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Social Encounter by Experiment? Potentials and Pitfalls of Real-World Labs for Urban Planning

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Abstract
This article explores the potential of real-world labs (RWLs) and real-world experiments (RWEs) to be a fruitful addition to established approaches in urban planning in Germany. While transdisciplinary and transformative RWLs rooted in socio-ecological sustainability studies have become an important tool for experimenting with innovative solutions for environmental challenges in cities, RWLs aimed at improving social cohesion in neighbourhoods and fostering a communal life characterised by dialogue and solidarity are rare. To this latter aim, this article contributes with research experience from a transdisciplinary RWL on cooperative urban open space development seeking to foster social cohesion in super-diverse neighbourhoods in Germany. This article analyses the contradictory perceptions of the local stakeholders involved as regards the potentials of RWEs to be a meaningful addition to established planning practices. This article makes it clear that there is greater proximity between urban planning theory, practice, and RWEs than initially assumed. Nevertheless, RWEs have considerable potential as a positive complement to established approaches to urban planning and as a means of experimenting with open-ended encounter formats in neighbourhoods.

1. Introduction

Cities today face a multitude of ecological, social, and economic problems—both new and old—and, as a result, urban practitioners and researchers are searching for new, transformative strategies to understand and solve these problems. Urban labs and experiments in their different variations seem to hold great potential for informing and re-directing established urban planning approaches. Derived from earlier experiences in socio-ecological sustainability studies, a new methodological approach called the real-world laboratory (RWL), which provides the research infrastructure for real-world experiments (RWEs), has also become established in urban planning and development in Germany (Bulkeley et al., 2019; Schäpke et al., 2017, pp. 28–45; Schneidewind, 2014; Scholl & Kemp, 2016, pp. 89–91).

As this relation between experiments and the city—as one aspect of the overarching 'experimental turn' in the social and economic sciences—has recently been attracting increasing attention in scientific discourse, opinions on how to assess this relationship and its effects in urban planning have multiplied. On the one hand, research notes the "absence of experiments in planning" (Honey-Rosés & Stevens, 2019, p. 267). According to this line of thinking, it is largely unclear whether far-reaching effects can be achieved at all through experimental approaches in urban development. On the other hand, "city labs are seen as vehicles for innovation in urban planning processes" (Scholl & Kemp, 2016, p. 89) and experimental methods using participatory and activating elements are said to be commonplace in urban planning theory and practice (Kanning, 2018, pp. 7–8). Here, "the experiment with its co-creative dogmas seems to

be a perfect fit for current governance policies in urban planning" (Jacobsen, 2018, p. 36; see Caprotti & Cowley, 2017; Evans, Karvonen, & Raven, 2016). Indeed, even if urban labs have become an established tool in urban development, the relationship between RWLs/RWEs and urban development/urban planning still seems to be under-researched in both the conceptual and empirical perspective.

This knowledge gap concerning the potentials and pitfalls of transdisciplinary and transformative RWLs in urban planning becomes even more apparent when the various RWL topics are considered: While a broad array of urban labs has been experimenting with innovative solutions for environmental challenges in cities, so far little attention has been paid to 'social' RWLs aiming, e.g., at improving the social cohesion in neighbourhoods (Räuchle & Schmiz, 2020). This is surprising insofar as the management of ethnic or social diversity has become a central topic of urban policy-making not only in Germany but also across Europe within the last decade, leading to a broad variety of 'mixing' and 'social cohesion' policies and interventions in urban planning and development (Lapina, 2016; Phillips, 2015).

The article at hand critically questions the potentials and pitfalls of RWLs on social cohesion in urban planning. The specific aim of this study is to analyse to what extent urban local stakeholders *perceive* RWLs and RWEs as a potential for urban planning, using an RWL project focused on cooperative urban open space development as a tool to foster social cohesion in super-diverse neighbourhoods in Germany as a case study.

The article proceeds as follows: The following sections outline the theoretical and conceptual relationship between urban planning, RWLs, and RWEs (Section 2) before the case study and methods of this article are set out (Section 3). Then, this article discusses the urban stakeholders' perception of RWLs/RWEs as an additional tool for urban planning along three aspects: firstly, it asks if an RWL is interesting for urban planning content-wise (Section 4), or secondly, in terms of the methodological design (Section 5), and thirdly, it explores how RWLs can enrich governance arrangements in urban planning (Section 6). Finally, the practical value of RWLs/RWEs as a tool for urban planning is critically questioned (Section 7).

2. Theorising the Relationship between RWLs, RWEs, and Urban Planning

The conceptual and empirical relationship between urban labs and urban development/planning has not yet been definitively elucidated and depends on very different dimensions, e.g., on the planning object, but also on the lab definition itself (e.g., Scholl & Kemp, 2016). For the case of this article, urban labs are primarily defined as RWLs, a specific conceptual-empirical phenomenon in Germany and one form of an urban lab (for the relation between RWLs and other forms of

urban labs cf. Schäpke et al., 2017). RWLs describe transdisciplinary research institutions that are established to conduct RWEs in a spatially delimited social context (Schneidewind, 2014). RWLs aim to initiate transformation processes and to establish scientific as well as social learning processes (Parodi et al., 2016). RWLs are essentially normative because they explicitly pursue social goals (Defila & Di Giulio, 2018). Determining—in a first step—the theoretical-conceptual relation between RWLs, RWEs, and urban planning, and thereby developing a clear definition of RWEs, can help shed light on the potentials and pitfalls of RWLs in urban planning more systematically. In the following section, I examine current literature on these aspects.

2.1. Approaching RWEs

RWEs' characteristics become more apparent in comparison with traditional lab experiments (Beecroft, Trenks, Rhodius, Benighaus, & Parodi, 2018; Parodi et al., 2016, pp. 15-16; Puttrowait, Dietz, Gantert, & Heynold, 2018). Taking the latter as a reference point, an RWE is defined as follows: (1) It is embedded in a specific spatial, physical, social, economic, political, and, in the end, societal 'real-world' context. Thus, it is more exposed to 'external' factors that are, in turn, more difficult to control than in lab experiments; (2) Although RWEs can be repeated, like a lab experiment can, these permanently changing contexts make it more difficult or even impossible to observe cause-and-effect relationships between dependent and independent variables; (3) As a result, the possibility to generalise the results is much more limited than in lab experiments; (4) Furthermore, the RWE's transdisciplinary methodology requires its co-design and co-production with actors from civil society, local government/administration, business, etc. (Renn, 2018). This calls for a continuous methodological reflection of the research process with all participants; (5) Moreover, the RWE as the RWL's key instrument, which per se pursues transformative goals, consciously aims at initiating social change. Within the framework of RWLs, RWEs are intended to generate knowledge that guides action to achieve normative goals.

This is, however, an ideal-typical definition of RWEs. It is still unclear whether the term 'experiment' is at all appropriate given the strong deviations from lab experiments and its inflationary, often unreflective use in social sciences (Karvonen & van Heur, 2014; May & Perry, 2016). At best, a RWE represents a hybrid form of experiment, as it moves between knowledge production (describe/explain) and knowledge application (change/transform) as well as controlled and situation-specific framework conditions (Beecroft et al., 2018; Schneidewind, 2014, p. 2). With this ideal-type of RWE in mind, the question arises, whether and how RWLs and their experiments can be integrated into urban planning theory.

2.2. The Relation between RWLs and Urban Planning in General Perspective

Very simplified, urban planning constitutes the opposite of an experimental approach to urban issues: Planning means to make final, risk-averse decisions for future action in the sense of a master plan, based on reliable knowledge about the actual state, the set goals, and the effects of the used instruments (e.g., Müller-Ibold, 1996, p. 32). Once a plan has been approved and its implementation has begun, the planning process ends. This, too, is an ideal-typical definition which does not necessarily correspond to 'real-world' urban planning. The relation between RWLs, their experiments, and urban planning processes depends to a large extent on the conceptual approach to urban planning (cf. Albrechts, 1991; Yiftachel, 1989).

Applying a rational, technocratic-hierarchical understanding of planning, a transdisciplinary and reflective dimension in urban planning is likely to be 'underdeveloped' and, in conceptual terms, RWEs can hardly be integrated into this type of planning (Banovetz, 1971; Healey, 1983). However, considering rather recent planning theory, linear-hierarchical stringent approaches to planning no longer seem to exist, having instead been replaced by a modern, communicative-performative ideal of planning (Danielzyk & Sondermann, 2018; Healey, 1996, 1997; Mackrodt & Helbrecht, 2013). Here, planning seems to consist only of open, incremental, communicative negotiations and collaborations of different actors in networks (Danielzyk & Sondermann, 2018, p. 964; Karow-Kluge, 2008; Knieling, 2018). The planner itself becomes a moderator between different interest groups (Olesen, 2018). In any case, in its modern understanding, planning is highly flexible as it, in the face of context-specific challenges, adapts its procedures and instruments correspondingly (Dorstewitz, 2014, p. 433). Some theorists, but also practitioners, even model urban planning—according to the critical-rationalist falsification criterion—as a trial-and-error process in which the plan as a hypothesis and its implementation as an experiment are in a continuous feedback loop (Deutscher Städtetag, 2013; Dorstewitz, 2014, p. 433). Lastly, conceptually and terminologically, RWEs and urban planning merge in the notion of 'performative planning,' particularly when 'performative' and 'experimental' are used as synonyms (cf. Altrock, 2014). This, of course, does not mean that urban planning is only limited to moderating processes. Urban planning is definitely based on planning guidelines, both in terms of strategy and content.

Comparing RWEs and urban planning, experiments are reversible and not designed for the long term; they use urban spaces only temporarily. Furthermore, they do not anticipate urban futures through the rational use of available knowledge that, in turn, melts into an urban development plan (Schäfers, 1992, p. 232). In principle, RWEs are in line with a planning approach that takes subjective values and local traditions to a greater extent into account than technocratic-hierarchical planning approaches (Othengrafen & Reimer, 2018). However, there is one main difference: Urban planning aims to intervene in urban spaces and change them, whereas RWEs, in a first step, aim at revealing and explaining (causal) relationships between different dimensions in urban spaces. Only in a second step shall RWEs have a transformative effect in urban spaces.

2.3. The Relation between RWLs and Urban Planning along Different Dimensions

Taking a deeper look at the German conceptual debate on RWLs, the main points of discussion revolve around the goals of RWLs, the types of knowledge needed and produced in RWLs, as well as the instruments that are used to generate this knowledge. Elucidating the relationship between RWLs and urban planning along these dimensions, similarities and differences are revealed.

2.3.1. Objectives

Urban RWLs and urban planning share common objectives when it comes to changing urban spaces. Both charge urban space with meaning in accordance with normative goals that are—in the case of urban planning—laid down in German planning law. These normative-legal goals correspond to those of the political support programmes with which most RWLs in Germany are financed and, with that, express specific paradigms of societal change: sustainability, ecological urban redevelopment, social cohesion, integration, etc. (Räuchle & Schmiz, 2020). Ultimately, it depends on the different RWLs and urban planning projects in which concrete values, i.e., objectives are to be realised. This observation leads to the question of knowledge: What do urban RWLs and urban planning need to know to pursue these goals successfully?

2.3.2. Types of Knowledge

In addition to knowledge about the urban context (system knowledge) and their own normative goals (target knowledge), RWLs need and produce, with RWEs, knowledge about how to achieve the set goals (transformation knowledge; Beecroft et al., 2018, p. 79; CASS & ProClim, 1997, p. 15). RWEs, however, never create 'secure' knowledge, but only 'safe' ignorance/not-knowing: From a critical-rationalist point of view, RWEs' hypotheses cannot be proven (verified), but only refuted (falsified). These experiments are therefore described as "metaphors for consciously dealing with ignorance" (Groß, 2017, p. 21). They must be 'open' regarding their results and contain a high degree of uncertainty. 'Success'—however it may be defined—is not guaranteed in these experiments. Yet, 'learning by failing' may also produce useful knowledge.

This, ultimately, also applies to urban planning. Planning almost always takes place under uncertainty as

soon as, in addition to the built environment, immaterial facts become, as system knowledge, part of urban planning projects (Abbott, 2005). By forecasting future developments, an urban development plan simplifies this knowledge so that in face of future imponderables, target knowledge is also uncertain. Finally, urban planning also works with uncertain transformation knowledge because the effects of the used instruments on urban spaces cannot be estimated precisely.

2.3.3. Instruments

In principle, urban development takes place, firstly, through legal instruments (binding legal provisions), secondly, through economic, exchange-based instruments (legally binding but terminable contracts) and thirdly, through communicative-informative, persuasive instruments (convincing arguments). Mainly between this last group of 'informal' urban planning instruments, e.g., neighbourhood development concepts, and RWLs, there is clear proximity. RWLs then can be easily integrated into planning projects in cities. Here, RWEs can be used as instruments that produce not only participatory, 'theoretical' transformation knowledge, but also practical, tested knowledge, opening urban planning to the "unplanned" (Drobek & Tran, 2017, p. 103). In sum, it seems that communicative instruments and methods in urban planning can be largely transferred to or adapted to RWLs—and vice versa (Eckart, Ley, Häußler, & Erl, 2018, pp. 131–145).

2.4. Analysing the Relation between RWEs and Urban Planning from the Perspective of Local Planning Cultures

Even if, from a theoretical-conceptual perspective, the relation between RWEs and urban planning is characterised by certain proximity, it remains unclear if this also applies to the reality of urban planning and the use of experimental approaches in different urban settings. Thus, although the paragraphs above describe the conceptual relation, they do not elaborate on this mutual relation in greater empirical detail. I, therefore, propose the following categories to aid in understanding the value of RWEs for urban planning from a practical point of view. The relationship between RWEs and urban planning depends on the three dimensions of target, system, and transformation knowledge, which in turn provide the following analytical categories:

- *Target knowledge* relates to an RWL's *content*, which may or may not be of interest for urban planning.
- *System knowledge* describes how an RWL is integrated into *local governance arrangements* and how urban planning relates to it.
- How the RWL collects *transformation knowledge* determines whether the RWL/RWE can be used as an additional *instrument* for urban planning.

Using these three categories, I analysed my empirical case study along with my research question on urban planning stakeholders' perceptions of experimental approaches. For this, this article refers to the notion of 'local planning culture' thereby emphasising the constructivist nature of urban planning itself. By 'local planning culture' I mean contextually embedded forms of urban planning that are shaped by overarching ways of thinking and acting of urban planning actors themselves. Local planning cultures manifest themselves in the social production of urban spaces (Sondermann, 2017, p. 47). One important dimension of planning on the ground is the specific local patterns of interpretation of different planning actors. In this understanding, urban planning objects do not exist as 'objective' problems, nor does the planning process. Rather, they are open to interpretation. In the following section, I present my case study and the applied methods before describing my empirical findings.

3. Setting the Stage: Case Study and Methodology

This article draws on empirical research conducted between 2018 and 2020 in the context of the RWL project "KoopLab: Participation through Cooperative Open Space Development" (https://www.kooplab.de/project). This RWL project is one example of similar research-practice-projects that address issues of social cohesion at the neighbourhood scale across European cities.

3.1. Urban Planning on Social Cohesion and Encounter

The steadily increasing diversity within cities has led to the insight that political steering is needed to strengthen local social cohesion and promote the acceptance of diversity, particularly in super-diverse urban neighbourhoods. This request is rooted in the observation that, despite a fundamental appreciation of diversity in society, not every form of diversity meets with unqualified acceptance (Wiesemann, 2019; Wilson, 2017); intolerance and rejection are certainly realities of everyday life in cities. In this respect, it is not only within the scientific community that the potential of group-spanning contacts and encounter for social cohesion is emphasised but also within urban development and planning practice (vhw, 2019). Accordingly, many social neighbourhood development measures in European cities are geared towards creating group-spanning contacts, often in combination with the idea of a 'social mix' (Phillips, 2015). At the same time, such measures frequently explain the kind and quality of encounters which are expected to reduce prejudices.

Here, the idea of 'spontaneous encounter' in public spaces is contrasted with that of 'organised encounters.' Regarding the former, many authors in urban and planning theory are convinced that, as shared everyday places, public spaces promote contact between

members of different social groups and, thus, lead to higher acceptability of social diversity (Dangschat, 2011; Sennett, 1991; Shaftoe, 2008), while sceptical voices regard everyday interaction being characterised by mutual distancing and indifference (Amin, 2002; Valentine, 2008; Wiesemann, 2015). In contrast, 'organised encounters' describe the creation of places of encounter and the provision of opportunities for encounters like communal gardens, concerts, etc. as part of urban development programmes to help reduce prejudices and create social cohesion (Wiesemann, 2019, p. 7). Nevertheless, research warns against excessive optimism, as the course of encounters—especially organised ones—is never predictable. It is not clear how relationships will develop in concrete situations (Wilson, 2017).

Against this backdrop, it is worth discussing the usefulness of combining established methods of urban development or planning with approaches that make greater use of spontaneous, experimental forms of encounter to improve social cohesion in urban neighbourhoods. In Germany, RWLs/RWEs are being tested as a new approach within urban planning to boost social cohesion in super-diverse neighbourhoods. Also, this article draws on experience from a RWL in a super-diverse neighbourhood.

3.2. KoopLab and Case Study in Hanover-Sahlkamp

At its three locations in Leipzig, Dortmund, and Hanover, the project KoopLab aims to test innovative methods of cooperative open space development that will bring residents together to design and develop green and open spaces close to their homes. The spatial focus is on so-called 'arrival neighbourhoods,' characterised by social disadvantage, migration, and high residential density (Saunders, 2010). For this article, particular focus is placed on the experiences of the RWL in Hanover, more specifically in the super-diverse neighbourhood Sahlkamp. The RWL Hanover-Sahlkamp is run by a university-based scientific team, an urban planning office experienced in participation procedures, and a civil society organisation, active in the neighbourhood for years. KoopLab is integrated into local governance arrangement in Hanover-Sahlkamp in different ways: There is not only a working relationship between the lab and the city's urban planning section within the local administration but also various residents and professional actors from the neighbourhood, e.g., social workers, have contributed to the RWL. Since 2018, KoopLab has been conducting a series of interventions, i.e., RWEs, all of which are geared towards developing alternative uses of open spaces and opportunities for encounters and strengthening social cohesion. These interventions include, for example: (1) A construction trailer that served as a mobile on-site café in seldom-used open spaces in the neighbourhood; (2) a balcony concert in a communal plot garden, surrounded by multi-storey residential buildings, which created an occasion for encounter and exchange for listeners from the direct neighbourhood and more distant residential areas; and (3) according to the motto "Sahlkamp dines," a long table that was set with white tablecloths and porcelain in the middle of the district park that invited local people to eat and drink together.

With a population of over 5,600 inhabitants and almost 2,500 households, Sahlkamp is located on the north-eastern edge of Hanover. In socio-demographic terms, it deviates in some key ways from the city-wide averages. For example, it is characterised by an above-average proportion of households with many children, higher rates of transfer benefit receipt, and a relatively large share of Germans with a 'migration background' (i.e., international immigrants and their children). The neighbourhood has been developed since the 1960s under the leadership of the public authorities to build affordable social housing. Since 2009, the neighbourhood has been part of the federal and state programme "Soziale Stadt" ("Social City") as an "urban district with special development needs" (Landeshauptstadt Hannover, 2015, p. 5). In addition to 'investive' measures, the local social infrastructure was also increasingly developed with the aim of not only strengthening social networks and neighbourhoods but also of promoting a "neighbourhood identity" and a "culture of participation" (Landeshauptstadt Hannover, 2019). Thus, the KoopLab RWL was established in a neighbourhood where the management of social cohesion through urban planning initiatives has a long tradition. While in the citywide discourse the district is discussed as a 'problem area' and a stigmatised neighbourhood, the perceptions of the residents themselves are quite varied here, as our empirical analyses have shown.

3.3. Empirical Methods

First, to gain an overview of the Hanoverian neighbourhood Sahlkamp, existing urban planning initiatives and the handling of social cohesion at the neighbourhood level, the project team employed a secondary analysis of existing data, including data on demographics provided by the municipal statistical offices. Also, we evaluated newspaper articles, documents, and web pages published by local authorities and semi-public actors such as civil society organisations to identify policy goals, stakeholders, institutional arrangements, and temporary programmes relevant to urban planning and the management of 'social cohesion,' 'mixing,' and 'encounters.'

However, given the scarcity of knowledge concerning the handling of experimental approaches in local urban planning and the perception of involved stakeholders of the RWL, the main focus of the empirical work for this article lay on qualitative methods that would allow for an interpretative approach to local planning cultures, i.e., we conducted 12 semi-structured interviews with three groups of stakeholders:

- First, a total of four interviews were conducted with people associated with neighbourhood development and social services in Hanover-Sahlkamp. Many of these interviewees were closely related to the KoopLab RWL, e.g., through participation in different lab interventions.
- Second, four interviews were carried out with representatives from municipal politics and administration, i.e., with experts affiliated to Hanover's urban planning and neighbourhood development section.
- Third, four interviews were conducted with members of the KoopLab core team at different stages in the lab processes.

The interviews focused, on the one hand, on the Sahlkamp neighbourhood and its communal life, (the history of) local planning initiatives in Hanover in general and in Sahlkamp in particular, on corresponding governance arrangements, and the role of performative-experimental approaches in this context. On the other hand, the interviews aimed at capturing the perceptions of the KoopLab RWL, the sense and senselessness of the conducted experiments/interventions and their effects in the neighbourhood.

The interview partners were selected according to the 'sampling along predefined criteria' as well as the 'snowball sampling' (Przyborski & Wohlrab-Sahr, 2014, pp. 182–185). The interviews were transcribed and analysed with the assistance of the text analysis programme MAXQDA. Empirical data was then subject to a qualitative content analysis based on multistage, thematic coding (Mayring, 2010).

However, in the context of the RWL and conducted RWEs, participant observations in Sahlkamp also helped to capture the perceptions of different groups of residents. In addition to these rather 'classical' methods of qualitative social research, the members of the RWL's core team—including myself—met every 2–3 weeks to exchange information and coordinate the lab process. Apart, they took part in various discussion groups and events in the neighbourhood and (informally) talked to residents and planners about their experiences in the neighbourhood. All these observations and conversations were recorded in a digital 'RWL diary.' These empirical data only play a 'flanking role' in the context of this article and are not systematically analysed.

As described above, from a conceptual perspective, whether proximity between RWEs and urban planning can be deduced depends on very different dimensions, e.g., the understanding of urban planning itself. How this plays out in 'real-world' planning practice, however, is also an ambiguous question. This relation depends very much, as I assume, on the local urban planning culture (see above). Here, Hanover seems to provide a rather favourable context for experimental approaches: As previous studies have shown, Hanover has a tradition of an open, communicative planning culture that sup-

ports a strong collaboration with civil society initiatives (Sondermann, 2015). This is also confirmed by the perception of the interviewed stakeholders, as will be shown in the following.

4. The Content Dimension: Neighbourhood-Related Planning and Transformative RWLs (Target Knowledge)

Due to the city's generally open planning culture, it is not surprising that the interviewed urban planning and community development stakeholders in Hanover have a rather positive attitude towards the RWL KoopLab. This applies first and foremost to the lab's overarching objectives.

4.1. Compatibility of Values and Norms

A RWL that aims at strengthening social cohesion in a super-diverse neighbourhood is in line with overarching (normative) political programmes that define how to politically handle these neighbourhoods, as in the case of the national urban development programme "Social City" (see above). This closeness in terms of contents is reflected in the interviewees' statements: A majority of them perceives the communal social life in the neighbourhood as being by no means conflict-free, especially because of its super-diversity. However, an appreciative perspective is the decisive aspect for the basically positive attitude towards the neighbourhood, as an involved urban planner emphasises: "What is really at stake is the positive recognition of a diversified urban society, be it multi-ethnic, multicultural, multinational, multisocial, or whatever, and Sahlkamp reflects this in a certain way" (personal communication). Against this background, local stakeholders promote the "strengthening of the neighbourhood," the enabling of "peaceful coexistence" and "pacification" in the neighbourhood, and ultimately its strong social cohesion, as fundamental values for the neighbourhood. Encouraging people to participate in urban development processes becomes, in their opinion, a means to the end of achieving social participation, conveying local democratic values, and informing people about their rights as residents in the neighbourhood. These ideas are not only compatible with already existing neighbourhood development programmes in Hanover-Sahlkamp; they also do justice to the conceptual demand that RWLs, with their transformative approach, should pursue a socially legitimate goal that is ethically well-founded and oriented towards the common good (Defila & Di Giulio, 2018, p. 12).

4.2. Normative Dilemma

While in terms of content, the proximity between urban planning initiatives in Hanover-Sahlkamp and the KoopLab RWL can easily be deduced, it becomes more difficult in terms of the (democratic) justification. In the case of the lab, on the one hand, its overriding values

and norms are set top-down. On the other hand, the RWL concept is based on the understanding that the normative goals are to be determined with the participation of all stakeholders (co-creation and co-design). Although the interviewed stakeholders in Sahlkamp identify with the overarching value of the RWL ("social cohesion"), secondary project objectives are simultaneously called into question. For example, an involved social worker voices criticism of the top-down set goals: "I find other topics much more important than open space development. Namely simply housing" (personal communication). Thus, while some stakeholders stress the importance of green spaces for life in the neighbourhood, others question the relevance of social encounters in public spaces to the residents' often highly problematic daily life: "Green and open spaces in the city are certainly not the first thing that comes to people's minds when they think about their problems" (personal communication). An interviewed urban planner reflects that KoopLab only receives its legitimation from the "seal of a research project," especially vis-à-vis the city administration: "We are using this to introduce experimental formats of neighbourhood participation…they have gained respectability in the eyes of the planners because they are not just any kind of student artist actions" (personal communication).

The difference to urban planning is obvious: It is also subject to the 'normative dilemma' but to a much lesser extent, given the more precise political guidelines in urban planning and the lower level of participation. This also applies to the problem of the translation of overriding values or their operationalisation into standards that guide action. However, particularly in a super-diverse neighbourhood like Hanover-Sahlkamp, it is not possible to define social cohesion, participation, and a 'good' neighbourhood by consensus bottom-up, given the fact the local population is so diverse (Räuchle & Schmiz, 2020). Here, the RWL offers a specific potential, as it is precisely its task to concretise such overriding values in constant dialogue and on-going communication with the local residents. This is, at least, confirmed by urban planning actors in Hanover, who stress that urban planning might be overburdened with this task due to a lack of personnel and financial resources.

5. The Instrumental Dimension: Knowledge Production and RWEs (Transformation Knowledge)

Although the RWE as the RWL's key instrument might differ from the instruments of conventional urban planning in conceptual respect, it is controversial whether this applies to urban planning practice. What do local stakeholders in KoopLab think about experimental approaches in urban planning for strengthening social cohesion in general and in Hanover-Sahlkamp in particular?

5.1. Questioning the Very Potential of RWEs in Urban Planning

Stakeholders from all different groups see several strengths and great potential in RWEs for testing possibilities for encounter in neighbourhoods. However, the interviewees make a very precise distinction between social neighbourhood development initiatives (like in the context of "Social City") on the one hand and 'classical' planning and participation processes subject to various (in)formal regulations on the other. While, in the former case, experimental formats are quite common and the proximity to performative approaches in urban planning is evident, in the latter case, RWEs represent a special opportunity. With RWEs, as an interviewed planner stresses, one moves "in a field that does not belong to the mainstream of urban planning, because there, the processes are usually so narrowly defined" (personal communication). Thus, RWEs offer special freedom to experiment. The interviewed members of the RWL core team particularly emphasise that, compared to other urban planning interventions that aim to create social cohesion, RWEs also gain a special character due to their being embedded in the research infrastructure of an RWL: "It is very important that one is not 'only' practically engaged in urban space…but that you reflect on it with each other" (personal communication).

In terms of knowledge production, there is a difference between experimental and traditional planning approaches. The open RWE, with its possibility of 'failure,' differs from the instruments of conventional planning procedures such as public discussions, round tables, or workshops. Experiments do not create 'safe' knowledge, they do not primarily serve to resolve conflicts, and create acceptance. Nevertheless, urban planners involved in KoopLab estimate the potential of experiments to be so high that they argue that they should no longer take place only in the 'niche,' but be integrated into official planning processes or precede them before the "actual planning machinery is set in motion" (personal communication). In the interviewed stakeholders' opinion, the potential of experiments lies in mobilising and activating local citizens and testing, e.g., options regarding how to use public spaces (cf. also Altrock, 2014, p. 24).

However, on the other side of the coin, the analysis reveals that some local stakeholders stress the limitations or challenges of this approach rather than its strengths. First, when specifically asked about the innovative potential of RWEs for social cohesion, interview partners from the social neighbourhood development department emphasised that they had "always" experimented with opportunities for encounters. As such, they indicate that these experimental approaches are actually nothing new. Furthermore, some stakeholders point to the ambiguity of the RWE format: It is possible, on an abstract level, to precisely define this type of experiment; however, the real challenge lies in its empirical implementation/operationalisation in urban planning in

line with the superordinate RWL's topic. For example, it is relatively easy to conduct experiments on technical issues of sustainability because their structure is usually clear, and the results can be recorded quantitatively. In contrast, this is considerably more difficult for RWEs on social cohesion, because the results or effects cannot be measured.

5.2. Questioning the Very Impact of KoopLab's RWEs

Against this background, the usefulness of the KoopLab RWEs is assessed ambiguously. Different interviewees say that they see their potential for the Hanover-Sahlkamp neighbourhood in two aspects: On the one hand, they expect that the RWEs demonstrate to actors at various levels of urban governance (district and city) which creative urban planning instruments can be used to boost social cohesion. On the other hand, project participants hope that the RWEs will open up possibilities for residents: Some interview partners stress that they are not only interested in getting residents more engaged in the development of 'their' neighbourhood in general, but that empowering socially disadvantaged people is particularly important. Another positive aspect is that KoopLab offers a chance for longer-term engagement in the neighbourhood. Although the different RWEs are always of short duration, an RWL is usually established for several years. As one of the city planners involved put it, "Urban planning is all too often like that, that you get an impression on the spot, but you are never on-site as long and in as much detail as we are now in Sahlkamp. For me, it means that much more comes to light" (personal communication). In the case of KoopLab, the involved stakeholders stress that the project's experimental approach definitely improves the neighbourhood's conditions for social encounter and appeals to residents who are difficult to reach even within an open, communicative approach in urban planning procedures. However, KoopLab's potential for the neighbourhood should not be overestimated. In this vein, one representative of the local community development department argued that "KoopLab is not really a concern for local residents, and the project is relatively invisible overall" (personal communication).

In general, it seems that the consideration of experimentally produced knowledge by official urban planning apparently depends on the inner 'attitude' of planners themselves. An open planning culture such as that in Hanover or an open attitude such as that of the local stakeholders certainly regards such knowledge production as an opportunity to make urban planning projects more citizen-centred. Here, KoopLab reveals that RWLs might be "a way of getting around the formal bureaucratic system in a quasi-formal way, by allowing certain deviations" (Scholl & Kemp, 2016, p. 93). As such, experimental approaches seem to hold potential for urban planning instrument-wise, but does that also apply to governance arrangements?

6. The Actor Dimension: Governance Arrangements and Networks of Relationships (System Knowledge)

Governance as a conceptual-heuristic framework describes urban actors and their relationships (hierarchical, competitive, cooperative), which are shaped by superimposed values and norms (Benz & Dose, 2010). Concerning RWL's embeddedness in local governance arrangements, the city administration may be closely associated with the lab, as either its "initiator or an important party to it," as in the case of 'city labs' (Scholl & Kemp, 2016, p. 89). This article is, however, based on an understanding of labs as RWLs whose relationship to the municipal administration and city politics can be much looser. This general approach to RWL governance arrangements corresponds to an open local planning culture (Sondermann, 2017, p. 47). From the governance perspective, different paradigms of spatial planning can then be determined, ranging from the 'synoptic' planning ideal (rational planning approach, intervening, hierarchical governance) to a 'discursive' planning culture (planning approach open to communication and results, negotiating-cooperative governance; Nuissl & Heinrichs, 2006). The latter will be discussed here and the question is whether interviewees perceive a specific potential of how the KoopLab RWL is embedded in Hanover's urban governance arrangements.

6.1. Competitive, Hierarchical, and Cooperative Relations

As introduced above, KoopLab represents an additional governance actor in Hanover-Sahlkamp, which acts relatively autonomously compared to other actors and also to the city's official urban planning politics. However, the RWL tries to establish cooperative relationships with other stakeholders in the neighbourhood and to dock into existing networks, e.g., by participating once a month in a working group responsible for organising neighbourhood events and consisting of the neighbourhood management, social workers, the biggest housing company on-site, and civil society organisations. In this respect, KoopLab serves as an intermediary interface between different groups of actors. The advantages of this rather independent position of the RWL are also recognised by various interviewed stakeholders, e.g., one representative of a local neighbourhood initiative stresses: "If we were more involved in official urban planning procedures, competition would be much stronger and some interventions would have met with more resistance from residents" (personal communication).

However, in the case of public spaces, the duration of the KoopLab interventions, i.e., RWEs, is decisive. As long as KoopLab only conducted temporary interventions in public space, no conflicts arose, e.g., with community workers or the urban planning section within the local administration. But, as soon as the core team tried to intervene with a long-term perspective, permission was not

granted from the city. Here, one member of the lab's core team emphasises: "This is very annoying because we can't implement ideas that really make sense for the neighbourhood" (personal communication). Hierarchical relationships are also evident in the case of interventions on privately owned land as permissions are not readily granted.

6.2. RWL as a New Actor

Against the background of the cooperative, communicative planning culture in Hanover (Sondermann, 2015, 2017), the urban planning staff with whom KoopLab works accepts the RWL as a new player and initially welcomes its interventions for experimental space use with interest and goodwill, as different interviewees confirm. They also accept that KoopLab acts relatively independently within the framework of the neighbourhood-related governance arrangement. The urban planning staff also see themselves, at least partially, involved in formalised planning procedures which do not ensure sufficient flexibility, as one urban planner confirms: "As part of the local administration, we cannot take such an independent position. This is particularly unfortunate in the case of planning projects that require a high degree of low-threshold participation" (personal communication). This is also true when the city awards a project to a private planning office. An interviewed planner also remarks that the flexibility for participating inhabitants is limited in official planning projects, given the more or less differentiated catalogue of services that must be worked through. Incidentally, most neighbourhoods—like Sahlkamp—have multi-layered constellations of actors and a complex range of interests that can only be covered by formal planning procedures to a limited extent. This opens up far-reaching possibilities for a RWL like KoopLab.

There can be no clear answer to the question of how a RWL must position itself in the governance arrangement of a city or neighbourhood to be able to work in a goal-oriented manner. This also applies to RWLs such as KoopLab Hannover, which retain their autonomy by neither concluding formal declarations of intent or land use agreements with the city administration nor entering too closely into cooperation with the official planning authorities. After all, interviewees confirm that they are maybe more likely to involve marginalised groups of residents who have little confidence in local actors working closely with the urban administration. Informal, loose relationships can be very promising for RWLs that aim at fostering social cohesion in the neighbourhood as an experimental niche in the existing governance arrangement. This is confirmed by the city's urban planning representatives, who see the potential of the RWL precisely in this independent position.

7. Lessons Learnt and Outlook

This article explored how local stakeholders from, e.g., urban planning and social work perceive the potential

of RWEs to be a fruitful addition to established urban planning practices. Based on an interpretative approach to planning and the notion of local planning culture, this study has focused on the content, instrumental, and governance dimension of urban planning. The findings presented are case study-based and, therefore, their generalisability must be critically questioned. Furthermore, the RWL's way of producing experimental knowledge is nothing entirely new for urban planning science and practice. In some respects, the RWL concept takes up the approaches that have already emerged in urban planning in recent past, for example within the framework of the communicative planning paradigm. Nevertheless, urban planning actors (in Hanover) see RWLs/RWEs as a potential for urban planning (in the case of social cohesion through cooperative open space development) particularly in the following aspects:

- *Negotiation of values and norms*: A RWL with its experimental, transdisciplinary and 'low-threshold' interventions, i.e., RWEs, enables the negotiation of overarching values and norms as well as their operationalisation for practice in different neighbourhoods. Here, the lab offers the specific chance to take into account local inhabitants' opinions, perceptions, and proposals that receive only limited attention in official planning processes. In this respect, RWLs may provide a more differentiated picture of what different groups of local stakeholders actually expect from different planning projects.
- *Extending opportunities for participation*: RWLs can expand opportunities for local residents' participation in neighbourhood planning. The lab's transdisciplinary approach—possibly combined with a targeted strategy of empowerment—its long-term engagement, and its various collaborative RWEs reach out to (marginalised) groups of residents with whom urban planning may find difficulty getting in touch with. Furthermore, a lab's 'neutrality' in the sense of a possible distance from other actors—especially from urban planning administration or housing companies—can positively influence the relation with a local public. Especially for social-participatory projects, an extended involvement of residents brings advantages for the planning process and the achievement of planning goals.
- *Permission to fail and reflect*: Like urban planning, RWLs pursue a transformative, normative goal. However, their RWEs do not aim at creating the conditions for achieving this goal, but primarily serve the purpose of open knowledge production. They allow for 'failure' and are designed to reflect the gained knowledge. For example, experiments can be conducted in different variations, which is hardly possible in planning itself. Openness, reflection, and an 'empathic understanding' of local issues are also often neglected in (conventional)

planning procedures. However, they can be helpful at least for an open planning culture, possibly as a preliminary stage to the actual planning process.

- *RWLs as new actors*: As a new 'actor,' the RWL enters governance arrangements at the neighbourhood scale with its established actor structures and relationships. For urban planning procedures, a RWL offers the opportunity not only to be a source of new ideas but also to break up ingrained, path-dependent patterns of relationships and negotiation. At least a rather open local planning culture can perceive the co-design and co-production in RWEs as enrichment. In this respect, RWLs can serve as intermediate interfaces between different groups of actors. They can dock onto existing networks, bring together actors who have had little contact with each other in the past, or set up flexible formats of cooperation which urban planning is not able to do in its formal planning procedures—due to legally or bureaucratically defined forms of participation, lack of time, or lack of human or financial resources. If participatory, deliberative involvement is a goal of planning, it can be strengthened by RWLs.

The recent crises that cities have been facing make new modes of transformative research necessary. In this study, I have argued that RWEs at the intersection of urban planning and community development hold unexpected potential for testing different 'opportunities for encounters.' In future research, however, comparative analyses of RWLs may help researchers gain a better understanding of constricting local conditions and the varied influence of different institutional environments on the transformative potential of RWEs and the successful creation of spaces of encounter. At the international level, comparative analyses of labs with different underlying theoretical concepts may identify specific lab settings that promote or inhibit social cohesion. Such research would be especially helpful to scientists and policymakers who wish to realise the full potential RWEs have to contribute at the interface of urban planning and community development to the fair and sustainable transformation of cities.

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Conflict of Interests

The author declares no conflict of interests.

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