UNIVERSITY OF AMSTERDAM

UvA-DARE (Digital Academic Repository)

Social learning as an analytical lens for co-creative planning

von Schönfeld, K.C.; Tan, W.; Wiekens, C.; Salet, W.; Janssen-Jansen, L.

DOI
10.1080/09654313.2019.1579303

Publication date
2019

Document Version
Final published version

Published in
European Planning Studies

License
CC BY-NC-ND

Link to publication

Citation for published version (APA):
von Schönfeld, K. C., Tan, W., Wiekens, C., Salet, W., & Janssen-Jansen, L. (2019). Social learning as an analytical lens for co-creative planning. *European Planning Studies*, *27*(7), 1291-1313. https://doi.org/10.1080/09654313.2019.1579303

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

Download date:10 Oct 2026

EUROPEAN PLANNING STUDIES
2019, VOL. 27, NO. 7, 1291–1313
https://doi.org/10.1080/09654313.2019.1579303

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Social learning as an analytical lens for co-creative planning

Kim Carlotta von Schönfeld[a], Wendy Tan[a,b], Carina Wiekens[c], Willem Salet[d] and Leonie Janssen-Jansen[a]†

[a]Department of Environmental Sciences, Wageningen University, Wageningen, The Netherlands; [b]Department of Civil Engineering, Western Norway University of Applied Sciences, Bergen, Norway; [c]Energy Academy Europe, Hanzehogeschool Groningen, Groningen, The Netherlands; [d]Department for Human Geography, Planning and International Development Studies, University of Amsterdam, Amsterdam, The Netherlands

ABSTRACT

This article highlights the psychological dimension of social learning. Insights from psychology address the interrelated role of personal and group dynamics in social learning. This can provide a useful starting point for a rewarding use of social learning as an analytical tool in co-creative planning. Such an approach to social learning proves beneficial to (i) identify both positive and negative potential effects of social learning, (ii) untangle hidden power relationships at play at individual and small group levels in relation to social psychological factors, and (iii) discern the role of individuals and small groups within their larger contexts. The findings are empirically illustrated with a case of incremental urban development in Groningen, the Netherlands.

ARTICLE HISTORY
Received 11 September 2018
Revised 17 December 2018
Accepted 19 December 2018

KEYWORDS
Social learning; co-creation; planning process; planning practice; psychology

1. Introduction

In the context of planning today, co-creation – that is, the involvement of various actors in the creation of a plan from start to finish – is increasingly common (see also below and section 2). Actors usually join co-creation processes based on (self-) ascribed roles, such as local urban planner, resident, entrepreneur, or large-scale developer (e.g. Rydin, 2010). This is a useful starting-point to understand their functions and effects in the planning process (e.g. Scharpf, 1997, Chapter 3). Yet, tensions between individuals and groups, questions of legitimacy, disagreements on priorities, and other such themes continue haunting co-creation processes (e.g. Voorberg, Bekkers, & Tummers, 2015). In view of increasingly diverse forms of co-creation among a variety of actors in planning, it is important to dig deeper for influential factors. To better grasp and potentially intervene in what happens when individuals and small groups co-create, a number of factors beyond their roles, especially at the individual and small group level, become crucial. While planning literature has certainly acknowledged several of these factors from the

CONTACT Kim Carlotta von Schönfeld kim.vonschonfeld@wur.nl Department of Environmental Sciences, Wageningen University, Droevendaalsesteeg 3, Wageningen 6708PB, The Netherlands
†Prof. Dr. Leonie Janssen-Jansen regrettably passed away during the writing of this article.

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

perspective of planners – such as the importance of emotions, personal dynamics, and power relations (e.g. Baum, 2015; Ferreira, 2013; Forester, 1999; Tewdwr-Jones, 2002) –, co-creative planning by definition includes several non-planners (Voorberg et al., 2015). The psychological aspects of the interaction between planners and non-planners, as well as between different non-planners involved in planning processes, warrant deeper engagement in planning research and practice, especially in view of their increasing relevance to the field.

Co-creation among the above-mentioned groups has a great impact on forms of collaboration and on how and what people learn from the emerging interactions. For example, individuals might confirm or refute stereotypes and expectations about 'greedy developers', 'unappreciative citizens' or an 'overly bureaucratic government', which may affect their future choices on whether to interact and how. A key contribution to understanding and potentially impacting the opportunities and challenges this leads to can be found in social learning (Blackmore, 2007; Holden, 2008). This article defines social learning as a process that describes how knowledge, skills and experience are exchanged and built through interaction between two or more human actors (see Salomon and Perkins (1998) and Reed et al. (2010) for an overview of various meanings attributed to the term, and see below for an elaborate discussion of various interpretations). Social learning has become something of a 'buzzword' in planning practice, seen as a solution to issues of legitimacy, inclusion, sustainability and several wicked problems (Collins & Ison, 2009; Dumitru et al., 2017; Holden, 2008; Moulaert, MacCallum, Mehmood, & Hamdouch, 2013; SLIM, 2004). Social learning has also been studied in various other fields, such as organizational studies and governance, which planning has drawn from, and in psychology, a field which planning has engaged less with. As shown in this article, however, psychology can provide important insights at the level of individuals and small groups, especially when it comes to understanding interactions between and with non-planners. This article therefore explores different conceptualizations of social learning within planning and psychology and reveals the potential of social learning as an analytical lens based on key insights from psychology. It explores how psychology can enrich planning's understanding of social learning, specifically in view of (the interplay between) personal and group dynamics among all actors involved in co-creation. Personal dynamics refer to, for example, education, social networks, attitudes, and motivations that an individual develops over time and that influence their and others' social learning during co-creation. Group dynamics refer to forms of interaction and elements that impact these interactions, such as the development of leadership or bias in favour or against another individual (based on previous experiences interacting with this person, or on their physical or professional features, for example).

There is a wide-ranging wealth of studies on social learning in planning, especially when closely related themes, such as policy transfer, deliberative or communicative planning, reflexivity and emotions in planning are also taken into consideration (e.g. Baum, 1983, 1987, 2015; Ferreira, 2013; Forester, 1999; Friedmann, 1981, 1987; Healey, 1992, 2008, 2013; Holden, 2008; Mäntysalo, Schmidt-Thomé, & Syrman, 2018; Peel, 2000; Schön, 1982; Tewdwr-Jones, 2002). This article builds on these important contributions and demonstrates the value of the development of social learning as an analytical lens informed by psychology, in relation to the impact of various personal and group dynamics, specifically in the context of co-creation. This also significantly contributes to planning practice, moving social learning (back) to a conceptualization beyond a 'buzzword'.

Engaging with a psychology-based understanding of social learning offers the following benefits for co-creative planning: (i) identifying positive and negative potential effects of social learning, (ii) untangling the power relationships behind the process at individual and small group levels in relation to (social) psychological factors, and (iii) highlighting the role of individuals and small groups, even when we see them as part of a larger whole.

This article first clarifies co-creation as the context of operation for social learning as studied in this article. Then, the ways social learning is defined and conceptualized in planning and psychology are presented. The contribution from psychology is studied in further detail to show its particular added value for planning, especially when it comes to personal and group dynamics. Subsequently, empirical material from a co-creative planning initiative in the Netherlands is used to illustrate the findings. To conclude, suggestions for policy and further research are made.

2. Co-creative planning as a context

Co-creation in planning is a form of collaboration in which policies and plans (for projects such as community gardens or local mobility projects) are created through ongoing interaction among multiple actors, all of whom contribute to the implementation of emerging decisions and plans for spatial development (Voorberg et al., 2015). As such, co-creation in planning subscribes to the wider participation literature (Beebeejaun, 2016; Innes & Booher, 2004; Jacobi, 2008; Rydin & Pennington, 2011). To better understand co-creative planning, one needs to position it within urban planning policy and practice of the past decade. On one hand, many changes are attributed to the global economic crisis of 2008, which led several governments to increasingly devolve responsibilities to citizens as a solution to their own financial incapacitation and logistical challenges. Others argue that such trends emerged earlier, related to the rapid expansion of neoliberal policies, and a gradual, if hesitant, turn away from welfare (e.g. Juhlia, Raitakari, & Hall, 2016; Zandbergen & Jaffe, 2014). Co-creation emerged, along with co-production and other such concepts, to address ways in which such responsibilization could take shape (e.g. Voorberg et al., 2015). Co-creation, then, implies a process in which policy-makers, planners, experts (often from universities or research institutes), developers, and end-users (often citizens) are included in the creation of a policy or plan and its implementation (Rooij & Frank, 2016). As a consultancy website puts it, co-creation means 'developing strategies and solutions alongside our clients instead of for them' (Carlson, 2017). Applied to governance in planning, co-creation redefines the power relationships and expectations between citizens, the state and the market. As such, it impacts opportunities for and types of social learning that occur between the involved actors, and what potential outcomes can be expected from such learning processes. Social learning has been described as a 'trading zone' or strategy for crossing communication boundaries and barriers within such governance settings (Mäntysalo et al., 2018). Therefore, this is the context and bounding frame within which social learning in planning will be discussed below.

3. Social learning in planning

Planning has drawn extensively from two fields of research for its understanding of social learning: organizational studies and environmental governance and participation. Table 1

Table 1. Overview of frequent representations of social learning.

Research field	Main term(s) used	Example definition	Core unit of analysis	Example Sources
Organizational studies	Organizational learning	'Organizational learning involves the detection and correction of error'. (Argyris & Schön, 1978, p. 3) [note: special emphasis is then given to the differentiation between single and double loop learning]	Organization (small to large group)	Argyris and Schön (1978); Huber (1991); Morgan (1986)
Environmental Governance and Participation	Social learning, group learning	'Social learning may be defined as a change in understanding that goes beyond the individual to become situated within wider social units or communities of practice through social interactions between actors within social networks'. (Reed et al., 2010, p. 6); 'Although the idea of social learning is a bit messy in and by itself, in this book it tends to refer to learning that takes place when divergent interests, norms, values and constructions of reality meet in an environment that is conductive to learning'. (Wals, 2009, p. 18); 'definition of social learning as a convergence of perspectives' (Van Der Wal et al., 2014, p. 2)	Society and large groups	Blackmore (2007); Jacobi (2008); Muro & Jeffrey (2008); Nilsson & Persson (2012); Reed et al. (2010); Van Der Wal et al. (2014); Wals (2009)
Planning Theory	Social learning, group learning	'Embodied in group relationships, social learning is a cumulative process that lasts for the duration of a given action cycle. When a cycle terminates and the group dissolves or undergoes a major change in composition, what has been learned is dissipated and lost. Action groups are a form of collective memory. […] Social learning in small groups takes place primarily through face-to-face relations, or dialogue. […] In social learning, objectives tend to emerge in the course of an ongoing action'. (Friedmann, 1987, pp. 186–187)	Individual, small group, large group, society	Albert et al. (2012); Friedmann (1981, 1987); Holden (2008)
Planning practice	Social learning, collective learning	'Sustainable urban development requires "social learning." Social learning seeks to change understandings on the part of urban stakeholders (and,	Individual, small group, large group, society	Gelauff & van der Knaap (2016); SLIM (2004); URBAN NEXUS (2015)

(*Continued*)

Table 1. Continued.

Research field	Main term(s) used	Example definition	Core unit of analysis	Example Sources
		thus, their behaviour) through social interaction and, in so doing, stimulates new ways of thinking about and responding to the challenge of sustainable urban development' (URBAN NEXUS, 2015, p. 12) Under heading 'social learning through interaction': 'Communication means that individual knowledge and beliefs are confirmed or actively contested. In this context, social psychologists argue that innovative learning takes place especially in social contexts […]' (Gelauff & van der Knaap, 2016, p. 37, author's translation)		
Psychology	Social learning, group learning	'In the social learning system, new patterns of behavior can be acquired through direct experience or by observing the behavior of others' (Bandura, 1971, p. 3)	Individual and small group	Ajzen (1991); Bandura (1971); Gallotti and Frith (2013); Heyes (2016); Salomon and Perkins (1998)

gives a brief overview of how the different fields of research and planning practice so far define social learning. It also includes the same information for psychology (see section 4), from which planning has drawn relatively little so far. There are, of course, significant differences in approaches within the presented fields, as well as cross-dissemination between them. However, there are some key differences among research fields that uncover a complementarity that can be useful for the development of a more comprehensive analytical understanding of social learning. Besides showing the usual terms used per field and exemplary definitions, the table also shows what the core units of analysis are in each field and some sources are given, which exemplify the use of the concepts in these research fields. The units of analysis provide a useful category for comparison because they highlight the key differences in approaches (see Reed et al., 2010; Salomon & Perkins, 1998), also showing the particular added value of psychology, as explained in more detail below.

3.1. Organizational studies

The unit of analysis in organizational studies is the organization, which learns, for example, how to organize its finances, how to produce a product, or how to deliver a service. The discipline tends to focus on organizations learning in a conscious way, emphasizing deliberate reflection to identify and correct errors (Argyris & Schön, 1978; Morgan, 1986). The goal usually lies in the creation of efficiency and improvements through innovation are prioritized (e.g. García-Morales, Jiménez-Barrionuevo, &

Gutiérrez-Gutiérrez, 2012). Organizational studies show the power of negative feedback for achieving desirable effects: learning what does *not* lead to a desirable outcome cautions for avoidance of that undesirable path and might lead to a better understanding of how the desired goal can be reached (Mäntysalo et al., 2018; Morgan, 1986). Mistakes and negative feedback are thus seen as a necessary and valuable part of the learning process. This research field argues that while outcomes of learning can be varied, and not necessarily positive from society's perspective (see also Huber, 1991), the organization's learning should eventually lead to desired outcomes from the perspective of the organization if it is given enough time and reiterations (Argyris & Schön, 1978).

Organizational studies developed the notion of learning loops, differentiating between learning about a direct consequence of action (first loop), learning about how such insights can be arrived at and thus, for example, anticipating errors (second loop), and learning about the learning process itself (third loop) (Argyris & Schön, 1978; Morgan, 1986). The third loop was further conceptualized as Learning III, based on the notion of double-bind situations and inner contradictions: 'In a double bind situation, learning acts follow one another, but no improvement in terms of capability building takes place' (Mäntysalo et al., 2018, p. 167). The double bind eventually leads to 'skilled incompetence' and 'defensive routines'(Mäntysalo et al., 2018, p. 167). Learning III is then a reflection on the learning process itself, and the governance culture of an organization, so that it can move beyond double binds (Mäntysalo et al., 2018).

Planning has drawn significantly from organizational studies, specifically in relation to learning loops (e.g. Deyle & Schively Slotterback, 2009; Mäntysalo et al., 2018). It has mostly used this field when studying planning departments as a type of learning organization, and understanding learning and reflexivity in planning (e.g. Holden, 2008; Rydin, Amjad, & Whitaker, 2007; Schön, 1982). Closely related to organizational studies, policy transfer, diffusion and innovation literatures have also informed planning in terms of how policies are learned from and transferred (e.g. Monios, 2017).

3.2. Environmental governance & participation

In studies on environmental governance and participation, social learning is usually understood at a societal, relatively abstract level (Wals, 2009). In this case, individuals are still those who learn, but the unit of analysis is usually wider society or a policy-framework as a whole. For example, such studies analyse how knowledge about energy- or water-saving lifestyles become standardized or mainstreamed in a country, or in national policies (Nilsson, 2005b; Reed et al., 2010). Achieving such societal learning is understood as a conscious effort to learn about particular goals and how to achieve them (e.g. Nilsson, 2005a, 2005b; Pahl-Wostl, Mostert, & Tàbara, 2008). Thus, policy-making processes are situations in which such learning is developed, with the goal of reaching wider dissemination of emerging knowledge through policy and through the participants' interactions with others.

In this field, social learning is usually studied in relation to natural resource management and sustainability, with specific attention to the content of what is socially learnt in terms of sustainability, for example. In several cases, this is mixed with an intrinsic valuation of social learning as a participatory method. The latter approach often blurs the distinctions between social learning as a process that can lead to a variety of outcomes,

and social learning as an outcome itself, which is desirable and leads to increased sustainability (e.g. Albert, Zimmermann, Knieling, & von Haaren, 2012; Dumitru et al., 2017; Van Der Wal et al., 2014). In relation to governance and policy-making specifically, several approaches to policy learning have been employed, distinguishing for example between technical and conceptual learning at policy level, or on political learning as distinguished from these (see e.g. Nilsson, 2005a). The tension between political power and policy learning processes is also explored (Nilsson, 2005b). Despite their frequent focus on social learning at the level of societies or national policy, (environmental) governance and participation studies often draw inspiration from organizational studies and planning literature (see Rydin, 2010), who tend to use other units of analysis, sometimes leading to confusion in relation to how the term should be defined (Reed et al., 2010). Nevertheless, the insights on social learning and the integration of a number of fields of research has delivered important insights. For example, emphasizing the importance of moving from a linear to a networked understanding of the process of learning for policy-making, and showing the relevance of social networks and social capital in these processes (Rydin, 2010, Chapter 5).

Planning and environmental and participation studies are intimately related also beyond the understanding of social learning. In relation to this concept, planning has added the idea of social learning at the level of society, and the use of it as a tool in participatory planning (such as co-creation) (Albert et al., 2012; Holden, 2008). By extension, it also took on the links between social learning and legitimacy, inclusiveness and sustainability. In some cases the integration of these various units of analysis and ways of understanding social learning have contributed to a somewhat variegated use of the term (as also shown by Reed et al., 2010) that has also influenced its use in planning.

3.3. Planning practice and research

While drawing from the above-mentioned fields of research for its understanding of social learning, planning has embedded these in the pragmatist ideology (e.g. Hoch, 1984). As a discipline, planning poses both the challenge and opportunity to connect all levels of analysis: planning works through the integration of practical applications at individual and small group levels, but also through the continuous incorporation of a meta-perspective at city, regional and societal levels and in terms of ethical choices. While this complex combination is valuable and inherent to planning, it poses the challenge of identifying core units of analysis for the understanding and use of concepts such as social learning (see also Table 1).

In planning, social learning was first seen as its own planning paradigm, with roots in pragmatism, focusing on interaction between different actors (Friedmann, 1981, 1987). It was understood as a discontinuous process (i.e. after a particular social learning moment the knowledge would dissipate), and did not at first focus on individual learning, but often on planners in general. The concept of social learning was developed in the 1980's and '90's into various directions, sometimes along with other, similar or related concepts (such as deliberative learning, reflective learning, policy learning, communicative planning, tacit knowledge and emotions in planning [e.g. Baum, 2015; Ferreira, 2013; Forester, 1999; Healey, 1992; Holden, 2008; Schön, 1982]). For example, some studies focused on what affects planners' learning processes, often including ways in which planners learn

to interact with others, or how they learn through education, interactions, experiences and from stories and friends (e.g. Baum, 1983; Forester, 1999; Schön, 1982; Tewdwr-Jones, 2002). At the level of national or municipal policy-making, the role of learning from 'best' and 'worst' practices elsewhere was studied (Bennett & Howlett, 1992; Dolowitz & Marsh, 1996; Healey, 1992). With this, some linkages to a longer-term and process-based understanding of social learning grew. In parallel, learning in collaborative and participatory settings was frequently used to explain how collaboration worked and to uncover its value for participatory and collaborative planning processes (e.g. Healey, 1992, 2013; Holden, 2008). Despite a traceable provenance of the concept, social learning as an analytical lens inspired by psychology remains a promising direction for research, especially in view of the increased variation in actors expected to co-create. We contribute to such a lens below, through an integration with insights from psychology.

4. Social learning in psychology

In the field of psychology, the concept of social learning emerged in relation to how social settings lead to observations and experiences, which lead to certain behaviour patterns of individuals or small groups in both a conscious or unconscious process (Bandura, 1971). The units of analysis are individuals and small groups, in contrast to most other fields planning has drawn from (see Table 1). Later studies in psychology have explored how social learning can be understood from a cognitive perspective (e.g. Rosenthal & Zimmerman, 1978), going into detail on how social learning occurs in a developmental context such as with children learning from adults and peers (e.g. Heyes, 2016), and how our brains are wired to facilitate social learning (e.g. Apps & Sallet, 2017). Kalkstein, Kleiman, Wakslak, Liberman, and Trope (2016) show how the extent and type of distance between a learner and who she or he learns from leads to different levels of contextual binding of what is learnt: when we learn from someone close to us (physical or psychological distance) we are more likely to consider what is learnt to be contextually dependent, while if there is more distance, we see it as more widely applicable. A number of authors have also studied the role of intentions, for example showing how 'a generative knowledge system underlies our skill at discerning intentions' of others, which determines 'how we understand and remember others' actions, how we respond, and what we predict about their future action' (Baldwin & Baird, 2001, p. 171) and how shared intentionality is developed through interaction (Gallotti & Frith, 2013).

As mentioned in the introduction, a psychology-based understanding of social learning offers the following benefits to planning: (i) identifying positive and negative potential (psychology-based) effects of social learning, (ii) untangling the power relationships behind the process at individual and small group levels as they are impacted by (social) psychological factors, and (iii) highlighting the role of individuals and small groups, even when we see them as part of a larger whole. For example, the psychological lens confirms that it is possible to gain insights on other actors' perspectives through social learning, as is claimed in much collaboration and deliberation literature (Forester, 1999; Healey, 1992). It similarly shows, however, that we also socially learn how to manipulate or exclude undesirable opinions or groups without this being apparent (see Heyes, 2016). Furthermore, individual backgrounds (e.g. schooling and motivations) are put centre-stage in psychology, in contrast to mainstream planning literature, especially when it

comes to how they affect collective work – even though notable exceptions have addressed different parts of this gap in relation to planners' own individual backgrounds (e.g. Forester, 1999; Healey, 2008; Tewdwr-Jones, 2002). As shown in psychology, the educational level and previous knowledge of the individual not only determine content outcomes but also have the ability to skew power relations (see e.g. Raven, 2008).

There are at least two areas through which the added insights from psychology for the planning discipline can be understood, helping to develop an analytical understanding of social learning in co-creative planning: (i) personal dynamics and (ii) group dynamics. Each of these is now discussed in more detail.

4.1. Personal dynamics

In every planning interaction, and especially in co-creative planning, individuals from diverse backgrounds come together in varied and changing actor-constellations, usually with diverging motivations. Several planning scholars have highlighted that it is problematic to assume that planners' personal dynamics do not exist or are irrelevant (e.g. Baum, 1983, 2015; Ferreira, 2013; Schön, 1982; Tewdwr-Jones, 2002). The assumption that individuals are 'blank pages' at the beginning of a planning process, disregarding their previous knowledge, networks and experiences, is nevertheless persistent in much planning research and practices. When this is not the case, the planning discipline has naturally tended to focus on planners themselves, while it becomes increasingly necessary to understand planning as shaped by many more groups and individuals than planners. Therefore, while some of the aspects below have been studied in relation to planners, it is worth expanding this knowledge to other involved actors, as well as deepening and further disseminating the knowledge on planners in relation to the newer actors. A psychology-based approach highlights how different individuals' predispositions, self-esteem, motivations, character, tacit knowledge, and experiences (e.g. those obtained through previous interactions, joint decision-making and social learning) often influence the current interaction (see e.g. Heyes, 2016; Kalkstein et al., 2016; Nijstad, 2009; Raven, 2008). Importantly, the personal dynamics developed outside the workspace affect the workspace, as noted by Tewdwr-Jones (2002), but they are also further developed *within* the workspace, as well as developing specific professional dynamics (Heyes, 2016; Raven, 2008). What is included into what is 'professional' and what is 'personal' can be seen as quite interconnected when one considers social learning from a psychological perspective – a useful insight particularly in co-creative planning contexts in which several involved actors are not there (solely) in their professional capacities. Perhaps this strict separation of personal and professional perspectives is not always useful, and rather, it might be valuable to acknowledge more overlap between professional and personal spheres.

Consider individuals as palimpsests instead of blank pages, where their previous social networks contributing to social capital can also positively or negatively affect any interaction, such as when an actor knows someone else from previous encounters, professionally or privately (Carrington & Scott, 2011). In existing planning literature, a profession or expertise might be attributed, but individual behaviour is assumed to be based on what occurs at the moment of the studied interaction, with implicit rationality (e.g. Albert et al., 2012; Holden, 2008). When it comes to valuing certain knowledge over another

(e.g. 'lay' vs. 'scientific' knowledge), this is often linked to an ascribed and assumed category, such as 'citizen', 'scientist' or 'expert'. These categories can provide clarity but also alienate and presuppose that one cannot be both a citizen and a scientist, for example (see Beebeejaun, 2016; Owens, Petts, & Bulkeley, 2006).

Contributions to alleviate this assumption can be found in organizational and governance studies, and in planning literature through discussions on trust, or the mechanisms of exclusion and inclusion through knowledge management (e.g. Beebeejaun, 2016; Nilsson, 2005b; Rydin & Pennington, 2011). However, they tend to neglect personal and group dynamics based on, for instance, personal backgrounds and social relations of all those involved. To address this gap, studies on social learning in the field of psychology are helpful in showing how previous knowledge and pre-dispositions are layers that can impact a collaborative process – for instance, what individuals learn is often built on what and how they have learned previously (e.g. Goldstein et al., 2010). How constructive social learning is in co-creative planning therefore depends significantly on the 'baggage' individuals bring to the table. Of course, not all the details of an individuals' palimpsest structure can be considered in planning; nevertheless, a better understanding of certain of these elements can shed light on crucial parts of co-creative planning processes, as also shown below.

4.2. Group dynamics

Interactions in planning do not happen in isolation, especially when co-creation and social learning are encouraged. Within these groups, there are unseen and unidentified dynamics that affect how decisions are made and knowledge is absorbed. Group dynamics are concerned with forms of collaboration and factors that influence them, such as personal or professional tensions; inspiring or frustrating joint experiences. Studies in psychology detail how we choose whom to learn from and what we retain in terms of knowledge, for instance through prestige bias where peers who already enjoy high visibility and status are more likely to be chosen as models when a choice is available (e.g. Heyes, 2016). Barsade (2002, p. 2) reports on a study in which 'group members experienced positive emotional contagion, and this contagion improved cooperation, decreased conflict, and increased perceptions of task performance'. Studies on the effect of hidden profiles, i.e. the tendency to refrain from sharing information that is not already known by others in a group, further highlight the influence of group dynamics on co-creation (Stasser & Titus, 2003). Even when more motivated knowledge sharing might overcome the hidden profile effect, as Wittenbaum, Hollingshead, and Botero (2004) argue, an effect of the particular dynamics between collaborating individuals remains.

Social learning is affected by group dynamics and vice-versa. For example, 'people usually learn to cooperate more when the probability of future interaction is higher' (Rand & Nowak, 2013, p. 416). Furthermore, motivations for collaborating in groups can be affected by whether direct or indirect reciprocity is expected. One usually adjusts one's way of collaborating depending on spatial-, multi-level, or kin selection (Rand & Nowak, 2013). Through group dynamics, individuals may socially learn that they are irritating others during interpersonal feedback, or they might lead to direct (verbal) feedback on attitudes or actions (see e.g. Forsyth, 2014). Psychology-based literature on conflict and mediation and on sources of power can furthermore be insightful (e.g. Raven, 2008).

Across various disciplines, trust and positive relationships often figure as important favourable conditions for collaboration (Albert et al., 2012; Heyes, 2016; Nilsson, 2005b; Switzer, Janssen-Jansen, & Bertolini, 2013). Social networks and trust can be rooted in multiple time-periods and can be influenced from beyond the confines of a particular space or context in which actors co-create. In co-creative planning, there might be inherent motivations to collaborate but the temporally sensitive constellation of actors involved can lead to group dynamics that steer the social learning process away from desired outcomes.

4.3. Conceptual relationships

As shown in the introduction, personal dynamics can overall be defined as a number of factors internal or inextricably linked to individuals, such as education, social networks, attitudes, and motivations, which an individual develops over time and that influence their and others' social learning during co-creation. Group dynamics can be defined as forms of interaction and elements that impact these interactions, such as bias in favour or against another individual based on previous experiences interacting with this person. By seeing them in a continuous dialectical relationship, co-creative planning becomes better graspable. The specific contribution of psychology is its in-depth insight into personal dynamics, their impact on group settings, and vice-versa.

Figure 1 shows the relationships between the concepts presented above, as well as their relationship to outcomes of the co-creative planning process that they are a part of. The starting point are the roles based on which individuals or (representatives of) groups take part in a co-creative planning process. This can be a local resident, developer, planner, government official or small business-owner, for example. These individuals or groups come together in co-creative processes, in which the social learning that occurs between them is influenced by their personal dynamics and the group dynamics that exist and emerge within and between the actors. All of this leads to outcomes in terms

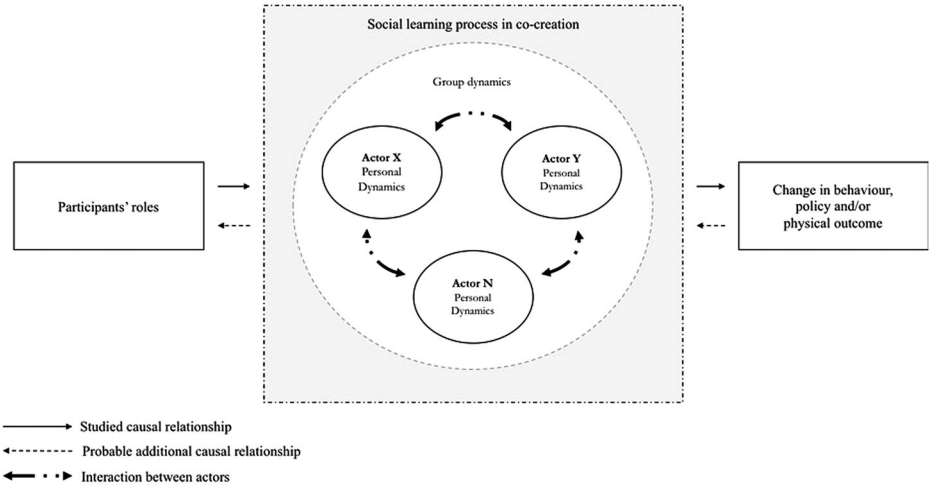

Figure 1. Conceptual relationships in social learning in co-creative planning processes (source: authors).

of behaviour, policy, or physical interventions. Zooming in on personal dynamics and group dynamics in the context of this scheme from the perspective of psychology helps uncover how we might understand social learning as an analytical lens that highlights the role of individuals and small groups, while untangling different power relationships at those levels and showing the significance of different types of social learning for different outcomes. This is especially valuable when attempting to understand the personal and group dynamics that arise in relation to planning with non-planners. It is worth acknowledging that the causal relationships presented in the figure are bidirectional (represented by the thin dotted arrows), but for the purposes of this research project only one direction is analyzed.

5. Social learning as an analytical lens: an application

This section explores how social learning as an analytical lens as suggested above can be used to study a concrete case of co-creative planning in the Netherlands. First, we turn to an overview of the case. The Open Lab Ebbinge is a case from Groningen, the Netherlands, which is widely quoted as an example of co-creative urban development within planning practice (Bergevoet & van Tuijl, 2013; Inden et al., 2016; Ministerie van Infrastructuur en Milieu, 2013). We then briefly describe the research methods used for the case study and subsequently present the results of the analysis.

5.1. Case description

The Open Lab Ebbinge (OLE) initiative is located in Groningen, the largest city in the North of the Netherlands. OLE was an urban redevelopment of about 1 km^2, housing start-ups, artist and event spaces in temporary structures (built from shipping containers) for approximately seven years (Inden et al., 2016; Ministerie van Infrastructuur en Milieu, 2013). The initiative was begun in 2010 by a collective of local business-owners and artists who were worried about the vitality and safety in the area due to what was essentially an abandoned brownfield redevelopment site. The original intention was to establish temporary structures – to be removed after five years – for a variety of functions such as a restaurant, a collective working space, an escape room, and an exhibition-space. The site, one of the largest remaining urban redevelopment sites within the city, housed many cultural events and festivals. The initiative was extended until 2017, ultimately with collaboration between the initiators, the municipality, a number of managers, and the implementers of projects in the space. However, the real estate market recovery and emerging development pressure eventually cancelled out the community initiatives and temporary use.

5.2. Research methods

The lifecycle of the initiative (2010–2017) allowed for sufficient information and data gathering via nine one-on-one, semi-structured interviews with seven key actors and by compiling various documents that were published or accessible through respondents, describing the various stages and agreements made between stakeholders for this initiative. The respondents are kept anonymous to protect their privacy and to remain in accordance with ethical guidelines. Both the interviews and documents were analyzed in Atlas.ti

(qualitative data analysis) and Gephi (social network analysis) to look for which roles were included in the process (from whose perspective) (5.3.1), the personal (5.3.2) and group (5.3.3) dynamics that played a role in the development, and which decisions and outcomes (5.3.4) emerged. The case was considered a pilot study, which meant that the analysis allowed various conceptualizations and operationalizations to emerge.

The analysis below combines approaches from planning, organizational studies, environmental governance and participation, and, most crucially, from psychology. The information on roles (5.3.1) was gathered mainly through a classic planning approach of the identification of relevant actors based on their roles in (relation to) the co-creative planning process. The subsequent subsections draw more from psychology, and therefore each include a brief concluding paragraph describing the specific contribution of this approach.

5.3. Analysis

5.3.1. Participants' roles

As a starting point, those who took part in the co-creation of the OLE initiative can be categorized according to a number of primary roles at the beginning of the process. They included, for example, the president of the local store-owner association, local entrepreneurs, several artists and architects, an independent planner as well as government-based planners, an overall manager, specific financial and event managers, a secretary, and so forth. These roles were either ascribed to individuals by their employer or organization, or self-ascribed through the wish for influence or job-creation in relation to the initiative. In two known cases, the roles were represented by different individuals throughout the initiative, such as the secretary, whose position was fulfilled by at least three different individuals over the course of the initiative. Respondents in this particular initiative did not find that these changes were significant for the collaboration within or outcomes of the initiative. The above roles were also the ones that were recognized as such by other involved actors, as emerged through interviews. Importantly, a number of these individuals were initiators of OLE, while others joined them later in the development process.

5.3.2. Personal dynamics

Those who started the initiative brought with them a number of personal characteristics, backgrounds, networks and motivations that were different from those who joined later. Due to ethical and privacy considerations, not all of these can be related here in detail, but some examples are presented. First, the creative-artistic and entrepreneurial backgrounds of individuals or their networks, especially among those who began the initiative, were key to facilitate the emergence of the idea for the initiative, as well as the know-how to make first steps towards its realization. The initiators' motivation related to somewhat precarious working conditions in the area also made the development of the space in question pressing for the initiators. Some familial and friendship-based networks among the initiators helped as well. It seems that among initiators it was crucial that each individuals' personal dynamics were relatively similar to those of the other initiators, including related backgrounds in expertise and motivation. This was likely due to the necessity to understand and identify with each other in the still relatively early and fragile beginning of

the initiative, and to 'liking', which can be a strong determinant for collaboration and is often encouraged by experienced similarities. 'You really needed those early-believers to get some élan into the project',[1] noted one of the initiators. This respondent also noted that there were residents initially involved who wanted bakeries and butchers back in their street, instead of more creative stores and activities, but others convinced them that those stores would not survive in the local environment at the time. Several interviewees among initiators and government representatives insisted that it was not so much residents, but local business-owners that were sufficiently motivated to make the change. When the higher goal was not shared, the basis of this difference was rationalized away, and the individuals in question were not further involved. The importance of aligned personal dynamics can, to a large extent, be explained by social capital and related theories, but can also be understood in relation to social learning: in this case, close relationships, similar backgrounds and a shared motivation led to a form of social learning that did not lead to divergent or new types of thinking, but to the emergence of a particular new idea within their own field.

Subsequently, however, the initiators required help for financial purposes as well as management-related tasks. This led to the addition of actors that were positioned much farther away from the initiators in terms of social networks – they knew each other on a less personal basis, if at all. The new group of actors and facilitators in the initiative was much more varied in terms of personal dynamics related to individual characteristics, education, interests, and motivations. Importantly, the motivations were sufficiently aligned with a shared vision for them to move towards it. The motivations included the aforementioned drive to improve the area for local entrepreneurship as well as for artistic and social benefits; the government's wish to upgrade and brand the neighbourhood to drive up land values and developers' interest in building in the area; the desire of some to try out a new business idea; opportunities for social engagement with some payment, or for a job to pay the bills; or the chance to participate in the kind of temporary spatial and architectural development that was still highly uncommon at the time. Each individual might in fact be led by more than one of those and other motivations, but crucially, the different motivations could at this point be united towards the common goal of implementing the temporary use and architectural design of the space, at least for a limited number of years (though the different motivations did lead to conflicts later on; see group dynamics below). By contrast to the relative commonality in their goal, the educational and professional background of the newly involved was very different from the initiators as well as among themselves. They included planning, management of temporary facilities (previously temporary housing for asylum-seekers), finance, policing, and communications, among others. Interestingly, some of the newcomers had personal inclinations that were not necessarily linked to their job description, which either facilitated or hindered exchanges between different actors (see 5.3.3). The personal dynamics became much more varied for the implementation phase of the initiative, and thereby significantly influenced the social learning process (see 5.3.3) and the physical outcomes of OLE (see 5.3.4).

The psychology-based approach used here highlights, for example, that motivations differ significantly per individual, and are often rooted in several personal characteristics, but when a common higher goal can be identified, this is likely to bundle efforts and lead to implementation of something at least akin to the common vision. When such a common goal is lacking, the process may be jeopardized, or those thinking differently may be

rationalized away – a form of socially learning how to reinforce certain group formations over others. It is therefore important to understand the different motivations and potential tensions emerging between them, especially in co-creative planning where involved actors are less used to each other. The next subsections will show instances in which certain personal dynamics, such as motivations and personal preferences, become influential for group dynamics and outcomes.

5.3.3. Group dynamics

The introduction of new actors throughout the initiative's formation resulted in shifts in power relationships: while at first the group dynamics relied mostly on friendship or 'liking' (perhaps something akin to referent power) among initiators, the introduction of government and management functions led to very different power relationships, related to financial dependence, which can be categorized as a combination of legitimate and reward power (see Raven, 2008). Expert power (or the power-holder's perception that they had expert power) was used to legitimize the exclusion of a group of people with a different vision. These different types of power-based group dynamics likely affected the observable kind of social learning. Knowledge and skills among all actors were shared to different extents, for example the joint knowledge development and demonstration of how temporary structures can take shape and how they can be used or the confirmation of knowledge on how temporary spaces should be managed. Key was the alignment of knowledge sharing with the shared vision to actualize the initiative. The managing group of the initiative placed emphasis on knowledge exchange beyond the core OLE group through interactions with residents across Groningen, as well as through talks and tours of OLE, in which the actors would share their experience with other potential co-creative developments in the Netherlands and internationally (Inden et al., 2016; interviews). However, as soon as the implementation phase had begun, visions of how this should happen began to vary more, and 'legitimate' power from government was enforced to focus on their version of the vision. From then on, among the core OLE group (initiators, managers, and implementers), the more divergent the backgrounds, the less explicit and content-based knowledge was shared. For example, several artists and actors realizing projects in the temporary structures on the site were provided only necessary practical information by the managers of the space, and vice-versa, while interacting very infrequently. This was meant to facilitate the initiative in terms of efficient implementation but did not reflect on the value of facilitating knowledge exchange between the co-creators. Multiple interviewees also attributed the stunted communication channels and knowledge exchange to mounting personal tensions between at least three key individuals of different backgrounds. Indeed, as hinted at before, conflicts due to different motivations emerged, partially because motivations were not discussed or shared among all actors from the outset – as can be explained partly by hidden profiles and prestige bias. For example, actors who were motivated by an interest in the particular socio-cultural development of this area and by the success of their new business there, found it hard to accept that others would (or seemed to) see their work in the area primarily as a convenient job that paid their bills. Two respondents were particularly upset by the distribution of financial risk, which they felt was too heavy on one end, while the managers were paid very regularly, even if little. This went hand-in-hand with a lack of mutual understanding between, for example, more artistically or entrepreneurially oriented actors, and actors

who were educated primarily in managerial functions and felt less drawn to artistic circles. Personal and professional dynamics became heavily blurred. Several individuals in this case furthermore socially learned to stereotype associations between certain personal characteristics and a particular professional position, albeit probably already influenced toward similar assumptions from the start. As seen in section 4, this can be partly explained by the human tendency to be more inclined to generalize or create stereotypes based on few experiences when someone is seen as more distant to ourselves. Three interviewees from different sides of this situation claimed that this disagreement contributed to the lack of continuity for one project in the space after OLE's termination.

In general, the group dynamics among OLE's initiators led to the creation of an idea for implementation and for enough networks and abilities to eventually result in its actualization. However, these same dynamics seem to have affected social learning adversely: between those who knew each other, little but confirmation of expectations occurred, while those who did not know each other previously became alienated from each other through tensions. The managerial group kept a formal distance to implementers of the temporary structures, unlike relationships between the latter with the original initiators. The lack of direct communication between a growing number of actors with different backgrounds and motivations contributed to limiting chances for (meaningful) social learning between those individuals and groups. From the city's perspective, this was instrumental in enforcing the temporary character of the initiative and ensuring less emotional bonding with other actors. For social learning it meant that expectations concerning the distant nature of managers (from the perspective of the implementers) and the chaotic and irrational nature of creative implementers (from the perspective of the managers) were 'confirmed'. Knowledge pooling (i.e. complementary knowledge brought to an initiative through different actors, but not shared among them) and indexing (i.e. knowing who to ask to contribute which knowledge, instead of acquiring the knowledge oneself) rather than knowledge sharing allowed efficient implementation. This also means that the coalition would need similar actors in future initiatives rather than one of the individuals utilizing knowledge from this initiative to start with a new (perhaps less experienced) group elsewhere. However, the emerged tensions also mean that the actors might be disinclined to form such an alliance again, resulting in a knowledge gap from both sides.

This section relied on insights from psychology for several findings. They helped to show the importance of interrelations between personal and group dynamics, as well as the emergence of key dynamics that affect learning: the level of alignment between motivations (largely based on personal characteristics, not only professional opinions for example), the types of relationships (e.g. friendship, liking, perception of closeness), and power types rooted in personal and group dynamics. Furthermore, the focus on learning at the individual and small group level shows the relevance of tracing learning at individual levels as well as at the level of policies or organizations, as it gives a grasp on the fragility of knowledge development through co-creation, for example, but also its potential impact outside its direct aims. Finally, this section uses psychological insights to demonstrate how social learning can have both positive and negative effects.

5.3.4. Outcomes

As already hinted above, the physical outcome of the initiative was the implementation of temporary uses in the area for about seven years. This was followed by the development of

housing, a student hotel and a school in the same area (see e.g. DeNieuweStijlvanWonen, 2018; Gemeente Groningen, 2015; interviews). The type of development continued to focus on housing and a school after the end of the OLE initiative, as it had before, with the exception of the student hotel (confirmed through interviews). Particularly, not much more public green space or commercial and artistic facilities were provided despite the success of such spaces during the OLE initiative – a shame according to two interviewees, though two others highlighted that the new plan is already much more open and commercially active than originally planned. The design and density of the constructions has indeed been revised substantially (Gemeente Groningen, 2015; interviews). Another physical outcome is that several of the entrepreneurs of the space were left to move their workplace elsewhere, at which some succeeded more than others, also due to their financial situation after the end of the initiative.

Policy and behavioural outcomes go hand-in-hand for OLE. In terms of observable behaviour, several effects can be discerned. The initiative was instrumental in implementing a policy of earlier interaction with citizens and interested parties for developments:

> not that we didn't do that at all [i.e. involve citizens], but we do this in a different way now. It's no longer "oh, we have a zoning plan, we'll have a consultation", because that doesn't work. That's so abstract, people are not engaged through that. (interview government official)

Furthermore, the same government official noted that the planning department has received significantly more applications from citizens wanting to be involved in planning for their neighbourhood than before OLE began. At least in part this seems to be related to citizens not involved in the initiative directly perceiving OLE as a 'success' in terms of functioning, and collaboration with government. On a more individual, but not as easily observable level, most OLE actors feel the initiative confirmed or strengthened their convictions in terms of who they do and don't (like to) cooperate with. Their behaviour towards those groups will likely stay the same or strengthen in its intensity. Some interactions between government officials and involved artist-entrepreneurs became more frequent and friendlier, generally speaking. Overall this confirms some of the impacts group dynamics appear to have had on social learning in the initiative. Furthermore, it shows that there is a significant impact of individual and relatively personal interactions on broader developments.

It is important to note that the outcomes can never be entirely attributed to one particular initiative. Part of the lessons that an analytical approach to social learning raises is that interactions and circumstances outside one particular initiative are likely to influence what occurs within it. However, OLE was described by all interviewees as a significant initiative in the evolution of their careers and the city's development. Together with the media and document analysis that shows intense engagement with the initiative over several years, this indicates that OLE – and the social learning processes occurring within and surrounding the initiative – had at least a significant impact on the outcomes described above.

The outcomes show that a focus on the individuals and small groups (emphasized in psychology) highlights how social learning plays an important role in reinforcing existing knowledge and relations, and that such a reinforcement can nevertheless lead to changes in physical outcomes. It also shows that social learning does not immediately tend to overrule existing overarching power structures (e.g. the tensions with some artists and

entrepreneurs did not lead to changes in their favour due to social learning processes), though it remains to be seen how the creation and reinforcement of existing tensions and negative sentiments plays out in the longer term, especially for future initiatives. Thus, the psychological approach provides an interesting complementary and reinforcing perspective for planning research and practice.

6. Conclusion

This article has presented social learning as a process, which's psychology-inspired analysis in planning can be useful, at least, to (i) identify positive and negative potential effects of social learning, (ii) untangle the power relationships behind the process at individual and small group levels as they change based on (social) psychological factors, and (iii) highlight the role of individuals and small groups, even when we see them as part of a larger whole. To do so, the article showed how psychology can add to our existing understanding of social learning in planning, namely through additions to conceptualizations of personal and group dynamics. As Figure 1 shows, it is useful to take roles in co-creative planning processes as starting points, as is common in planning. As shown through insights from psychology, however, it is then insightful to understand social learning as a process within co-creation, in which personal and group dynamics are crucially interrelated, and have significant impacts on outcomes. The analysis of the case study revealed that this uncovers otherwise hidden key relations and processes, such as tensions that hamper collaboration and the continuation of (parts of) an initiative, or knowledge pooling and indexing that can benefit short-term circumstances but potentially hinder longer-term capacity building for urban development among the various involved actors.

These findings have a number of consequences for planning research and practice. The article shows that they can affect current discourses on social learning in relation to co-creation and the responsibilization of citizens. On one hand, the article challenges the idea that social learning can be predictably associated with certain desirable outcomes and argues that it should therefore not in itself be a policy agenda. Indeed, social learning is revealed as a process that occurs whether or not an agenda is determined for it. However, understanding social learning as a fruitful analytical lens is proven to have value for understanding how co-creative planning unfolds – which quickly leads to the question how this might be instrumentalized for policy. In this article, we propose that such a step be made carefully, focusing less on trying to steer social learning itself, but focused on the various elements that have been described. For example, understanding social learning better can allow planners to (i) be more aware of the role of tensions or friendships; (ii) possibly intervene when certain groups have certain (social learning) effects on each other; (iii) develop trust in initiatives that have relatively good social learning dynamics; (iv) be better able to reflect on effects certain interactions have on planners *and others* in a co-creating group – both short-term and long-term; and by understanding these, (v) be better able to steer future reactions to this. More generally, it can be valuable to pay more attention to the interplay between personal and group dynamics, and the blurring of personal and professional boundaries in co-creative planning. In any case, it appears important for planning to acknowledge that individuals and groups in co-creative planning should be recognized as more than the roles based on which they join the process.

Further research should, first of all, further operationalize and methodologically develop social learning as an analytical lens for co-creative planning. This involves enabling a more systematic analysis of personal and group dynamics within social learning, based on the insights of this article. Among other things, it should then be possible to further understand who learns what from whom in co-creative planning, and how. Furthermore, power relationships provide an interesting avenue for further research, as this article revealed possible new insights with methods from psychology, which however remain underdeveloped. Finally, a deeper engagement of planning research and practice with literature from psychology proves promising. Psychology is a large field of research and many relevant areas in psychology have only been briefly touched upon – or not yet uncovered – in this article; each warrant at least further exploration for possible engagement within planning.

Note

1. Quotes freely translated from Dutch to English by authors.

Acknowledgements

The authors would like to thank the respondents who gave their time and input to make the research about the Open Lab Ebbinge possible, as well as the editors and two reviewers for their helpful and encouraging comments.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the Netherlands Organization for Scientific Research (NWO) under the Smart Urban Regions of the Future (SURF) programme [Grant number 438-15-159].

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179–211. doi:10.1016/0749-5978(91)90020-T

Albert, C., Zimmermann, T., Knieling, J., & von Haaren, C. (2012). Social learning can benefit decision-making in landscape planning: Gartow case study on climate change adaptation, Elbe valley biosphere reserve. *Landscape and Urban Planning*, *105*(4), 347–360. doi:10.1016/j.landurbplan.2011.12.024

Apps, M. A. J., & Sallet, J. (2017). Social learning in the medial prefrontal cortex. *Trends in Cognitive Sciences*, *21*(3), 151–152. doi:10.1016/j.tics.2017.01.008

Argyris, C., & Schön, D. (1978). *Organizational learning: A theory of action perspective*. Reading: Addison-Wesley Publishing Company.

Baldwin, D. A., & Baird, J. A. (2001). Discerning intentions in dynamic human action. *Trends in Cognitive Sciences*, *5*(4), 171–178. doi:10.1016/S1364-6613(00)01615-6

Bandura, A. (1971). Social learning theory. *Journal of Communication*. doi:10.1111/j.1460-2466.1978.tb01621.x

Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, *47*(4), 644–675. doi:10.2307/3094912

Baum, H. S. (1983). *Planners and public expectations*. Cambridge: Schenkman Books.

Baum, H. S. (1987). *The invisible bureaucracy: The unconscious in organizational problem solving*. Oxford: Oxford University Press.

Baum, H. S. (2015). Planning with half a mind: Why planners resist emotion. *Planning Theory & Practice*, *16*(4), 498–516. doi:10.1080/14649357.2015.1071870

Beebeejaun, Y. (Ed.). (2016). *The participatory city*. Berlin: jovis Verlag GmbH.

Bennett, C. J., & Howlett, M. (1992). The lessons of learning: Reconciling theories of policy learning and policy change. *Policy Sciences*, *25*(3), 275–294. doi:10.1007/BF00138786

Bergevoet, T., & van Tuijl, M. (2013). *De flexibele stad. Oplossingen voor leegstand en krimp*. Rotterdam: noi010 uitgevers.

Blackmore, C. (2007). What kinds of knowledge, knowing and learning are required for addressing resource dilemmas?: A theoretical overview. *Environmental Science and Policy*, *10*(6), 512–525. doi:10.1016/j.envsci.2007.02.007

Carlson, C. (2017). A culture of co-creation. Retrieved from https://reveconsulting.com/co-creation/

Carrington, P. J., & Scott, J. (Eds.). (2011). *The SAGE handbook of social network analysis*. London: SAGE Publications Ltd.

Collins, K., & Ison, R. (2009). Jumping off Arnstein's ladder: Social learning as a new policy paradigm for climate change adaptation. *Environmental Policy and Governance*, *19*(6), 358–373. doi:10.1002/eet.523

DeNieuweStijlvanWonen. (2018). Wonen in het Ebbingekwartier. Retrieved from https://www.woneninhetebbingekwartier.nl/

Deyle, R., & Schively Slotterback, C. (2009). Group learning in participatory planning processes: An exploratory quasi experimental analysis of local mitigation planning in Florida. *Journal of Planning Education and Research*, *29*, 23–38. doi:10.1177/0739456X09333116

Dolowitz, D., & Marsh, D. (1996). Who learns what from whom: A review of the policy transfer literature. *Political Studies*, *44*(2), 343–357. doi:10.1111/j.1467-9248.1996.tb00334.x

Dumitru, A., Lema-Blanco, I., Kunze, R., Kemp, R., Wittmayer, J., Haxeltine, A., … Cozan, S. (2017). *Social learning in social innovation initiatives: Learning about systemic relations and strategies for transformative change*.

Ferreira, A. (2013). Emotions in planning practice: A critical review and a suggestion for future developments based on mindfulness. *Town Planning Review*, *84*(6), 703–719. doi:10.3828/tpr.2013.37

Forester, J. (1999). *The deliberative practitioner: Encouraging participatory planning processes*. Cambridge: MIT Press.

Forsyth, D. R. (2014). *Group dynamics* (7th ed.). Boston: Cengage.

Friedmann, J. (1981). Planning as social learning. *Institute of Urban and Regional Development, University of California*.

Friedmann, J. (1987). *Planning in the public domain: From knowledge to action*. Princeton: Princeton University Press.

Gallotti, M., & Frith, C. D. (2013). Social cognition in the we-mode. *Trends in Cognitive Sciences*, *17*(4), 160–165. doi:10.1016/j.tics.2013.02.002

García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research*, *65*(7), 1040–1050. doi:10.1016/j.jbusres.2011.03.005

Gelauff, G., & van der Knaap, P. (2016). *Leren van en voor nieuw beleid: Twee essays met perspectieven op leren en mobiliteitsbeleid*. Den Haag: Kennisinstituut voor Mobiliteitsbeleid.

Gemeente Groningen. (2015). *Bestemmingsplan Ebbingekwartier Mei 2015*. Groningen: Gemeente Groningen.

Goldstein, M. H., Waterfall, H. R., Lotem, A., Halpern, J. Y., Schwade, J. A., Onnis, L., & Edelman, S. (2010). General cognitive principles for learning structure in time and space. *Trends in Cognitive Sciences*, *14*(6), 249–258. doi:10.1016/j.tics.2010.02.004

Healey, P. (1992). Planning through debate: The communicative turn in planning theory. *Town Planning Review*, *63*(2), 143–162. doi:10.3828/tpr.63.2.422x602303814821

Healey, P. (2008). Knowledge flows, spatial strategy making, and the roles of academics. *Environment and Planning C: Government and Policy*, *26*(5), 861–881. doi:10.1068/c0668

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

Heyes, C. (2016). Who knows? Metacognitive social learning strategies. *Trends in Cognitive Sciences*, *20*(3), 204–213. doi:10.1016/j.tics.2015.12.007

Hoch, C. (1984). Doing good and being right: The pragmatic connection in planning theory. *Journal of the American Planning Association*, *50*(3), 335–345. doi:10.1080/01944368408976600

Holden, M. (2008). Social learning in planning: Seattle's sustainable development codebooks. *Progress in Planning*, *69*(1), 1–40. doi:10.1016/j.progress.2007.12.001

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science*, *2*(1), 88–115. doi:10.1287/orsc.2.1.88

Inden, D., Schuurhuis, G., Bothof, H., Saris, J., Sekuur, M., Schaap, P. M., … Bekkema, I. (2016). *sOLEx Het Open Lab Ebbinge, tien jaar tijdelijk in Stad*. Groningen: Zaksman Groningen B.V.

Innes, J. E., & Booher, D. E. (2004). Reframing public participation: Strategies for the 21st century. *Planning Theory & Practice*, *5*(4), 419–436. doi:10.1080/1464935042000293170

Jacobi, P. R. (2008). Governança da Água e Aprendizagem social no Brasil. *Sociedad Hoy*, *15*, 25–44.

Juhlia, K., Raitakari, S., & Hall, C. (Eds.). (2016). *Responsibilisation at the margins of welfare services*. London: Routledge.

Kalkstein, D. A., Kleiman, T., Wakslak, C. J., Liberman, N., & Trope, Y. (2016). Social learning across psychological distance. *Journal of Personality and Social Psychology*, *110*(1), 1–19. doi:10.1037/pspa0000042

Mäntysalo, R., Schmidt-Thomé, K., & Syrman, S. (2018). Learning and governance culture in planning practice: The case of Otaniemi. In W. Salet (Ed.), *The Routledge handbook of institutions and planning in action* (pp. 165–182). London and New York: Routledge.

Ministerie van Infrastructuur en Milieu. (2013). *Mooi nederland*. Den Haag: Ministerie van Infrastructuur en Milieu.

Monios, J. (2017). Policy transfer or policy churn? Institutional isomorphism and neoliberal convergence in the transport sector. *Environment and Planning A: Economy and Space*, *49*(2), 351–371. doi:10.1177/0308518X16673367

Morgan, G. (1986). *Images of organization*. London: SAGE Publications Ltd.

Moulaert, F., MacCallum, D., Mehmood, A., & Hamdouch, A. (2013). *The international handbook on social innovation: Collective action, social learning and transdisciplinary research*. Cheltenham: Edward Elgar.

Muro, M., & Jeffrey, P. (2008). A critical review of the theory and application of social learning in participatory natural resource management processes. *Journal of Environmental Planning and Management*, *51*(3), 325–344. doi:10.1080/09640560801977190

Nijstad, B. A. (2009). *Group performance*. New York: Psychology Press.

Nilsson, M. (2005a). Learning, frames and environmental policy integration: The case of Swedish energy policy. *Environment and Planning C: Government and Policy*, *23*(2), 207–226. doi:10.1068/c0405j

Nilsson, M. (2005b). The role of assessments and institutions for policy learning: A study on Swedish climate and nuclear policy formation. *Policy Sciences*, *38*(4), 225–249. doi:10.1007/s11077-006-9006-7

Nilsson, M., & Persson, Å. (2012). Can Earth system interactions be governed? Governance functions for linking climate change mitigation with land use, freshwater and biodiversity protection. *Ecological Economics*, *81*, 10–20. doi:10.1016/j.ecolecon.2012.06.020

Owens, S., Petts, J. I., & Bulkeley, H. A. (2006). Boundary work: Knowledge, policy, and the urban environment. *Environment and Planning C: Government and Policy*, *24*(5), 633–643. doi:10.1068/c0606j

Pahl-Wostl, C., Mostert, E., & Tàbara, D. (2008). The growing importance of social learning in water resources management and sustainability science. *Ecology and Society*, *13*(1). doi:10.5751/ES-02352-130124

Peel, D. (2000). The teacher and town planner as facilitator. *Innovations in Education and Training International*, *37*(4), 372–380. doi:10.1080/135580000750052982

Rand, D. G., & Nowak, M. A. (2013). Human cooperation. *Trends in Cognitive Sciences*, *17*(8), 413–425. doi:10.1016/j.tics.2013.06.003

Raven, B. H. (2008). The bases of power and the power/interaction model of interpersonal influence. *Analyses of Social Issues and Public Policy*, *8*(1), 1–22. doi:10.1111/j.1530-2415.2008.00159.x

Reed, M., Evely, A., Cundill, G., Fazey, I., Glass, J., Laing, A., … Stringer, L. (2010). What is social learning? *Ecology and Society*, *15*(4). doi:10.5751/ES-03564-1504r01

Rooij, R., & Frank, A. I. (2016). Educating spatial planners for the age of co-creation: The need to risk community, science and practice involvement in planning programmes and curricula. *Planning Practice and Research*, *31*(5), 473–485. doi:10.1080/02697459.2016.1222120

Rosenthal, T. L., & Zimmerman, B. J. (1978). *Social learning and cognition*. New York: Academic Press, Inc.

Rydin, Y. (2010). *Governing for sustainable urban development*. London: Earthscan.

Rydin, Y., Amjad, U., & Whitaker, M. (2007). Environmentally sustainable construction: Knowledge and learning in London planning departments. *Planning Theory & Practice*, *8*(3), 363–380. doi:10.1080/14649350701514686

Rydin, Y., & Pennington, M. (2011). Public participation and local environmental planning: The collective action problem and the potential of social capital. *Local Environment: The International Journal of Justice and Sustainability*, *5*(2), 153–169. doi:10.1080/13549830050009328

Salomon, G., & Perkins, D. N. (1998). Chapter 1: Individual and social aspects of learning. *Review of Research in Education*, *23*(1), 1–24. doi:10.3102/0091732X023001001

Scharpf, F. W. (1997). *Games real actors play. Actor-centered institutionalism in policy research*. Boulder: Westview Press.

Schön, D. (1982). *The reflective practitioner. How professionals think in action*. Surrey: Ashgate Publishing Limited.

SLIM. (2004). *Social learning: A new policy option for integrated management and sustainable use of water - based on concerted action*. Brussels: European Commission.

Stasser, G., & Titus, W. (2003). Hidden profiles: A brief history. *Psychological Inquiry*, *14*(3), 304–313. doi:10.1207/S15327965PLI1403&4_21

Switzer, A., Janssen-Jansen, L., & Bertolini, L. (2013). Inter-actor trust in the planning process: The case of transit-oriented development. *European Planning Studies*, *21*(8), 1153–1175. doi:10.1080/09654313.2012.722940

Tewdwr-Jones, M. (2002). Personal dynamics, distinctive frames and communicative planning. In P. Allmendiger & M. Tewdwr-Jones (Eds.), *Planning futures: New directions for planning theory* (pp. 65–92). London: Routledge.

URBAN NEXUS. (2015). *Engaging society for a sustainable city: URBAN NEXUS research findings*. Brussels: European Commission.

Van Der Wal, M., De Kraker, J., Offermans, A., Kroeze, C., Kirschner, P. A., & van Ittersum, M. (2014). Measuring social learning in participatory approaches to natural resource management. *Environmental Policy and Governance*, *24*(1), 1–15. doi:10.1002/eet.1627

Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, *17*(9), 1333–1357. doi:10.1080/14719037.2014.930505

Wals, A. E. J. (Ed.). (2009). *Social Learning towards a sustainable world* (2nd ed.). Wageningen: Academic Publishers. doi:10.1515/9781400846504.

Wittenbaum, G. M., Hollingshead, A. B., & Botero, I. C. (2004). From cooperative to motivated information sharing in groups: Moving beyond the hidden profile paradigm. *Communication Monographs*, *71*(3), 286–310. doi:10.1080/0363452042000299894

Zandbergen, D., & Jaffe, R. (2014). Participation: Citizenship, democracy and responsibilization. *Etnofoor*, *26*(2), 7–10.