
Self-Organisation and the Co-Production of Governance: The challenge of local responses to Climate Change

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Abstract

The arena of locally embedded and engendered responses to climate change offers a particularly fruitful and challenging space in which to scrutinise the encounters between established forms of governance and knowledge as they become entwined with locally generated forms of self-organisation. The issue of climate change offers a particularly fertile case for study because to date it has largely been dominated by state and market-based responses and associated forms of governance selectively articulated with knowledge generated through scientific and expert modes of knowledge. Drawing on comparative research the article investigates how place-based forms of self-organisation relate to existing governance, knowledge and action. The article draws on case studies of self-organising locally based groups in Germany, the Netherlands and the United Kingdom that are addressing climate change, in a broad sense, within their locality. These groups represent a range of responses to the issue and associated modes of action, exhibit different levels and forms of 'organisation' and interface with more established forms of governance in different ways.

Keywords: Climate Change; Comparative; Governance; Q-Sort method; Self-organisation;

Introduction

In this article we address the issue of how forms of locally generated self-organisation interact with (or do not) existing forms of state and market based forms of governance, and associated knowledge forms, to co-produce new configurations of governance. In particular we consider the how locally embedded and engendered self-organised responses to climate change encounter and interact with established forms of governance and knowledge. For us one of the key questions is does this create or co-produce new forms of governance and knowledge that can form the basis for ‘new’ forms of governance that transcend the local contexts in which they are generated?

The empirical context for this article is based on the on-going research of the SELFCITY research project¹. This project explicitly set out to investigate how urban place-based forms of self-organisation (c.f. Boonstra and Boelens, 2011) develop new forms of ‘collective governance’, knowledge and action, how these interact with more established forms of state and market based governance processes and knowledge production and how they contribute to the enhancement of innovative societal capacity and the potential for societal transition in the face of climate change.

The article is structured as follows: we first briefly review the literature on governance, self-organisation and knowledge before then moving out to outline the methods used in our research and finally to consider the implications of our, still incomplete, research for the issues raised above.

Self-organisation, Governance and Knowledge

The concept of self-organisation may be seen as an approach which seeks to understand notions of social norming, social learning and social change within communities/groups and their locally developed forms of organising and acting in response to locally encountered and constructed problems (Seyfang & Smith 2007). Essentially self-organisation is a way of representing processes that institutionalise the social relationships deriving from a variety of local networks (Atkinson et al. 2017). Thus it is achieved through encounters, perhaps of a serendipitous nature, that lead to the identification of mutual interests, positions and relations (Mayntz, 2006; Ostrom 1990; 1999). These interactions initially generate trust derived from

¹ SELFCITY (Collective governance, innovation and creativity in the face of climate change; see www.selfcity-project.com) in a three-year research project under the umbrella of JPI Climate with partners from Germany (University of Bayreuth), the Netherlands (University of Groningen) and the United Kingdom (University of the West of England, Bristol).

individual relationships which, over time and through further interactions, become transformed into collective forms of trust articulated through actions that are ‘other’ regarding and create a form of “collective intentionality” (c.f. Searle, 2006; Hasanov & Beaumont 2016). This does not imply that they act ‘anarchical’ as they have to institutionalise some of their procedures, although they always try to uphold a certain ‘fluidity’ and openness of social processes and internal innovation. Self-organisation is therefore the process by which person-based social relationships, common in loose networks, are stabilized through the definition of mutual interests, positions and relations. As a result, trust based on direct communication in face-to-face contacts is transformed into trust based on informal or formal institutionalisation or organization (see Rothfuß and Korff 2015, p. 159).

However, this means that self-organisation can take on many different forms as it develops within local contexts in response to locally experienced and defined ‘problems’. Given this, in terms of an attempt to identify an ‘overarching definition’ of self-organisation, we need to exercise caution. There are multiple ways of ‘defining’ self-organisation that are not necessarily mutually exclusive. Two examples will suffice to illustrate this: Nederhand et al. (2014, p. 2) define self-organisation as a “collective process of communication, choice, and mutual adjustment of behaviour resulting in the emergence of ordered structures”; while for Boonstra and Boelens (2011) it is the absence of government involvement and thus of external control (see also Boonstra, 2015). We do not see these two approaches as necessarily being contradictory. However, we should also acknowledge that some forms of self-organising may consciously choose not to engage with established forms of governance, indeed they may seek to demonstrate that there are alternative ways of organising society. Meekerk et al. (2013) point out that self-organised initiatives represent a challenge to existing governance structures, yet evolve together within existing institutional settings.

In terms of our approach we recognise the value of the examples provided above and the need to build upon them; however, we argue that the most fruitful way of doing this and of understanding self-organising is a discursive approach that identifies particular ‘local issues’, ‘frames’ those issues, develops associated narratives and practices and then seeks to construct particular courses of action appropriate to local contexts. Here self-organising is a dynamic process that emerges in response to the development of shared local understandings of issues and how to address them (Rothfuß and Korff 2015). Moreover, as the experience and

knowledge of such groups evolves they themselves are likely to change and, perhaps, expand their horizons beyond local contexts and link these to wider national and global causal processes. Indeed, some participants within local self-organised groups may already view local issues in this way, but such an understanding should not necessarily be assumed to be shared by all participants. As groups develop it may be that a ‘collective’ understanding of how the local relates to wider issues grows, but this is not an inevitable outcome, rather it should be understood as contingent.

The implications of the above are that self-organisation may pose a challenge to existing forms of governance or an alternative to them; how then does self-organisation relate to systems of governance? The literature on governance is enormous and we lack the space to review it here; nevertheless it is reasonable to argue that governance concepts seek to explain changes in the process and meaning of governing. Within the existing literature there has been a focus on how state, market and civil society sectors are articulated with a growing emphasis on networks which represent a plurality of actors and the organisational forms this takes (see Kooiman 2002: 71-73). Governance “involves looking at context-specific, historically contingent and fundamentally political processes of the establishment, the operation, the negotiation and contestation of social institutions and how these are constantly ‘brought to life’ through social practices” (Etzold, 2013, p. 38). Generally governance can be described as a change from a hierarchical, bureaucratic and centralized authority to a self-governing, horizontal and/or market-based form of regulation (Shamir 2008, Dardot and Laval 2013; Börzel and Risse 2010). Therefore governance represents a way of organising social action through vertical, horizontal and cooperative mechanisms in contrast to more traditional hierarchical forms (i.e. bureaucracy). Moreover, in addition to political modes of governing societies are also governed by the ‘invisible hand’ of the market which also allocates (societal) resources and structures the scope for what is deemed possible in terms of action. Although this will vary between societies depending upon the social values and mores in which market systems are anchored.

How then does self-organisation relate to governance? Self-organisation as a means of action ‘from below’ emphasises interaction and discussion between participants leading to the identification of relevant local issues and the formation of an accompanying ‘discourse/narrative’ of problem definition that may challenge and subvert existing governance forms or enhance them. It provides alternative ways of doing things, it potentially

offers new ways of ‘governing from below’ that reflects local contexts and understandings of problems. However, this is also entwined with issues of knowledge, what is considered as knowledge and how knowledge is used.

For us the core function of knowledge is to select, order and integrate data and information vis-à-vis structures of relevance. Knowledge is thus concerned with processes of sense making, the development and enhancement of capacities to act and decision-making procedures. This also involves comparisons and assessment of the ‘costs’ (albeit not in terms of cost-benefit analysis) of action (or inaction), but it also involves judgements and values in relation to these assessments. In essence we are advocating a pragmatist perspective in which knowledge is always related to social processes of communicative interpretation, and associated narratives, which has as its objective the development of a shared understanding of how to enhance our capacity to ‘do things’. Increasingly the literature has recognised a variety of forms of knowledge (Matthiesen, 2005, 2008, 2011; Andersen and Atkinson, 2013), ranging from scientific, professional to everyday and local. Moreover, we argue that knowledge, and its use, is not understood as something which is neutral and value-free, indeed we would contend that it is embedded in power relations as Foucault prominently claimed. This implies that knowledge, understood as shared narratives, is determined by power (see Flyvbjerg, 1998) and that this places constraints on knowledge production and how knowledge is, selectively, used (or not used). This entails processes of knowledge filtering which can take a number of forms; for example initially what is defined as knowledge about reality plays a crucial role as a filter for interpreting and making sense of the world and for guiding action. This filtering process (which can be viewed as a process of structuration) produces specific place-, context- and actor-related combinations of different knowledge forms. Within particular action situations actors ‘mobilize’ the knowledge provided by the filtering process and choose the knowledge they deem to be relevant for them in selecting a particular course of action (or inaction) to achieve a desired outcome. However, we would point out that this is not a ‘rational process’ as it frequently entails processes of competition, conflict and clashes of interests.

Research Methods and Interim Results

The SELFCITY project carried out research on three self-organising groups in Germany, two in the Netherlands and two in the United Kingdom. Given the wide-ranging definition of self-organising that we adopted the initiatives we included in the research were diverse, including:

a 'transition town', two energy coops, a 'transition house', a 'transition town' a free café, a climate change group and ecological garden. All did, however, meet our working definition of self-organisation and were, albeit in different ways, concerned with addressing climate change, although in a number of cases this was one among a number of aims.

The research adopted an approach that sought to engage with the groups as active participants in the research process rather than as 'passive subjects' of research. Thus it adopted a 'twin track' approach; one track was based around an action-learning cycle for the groups in Germany and the UK, the other was based around the use of Q-sort methodology (see Barry and Proops, 1999; 2005; Watts and Stenner, 2005; 2011; Jeffares and Skelcher, 2011) with the groups in all three countries. What follows mainly draws on the interim results of the Q-sort methodology research.

There are five basic steps in the Q-Methodology process:

1. Representing the concourse (scope of debate) as a series of statements
2. Sampling the statements
3. Constructing a sample of respondents
4. Conducting the Q-Sort interviews
5. Factor analysis and interpretation.

In order to begin the process we engaged in an extensive review of the relevant literature in order to define the concourse and produce a set of meaningful statements to begin the process and select the relevant statements to be used. After a pilot study 47 relevant statements were selected to be used with our participants. In the Dutch case the English version of the statements was used while in the German case these were translated by members of the German research team².

Jeffares and Skelcher (2011, p6) describe Q-Sort in the following terms:

Q methodology involves each participant in the sample (the P sample) sorting a series of statements (a Q sample) representative of the breadth of debate on an issue (the concourse) into a distribution of preference (a Q-Sort) from which statistically significant factors are derived.

² This was by no means a straightforward process as the team engaged in extensive debate about the translation issue and how to capture the same meaning after translation. Of course this is a normal issue when it comes to comparative research involving the use of cross-national standardised questions/statements whether it be for Q-sort or more traditional interviews.

On this basis, augmented by discussions with participants about why they selected particular statements and placed them in positions on a scale³. Using Q-Sort we sought to identify groupings of ‘attitudes’ that represented particular ‘types of participants’ within each of the groups and the associated discourse/narrative participants deployed to explain their choices. In addition the results from all three countries were brought together and additional statistical analysis carried out⁴ to identify commonalities and difference in response between countries but also to attempt to identify ‘common cross-national types’.

Thus the Q-Sort process produced two kinds of data:

- a pyramid of response preferences (i.e. respondents order 47 statements into a pyramid of preferences); and,
- interview recordings (notes and recorded interview) where respondents explain why they selected statements that were most/least important to them.

In addition to Q-Sort methodology qualitative interviews were carried out with key actors but as these are currently still on-going we have not included them in this article.

Given that we have sought to link particular discourses to the Q-sort analysis we need to briefly state how we define ‘discourse’. Firstly, we need to recognise that the term ‘discourse’ does not refer to a unified body of work, there are a wide variety of theories of discourse (see Atkinson, Jeffares and Held, 2011 for an overview). However, and unlike some of the more radical social constructivist approaches, we argue there is a dialectical relationship between the discursive and the non-discursive such that one cannot exist (or be thought) without the other.

Furthermore, following Jameson (1989), we see narrative as a key epistemological category through which we gain knowledge of the world in the form of stories. Narratives are a way of presenting and re-presenting the world, or particular aspects of it, in a textual form that understand the world in a particular way. However, we should not take these ‘stories’ at face value, we need to consider how such individual narratives are related to wider social and power structures in society.

All four groups of actors (who are described below) share some common intentionalities and a mutual “logic of practice” (Bourdieu 1992). Their main focus is on local action and the

³ These discussions were recorded and will be transcribed allowing us to reconstruct accompanying narratives for the participants and their choices.

⁴ The interim analysis on which this article draws is based on the responses of 89 participants from the 3 countries. Since the interim analysis additional participants responded and will be included in the final analysis.

construction of communities of place and interest; a desire to bring about change at the local level, possibly as a demonstration of alternative ‘ways of doing things’ and living. This ranged from an emphasis on locally grown food, to local food and resource sourcing by businesses to the development of locally based distribution systems and the development of new forms of ecologically friendly systems of production and consumption.

Based on the initial statistical factor analysis of the responses from the groups in our three countries a number of ‘distinct groupings’⁵ were derived:

1. *Radical Green*. This group displayed attitudes that were radical and ‘anti-system’ (i.e. blamed capitalism and ‘global elites’ for the current ecological crisis), embodying a critique of neo-liberalism and a challenge to the authority of the state. There was a rejection of the state and a desire to develop alternative governing structures from below. They also viewed the environment as a ‘public good’, not to be exploited for profit. In addition they questioned the forms of knowledge deployed by governing elites to justify their actions. Furthermore, they consider that decisions are too often made about a local community by elites far away and with no commitment or even knowledge of the places they affect. Thus they place a greater emphasis on alternative knowledge forms and ‘local knowledge’ – i.e. that produced locally through people’s everyday experiences and understanding of how climate change impacts locally. It is not too far a stretch to suggest that they view the prevailing dominant knowledge as selective products designed to support the existing system. There is an underlying assumption that the current capitalism system of production and consumption is the cause of the current ecological crisis and that it will inevitably collapse. Thus developing alternative ways of producing and consuming was seen as a way to protect local communities against this and lay the basis for an alternative society.
2. *Consensus Builders*: Their focus was on working with/engaging the existing system of governance to bring about change through consensus building. There was no desire to create a new system rather the aim was to ensure that ecological issues were at the heart of the policy agenda and the “collective intentionality” of all those engaged in action to address ecological issues whether from the public, private or civil society. Nor was there a rejection of the market, again the emphasis was on ensuring that

⁵ It is important to emphasise that these groupings are provisional and the accompanying justifications/narratives provided by respondents still to be fully analysed.

ecological issues were addressed by market forces. This embodied an Ecological Modernist approach (see Mol and Spaargaren, 2000), a belief that technological developments could address issues such as climate change within a market framework and a desire to mainstream these changes in production technologies (i.e. create a 'green economy'). Nor did this entail a belief that living standards, in Western societies, needed to be limited or actually reduced.

Whilst not rejecting existing forms of knowledge there was an argument that new 'green' forms of knowledge arising from new technological niches and that they needed to be institutionalised in the thinking and action of both the state and market sectors. Similarly, whilst there was no outright reject of prevailing governance forms there was a recognition that more flexible governance forms needed to be developed that both supported the development of 'green technological niches' and facilitated the dissemination of these technologies and their embedding in the actions of states and markets.

3. *Eco-egalitarian*: This approach was based on the notion of 'Green Limits to Growth' allied with an emphasis on social justice. Thus there was a recognition that the current system of production and consumption was unsustainable and needed to be changed (perhaps radically). Implicitly this entailed an argument that new knowledge forms associated with the above needed to be mainstreamed, in some cases this entailed the displacement of existing dominant notions of profitability and consumption and ideas of ever increasing levels of consumption as being a 'good thing' because it was a driver of economic growth. Moreover, it requires a wide ranging rethink of features central to current production systems such as 'built in redundancy' of products and continuous minor upgrading of consumer products (e.g. smart phones) to encourage consumers to dispose of 'old' products and replace them with new ones. In terms of engaging with prevailing systems of governance a variety of attitudes were present: ranging from what might be described as 'reforming' to 'rejection'. At least implicitly this entailed a reduction in Western living standards in order to distribute growth more equitably globally. It also required the development of new production technologies that were ecologically friendly and that those living in the Global South should benefit from any such developments.
4. *Community building*: This group did exhibit a number of radical green ideals, but were distinctive through conviction that local collective action is primarily concerned with constructing a sense of 'togetherness' which is a 'good thing' in its own right

and that creating a 'sense of place' is a central part of local collective action. Here the main focus was on local action and the construction of communities of place and interest. There was an overwhelming focus on bringing about change at the local level, possibly as a demonstration of alternative 'ways of doing things' and living. This ranged from an emphasis on locally grown food, to local food and resource sourcing by businesses to the development of locally based distribution systems and the development of new forms of ecologically friendly systems of production. Here local knowledge forms generated by everyday experiences and 'learning by doing' were given a privileged status and dominant knowledge forms were viewed with suspicion. What was lacking was a thorough going critique of these forms. At least implicitly there was a suspicion of existing forms of governance and in some cases an explicit desire not to engage with them.

Nevertheless, these four emerging groupings do begin to allow us to identify distinct discourses and accompanying narratives which offer different understandings of/ways of addressing climate change and relating to/engaging with the prevailing modes of governance in their situations. However, it should not be assumed that all the individual members of the four groupings share a common action frame of reference and act according to a 'strict logic' consistent with the overarching group description we have given. In some cases groups were more or less homogeneous, their membership falling overwhelmingly into one of the four groupings. But several of the groups included a mix of individuals expressing these attitudes and in some cases groups specifically avoided discussing wider issues choosing to focus on the 'immediate task at hand' (i.e. the main objective they had been founded to achieve – an example is the energy coop) to side-step debates that might undermine the group's coherence. For instance, the *Consensus Builders* are willing to engage with existing forms of governance with the intention of bringing about change through processes of 'ecological modernisation', perhaps based on niches developing new technologies and forms of action that demonstrate they can be profitable and therefore to show how things can be done 'better' by utilising green technologies. By doing this it is possible to build a consensus around them that will lead to the mainstreaming of green technologies and associated 'ways of doing things'. This also has implications for forms of engagement with other stakeholders, in particular the market sector, which needs to be convinced to use such technologies. But it also requires support from government in terms of regulation and the use of resources to support these developments.

In contrast, the *Radical Greens* seem to be intrinsically driven by ethical norms and ‘sustainable practices’ in a broad sense (inclusion, consensual decision-making, money-free space, vegetarian/vegan nutrition etc.). They describe their initiatives as ‘laboratories for utopias’. They claim not to be ‘eco-political’ in a classic sense, but see themselves as implicitly political in practicing an ‘eco-logical’ non-capitalist way of life in their own created ‘interstitial’ spaces for freedom in collaboration and ‘being-together’.

On the other hand *eco-egalitarians* are engaged in practices which secure or enable autonomy. For instance members of a solidarior agriculture sub-group feel comfortable if they can exist ‘independent from the system’. They need “authenticity” in acting and communicating between each other. This is not simply the notion that ‘good’ moral worldviews are of importance but the ‘practicing body’ (gardening, cultivating). The range of leadership forms here varies between ‘non-hierarchical’ and respectful-charismatic. The ‘art of collaboration’ is central for their collective intentionality. Normally ‘pragma’ (‘doing sustainability’) is more important for their practices than ‘ethos’ (‘reflecting sustainability’).

The *Community Builders* focussed on place and how to develop new ways of governing local communities through a ‘deliberative’ trial and error process, but essentially a form of governance that was non-hierarchical and inclusive. However, the overall focus was inward looking. They had little desire to engage with existing forms of governance and were suspicious of existing dominant knowledge forms being much more concerned with locally generated knowledge based in everyday life, ‘learning by doing’ and local production and consumption.

In terms of their degree of organisation and professionalisation of our selected groups once again displayed considerable variation ranging from ‘highly organised and professionalised’ to much more ‘loosely structured’ and ‘amateur’. The more organised and professionalised groups tended to have a clearer, arguably more hierarchical, organisational structure and a focus on achieving particular tasks. For instance, one of these groups was registered charity with a board of trustees and received financial support from a variety of sources including local government and sought to influence local policy debate in climate change.

Many of our groups were engaged in a variety of forms of engagement with existing sub-national governance networks, although the extent and form of engagement varied considerably. It was possible, however, to identify groups that were completely independent of government engagement – their aim was to bring people together through collaboration and generosity without the interference of money and any form of commodification to

develop and demonstrate sustainable ways of living. These groups perhaps fit most comfortably into the Eco-Egalitarian category.

Discussion and Conclusion

To the best of our knowledge no other study focussing on self-organised local responses to climate change has used the Q-sort methodology to identify individuals attitudes and then on the basis of factor analysis attempted to identify particular groupings with an associated discourse/narrative or to consider the attitudes of groups vis-à-vis existing forms of governance. However, other studies of sustainability in a broader sense have sought to identify different individual attitudes within local groups (see for instance Fischer et al 2017). Fischer et al (2017) focus on what they described as the diverse views held by individuals in community groups addressing low carbon initiatives, the ‘everyday politics’ of the groups and how this related to ‘processes of societal transition’ which is close to what we were concerned with in the SELFCITY project. A key focus of their research was: “...the question of how such shared and coherent expectations develop and are negotiated in practice is hardly ever addressed in the recent literature on social aspects of sustainability innovations.” (ibid, p3) which broadly compliments our concern with self-organisation. Basically they identified what can be termed a range of, potentially dissonant, ‘world views’ (these might reasonably be described as discourses) held by members of the groups they studied. For instance some members of the groups wished to adopt a more ‘confrontational’ (i.e. overtly political) attitude whilst others wished to be apolitical and avoid confrontation when it came to arguing for change. This was likely to influence how they viewed engagement with existing forms of governance. Similarly the issue of organisational structure and ways of working differed considerably within and between groups. Some members clearly wished to work with other groups and networks whilst others wished to retain the groups’ independence. This in turn influenced how they viewed working/engaging with existing forms of governance (including local authorities). As in our groups the different initiatives studied by Fischer et al (2017) adopted a range of different ways of negotiating these dissonant ‘world views’ ranging from open discussion to tacit agreement not to confront them. This in turn produced various, sometimes unresolved, tensions within the groups, in some cases leading members to leave groups. How these tensions were resolved (or not) is also likely to have influenced how the groups engaged (or did not) with governance systems (although this was not an explicit focus of their paper).

What might be stated at this stage of our research and for all our initiatives was a commonly shared (though not always made explicit), and of varying intensity, conviction or world-view that they had lost trust in the way(s) in which existing institutionalised politics address climate change. A fundamental reason for them to engage therefore seems to be the distrust in existing market or state led 'solutions', which they regarded as ineffective and/or 'abstract', being far away from any substantial change at the local level with which they deal in their every-day lives. Therefore they have sought to follow a different, less hierarchically ordered, course of action based on 'deliberative politics' (Macedo 1999) and practices to reach their goal or at least set up pathways to do so. This approach compliments and supports new findings in critical studies on climate change that argues there is a widespread discontent with leading actors and initiatives seeking to tackle global warming (Stevenson and Dryzek 2014). A second aspect, which arguably constitutes common ground for all our self-organising groups, and perhaps more generally, is the level of social integration they offer (or aspire to). Each of the groups assemble a range of people from different backgrounds who, while sharing similar ideas about climate change, might not be found together under other circumstances, i.e. they cut across traditional social divisions/boundaries. Thus we would contend that our preliminary results (at least for the German case studies) indicate the existence of a 'cross-milieu', integrative and egalitarian effect of engaging in such groups, which may display promising new ways to channel aspirations, however vaguely defined, for fundamental societal change and for a sustainably shaped direct (co-existent) and proximate (social and biological) environment.

In terms of the implications for their own self-governance forms the above suggests a desire to develop more deliberative and non-hierarchical forms of organising and taking decisions. Indeed we observed this in several of our groups, although the more 'professionalised' the group there was a tendency to utilise more traditional forms of organising particularly where they engaged with external organisations from whom they received funding. The very act of such engagement required them to develop relevant accounting practices that conformed with the regulations governing the relevant funds. This in turn required 'responsible' individuals to be identifiable and decisions to be taken accordingly.

In terms of knowledge our research revealed a general suspicion, if not outright rejection, of dominant knowledge forms, although *Consensus Builders* were concerned to utilise new ecological forms of scientific and technological knowledge to develop new niche technologies. What remains unclear is how the forms of knowledge generate by self-organising groups can be incorporated into wider governance and decision-making structures,

i.e. to transcend their particular context. This reflects a wider issue of how their ways of organising interface/interact with prevailing forms of governance and the capacity of those systems to change and include self-organising forms without regularising them. It is perhaps ‘easiest’ for the *Consensus Builders*, to do this because they do not wish to challenge the existing system, merely to modify it. The other groups, to varying extents, identify fundamental flaws in the prevailing system that are difficult to accommodate.

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Literature

Andersen, H.T. and Atkinson, R. (2013) *Production and Use of Urban Knowledge: European Experiences*, Springer, Dordrecht.

Atkinson, R., Held, G. and Jeffares, S. (2011): Theories of Discourse and Narrative. What do they mean for Governance and Policy? In: *Sustainability in European Environmental Policy. Challenges of Governance and Knowledge* (Ed.) Atkinson, R., Terizakis, G. and Zimmermann, K., p. 115-130. London/New York: Routledge.

Atkinson et al. (2017): Making the case for self-organisation: understanding how communities make sense of sustainability and climate change through collective action. In: *International Journal of Sustainable Society* (in print).

Barry, J. and Proops, J. (1999) 'Seeking sustainability discourses with Q methodology', *Ecological Economics*, Vol. 28, pp.337–345.

Boonstra, B. and Boelens, L. (2011): 'Self-organisation in urban development: towards a new perspective on spatial planning', *Urban Research and Practice*, Vol. 4, No. 2, pp.99–122.

Boonstra (2015) *Planning strategies in an age of active citizenship: a post-structuralist agenda for self-organization in spatial planning*, PhD Series, InPlanning, Groningen.

Börzel, T.A., and Risse, T. (2010): Governance without a state: Can it work?, *Regulation and Governance*, 4(2), pp.113-134.

Bourdieu, P. (1992) *The logic of practice*. Cambridge.

Dardot, P. and Laval, C. (2013) *The New Way of the World: On Neoliberal Society*. London/ New York: Verso.

Etzold, B. (2013) *The Politics of Street Food. Contested Governance and Vulnerabilities in Dhaka's Field of Street Vending*. Stuttgart.

Fischer, A., Holstead, K., Hendrickson, C.Y., Virkkula, O. and Prampolini, A. (2017) 'Community-led initiatives' everyday politics for sustainability – Conflicting rationalities and aspirations for change?', *Environment and Planning A*, DOI: 10.1177/0308518X17713994.

Flyvbjerg, B. (1998) *Rationality and Power. Democracy in Practice*, University of Chicago Press, Chicago.

Hasanov, M. and Beaumont, J. (2016) 'The value of collective intentionality for understanding urban self-organization', *Urban Research & Practice*, 9(3), 1-19.

Jeffares and Skelecher, C (2011) 'Democratic Subjectivities in Network Governance: A Q methodology study of English and Dutch public manager', *Public Administration*, Vol.89 (4), pp. 1253-1273.

- Jameson, F. (1989) *The Political Unconscious. Narrative as a socially symbolic act*, Routledge, London.
- Kooiman, J. (2002) 'Governance. A social-political perspective', in Grote, J. and Gbikpi, B. (Eds.): *Participatory Governance: Political and Societal Implications*, pp.71–96, Leske and Budrich, Opladen.
- Macedo, S. (1999) (ed.) *Deliberative Politics: Essays on Democracy and Disagreement*. Practical and Professional Ethic Series, Oxford University Press, Oxford.
- Matthiesen, U (2005) *KnowledgeScapes. Pleading for a knowledge turn in socio-spatial research*, Working Paper, Leibniz-Institute for Regional Development and Structural Planning (IRS), Erkner.
- Matthiesen, U.(2009) 'KnowledgeScapes - A new conceptual approach and selected empirical findings from recent research on knowledge milieus and knowledge networks', *disP*, No.177, pp.10-28.
- Matthiesen, U. and Reisinger, E. (2011) 'The Zone of Knowledge Transactions. Recent tendencies in knowledge production, knowledge sharing and the trading of knowledge from a socio-spatial perspective', in Atkinson, R, Terizakis, G. and Zimmermann, K (eds) *Sustainability in European Environmental Policy: Challenges of Governance and Knowledge*, Routledge, London, pp.94-114.
- Mayntz, R. (2006) *Transition to sustainable development: Lessons from governance theory*, [WWW document]. URL http://www.ksinetwork.nl/downs/output/Mayntz_nov_2006.pdf. accessed 2 January 2014.
- Mol, A. and Spaargaren, G. (2000) 'Ecological Modernisation Theory in Debate: A Review', *Environmental Politics*, Vol. 9(1), pp17-49.
- Nancy, Jean-Luc (2008): Being-with of being there. In: *Continental Philosophy Review* 41, p. 1–15.
- Nederhand, M.J. et al. (2014) *Self-Organisation and the Role of Government: How and Why Does Self-Organisation Evolves in the Shadow of Hierarchy?*, Erasmus University, Rotterdam.
- Ostrom, E. (1990) *Governing the Commons: the Evolution of Institutions for Collective Action*, Cambridge University Press, Cambridge.
- Ostrom, E. et al. (1999) 'Revisiting the commons: local lessons, global challenges', *Science*, Vol. 284, No. 5412, pp.278–282.
- Rothfuß, E. and Korff, R. (2015) 'Urban self-organisation in the global south: the everyday life of the poor as a collective resource to enhance the politics of sustainability', in Wilson,

D. (Ed.): *The Politics of the Urban Sustainability Concept*, pp.152–166, Common Ground Publishing, Champaign, Illinois.

Searle, J. (2006) 'Social Ontology: Some Basic Principles', *Anthropological Theory*, Vol.6 (1), pp.12–29

Seyfang, Gill and Smith, Adrian , (2007) 'Grassroots innovations for sustainable development: Towards a new research and policy agenda', *Environmental Politics*, Vol.16(4), pp. 584 – 603

Stevenson, Hayley and Dryzek, John S. (2014) *Democratizing Global Climate Governance*, CUP, Cambridge.

Watts, S., & Stenner, P. (2005) 'Doing Q methodology: Theory, method and interpretation', *Qualitative Research in Psychology*, Vol.2, pp.67–91.