plaNext
NEXT GENERATION PLANNING

AESOP/YOUNG ACADEMICS NETWORK

Open Access Journal

Systemic Constellations in Spatial Planning Processes. A Method to Visualise Questions of Power and Cultural Peculiarities?

Meike Levin-Keitel
Institute of Environmental Planning, Leibniz Universität Hannover
Levin@umwelt.uni-hannover.de

Coming from a systemic point of view, systemic constellations focus on the complex interplay of different elements in order to come to a better understanding of the whole system. Spatial planning, which involves complex decision-making in an uncertain environment, is eventually able to profit from such a different methodology. In this context, the aim of the article is to implement systemic constellations as method for spatial research in two different ways: first, to visualise questions of power in planning processes, and, second, to visualise cultural influences in planning processes. The article concludes that the method of systemic constellations serves to visualise questions of power and is able to highlight important differences at a glance, even though this method does not meet all of the scientific requirements academia asks for. The specific contribution is that this method will be able to enrich the dialogue between theory and practice for a daily use, to make complex problems clearly visible and easier to handle.

Keywords: spatial planning; interactions; systemic constellations; questions of power; planning culture.

Please cite as: Levin-Keitel, M. (2016). Systemic Constellations in Spatial Planning Processes. A Method to Visualise Questions of Power and Cultural Peculiarities? *plaNext – next generation planning*. 3: 67-81. DOI: 10.24306/plnxt.2016.03.005

Open Access Journal

Analysing spatial planning processes as planning practices

Defining spatial planning by planning practices is not a very new and innovative approach in planning theory, but, nevertheless, these debates about a practice-oriented perspective on spatial planning is currently being discussed vividly at least in the European scientific community (e.g. Lord, 2014; Alexander, 2016; Davoudi, 2015; *practical turn* in social sciences). Following Campbell's definition – that the 'idea of planning is premised on the expectation that through intervention and action better space and place-based outcomes can be achieved than would otherwise be the case' (Campbell, 2012, p. 393) – the focus of spatial planning processes lays in interventions and actions; that is to say, practices with respect to how planners (and other stakeholders) interact. In a multi-level and multi-stakeholder approach, the coordination and consideration of diverging interests and land-uses are the core tasks of spatial planning, so as to come to an integrated future perspective. So, planning can be seen as a form of complex decision-making in an uncertain environment (Mitchell, 2005). Integrating all spatial demands can be seen as a creative process for structuring a mosaic of different layers for optimum interplay. The challenge is to accept the complexity of these highly polyrational steering processes and unpredictable outcomes for future development. As Rittel and Webber (1973) stated in their theory of wicked problems in spatial planning, policy problems cannot be conclusively described because they refer to public goods that have no objective definition of equity. Therefore, what is called a good-practice-example only fits in one specific context and can become obsolete if applied to other cases. The results are therefore dependent on particular circumstances and interpretations, are specific to certain situations, and don't follow a unique logic (Healey, 2009; Othengrafen & Reimer, 2013; Reimer, 2012, p. 29). The incontestable aspect of this is that planning processes are highly context-bound, to the extent that they call for individual solutions and open process designs; as Driessen et al. (2012; p. 145) claim, the 'extent of multi-actor, multi-level governance determines variation in the perception of problems and solutions'. In this sense, this contribution tries to go beyond universal theories in planning to overcome universalism without falling in the trap of simple particularism. Therefore, with the method of systemic constellations, borders of different disciplines are explored and critical reflections about its implementation in spatial planning are made to rethink of scholarship and practice.

Here, the approach of planning cultures comes into play. The cultural dimension focuses explicitly on these diversified planning practices, putting values and norms and self-perceptions in the foreground of the analyses of spatial planning. From a theoretical point of view, the approach of a cultural perspective on planning represents a shift from focussing on rational aspects of planning (e.g. instruments, legal frameworks) to highlighting cultural influences, underlying assumptions, or the established culture in what and how processes are implemented in practice (Levin-Keitel & Sondermann, 2015). Undoubtedly, theoretical thoughts as well as practical experiences are of mutual benefit for the purposes of reflection, for a deeper understanding of planning processes, for questioning the system itself, or for stating different ways in which to reach the goals. The benefit of their interplay lays in the creation of win-win situations and common issues on which to engage in a mutual reflection that enriches each party. In this article, the approach of planning cultures is used as specific lens, through which planning practices can be seen and analysed. But, planning cultures are complex, omnipresent and, accordingly, hard to identify analytically (for further details on the cultural perspective on planning see Knieling & Othengrafen, 2009; Othengrafen, 2010; Sanyal, 2005). With the background of a cultural understanding of planning processes, new methodological approaches need to be implemented in order to make these more or less underlying influences visible.

Open Access Journal

In the fields of psychology, business, and the organisational sciences the method of systemic constellations is used for the analysis and visualisation of highly complex, interacting connections within a system. This systemic approach comes out of a constructivist philosophical attitude (Watzlawick et al., 1974) and requires awareness of and reflection on the perceptions and socially constructed realities of multiple stakeholders (Kopp & Huemann, 2014).

In this article, the method of systemic constellations is introduced in spatial planning in two different areas. On the one hand, to visualise questions of power in every-day planning practices, where formal hierarchies and distributions of power only cover half of the story, and where aspects of informal power and the real use of power characterises planning practices in a crucial way. On the other hand, and here the cultural dimension of planning is more important, the method is used to visualise (cultural) self-perceptions in their specific interplay, the so called process-paradigm (Galler & Levin-Keitel, 2016) with its inherent learning processes. The guiding research questions of the article are:

- Methodological questions: How does the method of systemic constellations work? Which assumptions and procedural steps have to be followed?
- Ways of implementation: To what extent are systemic constellations able to visualise questions of power in planning practice? Or, with another focus, is the method suitable for focusing on cultural peculiarities?
- Benefits: And why is the implementation of the systemic constellation approach interesting for the analysis of spatial planning processes? Where can future fields of application be identified?

To answer these questions, the following section provides a general overview of the understanding of spatial planning as planning practices and presents, by introducing the debate on planning culture, a theoretical concept focussing especially on the high context-bound and case-specific orientations and values of planning practices. Following this concept of planning cultures, it will be evident that a methodology leading to these underlying assumptions, the actors' self-perceptions, or their interactions in terms of power in every day's planning practice is not yet worked-out well. Then, in the second section, the characteristics of the method of systemic constellations are highlighted in order to understand how this method works and what exactly can be shown by this method. Further, the implementation of this method in the field of spatial planning is considered. To what extent is it possible to visualise planning practices, and especially questions of power and the characteristic interplay of cultural peculiarities? Finally, in the last section, the attempt to implement systemic constellations in spatial planning is critically reconsidered.

Characteristics of the systemic constellation approach

Systemic constellations are often described as a psychological method frequently used in consulting activities (e.g. family or institutional constellations) due to its ability to make a system and its single elements (actors) visible and to clarify their position, role and self-perception (von Schlippe & Schweitzer, 2007). The method is able to visualise manifestations and peculiarities of the whole system and its interdependencies between single, highly complex parts. Therefore, it is crucial to understand individual positions and patterns, with all of their abilities, capacities, meanings, assets, and functions (Wade, 2004). Having been used in family therapy for the last 20 years, nowadays constellations are increasingly used by businesses for analysing complex decision situations (Birkenkrahe, 2009, p. 126ff; Whittington, 2012). Following Birkenkrahe (2009), the 'method is used in the sense of relating

several different empirical observations of phenomena […] to each other, consistent with fundamental theory, but not directly derived from theory' (Birkenkrahe, 2009, p. 126f).

The literature review shows relatively few scientific studies and not much by way of theoretical model building with respect to this method, but many more contributions have been made by practitioners in order to advance further applications of the method – that is to say, it is an approach much more promoted in practice (Stresius, 2006).

Systemic constellations create a spatial representation of an issue and are a practical, reflective way of illuminating dynamics in relational systems (Whittington, 2012; Birkenkrahe, 2009). Organisational constellations are representations of organisational systems of any kind – this includes a company, a country, a government, or even a temporary working group. The term system is used here in the broad sense of the term, even including open systems, where neither the number of the single elements nor their role or function within the system is formalised or enclosed. The system, as a background to the interplay between different elements, is open to new influences, other elements, elementary changes, or abrupt modifications (Schwing & Fryszer, 2010, p. 176; Assländer, 2013). Schwing and Fryszer (2010; p. 22) have pointed out that the term system serves, like every other term, as a construction to aid our ability to orient ourselves in the world. The reasons for implementing systemic perspectives are the urgent need to handle the enormous complexities of today's existence, without continuing the sectionalising and the fragmentising of deeply connected issues. Today's challenges consist of more than just the simple understanding of single parts, disciplines or fields, but require the reintegration of knowledge and detailed information in order to gain a deeper understanding of the underlying complexities. The method of systemic constellations is interpreted as a 'tool for the meta-analysis of a social system' (Birkenkrahe, 2009, p. 127), which is particularly suited for the analysis of complex interactions in the field of management and culture, leading to tailor-made solutions (Birkenkrahe, 2009).

Methodical steps of systemic constellations

The common idea of systemic constellations, in any field of implementation, is the observation and analysis of interactions between the actors and the parts of a system to find out how they are interrelated (Kopp & Huemann, 2015, p. 236). Typically, this is done via a spatial representation of orders, relationships, hierarchies, dependencies, or communication patterns (Kopp & Huemann, 2014). Using representatives serves to visualise these single elements within the system and, additionally, their inter-connectivity. Representatives can either be persons or figurines, the former is more often used in management constellations and the latter is seen as potentially useful for its implementation in spatial planning processes.

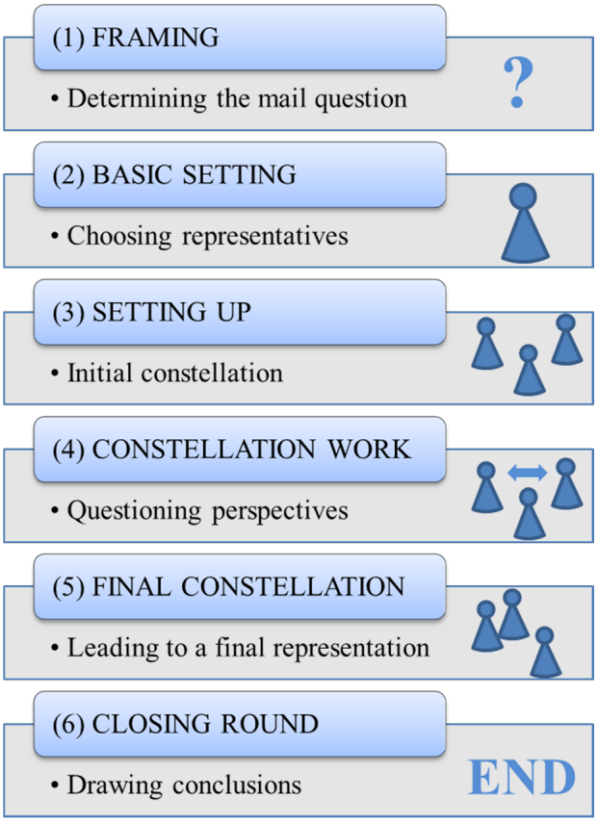

Figure 1: Generalised Steps of a systemic constellation (own illustration, based in parts on Birkenkrahe, 2009; Rosselet et al, 2007; Weber, 2000).

In the following, the different steps of a systemic constellation are explained (see Figure 1, based in parts on Birkenkrahe, 2009; Rosselet et al, 2007; Weber, 2000):

(1) **Framing:** At the very beginning of a systemic constellation, the main question of the constellation has to be defined. The set up question can vary, from being about very precise questions, reflecting, for instance, aspects of the planning process, to questions about more abstract, theoretical-conceptual issues (Whittington, 2012). Systemic constellations of precise planning processes can focus on everything from maps of case studies, to analysing complex interacting systems or planning styles, to understanding the actors' perspectives on conflict situations and dilemmas and their complex interplay. More theoretical issues can be addressed by focussing, for instance, on the most important influences on the organisational culture.

(2) **Basic setting:** Afterwards, adequate types of representatives have to be chosen. As already mentioned, this article focuses on figurines as representatives (e.g. wooden figurines or game chips) to set up a three-dimensional representation (Varga von Kibed & Sparrer, 2000, p. 13).

(3) **Setting up:** Every systemic constellation is set up by a facilitator, a person trained in systemic thinking and who is able to scrutinise the issue-holder (via circularly questions, see Schlippe & von Schweitzer 2007, p. 138). Apart from the facilitator, a client or a person who wants to set up a constellation is needed (further called issue-holder), who contributes with specific knowledge and content with respect to the set up question. The constellation can be done from diverse perspectives: actors and groups of actors set themselves up interactively, single actors set up their (socially constructed) perspective on the process, third party persons (such as a researcher) set up constellations from an outside perspective etc. One of the first considerations is the definition of the boundaries of the system; that is to say, the important factors and elements that characterize the system (Rosselet et al, 2007, p. 194). Then, the

first representative is placed – on, for instance, the table –, his orientation is reflected on, discussed, and corrected where necessary, and a second representative is placed in relation to the continuously evolving picture. That is how an initial constellation is built.

(4) **Constellation work:** Starting from the initial constellation, the positions and orientations of all representatives are in a constant state of flux, until their positions are justified in a verbal-argumentative way and are made to fit in the overall scene. Having found a position for all the relevant influences, actors and groups of actors, the whole scenery/constellation is interpreted. At that point, it is possible to use the constellation to play out different alternative scenarios or relationships (Birkenkrahe, 2009, p. 131; Rosselet et al, 2007, p. 197f).

(5) **Final constellation:** The series of constellations leads to a final constellation, which either points out the ways the chosen system works with its interconnected parts or, makes visible different scenarios and their main elements for future change. It is important, that the facilitator gives the client enough freedom and structure to develop this final constellation.

(6) **Closing round:** The closing round is important for reflecting on what has been visualised and to return to personal general conclusions.

Implementing systemic constellations in spatial research activities

The implementation of this method in spatial planning can be seen as a manifestation and continuation of the well-established actor-centred perspective of planning processes. It follows the logic of diverse actors and groups of actors being part of the planning process (Nuissl & Heinrichs, 2011). The methodology is inspired by its application in the field of organisational sciences (Birkenkrahe, 2009; Wade, 2004; Burchardt, 2015; Weber, 2000; Müller-Christ, 2013). Particularly in business constellations, the systemic constellation approach is a seen as a 'solution-focused process, which helps leaders of organisations to identify the complex, often informal, relationships and inter-dependencies within their organisation and to develop a deeper understanding about the underlying dynamics in a very time- and cost-efficient manner' (Burchardt, 2015, p. 101). Spatial planning, seen as an attempt to steer complex spatially significant demands and effects, is strongly characterised by uncertainties. So the question arises in what ways spatial planning may profit from a systemic point of view. Systemic constellations, as a constructivist and systemic method, focus on diverse interpretations, socially constructed individual and common patterns, and their interrelations. The implementation of this method in spatial planning could make it possible to indicate these aspects in the planning processes and to visualise them.

Apart from being a method to simply visualise spatial planning processes, systemic constellations can also be used as a method to show individual/organisational patterns and perspectives. The implementation in research activities are able to show, compare and analyse the perceptions of different actors and their unique logics and guiding-principles of their future behaviour.

In spatial research two different methodical applications seem to be promising:

- **As a method in expert interviews:** The interviewees set up a situation or planning process via representatives – for example, along their distribution of power. A facilitator leads the constellation by reflecting the issue-holder. As a result of the many interviews a whole set of constellations can be made, which can be compared, interpreted and analysed by the researcher in order to point out the actors' individual or organisational perceptions (for a research study using this design, see Ruppert, 2000).
- **As a method of the researcher:** The researcher uses this method to structure the results and to get an overview of key components and their interrelations. Here, as well, a facilitator is needed to question the positions and interventions made by the researcher. In this context, systemic constellations aims at the reduction of complexity and can, for instance, be used to create scenarios of future developments.

In the context of PhD-research about urban riverscapes and their local planning cultures, systemic constellations have been transferred and used for spatial planning research. The method has been used as a method for the researcher, based on previous data collection, in order to visualise and conceptualise the research results. The constellation has been led by Anne Ritzinger, a systemic facilitator and spatial planner. The constellation has been set up in the form of a third party perspective on the planning processes, without continuative feedback from planning practice. Characteristic for planning processes in urban riverscapes are various administrative and political actors, actors from the economic sector and civil society, with their diverging logics of action (e.g. environmental protection, water management, market-oriented interests) and possibilities of exerting influence (e.g. by different instruments or financial funding) (Biswas, 2004; Hartmann & Spit, 2014; Wiering & Immink, 2006). Recognising the city as an expression of the society and its needs, urban riverscapes seem to be nowadays a product of complex societal negotiation processes on the local level. These negotiation processes are crucial for planning and implementation in everyday life and principally determine the local planning culture. Starting from this theoretical-conceptual framework of planning cultures, the difficulty of capturing, analysing and indicating this complexity of cultural imprints, without it becoming a pure analysis of single components, becomes evident. Two constellations have been set up to visualise and check the first results on aspects of power and on local planning culture, for two case studies. One constellation includes the analysis of the actors' interrelations and their division of power in every-day practice. The other constellation served to identify key actors and their self-perceptions and potential role in the process. All constellations have been set up on paper, with quite different representations being used to display blatant differences at a glance.

Visualising questions of power in planning processes

The first constellations targeted questions of power beyond institutionalised claims of power and official hierarchies in two case studies (case study 1 and case study 2). Apart from having (institutionalised) power, the question aims to understand who is using power in a certain planning process and who is not (even if the actor could use his or her power). So, some parallels to the organisational and business sciences can be observed. There, organisations are compared to an iceberg: the tip of the iceberg is called the formal aspects of the organisation – in the case of spatial planning, the official hierarchies and institutionalised power – and the hidden rest of the iceberg, the much bigger part under the water's surface, is seen as the informal aspects of an organisation – in planning processes, the real use of power (Ruppert, 2000, p. 156). But how should one illustrate different aspects of power in a systemic constellation? Here are some basic considerations concerning the representatives' designs and positions:

(1) Single actors, groups of actors, or influencing factors – that is to say, representatives – can vary according to their size. For the following examples the size of the representative symbolises their formal power in the planning process, their quasi-institutionalised power – e.g. through hierarchies, instruments, or financial background. Therefore, the differences in size illustrate relational differentiations, though not based on definitive numbers calculated via statistics.
(2) The representative's position in the constellation symbolises the use of power in planning practice. This means, the more centrally the representatives are situated, the more important they are to the process, the more power they have in the planning process (which they use actively).

(3) The interrelation of the single representatives stands for their common ground: a small distance stands for close cooperation, a big distance symbolises hardly any cooperation or common interests, fought out with different forms of power.

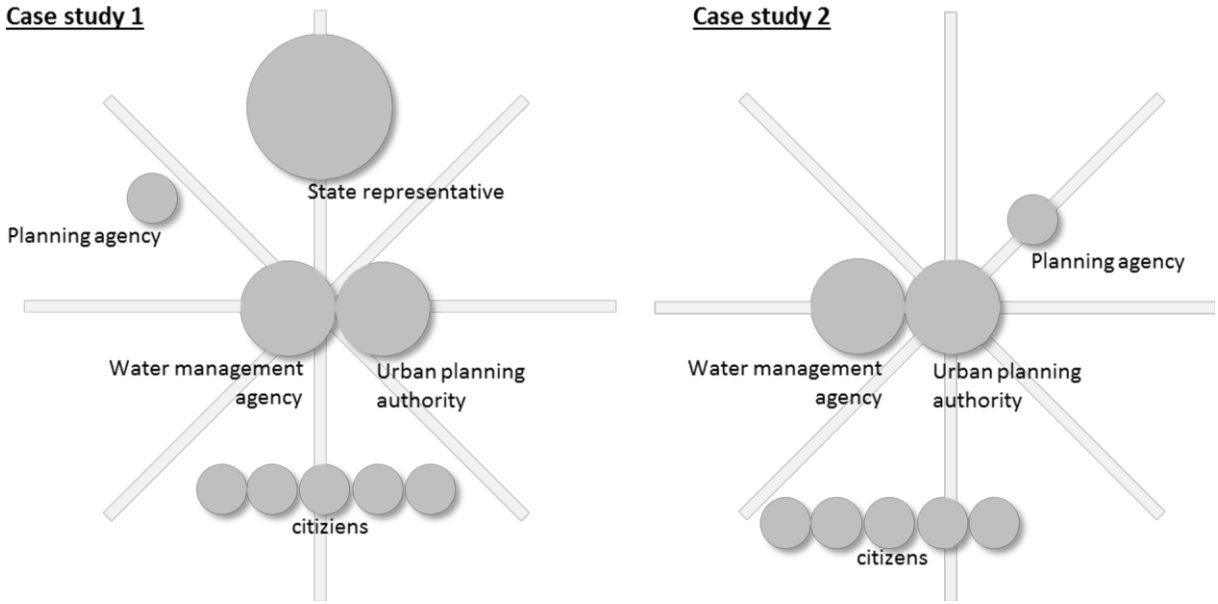

Figure 2: Two systemic constellations (case study 1 and case study 2) visualising formal and informal aspects of power (own illustration).

Analysing both constellations of case study 1 and case study 2 from a comparative perspective, a few thoughts on how the constellations has been set up can be drawn:

(1) All representatives in the two case studies are identical in size; the water management agency as well as the urban planning department, the citizens and the planning agency involved; all are shown in the same diameter. This is based on the identical legal framework, as the water management agency and the urban planning authority are equipped with similar legal competencies in developing urban riverscapes in both case studies. All of them possess formal power through procedural guidelines and legal frameworks. Analogously, in both case studies the involved planning agencies possess less influence and power, as they are simply instructed to realise tasks from one of the major players. In case study one?, another actor appears, the state representative, officially leading the whole planning process equipped with very powerful instruments, and therefore has the biggest circle diameter.

(2) The position of the single actors and groups of actors within the constellation represents their use of power in planning practices, the more centrally the representatives are placed, the more power and influence they have:
In case study 1 it becomes apparent, that the water management agency has a strong influence on the process, as its position is quite central, because all the planning activities are coordinated there. The urban planning authority is quite near to the centre of the constellation as well and participates in a lot of decisions and discussions. The real distribution of power between planning agencies and citizens ought to be considered as equal, both are integrated in the planning process, both use their strategic orientation to influence decisions and discussions, and both are integrated in the process at an early stage. The state representative is quite far off the centre, because they hardly use their formal power, only in cases of severe conflicts.
In case study 2, the lead management is in the hand of the urban planning authority, and they indeed use this power to steer the process (this explains its central position). The water

management agency is much less involved than in the first case study, but is actively engaged in their core competencies and a strong partner in the process (they realise their own measures in the urban riverscape). The involved planning agency has comparatively much influence and power, because certain (strategic) decisions were transferred to them (by the urban planning authority).

(3) Their position vis-à-vis each other, and therefore the interrelations and constellations of the single actors, groups of actors and organisations, also varies in both representations. Both systemic constellations are pretty much the same in terms of the interrelation between the water management agency and the urban planning authority: they stand next to each other in close solidarity at the centre of the processes.
In case study 1, the state representative is placed exactly above the two organisations, as umbrella of their cooperation. As already mentioned, the state representatives are formally given a lot of power, which is not used in every-days planning practice. The planning agency is placed at a half-distance to the state representative, a bit more oriented to the water management agency. The reasons for that lay in the administrative organisation, as the water management agency is the main contact person for them and defines the content of their contract.
In case study 2, the planning agency works in closer cooperation with the urban planning authority, basically steering their integration. This is the reason why their position is closer to the urban planning authority than to the water management agency.

Visualising cultural peculiarities like a (cultural) process paradigm

The second field of implementation in spatial planning is tied to the before-mentioned cultural perspective of planning practices. The aim, which is to identify and visualise the local specific planning cultures of a planning process via the actors' self-perceptions and their specific interplay, seems to be much more demanding, as it is based on much 'softer' indicators. With strong bonds to the cultural sciences, the theory is based on a change of perspective with regards to (planning) practice (Othengrafen, 2012). The focus is on the structural interrelations – for instance, how settings, values, interpretations and ways of thoughts and behaviours or procedures are constituted. The differences and cultural diversity demonstrate the wealth of interpretations, the influence of traditions, the range of self-perceptions and their consequences for a collaborative planning process (Ernste, 2012; Reimer & Blotevogel, 2012). The debates within planning culture theory are quite heterogeneous, based on the idea of including cultural impact factors in analytical frameworks, with the aim of coming closer to everyday planning practices (Ernste, 2012, Reimer & Blotevogel, 2012, Sanyal, 2005, Levin-Keitel & Sondermann, 2014).

But how can these cultural influences be visualised in systemic constellations? Two principles for implement the technique have been determined:

(1) Representatives' sizes and fragmentations symbolise the different self-perceptions of each actor, group of actors or organisation. The specific cultural aspect of these interactions and constellations is to regard different actor groups as organisations with an explicit organisational culture. The term 'organisation' is used here in a very broad sense – an organisation is a group of actors more or less institutionalised, ranging from the local planning authority or water management agencies to single-purpose citizens' initiatives or clubs and associations. Organisational culture denotes an organisation's values and norms, its specific processes of learning and socialisation as inter-individual patterns, its self-conception and game rules. These are based on invisible concepts, such as values and norms, and lead to the formation of common patterns of orientation that end up in the central premises of action, the development of shared informal rules, and the characterisation of the self-conception of an organisation (Schein 1999).
(2) Visualising and analysing the interrelations between the single actors in terms of learning processes and a common process paradigm seems to be even more complicated. The so-

called process-paradigm is the way different actors and their specific perceptions, values, and assumptions come together in different timelines, with diverse outputs and established routines, as well as the formation of common learning processes (see Galler & Levin-Keitel, 2016). The weaker this planning paradigm is built, the weaker will be the shared mental model of cooperation that is developed and the bigger will be the representative's distance in the constellation. A strong process-paradigm is then visualised by hardly any distance between the representatives.

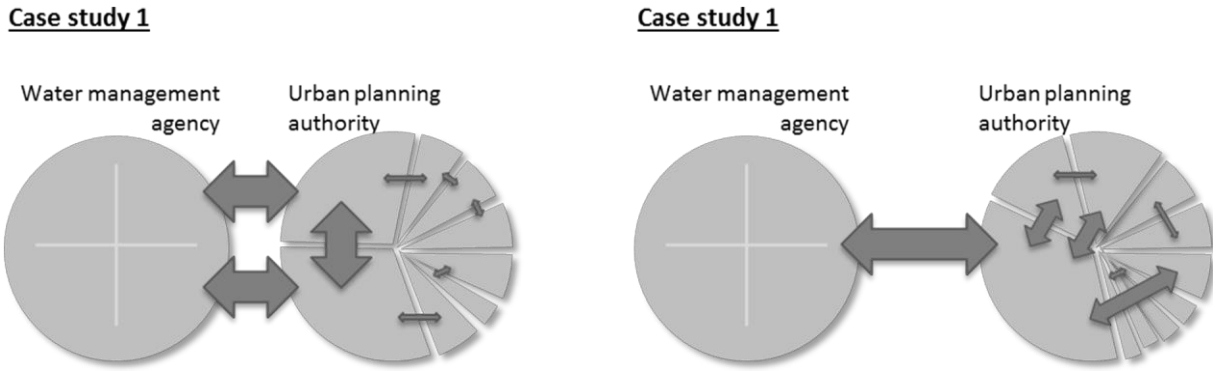

Figure 3: Two systemic constellations visualising the self-perceptions in their interplay, forming the process-paradigm (own illustration).

Using the above principles to set up constellations of the two case studies, some explications and information are needed:

(1) Regarding the actors' self-conception, the researcher choses representatives with identical sizes. Both institutions involved – the water management agencies and the urban planning authorities – are characterised as strong organisations with large influence on the planning processes.
The water management agencies, as sectoral planning agencies in both case studies, possess high self-confidence, further strengthened by numerous developments and its versatile competence on all levels. This importance was reinforced by additional tasks – e.g. by the water framework directive and the national/federal implementation (Moss, 2009). The reorganisation of the water management agencies led to a very modern, open-minded and innovation-friendly authority; on the one hand, acting in area-based teams on all levels and scales and, on the other hand, in thematic expert teams transferring new knowledge and experiences directly at all levels. This is symbolised by the cross in the representation, standing for an organisation divided in different sectors with a big emphasis on bringing the issues together again.
The urban planning authorities involved are much more fragmented and usually do not speak with one voice. As the authorities are not acting like one organisation with one organisational culture and one obvious target to implement, the self-perceptions varied significantly (as they also do in the two case studies). The urban planning authorities were characterised by a hybrid situation between high claims of coordination, the evaluation of different demands in a cultural context of more than one organisation (department), paired with weak instruments and no implementation possibilities. Their self-confidence depends very much on the organisational leadership, the functions and tasks they occupy, as well as their freedom of decision-making and their willingness to be involved. The differences with respect to the urban planning authorities' representatives in the two case studies are based on the inter-cooperation of their departments. In case study 1 there were two departments involved in the development of urban riverscapes, and they were in communication with the water management agency. Other departments were involved to the extent that this had to happen,

In case study 2, a lot of other departments were involved in the whole process; it was even crucially influenced by political statements, positioning and strategies. Therefore, the inner structure of the urban planning department is highly fragmented and communication is one of the major tasks. This is symbolised by the circle consisting of a lot of pieces in the inner structure, tied up with the communication structures (arrows).

(2) The last explanations concerning the self-conception of the urban planning authorities already led over to the analysis of the process-paradigm. To simplify the constellations, in both case studies, only the most important key actors are chosen for the visualisation of how they work and learn during the process. In a first conclusion, the process-paradigm varied significantly in both case studies. While in case study 1 the common learning processes led to routinized cooperation, in case study 2 the process and the establishment of a joint cooperation was an important first step.
In case study 1 the planning culture or the joint process-paradigm was developed on a high level, there were strong connections between the single actors, even if they did not agree on one opinion. This is demonstrated by the diverse characteristics of the system: the design of the interfaces within the system, the joint learning processes being initiated and supported, as well as the evolving benefits of the entire cooperation. In the constellation, this is demonstrated by big arrows between the most important actors and a high proximity between the water management agency and the urban planning authority.
In case study 2 the urban planning authority was much more occupied by inner-administrative cooperation, shown by the quantity and thickness of the arrows in the circle. For the process-paradigm this means that the involved actors are less able to refer to traditions and routines of cooperation and the aim is to sensitise all of them in order to come to a joint vision of how the urban riverscapes can be developed. Here it is important to know about the different assumptions, values and wishes and to accept the characteristics and specifics needed to create a joint organisation. Here, the relatively weak process paradigm becomes obvious, with a less defined joint perspective on the cooperation. The interfaces between the urban planning authority and the water management agency are to be developed in detail before every joint action or implementation.

Systemic constellations and what they are able to do – conclusions

What conclusions can be drawn from the implementing of systemic constellations in spatial planning? How fruitful is its implementation in the field of spatial planning and where does it lead? The key question is whether the implementation of this methodological approach can lead to a different understanding of planning processes and their systemic background. The two cases of implementation allow us to draw some conclusions.

It is a very adaptable method.

First, the method is very adaptable in the application field. The first constellation, visualising questions of power in planning processes, stands for a more structured and, what one might call, well comprehensible approach. The second example, with much softer influence factors and a more interpretational scope, is, admittedly, a bit trickier to follow. But, nevertheless, both implementations succeeded in presenting a scheme of the involved system. Reflecting on these two examples, the limits and shortcomings of systemic constellations become visible: Apparently, the interrelations of actors are not accurately calculated, so the distance of the actors to each other is not measurable in figures, the size of the circles is not corresponding to a calculated result and so on. In consequence, systemic constellations have to be considered as soft method to visualise interplays and networks within a group of actors in a relational way, not in absolute figures. In contrast to e.g. the method of actor-network-methodology, where absolute figures are calculated, systemic constellations don't build up apparent precision about how to calculate human interrelations.

Conclusions regarding the first implementation.

The constellations made to visualise questions of power highlight important differences at a glance. Especially comparing both case studies, it becomes immediately clear that there seems to be a big difference in the actors' possessing power and how the actors are using their possessed power. Of course, the issue-holder has to be aware of these differences in advance (as the issue-holder formulates the constellation question), but in fact it seems to be a useful method for transporting and communicating the results.

Conclusions regarding the second implementation.

The implementation of the effort to visualise cultural aspects the planning processes seems to be more imprecise than the first example. Due to the subject of culture, no definitive categories, indicators or outputs can be defined and declined. Both constellations need a lot of data collection and analysing to be done beforehand, the constellations still need a high level of interpretation, and there will always be critiques about the relativeness of this approach. Although all of these critiques have their validity, in some fields or disciplines this might be a suitable method for showing, for instance, the cultural influences on planning processes or the important impact of organisational cultures in their interrelations. Perhaps this is also a question of disciplinary cultures, which methods are used in which field of science; but most likely in the academic field of spatial planning this method is not objective enough (although this reflects a broader scientific-theoretical discussion).

Quick diagnostics for complex decision-making.

One benefit of the implementation of the method is to concentrate on the available information in order to come to a reasonable solution. Often, the issue-holder comes to surprising solutions by reflecting and structuring his or her own thoughts in accordance with the facilitator. The visualisation – that is to say the constellation – is an excellent way to reflect the own decision path. As a surplus, the method is easy to handle and the constellation is done in a very short time (compared with other systemic approaches in science).

Two other ways of using these constellations have just been touched on briefly: using constellations for different alternatives or scenarios, as well as using them as a method in expert interviews.

With respect to the former, the work with systemic constellations makes it possible to reflect on alternative scenarios. The direct feedback, together with the opportunity to check the effectiveness of specific scenarios within the system, can lead to further development and understanding of the planning processes. Systemic constellations serve to prove hypotheses and theories, to illustrate the impact of research fields or parameters on complex systems. 'The simulation is then a possibility to play out different alternatives of a scenario, or of relationships. In comparison with other intervention methods used in the change management area, constellations have been shown to yield results faster, and often lead to more sustainable results' (Birkenkrahe, 2009, 131).

For the latter, using constellations in expert interviews, Ruppert (2000) has made some notable research results. Using 90 constellations, he stated that constellations of different persons in an organisation are consistent (meaning that they show not only personal perspectives, but a common perspective on the issues) and that underlying organisational

structures and patterns become visible (proofed by interviews). So, for the field of spatial planning this means, in conclusion, that using constellations as a supporting method in interviews seem to be fruitful. Even if this method does not meet all of the scientific requirements, the potential lays in the implementation with respect to the interplay between academia and planning practices. The expected contribution is that this method will be able to enrich the dialogue between theory and practice for a daily use, to make complex problems clearly visible and easier to handle.

Acknowledgements

I want to thank Anne Ritzinger, a spatial planner and systemic coach, for guiding me through the systemic constellations procedure and giving me the opportunity to reflect on my thoughts about how to implement the methodology in the context of spatial planning. I also want to thank both my reviewers for the constructive way their critiques were presented and solutions were offered. Their respectful way of commenting on this paper has enabled me to improve its quality substantially.

References

Alexander. E. R. (2016). There is no planning – only planning practices: Notes for spatial planning theories. *Planning Theory* 15(1): 91–103.

Argyris, C. (1993). Knowledge in Action. San Francisco: Jossey-Bass.

Assländer, F. (2013). Systemaufstellung als Erkenntnismethode: Wissenschaft und Praxis vertiefen gemeinsam Führungserkenntnisse [Systemic constellations as epistemological method: Scholarship and Practice deepen their management knowledge together]. *Praxis der Systemaufstellung* 1: 63–69.

Bateson, G. (1972). Steps to an Ecology of Mind. Chicago: University of Chicago Press.

Birkenkrahe, M. (2009). Systemic constellations as a tool supporting organizational learning and change processes. *International Journal of Learning and Change* 3(2): 125–144.

Biswas, A. K. (2004). Integrated water resources management: A reassessment. *Water International* 29(2): 248–256.

Burchardt, C. (2015). Business coaching and consulting – the systemic constellation approach in business. In Schabacker, M., Gericke, K., Szélig, N., & Vajna, S. (Ed.). Modelling and Management of Engineering Processes. Berlin: Springer-Verlag, 101–112.

Campbell, H. (2012). Planning ethics' and rediscovering the idea of planning. *Planning Theory*.11: 379–399.

Davoudi, S. (2015). Planning as practice of knowing. *Planning Theory* 14(3): 316–331.

Driessen, P. P. J., Dieperink, C., van Laerhoven, F., Runhaar, H. A. C., & Vermeulen, W. J. V. (2012). Towards a conceptual framework for the study of shifts in modes of environmental governance – experiences from the Netherlands. *Environmental Policy and Governance* 22(3): 143–160.

Ernste, H. (2012). Framing cultures of spatial planning. *Planning Practice & Research* 27 (19): 87–101.

Galler, C., & Levin-Keitel, M. (2016). Innerstädtische Flusslandschaften als integriertes Handlungsfeld – Planungspraktische Einflussfaktoren der Koordination und Kooperation [Urban riverscapes as integrated field of action – Practical influences of coordination and cooperation]. *Raumforschung und Raumordnung* 74 (1): 23-38.

Hartmann, T., & Spit, T. (Ed.) (2014). Special issue: Frontiers of land and water governance in urban regions. *Water International* 39(6).

Healey, P. (2009). The pragmatic tradition in planning thought. *Journal of Planning Education and Research* 28(3): 277–292.

Knieling, J., & Othengrafen, F. (Ed.) (2009). Planning cultures in Europe. Decoding cultural phenomena in urban and regional planning. International Symposium 'Planning Cultures in Europe - Exploring Cultural Differences as Resources and Restrictions for Interregional Cooperation'. Farnham, Surrey: Ashgate.

Kopp, U., & Huemann, M. (2014). Project impact constellations - new tool to grasp the complexity of public sector projects. In Dominici, G. (Ed.). Advances in Business Management. Towards Systemic Approach. 3rd Business systems Laboratory International Symposium, Perugia - January 21-23, book of abstracts, 245–238.

Levin-Keitel, M., & Sondermann, M. (2015). Räumliches Planen als kulturelles Handeln: Planungskultur als analytischer Ansatz [Spatial planning as a cultural act: planning culturesas analytical approach]. In Othengrafen, F., & Sondermann, M. (Ed.), Städtische Planungskulturen im Spiegel von Konflikten, Protesten und Initiativen [Urban planning cultures in the mirror of conflicts, protests and initiatives]. *Planungsrundschau* 23, 33–60.

Lord, A. (2014). Towards a non-theoretical understanding of planning. *Planning Theory* 13(1): 26–43.

Mitchell, B. (2005). Integrated water resource management, institutional arrangements, and land-use planning. *Environment and Planning A* 37(8): 1335–1352.

Moss, T. (2009). Zwischen Ökologisierung des Gewässerschutzes und Kommerzialisierung der Wasserwirtschaft: Neue Handlungsanforderungen an Raumplanung und Regionalpolitik [Between ecologisation oft he protection of waters and commercialisation of water management: New requirements for spatial plannin gand regional politics]. *Raumforschung und Raumordnung* 67: 54–68.

Müller-Christ, G. (2013). Konzepte in Beziehung setzen: Systemaufstellungen in der universitären Managementlehre und –forschung [Putting concepts in relations: Systemic constellationsin the academic management education and research]. *Praxis der Systemaufstellung* 1: 70–77.

Nuissl, H., & Heinrichs, D. (2011). Fresh wind or hot air – does the governance discourse have something to offer to spatial planning? *Journal of Planning Education and Research* 31(1): 47-59.

Othengrafen, F. (2010). Spatial planning as expression of culturised planning practices: The examples of Helsinki, Finland and Athens, Greece. *Town Planning Review* 81(1): 83–110.

Othengrafen, F. (2012). Uncovering the Unconscious Dimensions of Planning: Using Culture as a Tool to Analyse Spatial Planning Practice. Farnham: Ashgate.

Othengrafen, F., & Reimer, M. (2013). The embeddedness of planning in cultural contexts: Theoretical foundations for the analysis of dynamic planning cultures. *Environment and Planning A* 45(6): 1269–1284.

Reimer, Mario M. (2012). Planungskultur im Wandel [Planning culture in change]. *Das Beispiel der REGIONALE 2010*. Detmold: Verlag Dorothea Rohn.

Reimer, M., & Blotevogel, H. H. (2012). Comparing spatial planning practice in Europe: A plea for cultural sensitization. *Planning Practice & Research* 27(1): 7–24.

Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences* 4: 155–19.

Rosselet, C., Senoner, G., & Lingg, H. K. (2007). Management Constellations. Mit Systemaufstellungen Komplexität managen [Management Constellations. Handle complexity with systemic constellations]. Stuttgart: Klett-Cotta.

Ruppert, F. (2000). Das Aufstellen von Arbeitsbeziehungen in Wirtschaftsunternehmen – Erfahrungen und Ergebnisse empirischer Untersuchungen [Setting up employee relations in businesses – Experiences and results of empirical studies]. In Weber, G. (Ed.). Praxis der Organisationsaufstellungen. Grundlagen, Prinzipien, Anwendungsbereiche [Practice of organisational constellations. Basics, principles, areas of application]. Heidelberg: Carl-Auer Systeme, 279–304.

Sanyal, B. (2005). Comparative Planning Cultures. New York: Routledge.

Schein, E. H. (1999). The corporate culture survival guide. San Francisco: Wiley Imprint.

Schlippe, A. von, & Schweitzer, J. (2007). Lehrbuch der systemischen Therapie und Beratung [Textbook of systemic therapy and consultancy]. Göttingen: Vandenhoek & Ruprecht.

Schwing, R., & Fryszer, A. (2010). Systemisches Handwerk [Systemic handcraft]. *Werkzeug für die Praxis*. 2nd edition, Göttingen: Vandenhoek & Ruprecht.

Stresius, K. (2006). Wissenschaftliche Untersuchungen zur Aufstellungsarbeit - der Forschungs(gegen)stand [Scientific analysis of constellational work – Object of research and state of the art]. *Praxis der Systemaufstellung* 9(1): 90–93.

Varga von Kibed, M., & Sparrer, I. (2000). Ganz im Gegenteil [To the contrary]. Heidelberg: Carl Auer.

Wade, H. (2004). Systemic working: The constellations approach. *Industrial and Commercial Training* 36(5): 194–199.

Watzlawick, P., Weakland, J., & Fisch, R. (1974). Change: Principles of Problem Formation and Problem Resolution. New York: Norton.

Weber, G. (2000). Praxis der Organisationsaufstellungen. Grundlagen, Prinzipien, Anwendungsbereiche [Practice of organisational constellations. Basics, principles, areas of application]. Heidelberg: Carl-Auer-Systeme.

Whittington, J. (2012). Systemic Coaching and Constellations: An Introduction to the Principles, Practices and Applications. London: Kogan Page.

Wiering, M., & Immink, I. (2006). When water management meets spatial planning: A policy-arrangements perspective. *Environment and Planning C* 24(3): 423–438.