Policy Studies

ISSN: 0144-2872 (Print) 1470-1006 (Online) Journal homepage: https://www.tandfonline.com/loi/cpos20

Making sense of complexity in governance: the case of local public management in the City of Stockholm

Nils Kvilvang, Erik Bjurström & Roland Almqvist

To cite this article: Nils Kvilvang, Erik Bjurström & Roland Almqvist (2019): Making sense of complexity in governance: the case of local public management in the City of Stockholm, Policy Studies, DOI: 10.1080/01442872.2019.1577372

To link to this article: https://doi.org/10.1080/01442872.2019.1577372

Published online: 10 Feb 2019.

POLICY STUDIES
https://doi.org/10.1080/01442872.2019.1577372

Routledge
Taylor & Francis Group

Making sense of complexity in governance: the case of local public management in the City of Stockholm*

Nils Kvilvang[a,b], Erik Bjurström[b] and Roland Almqvist[a]

[a]Accounting section, Stockholm Business School, Stockholm University, Stockholm, Sweden; [b]Department of Business Administration, Inland School of Business and Social Sciences, Inland Norway University of Applied Sciences, Rena, Norway

ABSTRACT
This study found that the problem-solving capacity of a public organization can be understood in terms of the legitimacy of the formulated problems and solutions. Increasing the problem-solving capacity depends on not only the acceptance of problems and how to solve them but also on formal structures and processes. Sensemaking and framing are important keys to unlocking how legitimacy is built, and consequently, how problem-solving capacity is built in a complex organization. We contend that although governance theory recognizes complexity through concepts such as networks and multi-levelness, empirical research tends to downplay what complexity can entail, thus limiting the theoretical development and practical usability of governance theory. Using complexity as a sensemaking framework, we analyze how the top-tier managers of a capital understand the challenges and solutions of coping with rapid growth. We argue that although complexity theory is no panacea to unlocking the difficulties of public sector challenges, it can be a valuable guide to future research on governance.

ARTICLE HISTORY
Received 20 October 2016
Accepted 9 December 2018

KEYWORDS
Governance; public sector; complexity; legitimacy; problem-solving capacity; sensemaking; framing

Introduction

Over the last four decades, since the late 1970s, the public sector in most Western countries has undergone a wave of successive reforms, which were eventually labelled New Public Management (NPM) (Aucoin 1990; Hood 1991). A key aspect of the reforms was turning away from legitimacy based on procedural representativeness and legality towards legitimacy based on performance, efficiency, and effectiveness (Christensen and Lægreid 2011b; Pratchett and Wingfield 1994). However, scholars argue that both NPM and newer forms of governance create distinct problems of legitimacy (Scharpf 1999; Van Kersbergen and Van Waarden 2004).

CONTACT Nils Kvilvang nils.kvilvang@sbs.su.se

*An earlier version of this paper was submitted to the AOM Annual Meeting 2016, and also presented at a FIRE seminar in Stockholm on 6th April 2016. The authors are grateful for the helpful comments by the two anonymous AOM reviewers and the reviews by Patrik Tran (Stockholm School of Economics) and the FIRE faculty from Uppsala University, Stockholm Business School and Stockholm School of Economics, who were present at the FIRE seminar. The authors are grateful for the helpful comments by the two anonymous reviewers from an earlier version submitted to Policy Studies.

Legitimacy is considered the acceptance of an environment that corresponds with social expectations (Deephouse and Suchman 2008; DiMaggio and Powell 1983; Hannan and Freeman 1977; Meyer and Rowan 1977). Hybels (1995) argues that legitimacy is shaped by the institutional characteristics of the environment and the organization, and the legitimation process where perceptions are built through reciprocal interactions (Baum and Oliver 1991; Kostova and Zaheer 1999).

Wagenaar (2007) claims that the complexity of modern social systems erodes legitimacy stemming from a hierarchical-instrumental approach to policymaking. Recognizing the increased complexity in public sector management, governance has been used as a synonym or alternative for "government", arguing for a shift towards less formalized and hierarchical forms of governing (Walters 2004; Rhodes 1990). Furthermore, while NPM "questioned the legitimacy of public policy as a context for public management" (Osborne 2006, 380), New Public Governance (NPG) recognizes the legitimacy of public policy and the interrelatedness of policymaking and implementation (ibid.). Arguably, a key factor of the public sector's legitimacy is its capacity to solve complex social problems (see e.g. Horeth 1999; Scharpf 1999, 2003).

Network governance has been suggested as an approach to increasing efficiency and effective forms of problem management and problem-solving (Koppenjan and Klijn 2004; Walters 2004). A dominant feature of governance theory is the emphasis on the network aspect of public policy, making the approach distinct from traditional hierarchical models (Marin and Mayntz 1991; Pierre and Peters 2000; Rhodes 1988). Collaboration through networks is held as the foremost means to address complex problems facing the public sector (see e.g. Podolny and Page 1998; Roberts 2000; Weber and Khademian 2008).

Termeer (2009) argues that new modes of governance are ambiguous. Emerging literature examines organizations' hybrid characteristics resulting from processes that blend competing logics in organizations. The notion of hybridity has gained momentum in recent research of different sectors (private, public, and third/non-profit sector) and with different approaches (see e.g. Billis 2010; Evers 2005; Fossestøl et al. 2015; Haveman and Rao 2006; Skelcher and Smith 2015).

Hybrid organizations are influenced by "competing organisational logics, trade-offs between social and commercial goals, and resource transfers" (Mullins, Czischke, and van Bortel 2012, 405). The provision of elderly care, child care, and primary health care, for instance, has evolved in many countries from a service predominantly provided by the public sector to a much more fragmented service provided by a host of public, for-profit, and non-profit organizations. However, the coordination, financing, and ultimate responsibility to citizens does largely remain in the hands of a political entity and the public bureaucracy (Christensen and Lægreid 2011a). For the public sector, hybridity is often associated with both conceptual and organizational approaches to (welfare) service delivery (Evers 2005).

The notion of hybridity and hybrid organizations can be linked to research on public sector governance using the network metaphor, leaving the networked public sector as an answer to, or a result of, deficiencies of NPM in an ever-increasing complex reality (see e.g. Castells 2000; Jordan 1990; Powell 1990). The notion of complexity implies both interconnectedness and distinctiveness, and questions conceptions of causality, reductionism, predictability, and determinism found in much NPM thinking (Ansell and Geyer 2017; Gershenson and Heylighen 2005; Haynes 2008).

Duit and Galaz (2008, 329) assert the necessity of elaborating "the problem-solving capacity of existing multilevel governance systems". Identifying, formulating, and framing problems, challenges, and possibilities remain a vital issue for public sector managers, and it strongly influences the organization's value-creating capabilities, especially in complex and unstructured settings that escalate the problems of framing and fitting capabilities and limitations exponentially (Ackoff 1978; Comfort and Cahill 1985; Newell and Simon 1971).

Examining how problems are seen and communicated by public managers, or how they understand and frame the governance of a complex public organization, will contribute to a shift in focus towards understanding how legitimacy grows from the problem-solving capacity. This article aims to make such a contribution by asking the following: "How does the administration of a fast-growing capital enhance its problem-solving capacity in a complex environment?" By doing so, we aim to contribute to an understanding regarding "what governments actually do" (Peters 2000, 37) by invoking insights from complexity, sensemaking, and framing.

In the following, we discuss our theoretical approach to sensemaking and framing in complex organizations. Next, we outline our method and the research context, followed by our empirical findings, where we identify three dimensions of framing the challenges faced by the city's administration. Finally, we analyze and discuss how the top administrative management in the City of Stockholm make sense of, and (re)frames its complex organization, and we conclude by suggesting areas for future research.

Theory

Sensemaking and framing

Sensemaking refers to actively creating a logical, ordered, and meaningful sense of what occurs (Weick 1979, 1993, 1995). According to Russell, Jeffries, and Irani (2008), sensemaking is centred around defined problems managers need to understand. However, the process of identifying *what* the problem is constitutes a vital part of sensemaking in organizations (see e.g. Daft and Weick 1984; Reger et al. 1994). As Weick (1999) posits, sensemaking focuses on how cues from the environment create patterns of meaning. Cues are, however, not given but rather constructed and inferred (Sutcliffe and Christianson 2013).

Shotter and Tsoukas (2011) indicate that practitioners handle novel situations every day. However, Thietart and Forgues (2011) note that actors in a system adapt to the outcomes of their prior actions. Juarrero (2011) and Dwyer and Ellison (2009) posit that this points to a circular or recursive causality where a process and its product are reciprocally dependent on each other, each being the cause and effect of the other.

Moreover, whereas sensemaking is a process at the individual level, it takes place in a social setting. Indeed, Weick (1995) sees "social" as one of seven properties characterizing sensemaking. Sensemaking is about "such features of the organisation as what it is about, what it does well and poorly, what the problems it faces are, and how it should resolve them" (Feldman 1989, 19).

Sensemaking involves the socio-psychological and epistemological processes of how a person understands the situation s/he is facing *by relating new information to existing* *frames* (Morgan, Frost, and Pondy 1983; Weick 1995, 1999; Sleegers et al. 2009). When actors experience ambiguity, as when being confronted by competing logics in hybrid and complex environments, existing routines and schedules (existing perceptions of what the problems are and how they can be framed) appear inadequate (Termeer 2009).

Complex and changing environments force managers "to change what 'facts' they pay attention to and 'frame' new courses of action" (Fligstein 2006, 950). According to Chong and Druckman (2007, 104), "Framing refers to the process by which people develop a particular conceptualisation of an issue or reorient their thinking about an issue". Entman (1993) sees framing as defining problems, diagnosing causes, making moral judgments, and suggesting remedies, thus making certain aspects of a perceived reality more salient. Frames organize experience by attaching meaningfulness to certain events (Benford and Snow 2000). As such, it bears a resemblance to Gioia and Chittipeddi's (1991) "sensegiving" as it not only frames meanings ("diagnostic framing") but also mobilizes support for a position ("prognostic framing") (Klandermans 1992; Snow and Benford 1988, 1992).

Chong and Druckman (2007) argue that frames affect attitudes and behaviours of their audiences, while Sniderman and Theriault (2004) find that in political contexts, people are often exposed to several competing frames. As Gilad, Kaish, and Loeb (1984) found, the acceptance of specific policy programs can be actively enhanced by how it is framed and presented to the public. Frames are employed to mobilize certain groups in certain ways (see e.g. Polletta and Ho 2006; Snow and Benford 1992), contributing in forming a public opinion as problems and solutions are effectively packaged (framed) (Gitlin 2003). Framing as a process is about framing challenges and solutions not only within the organization but also externally and thus building legitimacy by creating meaning aligned with political interest (Fiss and Hirsch 2005; Selznick 1949). In our approach, we see framing as the articulation, packaging, and communication of what has been understood. While sensemaking is about understanding what is going on, framing is about building acceptance for a particular view of what is going on. As such, they are complementary in a legitimation process.

Framing, according to Jacobs (2014), is a potent mechanism used by political elites to influence the public through wording and phrasing. However, as Entman (2004) indicates, the framing process is complex through feedback-loops. Frames communicated by an entity (e.g. political elite or the administration) influence (purposively) how other entities (e.g. media and the public) perceive an issue, but also reciprocally, how the reactions in turn influence and contribute to revising the communicated frames (see also Borah 2011). Furthermore, Greenhalgh and Russell (2009, 304) criticize an "evidence-based" framing of policymaking as "inherently unable to explore the complex … way in which competing options are negotiated" (see e.g. Black 2001; Lancaster 2014, for a critique of evidence-based policymaking).

Complexity as a sensemaking framework

Complexity theory, originating in the natural sciences, has gained momentum in the latter part of the twentieth century as a distinct theoretical approach in all major areas of social science (Ansell and Geyer 2017; Byrne 1998; Geyer 2012). Examples from the social sciences can be found in economics and economic policy (Arthur 2013; Battiston et al.

2016; Ormerod 1998), social policy (Blackman 2006), health service research (Kernick 2004), and education policy (Davis and Sumara 2006).

As Ansell and Geyer (2017, 162) posit, "complexity theory reflects the growing economic, social and political complexity and uncertainty that we see in our everyday lives and is reflected in the shift from 'government' to 'governance'". Nevertheless, complexity theory has not gained a very prominent place in public sector literature. Bovaird and Loeffler (2009) is a notable contribution, along with the special issue in Public Management Review[1]).

While complexity theory may still be somewhat fuzzy, revealing diverse ontological, epistemological, and methodological assumptions (Maguire, Allen, and McKelvey 2011; Thietart and Forgues 2011), there are some properties that are typical, for instance, non-linearity, feedback loops, emergence, networks, and adaptation (Baranger 2000; Maguire, Allen, and McKelvey 2011; Schneider 2012; Thietart and Forgues 2011). An overview of different perspectives is given by, for example, Capra (1996), Casti (1997), Lewin (2000), Waldrop (1992), and Mitleton-Kelly (2003).

As it has emerged in the natural sciences, there are reasons to be cautious of drawing too directly on complexity theory in matters that deal with people, as there are clear contextual differences between natural and social (human) systems (Kurtz and Snowden 2003). Indeed, Cairney and Geyer (2017, 2) question what complexity theory offers policy studies as they see major obstacles in sharing a "theoretical outlook, language, and a set of research methods" between the sciences. They posit that complexity theory should not be seen as a completely new way of thinking in policy studies (ibid.). Emergence, for instance, is a key term in complexity theory, but has different meanings in, for example, biology and policy studies. We thus see complexity theory more as a framework which equips us with terminology and insights than a completely new approach that will paradigmatically shift how we see public organization. Rather, it provides us with a way of looking at the managers, the organization, and the environment – and how they go about figuring out what challenges they will face and how to resolve them.

Method and research context

In 2008, enormous problems in the global economy had affected Swedish municipalities. The Swedish Association of Local Authorities and Regions issued forecasts on the rapid erosion of the tax base due to a crisis in the industrial sector and the subsequent increase in unemployment. Based on this, a group of 20 researchers from four leading Swedish research institutes studying local public management launched the Swedish National Research Program on Local Public Management in 2010. The entire project covered 47 of Sweden's 290 municipalities and included 195 in-depth interviews.

In 2014, the National Research Program on Local Public Management was extended to 2016, now with 26 municipalities involved. The extended program aims to particularly examine how local municipalities adapt and adjust their resource allocation to changing premises, and how they develop their organizational structures, management control systems, and collaborations in parallel with the environment. Some 400 interviews have been conducted, in addition to using statistical data, document analysis, and literature reviews to build the cases.

Although previous research has found that national capitals are anomalies (Gurr and King 1987),[2] we wanted to examine a large city experiencing rapid growth in a complex political and social landscape to see how they think about and respond to challenges. Arguably, Stockholm, as the nation's capital, is a conglomerate of different political entities, multinational corporations, and national and local interests in an urban landscape that yields extraordinary challenges to coordination. It is "as complex as it gets". Further, Stockholm and the Stockholm region has historically faced problems in approaching challenges as a driver in a larger regional context. For these reasons, we intentionally chose Stockholm as a case through purposeful sampling as we expected the complexity of the case to be particularly interesting when looking into the contemporary public organization (Bryman 2008; Denzin and Lincoln 2005; King, Keohane, and Verba 1994; Silverman 2013).

We were given access to top-tier city executives[3] for semi-structured interviews. Interviewees included the CFO, director of finances, director of city planning, senior finance controller, director of educational services, director of senior citizens' services, and the senior executive of a city district. We gained ample insights into how the city's top executives described, analyzed, planned, and executed the governance of the city considering the challenges they were facing.

All interviews were recorded and subsequently transcribed in Swedish by the first author, and we all had individual access to the audio recordings and full transcripts. The transcribed data were analyzed by looking for patterns emerging from the interviews. There were no predetermined codes for analyzing the transcribed interviews. Rather, as the interviews were analyzed using NVIVO, the data were categorized, continuously disaggregating the text "into a series of fragments, which [were] then regrouped under a series of thematic headings" (Atkinson 1992, 455; see also Miles and Huberman 1994; Silverman 2013). As new codes were identified, previous interviews already coded were re-examined. Finally, three thematic headings were identified through this iterative process, which subsequently became the three dimensions: vertical, horizontal, and spatial.

Secondary data in the form of statistical data from Statistics Sweden, financial data from the city's annual reports, and information from various websites (of collaborating public and non-public organizations) were used to complement and verify information gained through the interviews.

Empirical findings and analysis

A vital component of the Scandinavian welfare states is the redistribution of means, both at the individual and organizational levels – redistribution through taxation to secure individual rights and opportunities, and redistribution to combat regional differences that influence both national growth and individual possibilities. At the same time, Sweden is the second most concentrated economy among OECD countries, where almost 60% of the GDP is produced in three regions centred on the three main cities (OECD 2011). There are also regional differences, as Stockholm's buoyant growth in GDP per capita has driven an increase in inequality in economic performance. This growth, along with Stockholm's sheer relative size in Sweden, has led to the city contributing 41.7% of the growth in national GDP over the last decade (OECD 2011).

The main functional responsibility of Stockholm city is to provide well-functioning, timely, and modern services to its inhabitants in the Swedish welfare state. The traditional governance of the welfare services in Stockholm is tax-funded, with universal services performed predominantly by public service providers in a hierarchic system of governance (albeit with an increasing portion of private providers with varying degrees of public funding). The level of services in Sweden is unique and "unparalleled in other types of welfare systems" (Castles 2004, 181; Esping-Andersen 1999; Nordic Centre for Welfare and Social Issues 2013). The inhabitants' expectations are similarly high. When interviewed, the city leaders mentioned a twofold challenge for the welfare state in general and the city in particular: the continued rise in expectations of welfare services, and a decreasing willingness to accept higher taxes to finance them.

Along with the other capitals in Scandinavia, Stockholm has experienced substantial growth in population, with some 2–2.5% yearly growth over several consecutive years. Approximately 47% of this growth is young children, which puts enormous strain on the capacity to provide kindergartens, schools, and competent teachers. Growth thus becomes self-reinforcing if managed properly. Formulated in 2007, the strategic initiative "Vision 2030",[4] developed by Stockholm's city departments, administrations, and private companies, envisioned 1 million inhabitants within the city limits. That figure will be reached in 2020, if not sooner. The rate of growth is *the* future challenge. As one respondent expressed: "We are growing by leaps and bounds, and we want to grow! … [But] it costs money to grow … ".

In Vision 2030, Stockholm city aims to build 140,000 new dwellings before 2030 (40,000 before 2020), with accompanying schools, kindergartens, parks, sports arenas, public transportation systems, and more to cope with the growth. Residential areas are considered the absolute key to growth that is financially, socially, and environmentally sustainable. The volume of necessary investment puts a considerable strain on the city's finances, where total yearly investments made by the city alone have quintupled over the last decade, reaching the equivalent of 2.4 billion USD per year with a city budget (2016) having operating costs of 4.52 billion USD.

In the following, we will categorize our detailed empirical findings in three dimensions: vertical, horizontal, and spatial.

Vertical dimension

Governance is conceptualized and depicted in traditional terms through the political and administrative hierarchy, a functional hierarchy of vision-goals-budgets-measures-key indicators, and planning processes and products (e.g. 10-year investment plans, 5-year budgets, yearly budgets). In the case of Stockholm, the distinction between the state (nation-state), the county, and the city is becoming gradually less distinct. The responsibility for citizens' welfare slides downwards to the local level (the city), albeit without being accompanied by the appropriate funding. The vertical blurring has predominantly grown out of the city's gradual recognition of practical necessities, not through a conscious development of governance policy within the formal structures of governance. The city's financing of investments in public transportation systems that are not functionally its responsibility has been deemed necessary but remains a strain on city finances. As one senior executive said:

> The downside is that we are forced to pay for the investments in the infrastructure – the state's infrastructure – we have, or will pay, more than one billion USD for the state's investments, money that we need in our housing projects.

On this issue, the realized financial arrangements do not correspond with the formal responsibilities of the levels of government, and the pivotal point for the city management is that the income system of the municipalities and counties do not follow suit the rearrangements in financing that takes place in practice. An interesting parallel can be drawn to British "city deals", where the nation-state empowers cities to drive their local economic development through direct control over national funds for transportation and so forth.

There is also an expressed willingness to expand services beyond those that are formally and traditionally part of the city's domain. As one respondent stated, "We do have a responsibility to the population; we have the ultimate responsibility to the citizens. When it doesn't work, we just have to do something". The perception of the top management in the city is that several aspects of the public governance system have not kept up with development, forcing the city management to look beyond the vertical hierarchy for solutions.

City officials have expressed concern about what they see as unfortunate distributive effects in the Swedish income system for municipalities and counties, where, for instance, tax base equalization and differentiated state subsidies per capita form part of the income system. Municipalities that experience high growth thus receive a lower income per capita from the state than lagging municipalities. Seen from Stockholm, as a municipality in rapid growth, this is perceived as a somewhat dysfunctional and shortsighted system as it is not rigged for securing future growth in the economy. As a top-tier city official expressed:

> There is supposed to be equal opportunities for all in this nation, also for Stockholm. And one is politically very regionally focused concerning redistribution and the short perspective – now, here – but there is no growth perspective in the redistributions … The redistribution should sustain a nice operation throughout the country, but also create conditions for this in the future. And where there are people we can create growth, which, in turn, generates revenue to redistribute in the future. That perspective does not exist. That's on us.

The city transgresses its formal functional responsibilities to fill the void that is the (nation) state's lack of financing for necessary infrastructure in growth regions, thus reframing an essential meaning of the city's governance.

Horizontal dimension

One salient aspect of the NPM ideology is the need for more extensive public-private cooperation (PPC). Although the Scandinavian welfare states can be said to have been slower and more cautious than other European countries in adopting such a strategy, efforts have certainly been undertaken to increase PPC, and there is an ongoing discussion regarding in which domains of the public sector, and to what extent, PPC should be encouraged and implemented. In Stockholm, the city finances most, if not all, infrastructure investments. As one respondent said: "If you look narrowly on the question of financing, we see that no one that can borrow money as cheap as us. So we prefer to handle that cost ourselves". PPC thus does not cover the financing of projects in any significant way.

However, the city management has, for example, developed a deliberate policy of PPC when developing housing projects: "For every area that we develop, we allocate land to our own municipal housing associations, and to [private contractors]. And then we develop the areas together". Publicly owned land allocated to private contractors is sold on market terms with conditions for its development and use. This policy secures close cooperation between the city and private developers and finances a substantial part of the city's development costs.

Practically, efforts are being made to cope with the growth-driven challenges in several venues. The city management is crafting a strategy for working systematically with innovations and knowledge sharing, both internally (e.g. through "best practices" across the city administration) and externally (e.g. academia, OpenLab,[5] and the Stockholm Business Alliance[6]). The city management has expressed the need to blur the boundaries between organizations so that in the future, solutions can be built jointly by public, private, and non-profit actors. The city has thus taken upon itself the responsibility to build distinctive institutional environments that facilitate, for instance, labour mobility and transfer of knowledge across governmental and non-governmental organizations.

Technological development and strength tend to cluster around universities. In this aspect, the city management works actively with academia to stimulate and motivate those institutions to take on greater responsibility for participating in the development of smart technologies. Institutions such as Stockholm University, the KTH Royal Institute of Technology, Stockholm School of Economics, and Karolinska Institutet are mentioned as relevant institutions. A senior city health administrator, for instance, expressed that the city plans to spend the same amount of money (in real value) on elderly care in 2027 as they do today, despite the growth. Therefore, the city does not plan to increase the budget for elderly care relative to the growth in elderly citizens. Considering the ongoing and projected relative growth in the elderly population, this will imply a need to develop substantially more efficient services of providing elderly care (Statistics Sweden 2012; see also Gavrilov and Heuveline 2003; Kautto 1999).

These demands require asking new questions and finding smart solutions that are developed in various partnerships. The city management acknowledges that they alone cannot solve these challenges, and tries to activate networks of public, private, and non-profit organizations to identify and solve challenges pre-emptively, thus stepping away from the pure client-provider model envisaged in much of the NPM literature.

Spatial dimension

Regions are ambiguous entities in the Swedish government system. While the formal governing structure is state-county-municipality, the formal system also includes state agencies operating with regional, geographical domains (e.g. work employment regions, criminal justice regions, and police regions). There are, however, no formal, regional entities tasked with growth-related issues, be it general economic growth or specific growth issues related to, for instance, migration to larger cities, housing, and infrastructure. The formal structure of state-county-municipalities partly handles these growth issues, but the rhetoric among city officials has changed to include the adjacent municipalities and counties, indicating a regional consciousness. Developing Stockholm city is not only seen as a question of merely developing the city but is also about developing the region. Boundaries remain but are becoming more transparent, if not formally then certainly through practice, as manifested through investments in public transportation infrastructure.

The will to transcend functional, geographical responsibilities manifests itself through co-financing of infrastructure projects outside the city limits – projects that are deemed necessary by the city management to manage the growth. As one respondent said regarding the co-funding of national or county projects:

> We have said that we are willing to co-finance even though it is not within the city limits to stimulate the commencement of the building, because it is necessary for the city's growth. And it is quite substantial amounts – 1 billion USD … in co-financing.

One of the respondents described the rationale for the will to finance outside city limits and in projects that belong to the nation-state as follows:

> If the nation-state doesn't put up the money for its own [infrastructure] investments … we need to expand the city for it to work. Otherwise, it will implode [from] all the people moving here. Then we have to find the money ourselves even though it is not our responsibility.

The lack of formal possibilities in the public governance system has not hindered the city management from influencing and implementing its policy in its "area of interest". In the absence of commonly accepted solutions, city officials redefined the city's area of direct influence to match the area of interest through (co)financing infrastructure projects. However, the reframing of geography went well beyond concrete investments in the immediate proximity. As one respondent put it:

> … the growing city, the growing region … boundaries disappearing really, it's about the region,[7] the Mälardalen region,[8] it's really about Northern Europe, it's really about cooperating … the Öresund region,[9] Oslo, Helsinki – to handle the challenge from the rest of the world.

Geography, for the city, has ceased to be national. Geography has expanded the city and reduced the state. Simultaneously, geography has become less physical and more virtual.

(Re)framing Stockholm

There is an acknowledgement among top-tier leaders that its boundaries are somewhat blurred. Planning and investments are channelled not only directly to projects inside the city boundaries but also increasingly outside it as well. Taxpayers' money is spent outside the city, which is not entirely uncontroversial: "Well, it is not something we like, we don't like co-financing, we state explicitly that we think it is wrong that we [co]finance national projects, but we have to. We have taken that responsibility". The notion of spending taxpayers' money in a neighbouring municipality does signify a process of realigning the perception of what Stockholm is. As one respondent expressed: "As an inhabitant, you don't think 'Here was the boundary between Solna [neighbouring municipality] and Stockholm'". The reframing of the city is thus not new to the individual inhabitant, but more a change in political and administrative frames. Implicitly, the approach to neighbouring municipalities in the region has changed from a competitive to a cooperative view.

With Vision 2030, the competitive frame of top-tier city leaders looks at the region's competitiveness in a global context. The competing region might as well be somewhere in Europe, the US, or Asia. As formulated by one respondent:

> The reason we want to grow is to handle the globalisation and the competition with the rest of the world. To be attractive to companies, and to create employment, and why so? Because we want the same welfare in the future as we have today.

The city managers thus reoriented their focus to one that has both domestic and international dimensions. There is a huge implicit mental leap from growing in *the city* to growing in *the world*. The perspective seems to have changed from being the capital of Sweden to seeing Stockholm "in the world".

When the city management calculates housing development projects, they do so without doing socio-economic calculations. Instead, the net present value is calculated in every development project considering cost, the number of possible dwellings, and the allocations between different forms of tenure. This approach also represents a break with the traditional approach, where the socio-economic factors and calculations have a much more prominent standing and concerns about cash flow and profitability in public projects are of less concern.

Finally, a distinct pragmatism seems to have grown amongst the city management when approaching growth-driven challenges, as opposed to an ideological stance. The city executives seem to have little concern for principles when approaching PPC. Not only do they seem to have little concern for this dimension, in the sense that they actively seek PPC, but they also have little concern when addressing regional issues of development in public governance structures as well (although they seem very much concerned with regard to financing).

Discussion

This study aimed to examine how the administration of a fast-growing capital enhances its problem-solving capacity in a complex environment. Our main finding is that managers, through processes of sensemaking and framing, identify, formulate, and communicate what they see as pertinent challenges and solutions. We found that the primary challenge is the rapidly growing population. However, understanding what that entails, what the "secondary" problems are that arise from this, results in solutions that challenge formal structures and bureaucratic processes.

We have shown how the top managers make sense of challenges and how they plan to tackle them. Our analysis clarifies how three different dimensions of sensemaking manifest themselves: vertically, through levels of public sector hierarchy; horizontally, through public-private-non-profit spheres and cooperation; and spatially, through the reframing of geographical notions of "Stockholm". We found that the administration reframes the very notion of "what this organisation is about" (Feldman 1989). Moreover, "what it is about" is identifying, proposing solutions, and framing the complex organization, thus building legitimacy for perceiving challenges and solutions outside the formal structures and bureaucratic processes. Increasing the problem-solving capacity, then, rests just as much on acceptance of what the problems are and how to solve them, as on formal structures and processes.

We found that by using complexity as a sensemaking framework, we can better understand how the managers are actively involved in the practicalities of solving problems and how they mobilize support for a policy position and enhance certain policy options. As such, we can understand the governance processes better. Furthermore, while the city management clearly has profoundly changed its view on its role and responsibilities, and hence reframed the notion of structure, formal structures remain intact. Similarly, broader notions of responsibility for the future of the region, if not for the country, have complemented narrower notions of budgetary control and financial accountability. Calculations and concerns about cash flow and profitability regarding net present value in public projects have come to play a prominent role in the new governance practices. Engagement in, for example, investments (vertical dimension), innovative collaborations (horizontal dimension), and visions about a future region (spatial dimension) are manifestations of reframing challenges and solutions.

We contend that much governance theory, through concepts like networks and multilevelness, recognizes complexity (see e.g. Stoker 1998), but accepts and incorporates what complexity entails to a much lesser degree. Instead, complexity in governance theory is predominantly understood as "reduced capabilities for steering and control … in a structural sense" (Sjöblom, Löfgren, and Godenhjelm 2013, 4–5).

As Wagenaar (2007, 22) states, "the recognition and acknowledgement of complexity has fallen prey to the powerful hold that the ideal of rationality has over the discourse and practice of policymaking", thus missing out on insights from concepts such as nonlinearity, feedback loops, disequilibrium, emergence, and networked causality (see e.g. Richardson 2011; Schneider 2012). It is, however, as Maguire, Allen, and McKelvey (2011) claim, increasingly adopted by practitioners, as policy decisions typically concern systems that are open and complex (Bankes 2011). Furthermore, we hold with Richardson (2011, 373) that a complexity perspective "provides a powerful lens through which to 'see' organizations". We thus argue that governance research would benefit from insights from complexity theory, albeit carefully applied to a social system.

Conclusions

This study examined how managers in a fast-growing capital enhance the legitimacy of a complex organization by using complexity as a sensemaking framework. While we acknowledge that complexity theory is no panacea to unlocking the difficulties of public sector challenges, we contend that complexity can be a valuable guide to future research on governance.

Our main conclusion is that the problem-solving capacity of a public organization can be understood in terms of the legitimacy of the formulated problems and solutions. Thus, sensemaking and framing are important keys to unlocking how legitimacy are built in a complex organization.

Reform waves such as NPM and NPG have addressed perceived shortcomings in public sector governance. While different reforms have entailed different perceptions of what the challenges are and how they should be addressed, they have, arguably, brought about various legitimacy issues. Where NPM was criticized for downplaying procedural representativeness and legality, legitimacy in network governance is not unproblematic. We argue that a focus on the problem-solving capacity of the public organization that transcends a hierarchical-instrumental approach, recognizing complexity through sensemaking and framing, can be a viable way forward for further theoretical development and practitioners. There is, however, ample grounds for prudence when using complexity theory (originating in the natural sciences) in the social sciences.

For the broader research on governance, our study shows that taking a complexity view can expand process design issues. The concept of "designing" might be problematic in itself, at least if seen from a traditional hierarchical-instrumental perspective. Process design may, instead, require a focus on issues such as mutual adaptation, learning, and communication of frames.

As we have based our findings and conclusions on the top administrative management in Stockholm, there is considerable room for different views at different administrative and political levels. Claims of nomothetic generalizability (Lincoln and Guba 1985) in a classic sample-population perspective is neither warranted nor an aim of our study given our methodological approach. We do, however, claim case-to-case transferability, or what Misco (2007) calls reader generalizability, through purposive sampling (Lincoln and Guba 1985; Silverman 2013).

We see several avenues for future research, such as looking into how complexity as a sensemaking framework plays out at different levels of administration and political entities to broaden theoretical contributions. For instance, how do different actors look at the legitimacy of a public sector organization in a complex setting? Secondly, studies of governance could carefully take cues from complexity theory as a framework, thus building a better understanding of how complexity can inform theories and practices in public sector governance.

Finally, we suggest that future research can investigate how research on public sector governance can contribute to a better overall understanding of how complex systems work. After all, a public sector organization is "as complex as it gets".

Notes

1. Volume 10 (3), 2008.
2. We are indebted to an anonymous reviewer for clarifying this point.
3. This article refers to Stockholm city (or the city for short) when referring to the local municipality of Stockholm, as opposed to Stockholm county.
4. http://international.stockholm.se/governance/vision-2030.
5. http://openlabsthlm.se/about/.
6. http://www.stockholmbusinessalliance.se/.
7. The Stockholm region.
8. The adjacent region to the West.
9. The region centred on the cities of Copenhagen and Malmö.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Nils Kvilvang is a doctoral candidate in the Accounting Section and the Institute for Local Government Economics at Stockholm Business School, Stockholm University. He is a member of the FIRE Research School in Accounting, and is also affiliated with the Inland Norway University of Applied

Sciences in Norway. His research interests include public management, management accounting and control, and public policy.

Erik Bjurström, Ph.D., is Associate Professor at the Inland Norway University of Applied Sciences. His research focuses on intellectual capital, quality work, civil-military relationships and cooperation, management control and governance.

Roland Almqvist, Ph.D., is Associate Professor, head of the Accounting Section and the Institute for Local Government Economics at Stockholm Business School, Stockholm University. His research has mainly been oriented towards management control in the public sector with a special focus on the outcomes of New Public Management in public sector organizations.

References

Ackoff, R. L. 1978. *The Art of Problem Solving*. New York: John Wiley and Sons.

Ansell, C., and R. Geyer. 2017. "'Pragmatic Complexity' a New Foundation for Moving Beyond 'Evidence-Based Policy Making'?" *Policy Studies* 38 (2): 149–167.

Arthur, W. B. 2013. *Complexity Economics: A Different Framework for Economic Thought (March). INET*. New York: Institute for New Economic Thinking.

Atkinson, P. 1992. "The Ethnography of a Medical Setting: Reading, Writing, and Rhetoric." *Qualitative Health Research* 2 (4): 451–474.

Aucoin, P. 1990. "Administrative Reform in Public Management: Paradigms, Principles, Paradoxes and Pendulums." *Governance* 3 (2): 115–137.

Bankes, S. 2011. "The Use of Complexity for Policy Exploration." In *The SAGE Handbook of Complexity and Management*, edited by P. Allen, S. Maguire, and B. McKelvey, 570–589. London: Sage.

Baranger, M. 2000. *Chaos, Complexity, and Entropy*. Cambridge: New England Complex Systems Institute.

Battiston, S., J. D. Farmer, A. Flache, D. Garlaschelli, A. G. Haldane, H. Heesterbeek, C. Hommes, C. Jaeger, R. May, and M. Scheffer. 2016. "Complexity Theory and Financial Regulation." *Science* 351 (6275): 818–819.

Baum, J. A. C., and C. Oliver. 1991. "Institutional Linkages and Organizational Mortality." *Administrative Science Quarterly* 36: 187–218.

Benford, R. D., and D. A. Snow. 2000. "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology* 26: 611–639.

Billis, D. 2010. "Towards a Theory of Hybrid Organizations." In *Hybrid Organizations and the Third Sector: Challenges for Practice, Theory and Policy*, edited by D. Billis, 46–69. New York: Palgrave Macmillan.

Black, N. 2001. "Evidence Based Policy: Proceed with Care Commentary: Research Must Be Taken Seriously." *BMJ: British Medical Journal* 323 (7307): 275–279.

Blackman, T. 2006. *Placing Health: Neighbourhood Renewal, Health Improvement and Complexity*. Bristol: Polity Press.

Borah, P. 2011. "Conceptual Issues in Framing Theory: A Systematic Examination of a Decade's Literature." *Journal of Communication* 61 (2): 246–263.

Bovaird, T., and E. Loeffler. 2009. *Public Management and Governance*. 2nd ed. London: Routledge.

Bryman, A. 2008. *Social Research Methods*. 3rd ed. Oxford: Oxford University Press.

Byrne, D. 1998. *Complexity Theory and the Social Sciences*. London: Routledge.

Cairney, P., and R. Geyer. 2017. "A Critical Discussion of Complexity Theory: How Does 'Complexity Thinking'improve our Understanding of Politics and Policymaking?" *Complexity, Governance and Networks* 3 (2): 1–11.

Capra, F. 1996. *The Web of Life*. New York: Anchor Books.

Castells, M. 2000. *The Rise of the Network Society*. Oxford: Blackwell Publishers.

Casti, J. L. 1997. *Would-Be Worlds. How Simulation Is Changing the Frontiers of Science*. New York: John Wiley and Sons.

Castles, F. G. 2004. *The Future of the Welfare State: Crisis Myths and Crisis Realities*. Oxford: Oxford University Press.

Chong, D., and J. N. Druckman. 2007. "Framing Theory." *Annual Review of Political Science* 10: 103–126.

Christensen, T., and P. Lægreid. 2011a. "Complexity and Hybrid Public Administration—Theoretical and Empirical Challenges." *Public Organization Review* 11 (4): 407–423.

Christensen, T., and P. Lægreid. 2011b. "Democracy and Administrative Policy: Contrasting Elements of New Public Management (NPM) and Post-NPM." *European Political Science Review* 3 (1): 125–146.

Comfort, L. K., and A. G. Cahill. 1985. Increasing Problem Solving Capacity between Organizations: The Role of Information in Managing the May 31, 1985 Tornado Disaster in Western Pennsylvania. Boulder, CO.

Daft, R. L., and K. E. Weick. 1984. "Toward a Model of Organizations as Interpretation Systems." *Academy of Management Review* 9 (2): 284–295.

Davis, B., and D. Sumara. 2006. *Complexity and Education: Inquiries into Learning, Teaching, and Research*. New York: Lawrence Erlbaum Associates.

Deephouse, D. L., and M. C. Suchman. 2008. "Legitimacy in Organizational Institutionalism." In *The Sage Handbook of Organizational Institutionalism*, edited by R. Greenwood, C. Oliver, K. Sahlin, and R. Suddaby, 49–77. London: Sage.

Denzin, N. K., and Y. S. Lincoln, eds. 2005. *Handbook of Qualitative Research*. 3rd ed. London: Sage.

DiMaggio, P. J., and W. W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48 (2): 147–160.

Duit, A., and V. Galaz. 2008. "Governance and Complexity—Emerging Issues for Governance Theory." *Governance* 21 (3): 311–335.

Dwyer, P., and N. Ellison. 2009. "'We Nicked Stuff from all Over the Place': Policy Transfer or Muddling Through?" *Policy and Politics* 37 (3): 389–407.

Entman, R. M. 1993. "Framing: Toward Clarification of a Fractured Paradigm." *Journal of Communication* 43 (4): 51–58.

Entman, R. M. 2004. *Projects of Power: Framing News, Public Opinion, and U.S. Foreign Policy*. Chicago, IL: Chicago University Press.

Esping-Andersen, G. 1999. *Social Foundations of Postindustrial Economies*. Oxford: Oxford University Press.

Evers, A. 2005. "Mixed Welfare Systems and Hybrid Organizations: Changes in the Governance and Provision of Social Services." *International Journal of Public Administration* 28 (9–10): 737–748.

Feldman, M. S. 1989. *Order without Design*. Stanford, CA: Stanford University Press.

Fiss, P. C., and P. M. Hirsch. 2005. "The Discourse of Globalization: Framing and Sensemaking of an Emerging Concept." *American Sociological Review* 70 (1): 29–52.

Fligstein, N. 2006. "Sense Making and the Emergence of a New Form of Market Governance: the Case of the European Defense Industry." *American Behavioral Scientist* 49 (7): 949–960.

Fossestøl, K., E. Breit, T. A. Andreassen, and L. Klemsdal. 2015. "Managing Institutional Complexity in Public Sector Reform: Hybridization in Front-Line Service Organizations." *Public Administration* 93 (2): 290–306.

Gavrilov, L. A., and P. Heuveline. 2003. "Aging of Population." In *The Encyclopedia of Population*, 32–37. New York: Macmillan.

Gershenson, C., and F. Heylighen. 2005. "How Can We Think the Complex?" In *Managing Organizational Complexity: Philosophy, Theory and Application Volume 3*, edited by K. A. Richardson, 47–62. Greenwich, CT: Information Age Publishing.

Geyer, R. 2012. "Can Complexity Move UK Policy Beyond 'Evidence-Based Policy Making' and the 'Audit Culture'? Applying a 'Complexity Cascade' to Education and Health Policy." *Political Studies* 60 (1): 20–43.

Gilad, B., S. Kaish, and P. D. Loeb. 1984. "From Economic Behavior to Behavioral Economics: The Behavioral Uprising in Economics." *Journal of Behavioral Economics* 13 (1): 1–22.

Gioia, D. A., and K. Chittipeddi. 1991. "Sensemaking and Sensegiving in Strategic Change Initiation." *Strategic Management Journal* 12 (6): 433–448.

Gitlin, T. 2003. *The Whole World Is Watching: Mass Media in the Making and Unmaking of the new Left*. 2nd Rev. Berkeley: University of California Press.

Greenhalgh, T., and J. Russell. 2009. "Evidence-Based Policymaking: A Critique." *Perspectives in Biology and Medicine* 52 (2): 304–318.

Gurr, T. R., and D. King. 1987. *The State and the City*. Chicago: The University of Chicago Press.

Hannan, M. T., and J. Freeman. 1977. "The Population Ecology of Organizations." *American Journal of Sociology* 82 (5): 929–964.

Haveman, H. A., and H. Rao. 2006. "Hybrid Forms and the Evolution of Thrifts." *American Behavioral Scientist* 49 (7): 974–986.

Haynes, P. 2008. "Complexity Theory and Evaluation in Public Management." *Public Management Review* 10 (3): 401–419.

Hood, C. 1991. "A Public Management for All Seasons?" *Public Administration* 69 (1): 3–19.

Horeth, M. 1999. "No Way Out for the Beast? The Unsolved Legitimacy Problem of European Governance." *Journal of European Public Policy* 6 (2): 249–268.

Hybels, R. C. 1995. "On Legitimacy, Legitimation, and Organizations: A Critical Review and Integrative Theoretical Model." *Academy of Management Proceedings* 1995: 241–245. doi:10.5465/ambpp.1995.17536509.

Jacobs, L. R. 2014. "The Contested Politics of Public Value." *Public Administration Review* 74 (4): 480–494.

Jordan, G. 1990. "Sub-Governments, Policy Communities and Networks: Refilling the Old Bottles?" *Journal of Theoretical Politics* 2 (3): 319–338.

Juarrero, A. 2011. "Causality and Explanation." In *The SAGE Handbook of Complexity and Management*, edited by P. Allen, S. Maguire, and B. McKelvey, 155–163. London: SAGE.

Kautto, M. 1999. "Changes in age Structure, Family Stability and Dependency." In *Nordic Social Policy: Changing Welfare States*, edited by M. Kautto, M. Heikkilä, B. Hvinden, S. Marklund, and N. Ploug, 54–78. London: Routledge.

Kernick, D. 2004. *Complexity and Healthcare Organization: A View from the Street*. Oxon: Radcliffe Medical Press.

King, G., R. O. Keohane, and S. Verba. 1994. *Designing Social Inquiry. Scientific Inference in Qualitative Research*. Princeton, NJ: Princeton University Press.

Klandermans, B. 1992. "The Social Construction of Protest and Multiorganizational Fields." In *Frontiers in Social Movement Theory*, edited by A. D. Morris, and C. M. Mueller, 77–103. New Haven, CT: Yale University Press.

Koppenjan, J. F. M., and E.-H. Klijn. 2004. *Managing Uncertainties in Networks: A Network Approach to Problem Solving and Decision Making*. London: Routledge.

Kostova, T., and S. Zaheer. 1999. "Organizational Legitimacy under Conditions of Complexity: The Case of the Multinational Enterprise." *Academy of Management Review* 24 (1): 64–81.

Kurtz, C. F., and D. J. Snowden. 2003. "The New Dynamics of Strategy: Sense-Making in a Complex and Complicated World." *IBM Systems Journal* 42 (3): 462–483.

Lancaster, K. 2014. "Social Construction and the Evidence-Based Drug Policy Endeavour." *International Journal of Drug Policy* 25 (5): 948–951.

Lewin, R. 2000. *Complexity: Life at the Edge of Chaos*. Chicago: Chicago University Press.

Lincoln, Y. S., and E. G. Guba. 1985. *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

Maguire, S., P. Allen, and B. McKelvey. 2011. "Complexity and Management: Introducing the SAGE Handbook." In *The SAGE Handbook of Complexity and Management*, edited by P. Allen, S. Maguire, and B. McKelvey, 1–26. London: SAGE.

Marin, B., and R. Mayntz, eds. 1991. *Policy Networks: Empirical Evidence and Theoretical Considerations*. Boulder, CO: Westview Press.

Meyer, J. W., and B. Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83 (2): 340–363.

Miles, M. B., and A. M. Huberman. 1994. *Qualitative Data Analysis*. 2nd ed. Thousand Oaks, CA: Sage.

Misco, T. 2007. "The Frustrations of Reader Generalizability and Grounded Theory: Alternative Considerations for Transferability." *Journal of Research Practice* 3 (1): 1–11.

Mitleton-Kelly, E. 2003. "Ten Principles of Complexity and Enabling Infrastructures." In *Complex Systems and Evolutionary Perspectives on Organisations: The Application of Complexity Theory to Organisations*, edited by E. Mitleton-Kelly, 23–50. Amsterdam: Elsevier.

Morgan, G., P. J. Frost, and L. R. Pondy. 1983. "Organizational Symbolism." In *Organizational Symbolism*, edited by L. R. Pondy, P. J. Frost, G. Morgan, and T. C. Dandridge, 3–35. Greenwich, CT: JAI.

Mullins, D., D. Czischke, and G. van Bortel. 2012. "Exploring the Meaning of Hybridity and Social Enterprise in Housing Organisations." *Housing Studies* 27 (4): 405–417.

Newell, A., and H. A. Simon. 1971. *Human Problem Solving*. Englewood Cliffs, NJ: Prentice-Hall.

Nordic Centre for Welfare and Social Issues. 2013. *The Nordic Welfare Model*. Stockholm.

OECD. 2011. *OECD Regional Outlook 2011: Building Resilient Regions for Stronger Economies*. Paris: The Organisation for Economic Co-operation and Development.

Ormerod, P. 1998. *Butterfly Economics*. London: Faber.

Osborne, S. P. 2006. "The New Public Governance?" *Public Management Review* 8 (3): 377–387.

Peters, B. G. 2000. "Governance and Comparative Politics." In *Debating Governance. Authority, Steering, and Democracy*, edited by J. Pierre, 36–53. Oxford: Oxford University Press.

Pierre, J., and B. G. Peters. 2000. *Governance, Politics, and the State*. London: Macmillan.

Podolny, J. M., and K. L. Page. 1998. "Network Forms of Organization." *Annual Review of Sociology* 24: 57–76.

Polletta, F., and M. K. Ho. 2006. "Frames and Their Consequences." In *The Oxford Handbook of Contextual Political Studies*, edited by R. E. Gooden, and C. Tilly, 187–209. Oxford: Oxford University Press.

Powell, W. W. 1990. "Neither Market nor Hierarchy: Network Forms of Organizations." In *Research in Organizational Behavior*, edited by B. M. Staw, and L. Cummins, 295–336. Greenwich, CT: JAI Press.

Pratchett, L., and M. Wingfield. 1994. *The Public Service Ethos in Local Government: A Research Report*. London: CLD Limited.

Reger, R. K., L. T. Gustafson, S. M. Demarie, and J. V. Mullane. 1994. "Reframing the Organization: Why Implementing Total Quality Is Easier Said Than Done." *Academy of Management Review* 19 (3): 565–584.

Rhodes, R. A. W. 1988. *Beyond Westminster and Whitehall: The Sub-Central Governments of Britain*. London: Unwin Hyman.

Rhodes, R. A. W. 1990. "Policy Networks: A British Perspective." *Journal of Theoretical Politics* 2 (3): 293–317.

Richardson, K. A. 2011. "Complexity and Management: A Pluralistic View." In *The SAGE Handbook of Complexity and Management*, edited by P. Allen, S. Maguire, and B. McKelvey, 366–381. London: Sage Publications.

Roberts, N. 2000. "Wicked Problems and Network Approaches to Resolution." *International Public Management Review* 1 (1): 1–19.

Russell, D. M., R. Jeffries, and L. Irani. 2008. "Sensemaking for the Rest of Us." *CHI Workshop on Sensemaking* (October): 1–7.

Scharpf, F. W. 1999. *Governing in Europe: Effective and Democratic?* Oxford: Oxford University Press.

Scharpf, F. W. 2003. Problem-solving Effectiveness and Democratic Accountability in the EU (MPIfG working paper No. 03/1). Econstor.

Schneider, V. 2012. "Governance and Complexity." In *The Oxford Handbook of Governance*, edited by D. Levi-Faur, 129–142. Oxford: Oxford University Press.

Selznick, P. 1949. *TVA and the Grass Roots*. Berkeley: University of California Press.

Shotter, J., and H. Tsoukas. 2011. "Complex Thought, Simple Talk: An Ecological Approach to Language-Based Change in Organizations." In *The SAGE Handbook of Complexity and Management*, edited by P. Allen, S. Maguire, and B. McKelvey, 333–348. London: SAGE.

Silverman, D. 2013. *Doing Qualitative Research*. 4th ed. London: SAGE.

Sjöblom, S., K. Löfgren, and S. Godenhjelm. 2013. "Projectified Politics–Temporary Organisations in a Public Context." *Scandinavian Journal of Public Administration* 17 (2): 3–12.

Skelcher, C., and S. R. Smith. 2015. "Theorizing Hybridity: Institutional Logics, Complex Organizations, and Actor Identities: The Case of Nonprofits." *Public Administration* 93 (2): 433–448.

Sleegers, P., H. Wassink, K. van Veen, and J. Imants. 2009. "School Leaders' Problem Framing: A Sense-Making Approach to Problem-Solving Processes of Beginning School Leaders." *Leadership and Policy in Schools* 8 (2): 152–172.

Sniderman, P. M., and S. M. Theriault. 2004. "The Structure of Political Argument and the Logic of Issue Framing." In *Studies in Public Opinion*, edited by W. E. Saris, and P. M. Sniderman, 133–165. Princeton, NJ: Princeton University Press.

Snow, D. A., and R. D. Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research* 1: 197–218.

Snow, D. A., and R. D. Benford. 1992. "Master Frames and Cycles of Protest." In *Frontiers in Social Movement Theory*, edited by A. Morris, and C. M. Mueller, 133–155. New Haven, CT: Yale University Press.

Statistics Sweden. 2012. The Future Population of Sweden 2010–2060. Stockholm.

Stoker, G. 1998. "Governance as Theory: Five Propositions." *International Social Science Journal* 50 (155): 17–28.

Sutcliffe, K. M., and M. K. Christianson. 2013. "Managing for the Unexpected (Executive White Paper Series)." *Assuring High Performance in an Age of Complexity*. San Francisco.

Termeer, C. J. A. M. 2009. "Barriers to New Modes of Horizontal Governance: A Sense-Making Perspective." *Public Management Review* 11 (3): 299–316.

Thietart, R.-A., and B. Forgues. 2011. "Complexity Science and Organization." In *The SAGE Handbook of Complexity and Management*, edited by P. Allen, S. Maguire, and B. McKelvey, 53–64. London: Sage.

Van Kersbergen, K., and F. Van Waarden. 2004. "'Governance' as a Bridge Between Disciplines: Cross-Disciplinary Inspiration Regarding Shifts in Governance and Problems of Governability, Accountability and Legitimacy." *European Journal of Political Research* 43 (2): 143–171.

Wagenaar, H. 2007. "Governance, Complexity, and Democratic Participation." *The American Review of Public Administration* 37 (1): 17–50.

Waldrop, M. M. 1992. *Complexity: The Emerging Science at the Edge of Order and Chaos*. London: Viking.

Walters, W. 2004. "Some Critical Notes on 'Governance.'" *Studies in Political Economy* 73 (1): 27–46.

Weber, E. P., and A. M. Khademian. 2008. "Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings." *Public Administration Review* 68 (2): 334–349.

Weick, K. E. 1979. *The Social Psychology of Organizing*. Reading, MA: Addison-Wesley.

Weick, K. E. 1993. "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster." *Administrative Science Quarterly* 38 (4): 628–652.

Weick, K. E. 1995. "Sensemaking in Organizations." In *Foundations for Organizational Science*, edited by P. J. Frost, A. S. Huff, B. Schneider, M. S. Taylor, and A. van de Ven, 39–56. Thousand Oaks, CA: Sage.

Weick, K. E. 1999. "Sensemaking as an Organizational Dimension of Global Change." In *Organizational Dimensions of Global Change*, edited by D. L. Cooperrider, and J. E. Dutton, 39–56. Thousand Oaks, CA: Sage.