Innovations in spatial planning as a social process – phases, actors, conflicts

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\section*{ABSTRACT}

The aim of this paper is to understand the social process of the emergence and institutionalization of innovations in spatial planning (which we describe as ‘social innovations’). The paper is based on a recently finished empirical and comparative study conducted in four distinct areas of spatial planning in Germany: urban design, neighbourhood development, urban regeneration and regional planning. The empirical cases selected in these areas encompass different topics, historical periods, degrees of maturity and spatial scales of innovation. As a temporal structure of the innovation processes in the different cases we identified five phases: ‘incubating, generating, formatting, stabilizing, adjusting’. In a cross-comparison of the case studies and along these phases, we furthermore found typical (groups of) actors, tensions and conflicts. In the focus of our case analyses are the following dimensions: (1) the content of the innovations, (2) actors, networks and communities involved as well as (3) institutions and institutionalization.

\section*{KEYWORDS}

Social innovations; conflicts; urban design; neighbourhood development; urban regeneration; regional planning

\section*{1. Introduction}

Planning history reveals a complex and dynamic landscape of instruments, procedures and material results which are in constant change (e.g. Hall, 1998; Ward, 2002). These changes show patterns and regularities. One of them is the perennial emergence of fundamentally novel modes of planning – and their rise and fall. New practices are initially spurred by enthusiasm, subsequently unfold and consolidate, and once promoted to new planning models, they even may become mainstream. In some cases, however, they may eventually have to deal with fatigue and disenchantment, often ending up in a slow but inexorable downturn. This paper deals with the overarching question of how novel modes of planning enter the field of spatial planning and of what further happens to them.

Nationally, these patterns and regularities may vary considerably. In some countries, like for instance the UK, where practices of planning are perceived as highly volatile and the system is seen more or less as a pinball of political changes, discontinuity of rules and practices prevail. In other contexts, however, like Germany, the continuity of...
planning law, funding programmes and the checks and balances of a federal system favour a different, more evolutionary perspective on how novel modes of planning come about. Furthermore, the planning profession would more offensively mark its proactive contribution to processes of change rather than just highlight their reactive part in fulfilling overdue requirements of change.

It is this very context of Germany’s well entrenched planning system and practice that makes up the empirical background of the following paper. Here, the role of professional agency in inducing processes of structural change becomes most interesting. However, this does not mean that the concept of innovation has nothing to offer for understanding less stable institutional contexts as well. As we will argue, innovations in planning encompass not only creative turnarounds and surprises beyond the spectrum of well-known solutions, but also more mundane practices of institutionalization and routinization of novel modes. Against this background our more specific research questions are: What is the temporal order of the process of emergence and institutionalization of novel approaches in spatial planning? And how can this dynamic momentum in planning be analysed as a social process?

Conceptualizing change as a process of innovation, furthermore requires an analysis of conflict. It is widely acknowledged that innovation processes are accompanied by conflicts since ‘creative destruction’ (Schumpeter, 1911), being a structural element of innovation, necessarily challenges vested interests and contradicts mainstream opinions. However, little is known about the dynamics of conflicts in the course of innovation processes. Thus in this paper, within our analyses of the emergence and institutionalization of novel modes of planning, we additionally seek to trace changing constellations of conflicts in processes of disruptive change, thereby pursuing the following research questions: Which types of actors are typically involved in conflicts during which phases of an innovation process? And how do the lines of conflict shift in the course of the process?

The paper is based on a completed research project on ‘Innovations in Spatial Planning’ (InnoPlan) in which processes of social innovation were analysed by the example of four distinct areas of spatial planning in Germany.1 The four cases covered different topics, historical periods, degrees of maturity and spatial scales. In a cross-comparison of the four areas five phases of innovation were identified – ‘incubating, generating, formatting, stabilizing, adjusting’ – along which we found common procedural patterns related to (1) the content of the innovations, (2) actors, networks and communities as well as (3) institutions and institutionalization.

The structure of our contribution is as follows: Section 1 explains InnoPlan’s conceptual framework. In Section 2, we briefly clarify our understanding of planning, develop our concept of innovation, in particular that on ‘social’ innovation, and we discuss its applicability to the field of spatial planning. The project’s research design is described in Section 3, while the empirical findings are presented in Sections 4 and 5, along the above mentioned three dimensions. In Section 6, both a summary as well as conclusions are provided.

2. Innovations in spatial planning – a conceptual framework

Throughout this paper, we use the term ‘planning’ in a generic sense. Planning is a distinct social activity characterized by an obligation to being rational (Rittel, 1972). Planning can
be distinguished from other – more mundane – ways of making decisions for the future as it replaces spontaneous or intuitive decisions with systematic reasoning about the consequences of possible solutions. It is, of course, a debatable point how exactly this rationality is made operational in practice (Healey, 1992; Innes & Booher, 2010; Rittel, 1972). Furthermore, planning encompasses a particular way of arriving at decisions (Faludi, 1985). In sum, this generic understanding of planning opens up a suitably wide corridor of all forms of planning practices including different types of governance (Healey, 2013).

By using innovation as a key term, we suggest a shift in conceptualizing substantial changes in a political-administrative field such as planning. So far, novelties in planning have mainly been understood in terms of responses, namely as mere ‘reactions’ to broader societal structural changes. Hence the prevailing terminology is one of ‘shifts’ (Albrechts, 2006) or ‘transformation’ (Healey, 2006). Often the prefix ‘re’, e.g. in ‘reshaping’ (Pinson, 2002) or ‘revival’ (Healey, 1997), is used to put emphasis on continuity rather than disruption. This corresponds with the empirical observation that planning practitioners only seldom label their novel approaches as ‘innovative’, unless for obvious marketing purposes. If the term innovation is used at all, it is mostly confined to the economic sphere (Bayliss, 2004) and thereby explicitly located outside the domain of spatial planning. Apart from that, typically the term innovation is used in an intuitive manner and is only loosely defined (e.g. Healey, 1997). It can thus be observed in the literature on planning that in attempts to understand the emergence of changes in spatial planning, the concept of innovation or, to be more precise, of innovating has been rarely used in an analytical perspective (Jessen & Walther, 2010).

Of course, we agree that societal change is an important driver of novelty in the context of spatial planning. However, we argue that the concept of innovation still adds two so far underrated aspects: contingency and agency. First, contingency: Structural changes in the context of planning only offer an understanding for the reasons ‘why’ novelty emerges. They can at least explain the general dynamic – and to an extent, also the general direction – of novel modes of planning by looking at structural factors and overarching developments. However, a high degree of contingency persists when it comes to understanding the concrete instantiations of change that become observable empirically. Are, for instance, public private partnerships the only possible response to shrinking public budgets? Even when facing the same kind of challenges it is always possible to come up with several solutions. In this respect, the concept of change only has an insufficient explanatory power. Second, and relatedly, agency: The concept of innovation places a higher weight on the aspect of agency vis-à-vis structure whereas the concept of change implies a passive, reactive and adaptive behaviour of actors. It suggests that the real dynamic happens elsewhere, beyond the spheres of influence of actors. Innovation, in contrast, has been described in terms of an entrepreneurial attitude (Schumpeter, 1911) or as a ‘creative response’ (Schumpeter, 1947). Entrepreneurs identify novel opportunities, where most others would continue to rely on daily routine. They enthusiastically spur their peers on a novel solution and persuade others of its practical value. In other words, for entrepreneurs, societal challenges are no given facts, but need to be recognized and are subject to interpretation and interrogation.

This is why we propose to analyse the emergence of novelty in the area of spatial planning as instances of ‘social innovation’ (Dawson & Daniel, 2010; Moulalert, Jessop, Hulgard, & Hamdouch, 2013; Mulgan, 2006; Mumford, 2002). The concept of social
innovation has emerged on the agenda of the social sciences only recently as an object of research in its own right (Phillips, Lee, Ghobadian, O’Regan, & James, 2015). This can be explained by the fact that disruptions with previous routines are more difficult to trace in social practices compared to technological evolution or shifts in the commercial world. Social innovations are difficult to research as they represent ‘relatively rare [and] diffuse events involving interaction among multiple parties over rather long periods’ (Mumford, 2002, p. 254). The concept of social innovation provides an ‘analytical perspective that conceives agents as embedded in complex institutional environments that not only constrain but also enable actions’ (Cajaiba-Santana, 2014, p. 46). This approach thus acknowledges the aspect of proactive agency without neglecting the relevance of structures. Moreover, it addresses the contingencies of historical and local situations, while allowing the exploration of patterns across cases (see, for instance, Mumford, 2002).

Along with Mumford (2002, p. 253), we define social innovations as ‘the generation and implementation of new ideas about how people should organize interpersonal activities, or societal interactions, to meet one or more common goals’. This definition suggests that social innovation has to be set apart from other realms of innovation, mainly the technical world and commercial businesses. However at the same time, rather than constituting a distinct ‘sector’ strictly separated from other forms of innovation, the concept suggests a shift in emphasis highlighting the ‘social dimension’ of all innovation (Dawson & Daniel, 2010). This is due to the fact that in practice, technological, commercial and social aspects overlap in innovation processes (Mumford, 2002). For instance, a new technology would not be accepted by users if it does not address some social need (Dawson & Daniel, 2010). Social and commercial aspects intersect for example in approaches of corporate social responsibility (Phillips et al., 2015). Likewise, social innovations, although primarily aiming at improving social conditions, frequently also have to consider technical aspects and budgetary limitations (Mumford, 2002).

A crucial criterion for defining innovations as such is, of course, novelty (Dawson & Daniel, 2010). However, ‘new social ideas are rarely inherently new in themselves. More often they combine ideas that had previously been separate’ (Mulgan, 2006, p. 151). Hence, a social innovation most typically is nothing absolutely new in the world but in most cases a ‘relative novelty’ (Gillwald, 2000, p. 10f).² Admittedly, this understanding of social innovation as a re-combination of pre-existing elements makes it difficult at first glance to identify and attribute a novel way of acting or a novel mode of planning (Mumford, 2002). This is why we maintain that an innovation must nevertheless involve some type of ‘disruption’ with customary practices. Whether or not a new social practice qualifies as novel is thus primarily a matter of collective perception and societal negotiation (Braun-Thürmann, 2005, p. 6). With this in mind, we conceive of social innovations as social constructions – and this in two respects: firstly, as subjects establishing a different way of doing things and secondly, as third parties making judgements about something as a ‘novelty’ or ‘innovation’ (Rammert, 2010, p. 45).

It is a conditio sine qua non of any innovation that a novel idea was put into practice and became institutionalized. For economic and technological innovations, the ‘market entry’ is seen as a crucial moment (Phillips et al., 2015). In contrast, the social innovation literature identifies the imitation of the novel practices by others (Neuloh, 1977, p. 22) as the point of ‘introduction into practice’ to distinguish between innovation and invention. Apart from this, many authors agree that novel practices must display some degree of
A paradox of the definition of innovation lies in the fact however, that as institutionalization progresses – innovative practices transform into more established orders and thus lose the aura of innovativeness in the course of time (Häussling, 2007, p. 370; Howaldt & Schwarz, 2010, p. 66f).

Another important distinctive quality can be found in the main motivations of innovative agents: ‘Whilst business innovation remains in the world of commerce and competition, social innovation has its starting point in notions of social beneficence and public good that supports people in organizations, communities and society in general’ (Dawson & Daniel, 2010, p. 11). Unlike other forms of innovation, debates on social innovation include strong normative connotations (Moulaert et al., 2013; Murray, Caulier-Grice, & Mulgan, 2010). However, it is also clear that the desirability of novel practices can easily become subject of controversy. Social innovations ‘might be perceived as an improvement by a group and as regression by others’ (Cajaiba-Santana, 2014, p. 44). Moreover, the right motivation of participants alone, of course, does not guarantee desirable outcomes (Dawson & Daniel, 2010), nor are successful solutions automatically also innovative ones (Cajaiba-Santana, 2014, p. 44). An unfolding innovation entails a redistribution of opportunities and risks (Lindhult, 2008), which increases the likelihood of institutional friction and resistance.

Moreover, in the economic sphere, innovative agents typically see innovations as core competencies that secure the competitive edge of their firms on the market. They are thus kept secret and often are also protected by patents or intellectual property rights. In the case of social innovations, in contrast, key actors have a strong motivation to spread the novel practice as far as possible. Hence, sharing knowledge and propagating new practices are typical features of social innovations.

Finally, as we will show in this paper, the normative assessment of an innovation may shift in the course of the process. While fresh ideas usually spur enthusiasm and optimism at the beginning, participants often realize later on that not all initial promises of a social innovation can be fulfilled. Often, new solutions even entail new problems. In short, as is shown later in this paper, different interests and divergent professional identities frequently spur conflict about social innovations. And gradually changing interpretations may lead to shifting lines of conflicts between stakeholders.

Given the socially constructed nature of social innovation and our focus on conflicts, we decided to adopt a ‘second order’ perspective on social innovation for the purposes of this paper. According to Schütz’ (1953) methodology, the researcher has to take on the position of an observer and to investigate the research subjects from a ‘second order’ point of view. This enables us, the researchers, to analyse how participants in their ‘first order’ point of view judge about the degree and kind of novelty and the normative value of social innovations. Accordingly, in order to investigate the role of conflicts in processes of social innovation, it is necessary to exactly note who makes what kinds of judgements about new modes of planning at what time and for what reasons. Decisive are thus not our own notions of social desirability but rather the judgements undertaken by professionals in the field who mobilize their normative orientations and professional standards.

According to Cajaiba-Santana (2014, p. 48) a processual framework is required (though seldom realized) to fully appreciate the complexities of individual actions taken in historically contingent settings typical for social innovations. Along these
lines, we understand social innovations in spatial planning as a complex and multi-layered ‘social process’. To put things in a nutshell at the very outset, when looking at the temporal structure of innovation dynamics we were able to identify five phases of innovation: ‘incubating, generating, formatting, stabilising and adjusting’ (Ibert, Christmann, Jessen, & Walther, 2015):

- **Incubating.** In this phase, time seems ripe for novelty (Barnes, 2018), and the respective elements which are required for creating a novel approach are already largely in place. However, nobody managed to merge them to the characteristics of the innovation yet. The predominant order is already weakened due to widespread criticism and experienced dysfunctions.

- **Generating.** A new combination of elements is available for implementation for the first time. Initially this only takes place in one or only few localities that exhibit structural, social and institutional conditions conducive for the innovation.

- **Formatting.** The innovation becomes more widespread and accustomed. Actors involved now bring certain combinations of elements of the innovation in a more steady state in order to link them with each other so that they can be repeated more easily and with more routine elsewhere.

- **Stabilizing.** The innovation becomes widespread. Lessons learnt by the actors increasingly address locally specific aspects of the generic characteristics of innovation. Often the innovation is consolidated with a focus on the key elements that are essential for everyday use under average conditions.

- **Adjusting.** The new instantiations do no longer appear new at all and thus look increasingly less pristine. The respective innovations have already lost the charm of the novelty and some actors already experienced their restrictions. This pattern of disenchantment and partly critical withdrawal occurs in relevant fields.

Phase models of social innovation so far usually range from the idea generation to the idea implementation (e.g. Mulgan, 2006; Murray et al., 2010). In contrast to these, some particularities of our model should be mentioned. First, with the incubating phase our model encompasses not only the idea generation, but also the timespan even before participants are able to explicate the specific underlying problems and elements of a novel solution, although they are already immersed in problematic situations (also Mulgan, 2006). Second, with the phase of adjusting our model acknowledges the open-ended character of social innovation processes (also Murray et al., 2010). Finally, and again in contrast to existing analogous models that adopt the perspective of proponents of innovation, our phase model is ‘idea-centred’ (Ibert et al., 2015) and thus open to the in-/out-option of different actors entering and leaving the process.

We make this procedural understanding operational by analysing three interrelated and dynamic layers of social innovations in spatial planning: The patterns of recombining elements which constitute the novelty of a new social practice in the field of spatial planning (Section 4.1). The key roles and types of actors as well as their agency embedded in evolving social networks and professional communities (Section 4.2). The eroding and emerging shared expectations (or: institutionalization) as well as conflicts which are related to the violation of such expectations (Section 4.3).
3. Methodology

3.1. Research fields and case selection

Our research aimed at identifying in empirical detail key elements of the social process of innovations in different fields of spatial planning. To this end, we conducted research in four fields of empirical enquiry: urban design, urban regeneration, neighbourhood development and regional planning. Each field and its corresponding cases shall be briefly addressed here:

*Urban Design: ‘Designing New Urban Neighbourhoods’ (NUN).* Designing new urban neighbourhoods belongs to the classic tasks of municipal planning. Local authorities have faced this task time and again in recurrent cycles over the past 100 years. The cycle prior to the last one resulted in the large residential complexes of the 1960s and 1970s. In Germany, they are widely considered as failures – at least as far as urban development and housing design are concerned. In the early 1990s, in the wake of German reunification, the dynamic growth in large West-German cities triggered the planning and construction of new neighbourhoods (Bundesamt für Bauwesen und Raumordnung [BBR], 2007; Hafner, Wohn, & Rebholz-Chaves, 1998). All differences in detail notwithstanding, these new neighbourhoods that have emerged in the 1990s (in other European countries as early as the 1980s) have a number of significant features in common that clearly distinguish them from the large residential complexes built 50 years earlier. These features have been interpreted as a paradigm shift (from functionalist modernism to a compact city of mixed uses). The InnoPlan project treats this shift as an example of innovation, manifested in the morphology of urban development, the functional structure, the types of housing designs as well as the conception of development and public space (Jessen, 2004). Also, it frequently involved substantial changes in planning and implementation procedures. As case studies within the field of NUN we picked the new urban neighbourhoods of Allermöhe in Hamburg (9,100 housing units in total, with 3,500 housing units in Allermöhe-East and 5,600 housing units in Allermöhe-West) and Riem in Munich (6,000 housing units). Allermöhe was planned and built in two stages. Allermöhe-East, constructed in the 1980s, has been widely considered since as a pioneer in implementing new urban forms and functional concepts. In contrast, both Allermöhe-West and Munich-Riem, mainly built in the late 1990s and early 2000s, represent more or less early adopters of the new planning practice (Zupan, 2015).

*Urban Regeneration: ‘Strategies for Temporary Uses’ (STU).* Interim uses by pioneers of urban spaces first emerged in the field of urban regeneration. They occurred in places which were characterized by vacated properties and buildings and which were at the same time a challenge for municipalities engaged in urban regeneration. Often the municipalities reached the limits of what classic urban development could accomplish; at least they were not able to utilize urban wasteland as a resource for urban renewal. Unplanned uses by ‘urban pioneers’ (cf. Christmann, 2012) – i.e. by citizens who creatively appropriate unused spaces and vacant buildings for new (temporary) uses – created opportunities that offered new prospects for development. Against this backdrop, interim uses were soon deliberately employed in the context of urban regeneration strategies and developed into a planning tool. Interim uses represent a sharp break with previous planning practices. Once seen as an illegitimate appropriation of space, it is now put to strategic use and covered by building law. This type of usage became increasingly significant in municipal practice.
(cf., Senatsverwaltung für Stadtentwicklung Berlin, 2007) and has drawn considerable attention from an expert public (BMVBS & BBR, 2008; Haydn & Temel, 2006; Kauzick, 2007). As case studies for the analysis of STU we selected Berlin and Stuttgart. Berlin is well known for experimenting with temporary uses and has a long history in this respect. This is due to the city’s manifold spatial possibilities and a pressure to act in the field of urban development while being at the same time financially troubled, not least after the German reunification. Stuttgart is in contrast a more recent case for temporary uses. The wealthy city has comparatively little space for temporary uses, but it is strongly motivated to create a reputation of being a creative city.

Neighbourhood Development: ‘Neighbourhood Management’ (NHM). The concept of neighbourhood management signposts a new complex and joined-up approach to urban renewal (DIFU, 2003; Walther, 2008). Whereas in traditional urban renewal technical processes were to the fore, revolving around construction and involving mainly technical instruments (the side effects of which were to be mitigated by social measures such as prevention, compensation and participation), in the new approaches employing NHM in contrast, the social and organizational dimension became an object of planning. Now, not only the urban areas themselves, but also the established procedures of dealing with them were subject to renewal. Within a period of two decades, neighbourhood management evolved from its first experimental stage (as an element in the programmes of some federal states) to a widely accepted and virtually standardized procedure (Güntner, 2007). Evidence testifying to the relevance of this approach is the large number of NHM measures that have been implemented and are ongoing, the legal framework and the ongoing debate about the continuation of NHM in other form and within other organizational frameworks. A separate section titled ‘Social City’ in the German Building Code as well as the debates on its long-term continuation, on mainstreaming, which reach far beyond the planning community, are signs of the relevance of NHM in planning (Eltges & Kocks, 2015). For the analysis of NHM, our case studies include the well-worn old neighbourhood management of Duisburg-Marxloh in the industrial Ruhr Region as well as newer examples in Hamburg’s inner city and its more recent housing areas. Both cases testify to the extremely broad range of forms and contexts neighbourhood management has taken over the last decades.

Regional Planning: ‘Learning Regional Policy’ (LRP). A major innovation in the field of regional development has been the recent shift towards improving regional adaptability instead of making regions fit for a particular model of development (Grabher, 1994). This has led to abandoning the focus on regional development as a process of ‘catching-up’ along a defined path of development in favour of changing the path. A prototypical example of such an ‘innovation-oriented regional policy’ (Ewers & Wettmann, 1980) was formulated and implemented for the first time in the context of the Internationale Bauausstellung (IBA) Emscher Park (Emscher Park International Architecture Exhibition 1989-1999). The IBA pursued a multi-faceted approach to regional development that sought to integrate several classic areas of planning, such as housing, landscape design and commercial development (Häußermann & Siebel, 1994a, 1994b). In the process, the longstanding tradition of German building exhibitions has been turned into a regional policy instrument, which initiates learning processes at multiple levels and in various dimensions, revolving around the exemplary redevelopment of an old industrial area in the Northern Ruhr region. Since then, this policy approach has clearly moved beyond
its initial context of emergence and has evolved further (cf. Beierlorzer, 2010; Morgan, 1997). As case studies for a more detailed analysis of LRP we selected the REGIONALE 2016 Westmünsterland, as a most recent case example (2010–2016) of the innovation. It is situated in spatial and institutional proximity to the origin. As the provisionally last instantiation of the long-standing REGIONALE programme launched by the Federal State of North Rhine-Westphalia from 2000 to 2016, the Westmünsterland region had manifold opportunities to learn from preceding events. The Competition Impulse Regions in Saxony (2013/2014), in contrast, represents a recent instantiation institutionally and spatially remote from the place of origin. There were only limited opportunities to benefit from experiences by predecessors (Füg & Ibert, in this Special Issue).

All research fields represent significant points of reference in the national and international planning discourse. In order to capture the breadth of (innovative) action in spatial planning across various spatial scales, the cases range from the neighbourhood to the regional level of planning. Given that innovations can only be identified ‘ex-post’, we carefully made sure that the selected new modes of planning had already evolved to the point of being ‘mature’, i.e. that they could be considered successfully established and widespread models of planning and thus qualified as innovations according to our definition. Our sample nevertheless represents innovations at different points of maturity and includes fairly well established (‘New Urban Neighbourhoods / NUN’) as well as more recent innovations (‘Strategies for temporary Uses / STU’).

In the four areas of planning, the selected cases NUN, STU, NHM and LRP represent symptomatic examples for novel approaches in spatial planning. They are oriented towards aims that are valued high against the background of professional standards of planning practitioners. In normative terms, they aim at enhancing social wellbeing and contribute to the public good. Furthermore, the sample represents variations along theoretically relevant dimensions (Eisenhardt, 1989): the content, the type of innovation, the degree of maturity, the historical timeframe, and the scale of intervention (see Table 1).

3.2. Research design and stages of analysis

All four parts of the investigation were carried out in a parallel way between 2013 and 2016. Each research team addressed the same research questions and analytical dimensions. Our shared conceptual framework was individually adapted to the specificities of the respective fields. The joint work and comparative analysis ensured both internal validity of each partial project as well as the external validity of the InnoPlan project as a whole. Interim results were systematically assessed and validated by a panel of experts.

There were three steps in the joint InnoPlan project:

‘Step 1’ was devoted to reconstructing ‘ex-post’ the major features of the social process of innovation in the field in question and to distinguishing its phases. The contexts and the temporal order of the innovation in each field were explored beginning from the first prototype and passing through the stage of the new routine, in its decisive features and its nodal points concerning projects, persons and programmes. In all four fields of investigation document analyses of the relevant literature and documents (cf. Prior, 2003; Wolff, 2008) as well as expert interviews (cf. Bogner, Littig, & Menz, 2009; Kvale, 2007) were conducted. All in all we conducted 43 interviews with influential practitioners who belong to planning administrations, represent federal state and national ministries
or have made an impact to the discourse as experts or critical observers. It is noteworthy that we did not explicitly ask about conflicts in the interviews. Rather, the issue of conflict turned out to be relevant during the research process as it ran through all levels of analysis of our interview guidelines.

In 'Step 2', following an embedded multiple case study design (Yin, 2014, p. 50), we conducted in-depth analyses of several local instantiations of the respective innovations. Following a strategy of theoretical sampling (Eisenhardt, 1989) we selected two widely recognized projects in each field. For three of the areas of practice (NUN, STU, NHM) we contrasted earlier with more recent realisations of the respective innovation. In one case (LRP) we selected two recent cases, one proximate to and the other distant from the context of origin (see above). In Step 2 we applied the same methodological toolbox as in Step 1. Our data base consists of 73 expert interviews (between 6 and 13 per case study) and document analyses with regard to the respective local level. We approached responsible local planners, private investors, project managers and coordinators of policy programmes and we analysed all kinds of publications related to the cases (like press releases, plans, protocols, etc.). Data collected in this step allowed us to understand how a novel idea has been adapted to different local contexts and how the conditions of realization varied between different stages of maturity.

In 'Step 3' we sought to identify common procedural patterns in a cross-comparison. The findings of the studies in the individual fields of action – from the nationwide studies of the fields as a whole (Step 1) and the case studies (Step 2) – were drawn together and subjected to a comparative analysis.

This paper concentrates on the last step, the aggregation and comparative analysis of the cases. It presents a comparative analysis over and above the individual results, seeking to generalize from these across all four fields of spatial planning, aiming at identifying common patterns and themes in the innovation dynamics.
4. Innovation in spatial planning as a social process

The phases of innovation and the social processes therein are embedded in historical situations, are influenced by historical events, and the perceptions of the involved actors reflect historically contingent worldviews (Mumford, 2002). The very idea of history highlights the idiosyncratic nature and unpredictability in a course of events called innovation. However, in this paper, we are not primarily interested in a historical reconstruction. Rather, what we seek to demonstrate here is that innovation processes also have an immanent logic over and above the historical one. Consequently, we seek to abstract from historical particularities in order to identify typical patterns and regularities in the dynamics of an unfolding innovation (Langley, Smallman, Tsoukas, & van de Ven, 2013).

The following discussion builds on the empirical investigations in the four fields depicted above. However, for this we decided to abstract from the specific contexts of the different areas of practice and to abstain from depicting single case studies along their own logics. For the purpose of this paper we instead wish to focus on more general patterns and common themes that emerged inductively across all cases and relating them to the five phases of the innovation process. This may well appear as a somewhat stylized account. However, the prospect of detecting otherwise invisible patterns is worth taking this risk.

4.1. The innovation unfolding and consolidating upstream: recombination and assemblages

Each of the four cases of social innovation in spatial planning is not an ‘invention’ in the sense of a novel singularity. Rather, they consist of elements that already existed before but were then ‘recombined’ (Mulgan, 2006) in an unprecedented way.

The recombinations we observed can be further specified as assemblages. In contrast to the implications of rational, intentional action and expected outcomes in highly structured environments, our understanding of innovation allows for the opposite features of chance, unexpected action and societal constellations in which actors make use of unintended outcomes in contingent situations, too. In terms of Greek mythology, telos is now accompanied by cairos to account for the complex, dynamic and contingent constellation of heterogeneous factors involved in social change (De Landa, 2006). Radical geography has recently advanced concepts of assemblage by incorporating and generalizing concepts of ‘bricolage’ (McFarlane, 2011); theories of policy mobility explain how innovative ideas travel and change by being re-combined in other settings. In a similar vein, we propose here to conceive the examples of social innovations in our research as such dynamic ‘assemblages’ (McCann & Ward, 2012, 2013). We observed that in such contingent constellations, procedural and organizational elements as well as physical structures are inextricably linked in a novel fashion. In this section we seek to identify some of the recurrent patterns in the dynamics of these recombinant assemblages.

During the phase of ‘incubating’ key elements of the later innovation can already be observed in the respective historical periods, some of them even existed for a rather long time. The New Urban Neighbourhoods (NUN) appeared in the early 1980s for the first time. In terms of their architecture and urban design, they re-assembled elements most of which refer back to long-standing traditions in European urban development such as
block perimeters or small scale mixed use. Nevertheless, we regard the particular combination of traditional and new elements as innovative, because they were still unconnected before. Sometimes it was difficult to combine them, for instance because they were not yet present in the same territory. For instance, cities have always seen strategies of temporary uses (STU) in traditional funfairs, circuses or weekly markets. Also, practices of informal appropriation of fallow land or abandoned buildings already did exist for quite a while. Yet despite historical coincidence, they were still distributed across several actors and places and thus remained unrelated. Furthermore, it might have been difficult to combine elements because institutionalized perceptions were not quite ready for the novel recombination of them. In STU, the new perspective of administering a key element of temporary uses, i.e. the informal practice of occupying unused properties, were formerly (e.g. during the 1980s) seen as threatening or even sanctioned as illegal. In short, in the phase of ‘incubating’, the respective innovations were ‘in the air’ somehow. Key elements did already exist and were, at least in principle, available for recombination. Yet it was still difficult to access them all at once and to connect and assemble them in a robust, stable fashion.

In the subsequent phase of ‘generating’, the linkages that are crucial for the innovation can now be established for the first time – usually only in local niches and under particularly supportive conditions. Neighbourhood Management (NHM) broke through, when social policy or labour market measures were combined with classical neighbourhood regeneration policy. This was a major step to create area-based policies of social inclusion. Here, overcoming the silo-type of administrative separation of policies in favour of a joined-up strategy became a typical feature.

Later on in the ‘formatting’ phase, participants try to find appropriate formats which allow combining the requisite elements with less effort or under less favourable local conditions. Linkages are made more robust while others remain fragile. In the case of NHM, the term ‘neighbourhood management’ itself became the epitome of a suitable format denoting a template of on-site offices of local teams that bore the brunt of designing and joining up the new type of policy action. In the case of NUN it was a wave of urban design competitions that became crucial for formatting the main features of the new neighbourhoods in the early 1990s (small scale, mixed uses, urban blocks etc.).

The ‘stabilizing’ phase signposts the robustness of the novel approaches. They are now solid and earthy enough to be re-installed in other contexts with only moderate effort and risk. This often goes hand in hand with a consolidation: single elements that have been important during the preceding phases might be dropped off again and might no longer be linked to the innovation. For contemporaries, the innovation becomes more ‘mundane’ or less exciting. Typically for this phase, actors who push the innovation intensively debate about the fine discrimination between ‘constitutive’ (Roy, 2012) and facultative elements and linkages. For instance, learning region policies (LRP) essentially link at least the following constitutive elements (see also Füg & Ibert, in this Special Issue): Campaigning (a long term vision of the respective regions substantiated by a series of short-term projects), an extended spectrum of involved actors (public, private and civic), an integrated approach (overcoming sectoral and disciplinary boundaries), and mobilizing external expertise and competitive modes of governance (intra- and inter-regional competition for funding). Facultatively linked were the following elements: Problem-based ‘rescaling’ (replicate the geographical extension of the addressed problem), ‘intermediary agencies’ (e.g. regional development agencies) and ‘festivalisation’ (eventfulness, mobilizing public attention).
Eventually, the phase of ‘adjusting’ does not appear to be a part of the process of innovation itself. On the one hand, the initial innovation has turned into a standard routine or mainstream practice. On the other hand, critical points maybe pinpointed and it may become subject to controversy, in some cases even to roll-back. Last not least, in full circle, a new innovation may emerge. For example, in the case of NHM, neighbourhood management is on its way to become a mainstream institution for housing companies; and in the case of LRP (exemplified by the Competition Impulse Regions), in Saxony LRP now comes along in a rather mundane fashion with a focus on the constitutive elements only and with little effort beyond everyday routine (see Füg & Ibert, in this Special Issue). This less ambitious form, however, might be better adapted to the particular conditions in Saxony.

4.2. Key actors, evolving networks and emergent communities

In this section, we focus on agency in the process of social innovation. We identify ‘individual and collective actors’ who push and promote the respective innovations, and we look at their actions and interactions. Both are analyzed in terms of how individual actors enrol in strategic networks and become enculturated in professional communities.

Drawing on strands of network theory and their application in geography, we understand ‘networks’ as loosely coupled relations between autonomous actors who temporarily cooperate on a voluntary basis in order to achieve common goals (Kenis & Oerlemans, 2008; Provan & Kenis, 2007). In networks with a shared expectation of reciprocal returns and based on mutual trust, the requisite resources and ideas are exchanged (Grabher, 1994). Social networks are of key importance for understanding major changes in planning practices (Lelong, 2014).

‘Professional communities’ can be analytically distinguished from networks. They are held together by shared practice, professional training and a joint interest in particular problems or topics. In general, ‘communities of practice’ emerge as practitioners frequently asking their peers and colleagues for advice in challenging situations. Within these communities, the sharing of knowledge takes place without expecting immediate reciprocal returns (Belk, 2010). Sharing ideas can be interpreted as a side-effect of ongoing negotiation of practical problems. Novices are introduced to the secrets of the business by giving them apprentice-like roles or positions of ‘peripheral legitimate participation’ (Lave & Wenger, 1991). By story-telling and enculturating newcomers, professional communities cultivate a pool of shared knowledge, and this is a crucial prerequisite for creating novel solutions, shared knowledge which is permanently updated and variegated.

‘Professional communities’ are distinct from other types of communities of practice (e.g. epistemic communities or interest communities) because they combine formal academic training with the deep experience of applying abstract knowledge to practical situations (Amin & Roberts, 2008; Müller & Ibert, 2015). Along these lines, spatial planners can thus be understood as practitioners who belong to a ‘community of professional enquirers who make up the field of scholarship and practical engagement associated with planning as a project for shaping urban and regional/territorial futures’ (Healey, 2013, p. 189).

In all observed cases during the ‘incubating’ phase we identified ‘networks of founders’ (Lelong, 2014, p. 221). These are small, internally dense networks of pioneering
practitioners that remain almost de-coupled from hegemonic coalitions. These founders typically only expand their network very selectively. If they do so, shared beliefs and trustworthiness are more important criteria for selecting new members than formal position, affiliations or access to power (Lelong, 2014, p. 221). Such networks of founders typically encompass two kinds of actors.

- First, ‘elitists’, i.e. professionals who belong to the community of planners but perceive themselves as avant-garde.
- Second, ‘outsiders’, i.e. professionals who belong to a domain adjacent to planning, yet for some reason, develop an interest in topics relevant for planners.

Most typically, the latter group comes up with a critical attitude towards hegemonic planning practices. The former group of elitists sympathizes with this critique and takes it up to confirm their role as avant-garde. In addition, the elitist founders perceived themselves as a ‘new generation’ of planners who build up distinction vis-à-vis the establishment by integrating ideas from external influences. In the case of NUN, our analyses revealed that in the1960s a young generation of urbanists and publicists formed an opposition to mainstream post-war urbanism. They massively criticized the results of the modernist approach of mass production in both housing estates and urban renewal. In doing so, they rediscovered the qualities of the traditional European city and inspired novel ways of designing new urban districts in the 1980s (Zupan, 2018). Similarly, in the 1970s, the traditional approaches to revitalizing socially problematic districts were criticized for their fixation on investment in built environments by social workers, journalists and planners. A few years later, during the late 1970s, in LRP regional economists, mostly from the academic sphere, commented on traditional, catching up-oriented approaches in regional development policies and criticized the lack of innovation-orientation (Ewers & Wettmann, 1980). In STU, the 1990s saw action groups of squatters, radical planners and artists redefine and appropriate vacant urban spaces in a move of practical critique of urban planning’s voids.

The STU example demonstrates that intermediaries may enhance the interaction within founding networks. In this case, academics who continue to cross the boundary between academia and planning practice developed the ability to translate external critique in a way intelligible to professional planners. In general, external critique enriched with frequent references to ‘bad practices’ (Grabher & Thiel, 2015) in the respective fields plays a crucial role for the elitist networks’ internal cohesion.

Networks of founders, in other words, create constellations of overlapping practices. While it is not yet possible to already combine elements that belong to different practices, planning practitioners already experience irritation but also inspiration as they are confronted with external viewpoints and critique. Negative experiences, critique and even conflicting viewpoints were the initial drivers for joint learning processes and stimulated mutual learning. In the ‘incubating’ phase, thus, participants already know rather well what they do ‘not’ want to pursue in the future but are still unable to clearly circumscribe problems and express solutions (see also Ibert & Müller, 2015).

In the phase of ‘generating’, the networks of founders are usually complemented in a more strategic fashion (Lelong, 2014). In our case studies two additional types of actors become enrolled in the extending networks during this phase.
First, ‘patrons’ (similar: ‘mentorship’ in Ibert & Müller, 2015) frequently occur as soon as participants shift from cultivating an uncommon idea to implementing this idea into practice. Patrons are actors with institutional power, who feel sympathetic to the novel practice and who mobilize support within their sphere of influence. For instance, for LRP, the IBA Emscher Park is widely seen as the first successful implementation of learning region policies. There is a wide consensus that implementing it in the Ruhr Area in 1989 was only possible due to the backing of the then Prime Minister of North Rhine-Westphalia, Johannes Rau and, the then responsible Minister for Urban and Regional Development, Christoph Zöpel. Like-minded public service seniors played a similarly crucial role for NHM in creating networks of practitioners to accompany the respective Länder programmes. In NUN, we found previous ‘old school’ proponents of modern urbanism who now acted as ‘converts’ in powerful positions to support the new type of projects (Zupan, 2015).

Second, a constellation of ‘local allies’, locally influential actors who strive enthusiastically for the novel ideas, support the first implementation against concerned ‘naysayers’. They bring together people in key positions in political offices, administrations, civil society organizations and local firms within a municipality and are willing to collaborate in order to implement the novel idea. Local allies are important to link a novel idea to local traditions (Zupan, 2015) and to identify local needs that require a creative response. Enrolling powerful support is probably the biggest challenge in the course of an innovation process because these networks have to delegate institutional resources to a highly unfamiliar solution and take responsibility for uncertain project outcomes. Support is required at different scales and there are several actors with veto powers who are difficult or even impossible to bypass (see also Lelong, 2014). During the ‘generating’ phase, joint activities become more concrete and practical. This practical context forces professionals from different backgrounds to mutually engage in finding pragmatic solutions. What started as an irritation in the overlapping field of distinct practices now turns into a local ‘boundary practice’ (Wenger, 1998, p. 115ff) – thus creating the nucleus of a professional community in its own right.

The phase of ‘formatting’ is mainly about ‘early adopters’ who try to repeat the success elsewhere. Once the innovation has been successful for the first time, the task of strategic networking becomes less challenging. Adopters in the subsequent cohort can use the success of the prototype as a powerful argument for legitimation. Patrons now typically step back. They become less influential, because the subsequent projects usually move beyond their spheres of influence (see also Ibert & Müller, 2015). For the same reason, the initial constellation of local allies is no longer of critical importance. However, early adopters sometimes ensure that former local allies enrol in other places to act as consultants or advocates of the novel solution. Additionally, based on the reputation gained in successful prototype projects, the former local allies frequently move up the career ladder themselves and take up higher positions in other regions. These individuals carry their expertise with them and seek to adapt it to the new local contexts.

In conjunction with these networking dynamics, a once small and locally situated boundary practice gradually turns into a larger and multi-local professional community. Practitioners increasingly seek to distinguish between locally specific properties of single solutions and the general knowledge contained in them. In doing so, they create and share more robust and more generic practical knowledge. For instance, in NHM, once
formatted, it was no longer possible to understand a particular area-based approach in one place as a locally singular blend of traditional redevelopment and traditional social policies. Instead, it was considered as a new practice in its own rights with own terminology, roles, tasks and forms of collaboration etc.

Once the innovation is more established and knowledge about it more widespread, the networking dynamics shift again in the ‘stabilizing’ phase. Increasingly, ‘late adopters’ are entering the stage. They have no prior experience in the evolving field and most likely no personal contact to the network of founders and former local allies. Rather, they might have learned about the innovation from the media, public professional events or professional training courses. Late adopters rely on circulating handbooks, interpret lessons-learnt papers, use best-practice manuals and react to political programmes that support the novel practice. In network terminology, indirect ties between professionals become more important than previously. All in all, the growing professional community becomes less elitist. Average professionals benefit from the sharing of knowledge and an increasing number of novices become enculturated into the practice.

The phase of ‘adjusting’ is invariably beginning, when the ‘founding fathers’ increasingly feel uncomfortable in their self-esteem as avant-garde and start retreating from the extended networks. The remaining proponents increasingly close their networks in order to defend the approach against upcoming scepticism.

4.3. Institutions, institutionalization and lines of conflict

Social innovations always face complex ‘institutional settings’. First, they are enabled and constrained by existing habits of thought, formal rules, conventions as well as by informal, and more often tacitly shared, collective agreements (Cajaiba-Santana, 2014). Along these lines, Bathelt and Glückler (2014, p. 1) understand institutions as ‘stabilisations of mutual expectations’. Institutions should not be conflated with rules. Rather, ‘institutions develop in relation to rules, in response to them or even against them – they are shaped by them but in a rather contingent manner’ (Bathelt & Glückler, 2014, p. 7). Against this background, we understand social innovations as new ideas and practices that deviate from existing shared expectations. Second, however, social innovations can also be drivers of institutional change as they enduringly intervene in patterns of shared expectations. However, this may not necessarily go hand in hand with a change in formal rules. Expectations can shift while at the same time remaining related to a stable set of formal rules (Bathelt & Glückler, 2014). A closer investigation of shared expectations within groups of actors helps to analyse the lines of conflict in processes of social innovation. Furthermore, to appreciate the dynamics of conflict in social innovation, it is also important to understand, which institutions are challenged by an emergent new practice and which ones come into being through the consolidation of a new practice.

In the ‘incubating’ phase we can observe the formation of founding networks in which participants cultivate a growing discomfort with existing institutions. In all our case studies, the set of then stabilized expectations has increasingly lost legitimacy due to experienced practical limitations and due to external criticism: For example, the modernist conception of urban design in NUM was criticized by publicists, the downsides of capitalist urban development were highlighted by the illegal practices of informal land use in STU, the top-down urban renewal approach of the ‘federal bulldozer’ in NHM, or the
outdated catching-up philosophy in LRP. The line of conflict was always between representatives of the so far hegemonic order – who sought to defend these expectations – and a gradually growing group of avant-gardists, often representing the younger generation – who felt a vague discomfort and increasingly sympathized with a critique formulated by professionals from outside the domain of planning.

The opportunity to realize an innovative approach for the first time usually takes place beyond a given institutional order. Members of the founding network, local allies and patrons experience such first practical instantiations as ‘extraordinary’ effort. Such conditions can be interpreted as temporary and locally restricted ‘institutional voids’ (Hajer, 2003) within which expectations are ambiguous and inertia against novelty are relaxed. Patrons are required to create such situations in which existing rules can be over-ridden, and to back them politically. Local allies are required to identify links to local traditions. For instance, in NUN frequent reference to widely acknowledged local projects in the same city helped to foster the innovation. Furthermore, local allies are helpful to identify under-regulated areas with a view to the local ‘opportunity structure’ (Heinelt & Zimmermann, 2011). In STU, in the early 1990s, the political and institutional turmoil and the unclear legal ownership situation for many properties immediately after the German reunification created a situation, in which it was easier than anywhere else in Germany to find unused land or buildings for informal appropriation.

Extraordinary events provide additional local opportunities to test unusual ideas at an early point in time. The International Building Exhibitions (IBA) Berlin (1987) and Emscher Park (1989-1999) offered decisive learning opportunities in all four cases studies.

In the ‘generation’ phase the conflict lines between avant-gardists and the establishment remain similar, yet the conflict changes in nature as institutional resources, such as public funding, personnel but also land and capital all have to be invested in prototypical novel practices. The requisite networking practices are driven by the desire to identify or even create local situations in which representatives of the establishment are a minority and/or suffer from de-legitimisation in order to focus on pragmatic problems of implementation, and to postpone the more fundamental conflict about the alternative approach itself.

Once put into practice successfully, the desire to learn more about the successful innovation comes to the fore in the ‘formatting’ phase. The previous conflict between self-proclaimed avant-garde and the establishment persists and can flare up locally wherever a less well protected local coalition forms to implement another innovative project. More interestingly, at this stage a distinct new conflict line runs straight through the group of network founders reflecting the dynamics of institutionalization. Initial attempts towards institutionalization can be observed in this phase, relating to soft institutions. Typical conflicts occur in the process of codification of key knowledge, e.g. about the most effective terminology to describe the innovation or elements of it and about the setup of accompanying research. Within the avant-garde thus conflicts arise about opinion leadership and competition for reputation within the growing professional community.

In the phase of ‘stabilizing’, the efforts towards institutionalization also include harder institutions, like regulative laws (e.g. in STU the inclusion of temporary use agreements such as in the so-called ‘Gestattungsvereinbarung’ or in the German building law in 2004), policy programmes (e.g. in NHM, the federal state of North Rhine-Westphalia in the early 1990s as well as national programmes such as the ‘Soziale Stadt’ in 1999 fostered
area-based social measures; in LRP, the REGIONALE programme in North Rhine-Westphalia from 2000 to 2016 institutionalized learning region policies in one federal state), the curricula of planning faculties (e.g. for NHM, the professionalization of neighbourhood management). So called ‘Städtebauliche Leitbilder’ – widely shared cognitive urban models to guide urban development – play a similar role in NUN, for example, the former ‘Leitbild’ of the modernist city was completely replaced by the new cognitive model of the new mixed use urban neighbourhood. It guided the rejuvenation of the European City as a normative projection for newly built districts.

In this phase, the long-lasting line of conflict between (former) pioneers and (former) establishment becomes less relevant. From time to time, confrontations might flare up in debates accompanying formal decision making processes but become less prevalent the more the new model turns into mainstream. However, within the group of proponents, another line of conflict is becoming more palpable at this stage: the conflict between pragmatist and idealistic proponents of the idea. While the former group is driven by the desire to further expand the sphere of influence and to enrol ever more allies, the latter becomes increasingly concerned about preserving the original magic of the idea and warns about its possible trivialization. ‘Men of the first hour’ become frustrated and frequently disengage from the community right at this stage.

Eventually, on its way into the last phase of ‘adjusting’, however, this conflict fades out when the innovation is becoming undeniably common sense, causing fatigue on the side of the pioneers. Their enthusiasm has gone.

5. Summary and conclusions

This paper explored whether concepts of social innovation allow us to better understand how significant changes in the domain of spatial planning take place. We took a procedural perspective (Cajaiba-Santana, 2014; Mulgan, 2006) and looked for regularities in the spatial–temporal dynamics of unfolding and consolidating social innovations in the realm of spatial planning.

The first important regularity concerns the temporal structure of innovation processes. Five phases of innovation can be distinguished (see Table 2): ‘incubating, generating, formatting, stabilizing and adjusting’. Along these phases innovation unfolds in a complex and multidimensional social process, yet a process with some recurring patterns. For analytical reasons we run a distinction between three dimensions, which in practice, of course interact closely. Each of them was discussed separately: (1) recombination or assemblage, (2) its relation to actors, and (3) institutions. The dynamics in each of these dimensions are summarized in Table 2.

Our approach advances a better understanding of the role of agency and pro-active learning of planners in promoting social innovations within their sphere, yet one in which agency is interacting with structures in a reflexive way (Cajaiba-Santana, 2014). In fact, our results suggest that planners have a great deal of power at their hand to shape and configure their own working conditions. However, it also became clear that this type of agency is distributed across several institutional roles, locations, societal spheres and spatial scales. Professional planners who wish to stimulate substantial change can enhance the likelihood of success by initiating or joining networks of founders and by carefully extending such networks according to the requirements of the situation
In order to promote the emergence of ‘boundary practices’ (Wenger, 1998, p. 115ff.), proactive practitioners look beyond the boundaries of the domain of planning for external inspiration. The presented model provides space for agency in roles outside of an elitist avant-garde, too. For instance, professional planners might contribute to innovation in more mundane roles such as local allies, early or late adopters or advocates. Actors outside of the profession can promote the process by acting in roles such as ‘patrons’ or ‘intermediaries’. Each role, however, has also fundamental limitations and is only productive in particular phases. For instance, elitist networks of pioneers are indispensable for promoting novel solutions in spatial planning but little helpful when it comes to formatting or stabilizing. Hence strategies and practices for effective agency have to change during the process.

The second point of our conclusion refers to the aspect of conflict in processes of social innovation. While it is well acknowledged that social innovations are embedded in normative agendas (e.g. Dawson & Daniel, 2010), our findings show that what actually is ‘socially desirable’ is usually assessed differently by different stakeholders in the process (Cajaiba-Santana, 2014). These findings go beyond the common sense that conflict is almost unavoidable when it comes to innovating given the Schumpeterian ambivalence expressed as creative destruction. They also go beyond existing process models on social innovation (e.g. Mulgan, 2006; Murray et al., 2010) that mainly take the perspective of proponents of an innovation. Rather, the framework elaborated above allows for a deeper understanding of the dynamic nature of conflicts during the process of social innovation, the different groups of stakeholders involved in it. Moreover, it reflects the shifting lines of conflict as well as the changing constellations among the actors involved. For instance, our framework unveiled different lines of conflict beyond the well-understood confrontation between pioneers and establishment.

| Phases of innovation | Incubating | Generating | Formatting | Stabilizing | Adjusting |
|----------------------|------------|------------|------------|-------------|-----------|
| **Content and form of the innovation** | Assemblage | Unconnected elements | First links between elements | Consolidation of elements and links | Variation and adaptation | Mundane routine |
| **Actors, networks and communities** | Networking | Avant-garde network, intermediaries | Enrollment of local allies & patrons | Enrollment of early adopters, retreat of patrons, local allies as advocates | Enrollment of late adopters, retreat of frustrated avant-gardists | Network closure |
| **Professional communities** | Overlapping practices | Local blend (boundary practice) | Multi-local boundary practice | Multi-local boundary practice | Multi-local boundary practice | Wide-spread common practice |
| **Institutions, institutionalisation and conflict** | Institutions | Deviant idea | Extraordinary conditions | Establishing concepts and frames | Establishing rules and laws | Differentiation of rules and laws |
| **Institutionalisation** | Anti-institutions | Extraordinary conditions | Establishing concepts and frames | Establishing rules and laws | Differentiation of rules and laws | Fatigue |
| **Conflicts** | Avant-garde vs. establishment | Avant-garde vs. establishment | Dominant vs. average avant-garde | Pragmatists vs. idealists | Fatigue |
During the later phases of an innovation, the main lines of conflict run right through the group of proponents. In the formatting phase, the dominant conflict is between different fractions of the avant-gardist group. This phase is characterized by struggles about the right understanding and the appropriate vocabulary to describe the innovation. Subsequently, in the stabilization phase the lines of conflict shift once more. Pragmatic avant-gardists who wish to collaborate with early and late adopters in order to further advance the innovation dispute with idealists who wish to preserve the magic of the first hour.

Our findings suggest that conflicts should be viewed as normal phenomena in processes of social innovation and thus appear more tolerable than commonly assumed so far. Sometimes, however, it might be helpful (both for the innovation and the individuals involved) if the actors of the first hour leave the network. Ironically, the most enthusiastic proponents of social innovations are not always the most suitable advocates to push an idea towards established practice.

**Last words**

Ultimately, this article wants to contribute to making the practice of planning more reflexive. We hope that our analytical framework and findings may help practitioners to better interpret their own role in processes of social innovation. This also includes reflexive knowledge about how to handle conflicts in the course of the innovative process – innovations may make the world a better place, but not necessarily in harmony.

**Notes**

1. The research project was conducted at the Leibniz Institute for Research on Society and Space, Erkner (near Berlin), and at the University of Stuttgart, Germany, between 2013 and 2015. It was financed by the German Research Foundation (DFG) under Grant CH 864/3-1, IB 95/6-1, JE 202/6-1 and WA 1591/6-1. The project comprised four sub-projects in close cooperation, being similar particularly in terms of the research design. Johann Jessen (PI) and Daniela Zupan were responsible for the sub-project ‘New Urban Neighbourhoods’, Uwe-Jens Walther (PI) and Oliver Koczy for ‘Neighbourhood Management’, Gabriela Christmann (PI) and Thomas Honeck for ‘Strategies of Temporary Uses’, and Oliver Ibert (PI) and Franz Füg for ‘Learning Regional Policies’. The paper was discussed in the ‘One on one paper discussion session’ at the 5th European Symposium on Culture, Creativity and Economy, Seville, October 6-8th, 2016. We would like to thank the discussants for their helpful comments.

2. Absolute novelty exists only in a historical perspective, particularly when something comes into being for the very first time.

3. Empirically grounded papers from the respective fields have been published elsewhere (Christmann et al., 2018; Füg, 2015; Honeck, 2015, 2017, 2018; Jessen & Zupan, 2017; Koczy, 2015, 2018; Zupan, 2015, 2018).

4. Many more men than women actually.

**Disclosure statement**

No potential conflict of interest was reported by the authors.
References

Albrechts, L. (2006). Shifts in strategic spatial planning? Some evidence from Europe and Australia. *Environment and Planning A: Economy and Space, 38*(6), 1149–1170. doi:10.1068/a37304

Amin, A., & Roberts, J. (2008). Knowing in action: Beyond communities of practice. *Research Policy, 37*, 353–369. doi:10.1016/j.respol.2007.11.003

Barnes, T. A. (2018). A marginal man and his central contributions: The creative spaces of William ('Wild Bill') Bunge and American geography. *Environment and Planning A: Economy and Space, 50*(8), 1697–1715. doi:10.1177/0308518X17707524

Bathelt, H., & Glückler, J. (2014). Institutional change in economic geography. *Progress in Human Geography, 38*(3), 340–363. doi:10.1177/0309132513507823

Bayliss, D. (2004). Creative planning in Ireland: The role of cultural-led development in Irish planning. *European Planning Studies, 12*(4), 497–515. doi:10.1080/0965431042000212759

Beierlorzer, H. (2010). The regionale. A regional approach to stabilizing structurally weak urban peripheries applied to the southern fringe of the metropolitan area Rhine-Ruhr. *disP, 46*(2), 80–88. doi:10.1080/02513625.2010.10557089

Belk, R. (2010). Sharing: Table 1. *The Journal of Consumer Research, 36*(5), 715–734. doi:10.1086/612649

Bogner, A., Littig, B., & Menz, W. (Eds.). (2009). *Interviewing experts*. Hampshire: Palgrave Macmillan.

Braun-Thürmann, H. (2005). *Innovationen* [Innovations]. Bielefeld: Transcript.

Bundesamt für Bauwesen und Raumordnung (BBR). (2007). *Neue Stadtquartiere. Bestand und städtebauliche Qualitäten* [New urban neighbourhoods. Portfolio and quality of urban design]. BBR-Online-Publikation Nr. 01/2007. Bonn: BBR. Retrieved from http://www.bbrs.bund.de/BBSRD/DE/Veroeffentlichungen/BBSROnline/2007/DL_NeueStadtquartiere.pdf?__blob=publicationFile&v=2

Bundesministerium für Verkehr, Bau und Stadtentwicklung (BMVBS), & Bundesamt für Bauwesen und Raumordnung (BBR). (2008). *Zwischennutzungen und Nischen im Städtebau als Beitrag für eine nachhaltige Stadtentwicklung* [Temporary uses and nitches in city planning as a contribution to a sustainable urban development]. Werkstatt Praxis Heft 57. Bonn: BBR.

Cajaiba-Santana, G. (2014). Social innovation: Moving the field forward. *Technological Forecasting and Social Change, 82*, 42–51. doi:10.1016/j.techfore.2013.05.008

Christmann, G. B. (2012). Raumpioniere in Stadtquartieren und die kommunikative (Re-) Konstruktion von Räumen [Spatial pioneers in urban neighbourhoods and the communicative (re-)construction of spaces]. In R. Keller, H. Knoblauch, & J. Reichertz (Eds.), *Kommunikativer Konstruktivismus: Theoretische und empirische Arbeiten zu einem neuen wissenssoziologischen Ansatz* [Communicative Constructivism: Theoretical and empirical investigations in the framework of a new approach to the sociology of knowledge] (pp. 153–184). Wiesbaden: Springer VS.

Christmann, G. B., Ibert, O., Jessen, J., & Walther, U.-J. (2018). How does novelty enter spatial planning? Conceptualizing innovations in planning and research strategies. In W. Rammert, A. Windeler, H. Knoblauch, & M. Hutter (Eds.), *Innovation society today. Perspectives, fields, and cases* (pp. 247–272). Wiesbaden: Springer VS.

Dawson, P., & Daniel, L. (2010). Understanding social innovation: A provisional framework. *International Journal of Technology Management, 51*(1), 9–21. doi:10.1504/IJTM.2010.033125

De Landa, M. (2006, 1953). *A new philosophy of society: Assemblage theory and social complexity*. London: Continuum.

Deutsches Institut für Urbanistik (DIFU). (2003). *Strategien für die Soziale Stadt* [Strategies for the socially integrative city]. Berlin: DIFU.

Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review, 14*(4), 532–550. doi:10.5465/amr.1989.4308385

Eltges, M., & Kocks, M. (2015). Integrating efforts in the planning process – the programme Soziale Stadt [Integrated approaches in spatial planning – the programme Socially Integrative City]. *Informationen zur Raumentwicklung, 3*, 287–300.

Ewers, H.-J., & Wettmann, R. W. (1980). Innovation-oriented regional policy. *Regional Studies, 14*(3), 161–179. doi:10.1080/09595238000185171
Faludi, A. (1985). A decision-centred view of environmental planning. Landscape Planning, 12(3), 239–256. doi:10.1017/S0304-3924(85)90004-8

Füg, F. (2015). Reflexive Regionalpolitik als soziale Innovation: Vom Blick in die Sackgasse zur kollektiven Neuerfindung [Reflexive regional policy as a social innovation. From the view into the deadlock to the collective reinvention]. Informationen zur Raumentwicklung, 3, 245–261.

Füg, F., & Ibert, O. (in this Special Issue). Assembling social innovations in emergent professional communities. The case of learning region policies in Germany. European Planning Studies.

Gillwald, K. (2000). Konzepte sozialer Innovation [Concepts of social innovation]. WZB Paper, P00-519. Berlin: WZB. Retrieved from http://bibliothek.wzb.eu/pdf/2000/p00-519.pdf

Grabher, G. (1994). The embedded firm: On the socioeconomics of interfirm relations. London: Routledge.

Grabher, G., & Thiel, J. (2015). Mobilizing action, incorporating doubt: London’s reflexive strategy of hosting the Olympic Games 2012. In G. Grabher & J. Thiel (Eds.), Self-induced shocks: Mega-projects and urban development: Perspectives in metropolitan research (pp. 87–98). Berlin: Jovis.

Güntner, S. (2007). Soziale Stadtpolitik: Institutionen, Netzwerke und Diskurse in der Politikgestaltung [Social urban policy. Institutions, networks and discourses in policy making]. Bielefeld: Transcript.

Hafner, T., Wohn, B., & Rebbholz-Chaves, K. (1998). Wohnsiedlungen. Entwürfe. Typen. Erfahrungen aus Deutschland, Österreich und der Schweiz [Residential areas. Designs. Types. Experiences from Germany, Austria and Switzerland]. Basel: Birkhäuser.

Hajer, M. (2003). Policy without polity? Policy analysis and the institutional void. Policy Sciences, 36(2), 175–195. doi:10.1023/A:1024834510939

Hall, P. (1998). Cities of tomorrow: An intellectual history of urban planning and design in the twentieth century. Oxford: Blackwell.

Häußermann, H., & Siebel, W. (1994a). Die Kulturalisierung der Regionalpolitik [The culturalisation of regional policy]. Geographische Rundschau, 45, 218–223.

Häußermann, H., & Siebel, W. (1994b). Wie organisiert man Innovationen in nicht innovativen Milieus [How to organise innovations in non-innovative milieus]? In R. Kreibich (Ed.), Bauplatz Zukunft: Dispute über die Entwicklung von Industrieregionen [Building place ‘future’. Disputes about the development of industrial regions] (pp. 52–62). Essen: Klartext Verlag.

Häussling, R. (2007). Sozialwissenschaftliche Innovationsforschung: Zum aktuellen Umgang der Gesellschaft mit dem Neuen [Social-science based innovation research: Towards the current society’s dealing with novelty]. Soziologische Revue, 30(4), 369–382. doi:10.1524/ssrr.2007.30.4.369

Haydn, F., & Temel, R. (Eds.). (2006). Temporäre Räume: Konzepte zur Stadtverwendung [Temporary places. Concepts of using the city]. Basel: Birkhäuser.

Healey, P. (1992). Planning through debate: The communicative turn in planning theory. Town Planning Review, 63(2), 143–162. doi:10.3828/tp.r.63.2.1422(602303814821

Healey, P. (1997). The revival of strategic planning in Europe. In P. Healey (Ed.), Making strategic plans: Innovation in Europe (pp. 3–19). London: Routledge.

Healey, P. (2006). Transforming governance: Challenges of institutional adaptation and a new politics of space. European Planning Studies, 14(3), 299–320. doi:10.1080/09654310500420792

Healey, P. (2013). Circuits of knowledge and techniques: The transnational flow of planning ideas and practices. International Journal of Urban and Regional Research, 37(5), 1510–1526. doi:10.1111/1468-2427.12044

Heinelt, H., & Zimmermann, K. (2011). ‘How can we explain diversity in metropolitan governance within a country?’ Some reflections on recent developments in Germany. International Journal of Urban and Regional Research, 35(6), 1175–1192. doi:10.1111/j.1468-2427.2010.00989.x

Honeck, T. (2015). Zwischennutzung als soziale Innovation: Von alternativen Lebensentwürfen zu Verfahren der räumlichen Planung [Temporary uses as a social innovation. From alternative lifestyles to procedures of spatial planning]. Informationen zur Raumentwicklung, 3, 219–233.

Honeck, T. (2017). From squatters to creatives: An innovation perspective on temporary use in planning. Planning Theory & Practice, 18(2), 268–287. doi:10.1080/14649357.2017.1303536

Honeck, T. (2018). A touch of post-truth: The roles of narratives in urban policy mobilities. Geographica Helvetica, 73(2), 133–145. doi:10.5194/gh-73-133-2018
Howaldt, J., & Schwarz, M. (2010). “Soziale Innovation” im Fokus: Skizze eines gesellschaftstheoretisch inspirierten Forschungskonzepts [“Social innovations” in the focus: A sketch of a socio-theoretically informed research design]. Bielefeld: Transcript.

Ibert, O., Christmann, G. B., Jessen, J., & Walther, U.-J. (2015). Innovationen in der räumlichen Planung [Innovations in spatial planning]. Informationen zur Raumentwicklung, 3, 171–182.

Ibert, O., & Müller, F. C. (2015). Network dynamics in constellations of cultural differences. Relational distance in innovation processes in legal services and biotechnology. Research Policy, 44, 181–194. doi:10.1016/j.respol.2014.07.016

Innes, J., & Booher, D. (2010). Planning with complexity: An introduction to collaborative rationality for public policy. New York: Taylor and Francis.

Jessen, J. (2004). Europäische Stadt als Bausteinkasten für die Städtebaupraxis – die neuen Stadtteile [The European city as a modular kit for urban development practices – the new urban neighbourhoods]. In W. Siebel (Ed.), Die europäische Stadt [The European city] (pp. 92–104). Frankfurt a. M.: Suhrkamp.

Jessen, J., & Walther, U.-J. (2010). Innovationen im Städtebau [Innovations in urban design]. In A. Harth & G. Scheller (Eds.), Soziologie der Stadt- und Freiraumplanung [Sociology of urban and open-space planning] (pp. 283–296). Wiesbaden: Budrich.

Jessen, J., & Zupan, D. (2017). Leitbildwechsel. Wie kommt Neues in die Stadtplanung? [Change in the guiding principle. How does novelty enter urban planning?]. Forum Stadt, 1, 59–77.

Kauzick, M. (2007). Zwischennutzung als Initiator einer neuen Berliner Identität [Temporary use as initiator of a new city’s identity in Berlin]? Institut für Stadt- und Regionalplanung. Graue Reihe, Heft 7, Berlin: Technische Universität Berlin. Retrieved from http://opus4.kobv.de/opus4-tuberlin/files/1702/Graue_Reihe_Heft_7_Zwischennutzung.pdf

Kenis, P., & Oerlemans, L. (2008). The social network perspective: Understanding the structure of cooperation. In S. Cropper (Ed.), Handbook of inter-organizational relationships (pp. 289–312). Oxford: Oxford University Press.

Koczy, O. (2015). Neue Akteure im Stadtteil: Entstehungsstranglinien des Quartiermanagements [New actors in the neighbourhood. Lines of development of the neighbourhood management]. Informationen zur Raumentwicklung, 3, 273–285.

Koczy, O. (2018). Quartiersmanagement als soziale Innovation. Eine empirische Untersuchung zum Prozess der Entstehung, Verbreitung und Ausstrahlung integrativer und sozialraumorientierter Verfahren der Quartiersentwicklung. [Neighbourhood management as social innovation. Empirical study on the emergence, dissemination and transfer of integrated sociospatial planning procedures in neighbourhood development]. Dissertation an der Universität Stuttgart [PhD-Thesis at the University of Stuttgart].

Kvale, S. (2007). Doing interviews. London: Sage.

Langley, A., Smallman, C., Tsoukas, H., & van de Ven, A. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. Academy of Management Journal, 56(1), 1–13. doi:10.5465/amj.2013.4001

Lave, J. C., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.

Lelong, B. (2014). Grasping micro-macro-interactions in urban development politics: A multidimensional network approach to collective action. Historical Social Research, 39(2), 203–234. doi:10.12759/hsr.39.2014.2.203-234

Lindhult, E. (2008). Are partnerships innovative? In L. Svensson & B. Nilsson (Eds.), Partnership – as a strategy for social innovation and sustainable change (pp. 37–54). Stockholm: Satéruns Academic Press.

McCann, E., & Ward, K. (2012). Assembling urbanism: Following policies and ‘studying through’ the sites and situations of policy making. Environment and Planning A: Economy and Space, 44(1), 42–51. doi:10.1068/a44178

McCann, E., & Ward, K. (2013). A multi-disciplinary approach to policy transfer research: Geographies, assemblages, mobilities and mutations. Policy Studies, 34(1), 2–18. doi:10.1080/01442872.2012.748563
McFarlane, C. (2011). *Learning the city: Knowledge and translocal assemblage*. Malden, MA: Wiley.

Morgan, K. (1997). *The learning region: Institutions, innovation and regional renewal*. *Regional Studies*, 31(5), 491–503. doi:10.1080/00343409750132289

Moulaert, F., Jessop, B., Hulgard, L., & Hamdouch, A. (2013). Social innovation: A new stage in innovation process analysis? In F. Moulaert, D. MacCallum, A. Mehmoood, & A. Hamdouch (Eds.), *The International Handbook on social innovation: Collective action, social learning and transdisciplinary research* (pp. 110–130). Cheltenham: Edward Elgar.

Mulgan, G. (2006). The process of social innovation. *Innovations: Technology, Governance, Globalization*, 1(2), 145–162. doi:10.1162/itgg.2006.1.2.115

Müller, F. C., & Ibert, O. (2015). (Re-)sources of innovation: Understanding and comparing time-spatial innovation dynamics through the lens of communities of practice. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 65, 338–350. doi:10.1016/j.geoforum.2014.10.007

Mumford, M. D. (2002). Social innovation: Ten cases from Benjamin Franklin. *Creativity Research Journal*, 14(2), 253–266. doi:10.1207/S15326934CRJ1402_11

Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation*. London: The Young Foundation. Retrieved from https://youngfoundation.org/wp-content/uploads/2012/10/The-Open-Book-of-Social-Innovation.pdf

Neuloh, O. (Ed.). (1977). *Soziale Innovation und sozialer Konflikt* [Social innovation and social conflict]. Göttingen: Vandenhoek and Ruprecht.

Phillips, W., Lee, H., Ghobadian, A., O’Regan, N., & James, P. (2015). Social innovation and social entrepreneurship: A systematic review. *Group & Organization Management*, 40(3), 428–461. doi:10.1177/1059601114560063

Pinson, G. (2002). Political governmental and governance: Strategic planning and the reshaping of political capacity in Turin. *International Journal of Urban and Regional Research*, 26(3), 477–493. doi:10.1111/1468-2427.00394

Prior, L. (2003). *Using documents in social research*. London: Sage.

Provan, K. G., & Kenis, P. (2007). Modes of network governance: Structure, management, and effectiveness. *Journal of Public Administration Research and Theory*, 18(2), 229–252. doi:10.1093/jopart/mum015

Rammert, W. (2010). Die Innovationen der Gesellschaft [The innovations of the society]. In J. Howaldt, & H. Jacobsen (Eds.), *Soziale Innovation: Auf dem Weg zu einem postindustriellen Innovationsparadigma* [Social innovation. On the path to a post-industrial innovation paradigm] (pp. 21–51). Wiesbaden: VS Verlag.

Rittel, H. W. (1972). On the planning crisis: System analysis of the first and second generation. *Bedriftsøkonomer*, 8, 390–396.

Roy, A. (2012). Ethnographic circulations: Space-time relations in the worlds of poverty management. *Environment and Planning A: Economy and Space*, 44(1), 31–41. doi:10.1068/a44180

Schumpeter, J. A. (1911). *Theorie der wirtschaftlichen Entwicklung* [Theory of economic development]. Leipzig: Duncker und Humblot.

Schumpeter, J. A. (1947). The creative response in economic history. *The Journal of Economic History*, 7(2), 149–159. doi:10.1017/S00220507000054279

Schütz, A. (1953). Common-sense and scientific interpretation of human action. *Philosophy and Phenomenological Research*, 14(1), 1–38. doi:10.2307/2104013

Senatsverwaltung für Stadtentwicklung Berlin. (2007). *Urban pioneers*. Berlin: Jovis.

Walther, U.-J. (2008). Integrated area based approaches in neighbourhood regeneration – the European experience. In W. Strubelt & G. Gorzelak (Eds.), *City and region* (pp. 346–357). Opladen: Budrich.

Ward, S. (2002). *Planning the twentieth-century city: The advanced capitalist world*. Chichester: Wiley.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Wolff, S. (2008). Dokumenten und Aktenanalyse [Document and file analysis]. In U. Flick et al. (Eds.), *Qualitative Forschung* [Qualitative research] (pp. 502–513). Reinbek near Hamburg: Rowohlt.
Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

Zapf, W. (1989). Über soziale Innovationen [On social innovations]. *Soziale Welt*, 40(1/2), 170–183.

Zupan, D. (2015). Von der Großsiedlung der Spätmoderne zum kompakten nutzungsgemischten Stadtquartier. Verlaufsformen eines städtebaulichen Erneuerungsprozesses [From the large housing estate of the late modernism to the compact mixed-used urban neighbourhood. The course of a renewal process in urban design]. *Informationen zur Raumentwicklung*, 3, 183–200.

Zupan, D. (2018). *Leitbildwechsel: Dynamiken und Charakteristika städtebaulicher Innovationsprozesse* [Changes in the guiding principle: Dynamics and characteristics of innovation processes in urban design]. Detmold: Rohn.