteristics of social innovation retrieved from existing innovation related literature, second, we use the theory of path dependency and third, the concept of institutional reflexivity is applied as an analytical framework to investigate the characteristics of potential drivers of social innovation. While applying these analytical frameworks we compare two case studies of two non-profit organizations advancing social innovation in Germany. The first case study examines a nonprofit organization working with online-maps for people with special needs (Berlin, Germany) and the second study investigates a social non-profit project focusing on urban redevelopment (Chemnitz, Germany). We aim to identify synergetic effects from the two cases in order to generate a new approach for the understanding of social innovation. Moreover, we reconstruct reflexive practices and their potential to disrupt societal routines in order to understand the specific characteristics of social innovation [26].

Our contribution will first highlight the characteristics of social innovation in comparison to understandings of technical innovations. Then the empirical study will be introduced by describing the methodological approach and the chosen cases. We will explain and apply the analytical frameworks to these cases in the following section and finally conclude in the last section with a discussion of the first insights we gained from the analysis.

II. THREE ANALYTICAL FRAMEWORKS FOR SOCIAL INNOVATION

A. Social vs. Technological Innovation

In the following section, we will outline the differences between technical and social innovations within the academic discourse (see Table 1) as an analytical framework. First, we will look at the dimensions: outcome and classification of the outcome. According to Howaldt & Schwarz [18], social innovation is aimed to change or create social practices [12], while technological innovations mainly produce technical artifacts [4]. Thus in terms of value creation from a normative

perspective [30], social innovations deliver an added value which can be considered as social benefit ([25], [17]). They are aimed at a broad social use which exceeds technological innovations primarily prioritizing individual benefits and commercial success as a key driver [4]. In reference to Conger [6], social innovations are called social innovation only after its diffusion. Here the social adoption and application of the new social practice is decisive, which finally leads to institutionalization and transformation into a social fact [7]. Different diffusion paths are possible, most of which are closely interlinked: on the market, by technological infrastructure [7], by social networks, by social movements, by government regulations and subsidies, by various ways of communication and cooperation, by the work of charismatic personalities [24], by social Entrepreneurship, by living experience, by altered capacity building [21] as well as in intra- and inter-organizational processes. In contrast, the diffusion paths of technological innovations are less linked, and there are often only a few available [18]. Because of their isolation in a confined space and societal acceptance in specific social actions, social innovations are much more context-dependent than technological ([18], p. 93).

TABLE 1: COMPARISON BETWEEN SOCIAL AND TECHNOLOGICAL INNOVATION IN REFERENCE TO [15]

Characteristic	Social Innovations	Technological Innovations
Outcome	altered or new social practices	technical artifacts
Resource classification of the outcome	Mostly intangible	mostly tangible
Intention (from a normative point of view)	wider social application	benefit for the individual, firms; commercial success as a key driver
Diffusion Paths	Closely interlinked	Less linked and mostly only a few
Context	mainly dependent on context	less dependent

In the following we will refer to the definition of ([18], p. 89):

“The new does not take place in the medium of technical artifacts, but at the level of social practices. A social innovation is an intentional, purposeful reconfiguration of social practices in certain fields of activity or social contexts, with the aim to solve problems or needs better and to satisfy, than is possible on the basis of established practice.”

In summary, we consider a social innovation as a collective phenomenon encompassing the change of social practices for the benefit of society as a starting point for our empirical investigation. To do so, we will introduce three frameworks for understanding social innovations from a social scientist paradigm that encompasses social innovation as a phenomenon of changed social practices. As social innovation occurs at the level of social practice we define it (in reference to [16], [13], [25]) as a new combination or new

configuration of social practices driven by actors in organizations under the premise of better answering needs and problems than is possible on the basis of already established practices ([15], p. 47). The applied definition combines two crucial aspects: the Schumpeterian definition of innovation with a descriptive dimension addressing the subject of social innovations: social practices. The latter is the starting point for the next section.

B. Path Dependency of Social Innovations

In the following, we will focus on the new social practices (shown in Table 1 and Table 2) by interpreting them in the light of the theoretical concept of path dependency. Thereby we want to explain how and why routines are broken through social innovations. This allows an investigation on the potential of social innovation to disrupt societal routines.

We associate with the path dependency theorem as sustained stabilization - a consideration is taken as a basis by numerous authors. The underlying assumption of path dependence theories is characterized by the idea of a lock-in of a once found solution [3]. Nevertheless, path-dependent processes are characterized by change and finiteness of a path. The range of processes that are considered to be path dependent is large in scientific discourse. Different patterns of thought exist: technology-related [1], institution-related [25] and approaches that are oriented to the social science [29]. The latter is attributed to the great relevance of path dependencies in non-economic contexts; this exemplifies our focus. The relevance is reasonable by a high significance of collective action, high density of institutions, asymmetrical power relationships and inherent complexity [29]. Mahoney expanded the concept of Pierson and distinguishes between self-reinforcing paths and reactive sequences within paths. We focus on the reasons of self-reinforcing as outlined by Mahoney [19] and path-dependent processes: power, functionality, legitimacy and utilitarian reasons. Moreover, Mahoney ([19], pp. 516) calls typical reasons for the further branching or resolution of a path; accordingly power-based path dependencies can be change by the deformation or reshaping of power elites. Here fundamental change can be described by mechanisms of institutional layering and institutional conversion [32]. The latter mechanism outlined changes of actor constellations that can question the meaning of a routine. The breaking of legitimacy based paths succeeds as a fundamental change of values and norms. Generational change, updates of action patterns or uncovering interpretations can trigger these changes ([3], p. 17). Function-based paths can be broken by external shocks and dysfunctions ([19], p. 517), whereas uncertainty reduction and compliance are drivers for utilitarian paths. Such paths are aimed at guiding principles. Consequently, deviations of the path can be caused by a questioning of the ongoing guiding principles ([3], p. 18). This can be promoted by crisis and innovations.

In the following we address the breakthrough of these paths, which disrupt societal routines. We will conceptualize

this disruption with the theory of institutional reflexivity. Accordingly, we outline specific instruments (called reflexive practice) that promote the breakthrough.

C. Reflexive Practices of Social Innovations

Thirdly, we use the concept of institutional reflexivity as an analytical framework to analyze the reflexive practices of the two cases of social innovation. The concept seems especially applicable since it also includes the investigation of non-profit organizations [20]. The origin of the theory was the examination of the dilemma between routines and innovation where path dependencies in organizations and their revisions of these dependencies displayed a central role [14]. The concept conflates the various meanings of reflexivity: self-reference, reflecting on side effects as well as the dependency of knowledge. Thereby the focus is on the reflexive handling of knowledge and the organizational state of not knowing. Thus, innovativeness is described as an institutional arrangement of reflexive practices and regulations that are evaluated by their degree of self-reflection, evaluation of side-effects and conformity with the category of knowledge [20]. The dimensions are then [14]:

- the institutionalization of self-observation and self-critic in the form of question heuristics and monitoring,
- the practice of drafting alternatives for the present and future with parallel development teams, the application of creativity techniques and think tanks,
- the communicative relations to external references where reporting practices and reputation studies remain the central focus,
- the open evaluation of consequences of action in the form of evaluations and surveys of potential users,
- the systematic use of observations in the form of employing external consultants, cooperation with critics, roundtables and reciprocal hospitations.

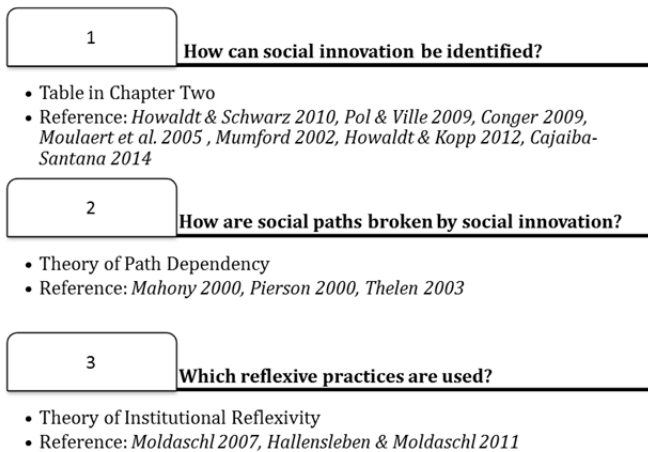


Figure 1: Procedure for the analysis

The following section of the paper will investigate the two outlined empirical cases under the lens of three analytical

frameworks (see in Figure 1) with the aim of better understanding social innovations.

III. METHODOLOGICAL APPROACH AND CASE SETTINGS

In order to first apply the analytical frameworks to empirical data, we compare two cases. In accordance with the descriptive and explorative objective of the study, a qualitative research methodology was used. We follow a case study strategy which is concerned with the complexity and particular nature of the cases in question ([4], p. 59) and a theoretical-explanative focus. Moreover, we chose a comparative design with the possibility to distinguish characteristics of two cases to allow theoretical reflections about contrasting findings ([4], p. 67). The findings can only be preliminary at this stage, as we have only conducted a problem centered interview, a participant observation and investigated 24 documents and two videos. The documents were created from a period of 01/07/08 to 13/01/16. The cases will be described in the following paragraphs.

Case 1: Urban development project

We will draw findings from a case study of social non-profit project focusing on urban development in Chemnitz, a city in Saxony, Germany. The *urban development project* is located in a district with a lot of historic Wilhelminian buildings. The district is funded by the European Regional Development Fund (ERDF) which aims to remove existing development gaps, social and economic stabilization of the areas as well positively influencing public image. The *urban development project* group describes the district as a social, economic and cultural melting pot as well as being a socially deprived area. The idea to restore one of the Wilhelminian buildings has existed for several years, but the initiative has gained system momentum only in the last two years. The *urban development project* intends to save a corner house, which among other things was formerly a bakery. In this context, the *urban development project* members are trying to implement different ideas: These are the integration of an aquaponics facility, barrier-free living, doctors' consulting hours, multigenerational housing, an organic grocery store, beekeeping, a rehabilitation concept for young offenders, a soup kitchen, therapist' consulting hours, co-working spaces and urban farming. The basic intention (restore the building) has been an active project for several years, the different *urban development project* ideas for about two years. The house was bought in 2012 and was sanitized by a socio-educational support services company in the context of an aid project. On 14/07/14, the first project presentation took place and three presentations followed.

Case 2: Social Association

Secondly, we will draw on a case study of a social non-profit organization involved in social projects focusing on persons with disabilities. Eight part-time practitioners and a network of various volunteers have been working for 10

years with the mission to make people become aware of social problems of persons with disabilities and encourage them to engage in social action. In their self-concept, the *Social Association* considers themselves as cooperative partner and contact person in terms of social innovation. One of their innovative projects is an interactive online map for wheelchair access to public spaces with currently 600,000 tagged locations worldwide and about 300 new locations being added every day. The wheel map helps people using wheelchairs or wheeled walkers to more easily plan their days. Another innovative project is engaged in supporting media with information on reporting on people with disabilities. They set up a website for journalists who want to report on people with disabilities and aim at a journalistic style that is aware of diversity and inclusion.

IV. ANALYSIS OF THE CASES

A. Analytical Framework 1: Characteristics of social innovation

The first analytical framework refers to the basic characteristics of social innovation as shown in section 2. The result of applying the analytical framework is shown in Table 2.

TABLE 2: ANALYSIS OF THE CASES IN TERMS OF SOCIAL INNOVATION

Characteristic of Social Innovation	Case 1	Case 2
Outcome: <i>altered or new social practices</i>	Altered social practice for old, abandoned houses	New social practice in reference to how media focuses on people with disabilities, altered social practice of making the access of people with disabilities public
Resource classification of the outcome: <i>Intangible</i>	Tangible (the aquaponics system), intangible (the multiple use concept)	Intangible (discourse and chanced practice, online map) and tangible (publication)
Intention: <i>wider social application</i>	Within the district	Online platform is worldwide
Attribution as innovation: <i>after Diffusion</i>	Not yet	World summit award for an innovative application; 47,300 downloads; 50,000 site visitors per month
Diffusion Paths: <i>closely interlinked</i>	Min. 4 diffusion path	Min. 4 diffusion path
Context: <i>greatly depending on the context</i>	One house in a specific district	People with disabilities in focus

According to our analysis, there is a strong reference to a context in both cases. In case 1 an abandoned house in a particularly neglected district is considered. In case 2 people with disabilities are addressed: on the one hand the mobility of people is put into focus and on the other hand the media

reporting on them. The diffusion of new ideas by the urban development group is characterized by the charismatic personality of the owner, new supply and utilization concepts, social movements in the district as well as cooperation projects with other associations. Moreover, the *Social Association* in case 2 uses a technological infrastructure (such as social media and online platforms). In particular, the digital platform for people with mobility impairments was awarded with the World Summit Award (the summit addresses innovative applications). Accordingly, we see an external attribution as an innovation. Now, we will take a look at the diffusion dimension from case 1. Here, it seems there is no completed diffusion. According to the classification in section 2, we cannot attribute a social innovation at this time. Nevertheless, we consider the *urban development project* as a broad-based social application in the district through the sale of organic products, coworking spaces, multigenerational house, and rehabilitation of young offenders. By building an aquaponics system, it is difficult for us to classify the result as intangible. However, the *urban development project* group with multiple use concepts for a crumbling house aims at a new practice. In this case, we can observe both a new social practice and tangible outcomes. This also applies to the second case since the online platform and publications for journalists also serve as tangible artifacts to be used by the public. Due to the use of an open digital platform and the open access to the websites, the *Social Association* achieved a wide social application.

In summary, we identify the project of the *social association* as social innovation. Since the idea of the *urban development project* have not yet been implemented or diffused, we will describe the process as a social innovation.

B. Analytical Framework 2: Path dependency of social innovation

We first make use of the path dependency theory and will therefore discuss three questions:

- (1) Which paths target the cases?
- (2) How the subjects reach a branch of the path?
- (3) What is the intention pursued by the subjects with the path?

Applying the analytical framework of path dependency to the two cases delivers the following insights and illustrated in Table 3.

Case 1: The *urban development project* group focuses on the urban re-development of abandoned houses and the self-image of the district. They are faced with power-related and function-related path dependencies. The bureaucratic thinking in the town is determined by the makeshift maintenance of crumbling houses. However, this leads to a deterioration and damage of the neighboring homes. The dysfunctionality of the path triggers the intervention of the *urban development project* group, and thus the change in ownership of the house. We interpret this as the mechanism of institutional conversion as described above and as the end of the path by the purchase

of the house by the *urban development project* group. The idea of house purchase leads to a questioning of the urban routine and the makeshift renovation of historic buildings.

The self-reinforcing image of the district (as a socially deprived area) is reasonable by action-guiding values and norms. The *urban development project* group is trying to change this through the open re-thinking of new possibilities and the actualization of action patterns. The group attempted this by implementing a rehabilitation concept for young offenders, multigenerational housing and an organic grocery store. Thus we see the intention of the legitimacy-based path to branch.

Case 2: The *Social Association* wants to sensitize people to social circumstances and focuses on the needs of people with disabilities. Here we have two Examples:

- "We [...] promote social rethinking"
- "We do not want to impose any dogmas [...], but awareness, give ideas and suggestions"

So their projects aim at path dependencies that are based on legitimacy and uncertainty reduction. The *Social Association* focuses on awareness of inequality, for example in terms of access to buildings, as well as questioning journalistic language used when reporting on people with disabilities. Thus, new social practices can be emerging.

C. Analytical Framework 3: Reflexive practices

Hence, we analyze the cases regarding their reflexive practices as in Table 4. We expect an insight into the innovativeness of the *Social Association* and the *urban development project group*. Also, we use the concept to look

at how organizations deal with social paths and their own state of not knowing. We want to address the question: How do social innovations work in order to break up the paths? Which reflexive practices can be observed?

As can be seen from the Table 4, the two cases show an immense amount of reflexive practices in both cases. Moreover, we found two very open organizations. In the area "state of not knowing" we consider the organizations very reflexive. In both cases consultations were called for areas in which the *social association* and the *urban development project* had no knowledge. The *urban development project* had regular exchange with interested persons and discovered their main problem only with a consulting firm. Thus, the problem is not the renovated building but the lack of demand renovated houses. Then, the *urban development project* group dealt with a multifunctional use concept and the appreciation of the district. In addition, the *urban development project* group decided to build an indoor aquaponics system. However, they were aware of their lack of expertise and cooperated with a special club. They also recruited designers and architects for the renovation and implementation of utilization concepts. Likewise, expertise within the *social association* was compensated through the integration of computer scientists for the Map and McKinsey for organizational questions. In particular, failure cultures and error cultures has been implemented directly in both cases: lesson learned (*social association*) and pilot experiments (*urban development project*). Moreover, both organizations intend to provide feedback via social media and involve them in organizational processes.

TABLE 3: ANALYSIS OF THE CASES IN TERMS OF PATH DEPENDENCY IN REFERENCE TO [19]

Characteristic of Path-Breaking	Case 1	Case 2
Power-based Paths		
Institutional layering		
Institutional conversion	Makeshift maintenance of crumbling houses through the → Change in the ownership of the house	
Legitimacy-based Paths		
Generational change		
Updates of action patterns	Self-reinforcing image of the district as socially deprived area → rehabilitation concept for young offenders, multigenerational housing, organic grocery store	
Uncovering interpretations		sensitize people to social circumstances → questioning journalistic language used when reporting on people with disabilities
Function-based paths		
Dysfunctionality	Makeshift maintenance of crumbling houses → deterioration and damage of the neighboring houses	
External shocks		
Utilitarian Paths		
Crisis		
Innovations		focuses on the needs of people with disabilities → interactive online map for wheelchair access to public spaces with currently 600,000 tagged locations worldwide

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TABLE 4: USE OF REFLEXIVE PRACTICES BY CASE 1 AND 2 IN REFERENCE TO [20] AND [14]

Dimension	Case 1		Case 2	
	Practices	Characteristics	Practices	Characteristics
Institutionalization of self-observation and self-criticism	Workshops	There have been at least 3 workshops carried out with different focus.	Association summit	Every 3-4 months, each member reports on his/her field, collective problem solving, practitioners and volunteers
	Visualization and distribution of activities	There are tasks - for example: energy management, benefit concerts, building applications, press (illustrated in a chart)	Meeting on the organization's communication	Monthly, review, assessment and outlook with all members working on communication
	Calculation of profits	In progress	Spontaneous discussion rounds	Position finding on critical topics, spontaneously possible with five practitioners working in one office, "we then simply take this space"
The systematic use of observation	Project presentation	Since 2014, four presentations have been done for interested persons. The interested persons are invited to take part, think and provide room for vocalizing comments.	Consulting by external business consultancy (McKinsey)	Three month voluntary consulting by two McKinsey-consultants
	Commitment of boundary spanners	Cooperation with designers and artists as well as aquaponics clubs	Informal cooperation with nonprofit consultancy	Special website
	Use of extern consultants	These are, among others, financial advisors, social-entrepreneurial foundations, architectural consultant		
Communicative respect of foreign references	Public votes	For example, project name and logo	Final reports for funding institutions	3-4 reports a year, documentation of project management and results
	Social Media comments	Are evaluated and partly included in the agenda.	Online user feedback on projects	Gathering of user voice on wheelmap.org
	Visit similar projects	especially of aquaponics and urban farming equipment – here: Berlin, Bautzen, Basel		
Open evaluation of consequences	Tests / Pilot Experiments	Test system for fish farming and aquaponics	Lesson learned	"What did we learn, when something didn't work out?"; on request of project partners or members dissatisfaction
			Jour fixe	"this micro reflexion once a week helps us a lot to somehow take countermeasures", practitioners only, 30-60 min
Draft of alternative presents	Brainstorming	Sitting together in the building, in order to develop ideas		

In summary, we describe the characteristic innovativeness of social innovation as an institutional arrangement of reflexive practices for handling the organizational state of not knowing - specifically cooperation, counseling and social media.

V. DISCUSSION AND CONCLUSION

Applying the three analytical frameworks, we are able to make several statements on the analytical strengths of each framework and further develop the concept of social innovation. The first analytical framework referring to the different characteristics of social and technological innovation can be used to identify certain organized social practices as social innovation. We identified two social innovations as a new social practice: *Urban development project* was considered a social innovation because of the idea to integrate an aquaponics system in the corner house and the closely interlinked diffusion paths. *Social Association* proved to be a social innovation due to their new social practice in online-mapping barrier-free building access and a

new diversity-related approach to journalistic writing about people with disabilities.

The second heuristic referring to the theory of path dependency can analyze which routines the social innovations intend to break. In our first case these were power-related and legitimacy-related paths, which were broken by the purchase of the house and its alternative uses. The *social association* is focused on legitimation-based and utilitarian paths. They intend to break the path through education and awareness.

Finally, the third analytical framework of reflexive practices can show which daily organizational practices are used in order to generate or modify new paths and thus enable innovative practices. We reconstructed several reflexive practices for both cases and showed reflexive institutional arrangements as helping to break up existing paths.

Drawing from this comparing analysis of both cases, we can also highlight some preliminary findings that we suggest to develop further in future research. First of all, in both cases the social innovations were based on a huge set of different reflexive practices; and even more, they were used implicitly.

Future studies could examine the meaning of the application of reflexive practices. Furthermore, the risk of recursive loops could be as a focus that might prevent social innovations.

Moreover, as shown by the type of reflexive practices as being both internal and external, both cases seemed to be well aware of the boundaries of their own knowledge. The urge to gain external knowledge due to missing expertise appears to lead to a highly cooperative structure of the organizations and their network. Technological artifacts such as social media platforms further support this cooperative structure. Future studies could examine the structure and confidence within the cooperation as well as the knowledge transfer in more detail. Similarly, the competence development of involved individuals could be considered.

In addition, we have listed only static frameworks. An empirical study of the dynamics and processes within social innovation could be necessary for further research. We think findings could be obtained in this field with the inclusion of a learning theory that is based on the activity theory ([10], [9]). Through its application it is possible that specific statements could be made for the development of social innovations, individual implications and their beginning.

We focused on the consideration of multiple dimensions of social innovations and neglected the direct examination of the social practices. Further analysis using a theory of social practices would be possible [31].

Finally, in comparison to technological innovations, it was an explicit mission of the social practices in both cases to break the already existing dissatisfying paths. As Mulgan states in his theory of social innovation, motivations for social innovation will usually arise from tensions and contradictions as well as dissatisfaction [23]. This was prevalent in both cases. Dissatisfaction with the urban approach of leaving abandoned houses in the first case, as well as dissatisfaction with the approach of journalists addressing people with disabilities and the dissatisfying barrier-free access to buildings in the second case. Future studies on social innovation should thus more systematically investigate dissatisfaction and societal tensions as a starting point of social innovation. Theoretical perspectives addressing societal contradictions might encompass this underlying feature of social innovations.

Furthermore, our cases showed that mainly technical artifacts were needed to implement the changes in social practice ([2], p. 108). “Artifacts are objects intentionally made to serve a given purpose. The term ‘artifact’ applies to many different kinds of things—tools, documents, jewelry, scientific instruments, machines, furniture and so on” ([2], p. 99); technical Artifacts determined by intentional and physical aspects [11]. According to Franssen ([11], p. 27), “the essentiality lies in the fact that technical artifacts have been designed and made for the purpose that they are used for”. In particular technological artifacts in social change appear to be significant. Scientific discourse used the example of the printing press without any ecclesiastical revolution would have been possible [18]. In this regard, we

formulate the hypothesis that technical artifacts act as intermediaries for the dissemination and implementation of social innovations. The *Social Association* explicitly disseminates the idea of unrestricted accessibility for people with special needs by inventing an online map and extensive use of social media for its distribution. Here, insights from technology research should be integrated in the research on social innovations in future studies.

Overall, when investigating the field of social innovation, we recommend a stronger cooperation of social scientists and technology researchers in order to advance the understanding of social innovation.

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