Betina Hollstein · Wenzel Matiaske
Kai-Uwe Schnapp *Editors*

Networked Governance

New Research Perspectives

Springer

Networked Governance

Betina Hollstein • Wenzel Matiaske •
Kai-Uwe Schnapp
Editors

Networked Governance

New Research Perspectives

Springer

Editors
Betina Hollstein
SOCIUM—Research Center on Inequality and Social Policy
University of Bremen
Bremen, Germany

Wenzel Matiaske
Faculty of Economics and Social Sciences IPA Institute for Employment Relations and Labour
Helmut-Schmidt-University—University of the Federal Armed Forces Hamburg
Hamburg, Germany

Kai-Uwe Schnapp
Political Science Department
Universität Hamburg
Hamburg, Germany

ISBN 978-3-319-50384-4 ISBN 978-3-319-50386-8 (eBook)
DOI 10.1007/978-3-319-50386-8

Library of Congress Control Number: 2017932913

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Contents

Networked Governance: A New Research Perspective

Betina Hollstein, Wenzel Matiaske, Kai-Uwe Schnapp, and Michael Schnegg

The social sciences should have known better. *Social action*, *inter*- and *transaction*, *social relation*, and so forth have always belonged to the basic terminological stock that all branches of social sciences have in common. For a considerable time, however, our disciplines—sociology as well as political science and economics—were preoccupied with contextual factors on the one hand and characteristics or attributes pertaining to the individual level on the other. It was, one might say with hindsight, only after this 'sociology of variables' (Esser 1987) failed to produce any substantial new insights that many scholars of the social sciences remembered their origins and rediscovered social relations and their figuration: social networks.

Moreno's (1934) sociometry, for instance, which drew upon gestalt psychology as well as Simmel's sociological concept of social circles (Simmel 1908), was readily applied in the now-famous Hawthorne studies. On the recommendation of W. Lloyd Warner, a disciple of A. Radcliffe-Brown, E. Mayo and his team resorted

B. Hollstein (✉)
Department of Sociology, School of Social Sciences, University of Bremen, Mary-Somerville-Str. 9, 28359 Bremen, Germany
e-mail: betina.hollstein@uni-bremen.de

W. Matiaske
Faculty of Economics and Social Sciences, IPA Institute for Employment Relations and Labour, Helmut-Schmidt-University University of the FAF Hamburg, Holstenhofweg 85, 22043 Hamburg, Germany
e-mail: matiaske@hsu-hh.de

K.-U. Schnapp
Faculty of Business, Economics and Social Sciences, Social Science Department, Universität Hamburg, Mittelweg 177, 20148 Hamburg, Germany
e-mail: kai-uwe.schnapp@wiso.uni-hamburg.de

M. Schnegg
Institute of Social and Cultural Anthropology, Universität Hamburg, Edmund-Siemers-Allee 1, 20146 Hamburg, Germany
e-mail: michael.schnegg@uni-hamburg.de

B. Hollstein et al. (eds.), *Networked Governance*,
DOI 10.1007/978-3-319-50386-8_13

to sociometric methods to describe informal relationships within their experimental groups (Roethlisberger and Dickson 1939, S. 500). The sociometric analysis of informal relationships later gained prominence owing to Homans' reanalysis, which addressed the interaction between group structure and individual behavior (Homans 1950, S. 72). Although sociometric methods have since become a part of the standard toolbox utilized to analyze informal processes within groups and organizations, organizational research in general has, it seems, remained largely ignorant of those instruments, at best conceding them relevance only to the small world of group research.

Organizational research instead set out to tackle the big questions: the determinants of strategies und structures. Towards the end of the twentieth century, however, when emerging information technologies, new logistic possibilities, and favorable national, regional, and international regulatory frameworks helped business processes transcend the boundaries of the firm, networks turned up in the literature as a metaphor characterizing production and service value chains that extended beyond organizational and national borders (Wigand et al. 1997). Accordingly, both sociological and economic organizational research turned towards alliances, value-added chains, clusters, and so forth. That is to say, research turned towards hybrid forms of organization, in the parlance of new institutional economics (Williamson 1985), a discipline that played a pivotal role in the development of this field of research. However, in sociology and political science especially, it was not only the market–firm or market–organization dichotomy that received increased attention but also the market–bureaucracy or market–state dichotomy. Into the focus stepped specific forms of self-organization such as the provision of public goods, quasi-governmental and non-governmental organizations, and—at least since the dawn of new public management—governance networks. Ever since, the governance *of* networks and governance *through* networks have been among the central research issues in the social sciences.

The arcs of development sketched above resemble those in social anthropology, a discipline that has received due credit in the literature for fostering the emergence of social network analysis as a methodology in its own right that addresses specific fields of research and has increasingly produced substantial research results. In the 1950s, members of the 'Manchester school' of British social anthropology—for instance, Barnes (1954), Bott (1957), and especially Mitchell (1969)—encountered in their field studies the limitations of the then-dominant structural functionalism. The expansion of research interests from rural areas in Africa to urban regions showed that structural variables like kinship and social norms, passed down from generation to generation, did not suffice to explain (social) behavior. Rather, emphasis was placed on the roles played by ethnic and regional affiliation as well as ties between colleagues, neighbors, friends, and acquaintances. While formulating their theoretical framework, the aforementioned scholars turned away from structural-functionalistic theories and developed, with Nadel (1957) as a point of departure, an analytical network concept that aimed at better descriptions and explanations of social interaction.

However, as stated in the introduction to this volume, the term *network* has mostly been used in a mere metaphorical sense in governance research. There, networks have been perceived as totalities. This neglects both their internal structure and the insights we might gain from a structural analysis of the (inter-) connections within these networks (Hollstein et al. 2017). It is this analytical approach of social networks and social network analysis, an ensemble of specific concepts and methods to collect and analyze relational data (e.g., Wasserman and Faust Wasserman and Faust 1994; Scott and Carrington 2011; Dominguez and Hollstein 2014), that we want bring to the fore in governance research.

Our main argument in this volume is that the analysis of the network (ed) structure of old as well as new forms of organization and governance can provide a deeper understanding of their functioning, success, and failure.

To elaborate this position in more detail and to relate this perspective to network governance research, we will first recap the discussion of governance and network governance as it has developed over the last three decades. Second, we will present a classification of networks as institutions and discuss the relations between actors and networks. We will then invert the perspective by putting networks (and not governance) at the focal point. Next, we will introduce the concept of *networked governance* and summarize the most salient points of the contributions in this volume.

1 Two Notions of *Governance*

The meaning of the term *governance* varies with the level of abstraction and the context in which it is used. As an abstract concept, governance refers to the multitude of ways, mechanisms, and processes in which individuals, companies, organizations, societies, as well as states and even supra-national or supra-state forms of interaction coordinate themselves and reach and implement decisions. Governance in this usage describes patterns of rules and mechanisms of social coordination and decision making in which a group of actors regulates collective issues and interests (Mayntz 2009, S. 9).

As a less abstract concept, governance is not just any but a particular mode of coordinating action, one that relies on cooperation in a network structure. The terms *governance* and *network*(*ed*) *governance* refer to mechanisms of reaching and implementing decisions cooperatively, as opposed to coordination mechanisms like hierarchy and command or markets and prices. Whereas government always entails a hierarchical component, governance does not even need to entail government (sensu stricto) or state actors (Fuster 1998, S. 68) at all. This notion was formed between the 1980s and the 1990s as a result of the perception that the structure of polities and of many societal interactions was about to change from hierarchical or market-like relations towards a more cooperative kind of relationship. This cooperative way of interacting was soon dubbed *governance*, and its network-like character was to be its hallmark (Börzel 2011, S. 59; Mayntz 1993).

With these two notions of governance in mind, governance research has emerged from two distinct disciplinary traditions: economics and political science (Benz 2004). Both disciplines have approached the concept from distinct points of departure. Economics focused on markets until Coase pointed out that markets can be inefficient and demonstrated that the existence of transaction costs and the attenuation of property rights can explain their inefficiencies to a large degree (Coase 1937). Williamson followed his lead and put institutions at the core of his theoretical thinking. Adhering to the market as a point of reference, he argued that the term *governance* denotes the rules that structure economic interactions more generally (Williamson 1985) and emphasized the importance of assessing forms of governance that are alternatives to the market as a governance structure (Williamson 1981). For the economist, this means differentiating at least between the market and the firm. Markets are understood as a set of rules that govern interaction and economic exchange between economic actors whose choices are guided first and foremost through prices. The market in this understanding is conceived of as an institution. The same holds true for the firm. The firm is an organization, a hierarchy and again a set of rules that governs interaction and exchange—and consequently, from this point of view, firms or organizations in general also show the characteristics of institutions. In this understanding, networks are located between markets at one end of a continuum and hierarchies at the other as a hybrid form of organization—for example, strategic alliances, franchise systems, and lateral collaborations between firms, regions, or clusters (Powell 1990; Sydow 2001).

Market governance is thus an institutionalist concept that is concerned with the design and provision of rules and guarantees that ensure the proper functioning of the market. The entity guaranteeing this functioning is the state. However, the governance of firms, better known to business administration as corporate governance, concerns processes of decision making and implementation inside a hierarchical organization—namely, the firm.

In political science, governance initially referred to ruling via hierarchies (Bevir 2007, S. 364–365). Through bureaucratic organizations, the state was thought to be able to direct or plan with efficiency and accuracy. These idealized expectations were put into question in the 1970s and 1980s both empirically and theoretically. Empirically, the failure of planning became increasingly evident; theoretically, doubt was cast on the assertion that social processes can be regulated through politics at all (Mayntz 1987; Pressman and Wildavsky 1973; Scharpf 1975). These shortcomings, drawn into the spotlight by both theoretical considerations and empirical research, have led some political scientists to call for a greater reliance on markets as a more efficient mode of regulation (Bevir 2007, S. 365–366). The neoliberal politics of the 1980s and 1990s mirrored those developments (Benz et al. 2007, S. 12; Mayntz 1996, 1998). Then, at the beginning of the 1990s, political science as well as public administration increasingly associated the term *governance* with

> a formal as well as informal interaction between public and private actors, competent and knowledge-based decision making, creative problem solving and innovative policy solutions, flexible and well-coordinated policy implementation, the realization of democratic ideals about inclusion, empowerment and ownership, and a more realistic account of the actual forms of governing society and the economy (Torfing and Sørensen 2014, S. 330).

Governance thus came to be understood as something that transcended the traditional organization, either government or firm, as well as traditional forms of inter-organizational cooperation. Research on governance then turned towards cooperation and networks, something that consisted of and connected people and organizations (O'Toole 2014). With this perspective came the understanding of governance networks as organisms for which there seemed to be an implicit unitary actor assumption. Hence, they were mostly understood as entities with a dense, cooperative, almost peer-like structure that was not meant to be thoroughly analyzed but treated as a totality (O'Toole 2014). The discussion then moved on towards a generic definition of the term *governance* "as the process of steering society and the economy through collective action" (Torfing and Sørensen 2014, S. 333). Notwithstanding these developments, the holistic and metaphorical use of the term remained unabated while only rarely being used with an analytical intent (see Koliba et al. 2011, S. 46–55).

To better differentiate between the various forms of governance as a non-hierarchical cooperative process of coordinating action, some authors started using the term *governance* with the adjective *network*. What they wanted to achieve was a clear and workable definition of governance, and the "network" attribute was intended to accomplish just that (Torfing and Sørensen 2014, S. 329/344). Whereas large parts of the network governance literature shared (and still share) a positive image of governance as a mode of coordinating action in politics and society political processes and society, the emphasis on networked governance drew some authors towards a more critical perspective. This seems to be due to the fact that governance networks came to be related to policy networks (Blanco et al. 2011). This in turn fed the discussion on governance back into the discussion on corporatist decision making in the 1970s and 1980s (Torfing and Sørensen 2014, S. 331–332). As a consequence, governance networks have been perceived not only as cooperative and therefore normatively desirable but also as a problematic mode of coordinating action as well. It was stated that network governance defies democratic values because governance networks are an elite-driven, exclusive type of network structure with only limited public access and control. Network governance was then described as a mechanism for actors rich in resources to steer society in directions to their liking (Papadopoulos 2004, 2005; Torfing 2005, 2006; Torfing and Sørensen 2014). In a similar vein, Mayntz (2004, S. 74–75) warned that too positive a view of governance networks could neglect power as one of the major categories in the scientific analysis of politics. The ubiquitous references to cooperation and consensus could obscure the fact that large parts of the population are excluded from those cooperative mechanisms. The consensus reached inside governance networks, as she argued, is a consensus of the already powerful elites. Yet, even among this more critical group of authors, governance networks were still perceived as ontological entities that acted as a whole. Their internal structures still were widely neglected.

To sum up the discussion so far: In the dominant conception of *network governance*, the term *governance* is the core concept, whereas the term *network* is little more than a modifying attribute. It is there only to highlight that governance is understood in a very specific way. The joint term *network governance* describes decision-making structures as cooperative, non-hierarchical, and communicative. Its use, however, is merely metaphorical for the most part. The networks as such have not been given due credit as social structures that are worth analyzing. By building on the recent theoretical and empirical work of various scholars (e.g., Wald and Jansen 2007; O'Toole 2014; Mayntz 2017) and by adopting our specific point of view, we open up a new perspective and arrive at a more general analytical framework of network*ed* governance. For us, taking networks seriously in the research on networked governance means inverting the focus, making *network* the focal term and leaving *governance* with the auxiliary function, if only to sharpen our comprehension of the network structures and their effects on all kinds of social, economic, and political conglomerates and organizations.

2 Networks as Institutions

Before we extend upon the contributions of social network analysis to the investigation of governance processes, it is worth taking a second look at networks as entities in their own right. It is hard to overlook that far-reaching transformations have taken place—not only in economic and political organizations but in virtually every social system—that give rise to the use of the term *network* as a metaphor. Most worthy of note are the fundamental reorganizations in the economic system that have swept through economic organizations since the mid-1980s. During this period, concepts and processes have gained popularity that Drumm (1996) has subsumed under the paradigmatic term "new decentralization." Especially prominent in this respect is so-called outsourcing, which epitomizes some core issues in the decisions on how economic organizations are structured. In the eighties, the question of make (internally) or buy (externally) staged a comeback in light of the advancements in information technology, which allowed for the introduction of new organizational forms. Classical examples are General Motors' move to outsource its IT services to the previously acquired IT service provider EDS in 1984–1985 and, most notably, Eastman Kodak's decision in 1989 to transfer its data-processing infrastructure and communication networks to IBM and DEC (Hirschheim and Dibbern 2002, S. 5). However, it is not only the sheer dynamics of the advancements in information technology that have subsequently challenged the economic wisdom of vertically integrated hierarchies and encouraged experimentations with new and innovative organizational forms. Innovations in traditional infrastructures such as transport and logistics have given way to a reduction in stockholding costs and to the introduction of just-in-time production (Ohno 1988), whereas innovations in the laws governing world trade have accelerated global production processes and service provision processes (Wigand et al. 1997).

From a business administration perspective and referring to some classical terminology, one might state that the relationship between organizational structure and process organization has been *inverted*. Whereas organizational practice and organization theory used to address the structural dimension of organizational issues, nowadays both are primarily concerned with process organization in the sense of the management of value-added chains (Brown et al. 2010; Porter 1985). These developments, largely rooted in organizational practice, provide a point of departure for the discussions about lean organizations, flat hierarchies, and core competences as well as about network organizations, implicit contracts, and trust, a key term of contemporary economic reasoning.

Both sociological organization theory and its business administration counterpart have—at a fairly early stage, but at least since Weberian ideas had started to feature prominently in the contingency approach—illuminated theoretically as well as empirically the relationship between the organization and its environment (Pfeffer and Salancik 1978). This, however, did not fully resonate with economic theory, which came to acknowledge the relevance of the developments sketched above only when dealing with some issues of applied research. A central point of reference for the new institutional economics was a long-overlooked paper by Coase (1937). Without actually using the term, Coase nevertheless described firms as a closed network of contracts that comes into existence if its associated transaction costs are lower than those of the alternative 'market' allocation mechanism. The concept of transaction costs comes with various implications, especially as far as the conception of the economic actor is concerned. This is a crucial issue in the given context and will be addressed once again below. Beyond that, it is important to note that this concept points our attention towards the external relations collective actors maintain, relations that are no longer restricted to market transactions. Rather, the fundamental decision between make or buy is now mapped to a continuum between two extremes, 'market' and 'hierarchy' (Williamson 1975).

The top of Fig. 1 depicts the oft-cited (and slightly modified) market–hierarchy continuum. In the domain of hierarchies, highly integrated firms combine up- and downstream processes and the manufacturing of core products into an all-encompassing system. Of course, the above model simplifies the reality of traditional enterprises, which form trusts, conglomerates, or, given slightly different social and economic circumstances, collective combines. Whereas strategic alliances or franchises still exhibit formally defined focal firms, entities like these no longer appear in company networks. Traditionally, relatively long-lasting consortia have existed in industries such as the construction sector or shipbuilding for quite some time (Piore and Sabel 1984). Regarding clusters, which are much discussed at present, the ties between the entities involved become even weaker as such ties involve little more than consultations on specific joint activities—and there are no tightly knit interrelations with the goal of joint production of a specific

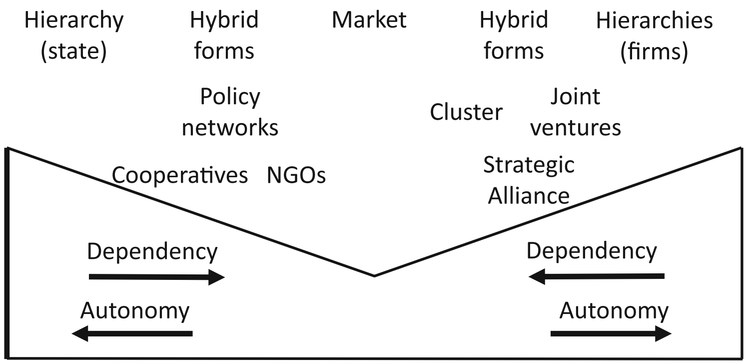

Fig. 1 Markets and hierarchies

good or service (Saxenian 1994). At least insofar as these weak forms of cooperation between collective actors are concerned, the assumption of a unitary actor appears to be overly simplistic. Instead, the interrelations and interdependencies between different actors should be explored on a network-analytical basis in order to appropriately reflect the existence and dissolution of hybrid structures as well as to assess the consequences of unintended behavior or the failure to achieve commonly agreed goals.

These deliberations have radiated far beyond the realm of the organization in the economic subsystem of society. Whereas traditional organizational theory in business administration was deeply influenced by the conception of state bureaucracy in the vein of Max Weber (1972), organizational reasoning in new public management has instead developed along the lines of business economics. Public organizations, according to the perspective of new institutional economics, provide public goods that can nevertheless be produced and allocated by alternative institutions (Coase 1960). Inspired not least by public choice theory (Downs 1957) and new public management, the basic idea in this debate was to transfer the production of public goods from the state to the market. The works of Olson (1971) and Ostrom (1990) demonstrate, however, that decentralized forms of producing public goods can be accessed both practically and theoretically from the opposite direction as well—that is, from the public domain. Regardless of whether theory construction works in a top-down or bottom-up fashion, many forms of intensive state involvement in the production of public goods have to be distinguished. Figure 1 arranges policy networks, associations such as unions, cooperatives, or political parties, and NGOs along the spectrum.

It may come as a surprise that we locate policy networks—basically the nexus between the public and politics—closer to market coordination than, for example, cooperatives that frequently pursue nothing other than economic goals on behalf of their members. Yet one must still bear in mind that new institutional economics conceptualizes markets in the same way as it does most general institutions, which allows for the exchange of more than economic goods. In this respect, economic theory is [currently] moving closer to a general sociological theory of exchange

(Matiaske 2013). Furubotn and Richter (1997, S. 310) define markets as “social institutions of recurrent exchange” and reiterate—albeit with no mind to the traditions of thought in the realm of sociology—a definition Homans (1958) used much earlier to define social exchange as being distinct from economic exchange. In sociological research on exchange, various models have long since been devised that are in accord with the concept of constraints on transactions, goods, and exchange partners, as developed in microeconomic market theory (see, e.g., Braun 1998; Coleman 1972; Skvoretz 2015).

Figure 1 could give the impression that we interpret state institutions and economic institutions on the same continuum as markets and hierarchies. However, this interpretation would miss our main point. Even if the reader were to follow those authors who adhere to Granovetter’s (1985) prominent argument of the embeddedness of economic action in social structures, it is fair to concede that both in the political as well as the social realm a variety of entities exist that are more or less hierarchically structured. Their inner constitution, and consequently their governance structure, can be approached by means of social network analysis—without the risk of a ‘normative prejudice’ that confuses collective forms of organization and governance with collective actors.

3 Networks and Actors

The perspective outlined in this contribution carries far-reaching implications for the conceptualization of actors. These implications should be given a brief look because, in our opinion, strict macro-sociological and structuralist positions in the governance-related research fields provide only modest insights.

The fundamental ideas of the imperfections of markets and hierarchies immediately impose restrictions on the strong assumptions about rationality that are usually implied in with the figure of *homo oeconomicus*. The crucial problem of the ‘old,’ ‘under-socialized’ *homo oeconomicus* is not, at least from an institutional economics perspective, that this coldhearted, calculating machine would not hesitate to sell its own mother provided this move were to be utility-maximizing (which, incidentally, is the reason why economists with an inclination to rational thinking are largely unwilling to accept a fellow of this rational type as a son-in-law, as Boulding 1969 once noted). For economic theory, the core problem with this figure is rooted in the fact that it could, given its characteristics, only survive in those perfect markets which neoclassical standard theory has introduced. The concept of transaction costs brings with it the idea that another type of cost enters the vector of optimization calculus, and indeed, many proponents of the new institutional economics operate in that fashion. Furthermore, economic usage can hardly conceal the fact that these transaction costs are associated with a lack of information and that the costs of information-gathering can be either uncertain or prohibitively high. In other words, it does not suffice to excel in utility calculus and utility maximization. One also needs to be prepared to deal with the risk and uncertainty that transactions entail. Williamson (1985) therefore ‘equipped’ the new *homo* *oeconomics* with bounded rationality on the one hand and opportunistic inclinations on the other.

Bounded rationality, following Simon (1959), suggests that an actor no longer optimizes in the strictest sense but rather strives for satisfactory solutions to problems. Putting aside the problems that come along with a weaker concept of rationality (Elster 2009), it is worth noting that the relaxation of some assumptions have opened up a window of opportunity for behavioral sciences to enter those research fields previously associated with rationality. Outside the economic community—and especially in (social) psychology—some might wonder why economists all of a sudden began carrying out experimental studies to investigate those anomalies and deficiencies exhibited by *homo oeconomicus* both old and new (it would be much easier to take note of the findings of the human sciences), but this trend comes with the advantage that the gap between reality-oriented behavioral sciences and economic theorizing does not seem as insurmountable as it once did (Matiaske 2004). It should be kept in mind, however, that social science usually does not try to understand and explain human behavior but instead the reasons for actions taken by social actors in specific situational settings and their consequences. To this end, they expediently apply simplified actor models that reflect the respective behavioral assumptions. In the enlightened models of rationality in contemporary microsociology, it is the rule of diminishing abstraction that exercises control in a given subject area over the appropriate level of complexity of the behavioral assumptions (Wippler and Lindenberg 1987).

The assumption of opportunism (i.e., the inclination to deceive and to devise stratagems in addition to rational calculus) does little to make the rational actor more likable but does enable such actors to retain their ability to act in imperfect markets. It is this assumption in particular that exposed the rabble of (new) *homines oeconomici* to harsh criticism (Pfeffer 1994). No matter how valid the criticism of this standard assumption—real human beings are, of course, capable of empathy and altruism as contemporary behavioral economics does not grow tired of emphasizing (Fehr and Fischbacher 2003)—one should still bear in mind that we frequently encounter not just individual but also corporate actors in the economic as well as the political, social, and cultural subsystems of society. Even if the notion holds true that individuals build relationships of trust with organizations or enter into psychological contracts, organizations, at the end of the day, enter contracts that are based on established law, include provisions protecting themselves from opportunism, and usually conclude with some form of escape clause. In governance-related research, it frequently seems appropriate to operate with behavioral assumptions that are applicable to both individual and corporate actors.

In this context, networks play an important role. They are constraints, yet they also enable social interaction—an issue that will be addressed in more detail in the following section. With regard to individual and corporative actors, it is worth noting that social networks, in contrast to the ideal of perfect markets, constitute nothing other than a restriction on the choice sets of their members. According to classic economic understanding, participants in the market interact effortlessly and without costs on the basis of money as a means of transaction. Having money or not constrains interactions in this setting or makes them possible. Networks assume a similar role when introduced into the socio-economic theory of exchange (Braun 1998; Coleman 1990; Skvoretz 2015; Willer 1999). They allow for transactions in the domain of normatively regulated social exchange, as highlighted by the different strands of social capital research (Bourdieu 1983; Coleman 1990; Putnam 1993). And they constrain transactions as well, just as having money or not having it does in the marketplace, because networks have rules for what kind of (social) capital can or cannot be exchanged in which ways.

4 Networked Governance as a Research Perspective

Let us now describe our *network*ed *governance* approach in more detail. By summarizing the most salient points of the chapters assembled in this volume, we want to illustrate the contributions of this new perspective to the investigation of processes and mechanisms of networked governance. We aim to advance networked governance as a more general research paradigm that focuses on the processes of coordinating, reaching, and implementing decisions that take place in network(ed) (social) structures. To analyze these processes, we propose taking social networks seriously and combining social network analysis with governance research. Whereas governance research has most often viewed networks as an alternative to markets and hierarchies, network analysis provides a methodology and—in part—a theory to analyze governance systems on the basis of the internal and external interactions through which they operate (Henning and Pappi 1998; Jansen 2002; Jones et al. 1997; Kenis and Schneider 1991; Lazer 2011; Powell 1990; Wald and Jansen 2007). We thus understand networked governance as a research perspective that focuses on those governance processes in and through networks. With this perspective, it is possible to analyze very different types of institutions—not only those discussed in the last section but also state and supra-state forms of interaction, thereby taking into account the increasingly complex forms of governance structures.[1]

Figure 2 illustrates this approach. While there are different forms of interaction, all the above forms of interactions are networks, which means that there are nodes; these nodes are actors and the edges symbolize some sort of interaction. Figure 2a shows a bureaucracy with a clear hierarchical structure. The relationships are based on instructions given from a supervisor to his or her staff. However, instructions are

[1]Many of the problems with the predominant usage of networked governance as described by Börzel (2011), among others, seem in large part to be problems of analytical perspective. Although there are organizational forms that are more cooperative than the market and less command-driven than hierarchies Börzel (2011, S. 57), analyzing all those social structures as networks helps us to understand how these structures work and how governance is exercised through them. And even the constructivist perspective Börzel (2011, S. 58) can benefit from structural network analysis, as Emirbayer (1997) and others have argued all along and as Gluesing et al. (2017) and Heath et al. (2017) demonstrate in this volume.

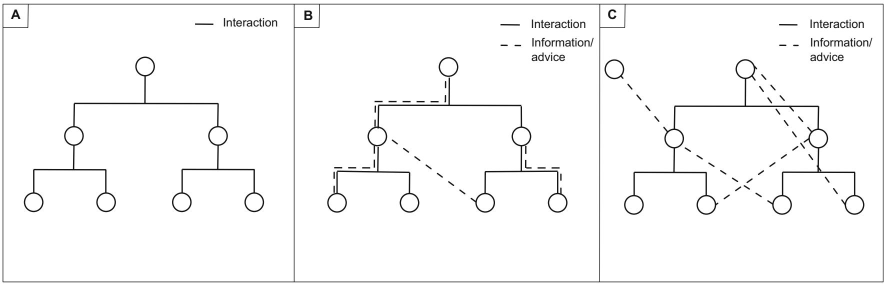

Fig. 2 Networks and hierarchies

not the only form of interaction or relationship that makes an organization work. Figure 2b adds linkages of information exchange and the seeking of advice. It shows a situation in which those two types of relationships (i.e., instructions and information- and advice-seeking) overlap in many cases but constitute new relations between actors (nodes) as well. Things become even more complex in Fig. 2c. It shows an organization in which most transactions do not follow the formal hierarchy and even include actors from outside the organization (Borgatti and Cross 2003). Although it exemplifies different kinds of relationships, the example also illustrates that networks and hierarchies are not in opposition but that hierarchies are a specific type of network.

The networked governance perspective proposed here does not make a priori assumptions about the specific nature of organizations. It starts with the observed or perceived linkages among actors. It reconstructs the networks that they form and tries to explain what a network does and how this is achieved using the very structure of the network as an explanans. Whether these structures are hierarchical (or not), egalitarian (or not), or include or encompass outside channels (or not) becomes an empirical question and not a conceptual one.

Markets are generally viewed as the second prototypical governance structure. The mechanism that structures transactions is price, and the transactions themselves have long been assumed to be without costs. However, over the last few decades, new institutional economics has shown that transaction costs matter (North 1990; Williamson 1985). Trust, a factor in social relationships and built through repeated interactions, plays an essential role in reducing those transaction costs (Platteau 2000). Figure 3 shows buyer–seller relationships in a market context (e.g., dealing used cars). The figure shows the prices for which vendors are willing to sell a good. Figure 3a shows the network of transactions that emerges if all buyers search for the lowest prices unconditionally. When we add a relationship of trust as in Fig. 3b, we see that a different network structure evolves with different monetary transactions for goods than before. This demonstrates that, while many buyers still seek the cheapest product, in some cases trust relationships cause people to shift to more expensive outlets.

This example illustrates that, from the perspective of networked governance, markets are also networks formed through transactions. As in simpler models, there

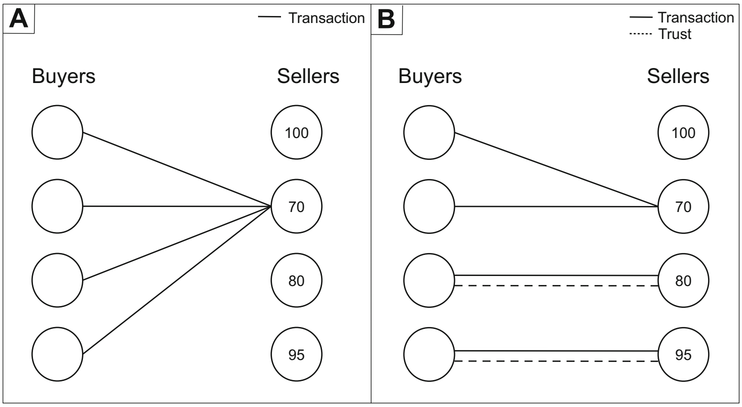

Fig. 3 Markets as networks

are different kinds of transactions such as goods and money that shape the structure of the market, but trust is a factor as well. And, once again, which concrete network structure emerges from the different types of interactions is an empirical question. As was the case in regard to bureaucracies, the hypothetical example shows that markets are not in opposition to networks either but can also be conceived as networks themselves (Beckert 2009; Diaz-Bone 2010; Furubotn and Richter 1997).

Anthropologists have long highlighted the embeddedness of transactions in social relationships. The historian Karl Polanyi laid this foundation in his theoretical work when he distinguished between pre-capitalist societies in which transactions are embedded in other social relationships (e.g., kinship, political relations) and capitalist societies in which these relationships have been substituted with market transactions (Polanyi 1944, 1957). In the anthropological literature, one of the classical examples that demonstrates the embeddedness of social transactions is the link between trade and ceremonial gift exchange among the Melanesian Kula (Malinowski 1922). Among the islanders, the ritual exchange of necklaces and bracelets establishes trust and opens the way for trade in an environment where many of the islands are hostile towards one another. And even in market situations, Plattner has observed that Mexican peasants who had to walk many miles to the marketplace were not willing to sell their fruits at very good prices to tourists they met on their way. Asked for their rationale, they insisted that this would disappoint their long-term trading partners waiting at the central marketplace (Plattner 1989). Similar observations have been made in capitalist societies: Uzzi and Lancaster (2004), for instance, have shown that customers of law firms that have longer-term relationships get better prices.

Figure 4 offers a theoretical and conceptual framework of the research perspective proposed here. We understand governance structures to be both the product and the precondition of human agency. Governance structures provide actors with resources (e.g., social, political, economic) to achieve certain goals, but they can also be used to (re)shape the rules under which they interact. The figure also

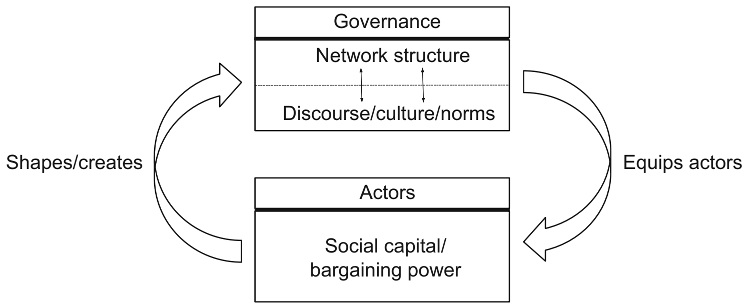

Fig. 4 Networked governance: a theoretical framework

illustrates that the concept of networked governance does not focus on structures (i.e., the ties between actors) alone. Cultural and normative aspects are also relevant in understanding the processes in those networks, especially if one seeks to actively integrate agency when discussing networks, such as White (1992), Emirbayer (1997), Hollstein (2001), Mische (2003), and Fuhse (2015) do.[2] This work aims to link the structural level to the actors involved. This particularly concerns the systematic integration of their capacity to act and actively shape their (social) environment as well as their reference to norms, symbols, and cultural practices (Emirbayer 1997; Emirbayer and Goodwin 1994; Mizruchi 1994; Schweizer 1996). In the investigation of governance processes, we consider this perspective to be especially fruitful, because strict macro-sociological and structuralist positions in governance-related research omit important aspects of human action and interaction and are thus only able to explain half the picture.

Let us give an example to illustrate this point. If kinship or trust as forms of social capital are the main mechanisms to guide transactions in a given economic system, we can expect a structure to emerge that reflects this. If markets enter the picture and some actors aim to change the rules and begin transacting on the basis of prices, in part or alone, we can expect the societal structure to change. Not only will the structure change but also the ideology, as Bohannan has shown in his analysis of the transformation of the economic system of the Tiv of central Nigeria (Bohannan 1959, 1960). Whether this transformation takes place is a question of the bargaining

[2]Following Harrison White (1992), Anthony Giddens (1984), or Georg Simmel (1908), all of these authors claim that the significance of action has been overlooked by social network analysis owing to its preoccupation with structure. Their arguments are mainly directed against approaches that are either committed to "structural determinism" Emirbayer and Goodwin (1994) or involve utilitarian models of action ("structural instrumentalism"; ibid.). As Dorothea Jansen has put it, "A significant theoretical problem [of parts of network research—added by the authors] lies in the sparsely reflected relation between concrete networks and interactions, on the one hand, and subjective attributions of meaning, norms, and institutions, [as well as] cultures and symbolic worlds, on the other. In their dispute with structural functionalism of the Parsonian kind, network researchers have possibly thrown out the baby with the bathwater in claiming absolute priority for concrete structures of interaction vis-à-vis norms and symbolic worlds of any kind" (Jansen 2003, p. 258, translated from German by the authors).

power with which networks equip their actors. Social capital is one of the main sources of power and thus links network and governance research and structures and action (Granovetter 1985, Bourdieu 1986, Coleman 1988, Portes 1998, Sewell 2005, Wald and Jansen 2007; Jansen 2017). But without an appropriate understanding of the cultural norms and values that guide a society, neither the status quo ante, the changes themselves, nor the obstacles to change can be properly understood.

The framework sketched in Fig. 4 therefore offers an approach to overcome the gap between micro- and macro-level analysis. At the same time, it offers a platform to think about the linkage between culture/discourses and structures and thus overcomes major problems identified in both governance research and network analysis (DiMaggio 1994a, b; Emirbayer and Goodwin 1996; Emirbayer and Mische 1998; Fuhse 2015; Hollstein 2001). Now is a good time to promote such an approach: Besides the extensive set of standardized methodical instruments that is already available (e.g., Wasserman and Faust 1994; Carrington et al. 2005; Scott and Carrington 2011; Snijders 2011), qualitative methods that capture network orientations, interpretations, and practices have also been integrated into the toolbox of network research, together contributing to a deeper understanding of network dynamics and network effects (Dominguez and Hollstein 2014).

The chapters in this volume all demonstrate different aspects of how this approach can advance our understanding of the processes and mechanisms that take place in network(ed) social structures. As the studies illustrate, social network analysis can help us to disentangle actors and their roles inside networks in order to detect hidden institutional details (e.g., Schneider 2004; Mayntz 2017). It helps us to identify structurally important positions such as central individuals, brokers, and so forth who are important for the functioning of the governance structure (e.g., Christopoulos 2017; Mayntz 2017; Gluesing et al. 2017). And it helps us determine key relationships as well as disconnected actors who are therefore in a weak position in any kind of social conflict (Lubell 2013). Renate Mayntz, Steffen Mohrenberg, Jürgen Pfeffer, and Momin Malik illustrate different ways in which social network analysis can help to describe and analyze how governance structures evolve and to understand the dynamics of these structures. In this regard, Jörg Sydow's contribution points to the tension between emergent features of existing inter-organizational networks and the active governance of their network structure and performance. To maintain the functionality of a network and prevent ossification, network governance needs to find a balance between path dependency, uncertainty, and necessary risk-taking. How the structure of political networks shapes policy outcomes while these networks are continuously shaped by the political process at the same time is discussed by Dimitris Christopoulos. One of the major drivers behind this constant reshaping is the existence of divergent norms in policy networks that have to be constantly reconciled by political agents. The sustainability of such networks then depends on optimizing the distribution of competences among different levels of governance, smart bridging, and clustering within those networks. In this regard, political networks seem to have similar characteristics to interstitial communities between heterogeneous actors, as both have to find language that bridges and differentiates sub-communities. As Valeska

Korff, Achim Oberg, and Walter Powell argue, the bridging capacity of interstitials is based on the power of a common language, the power of internal cohesion, and the power of external integration. Interstitials are collective organizations with access to multiple cultural repertoires that are internally integrated and have an external reach into adjoining domains. This helps their "members" to serve as bridges, potentially fusing formerly separate domains into governance networks. With regard to knowledge production, Dorothea Jansen describes how the tradeoff between dense networks and structural holes and between innovation incentive-breeding and trust-breeding institutions is solved in innovation networks. She demonstrates that a network approach can help to determine why, when, and which type of network structure and which network ties promote the process of knowledge production at the meso level of organizations.

Christopoulos describes that, in politics, governance is a product of political exchange and as such is affected by the quality of interaction between political agents (so-called governance embeddedness, Jones et al. 1997; Robins et al. 2011). At the same time, governance as a process is affected by the pattern of exchange between political actors, such as core and periphery, multiplicity of clusters, prevalence of brokers, and the skewness in the distribution of ties. Size, for example, can make political networks dysfunctional. Network growth leading to unmanageability is an aspect that is also emphasized by Gernot Grabher and Jonas König with regard to managing personal networks on social networking websites. On those websites, the authors find a generic type of performativity: Actors perceive and describe themselves and their actions through the lens (the vocabulary) of social network theory. Not only do people describe themselves in this way, they also use knowledge gained from social network theory to shape their own networks. A social networking website can therefore be seen as a kind of camera that helps individuals to observe their personal networks (virtual and real) and further develop them on the basis of their theoretical as well as their empirical knowledge.

Rather implicit influences on individual decisions are addressed by Sue Heath, Alison Fuller, and Brenda Johnston. They show how identities are formed in a personal network, how learning identities are conveyed from the parental to the filial generation, and how habits, norms, and routines within the social network shape individual preferences and decisions. With regard to governance as a process of collective decision making, this contribution is a borderline case, of course. However, the study sheds light on the complexity of social influence, the roots of normative orientations, and the unintended consequences of action, aspects that can be of the utmost importance in understanding the success or failure of governance processes. Furthermore, this study helps to understand the diffusion of attitudes and beliefs within personal networks.

Diffusion is studied by Steffen Mohrenberg as well, albeit from a very different angle. He asks how mechanisms of influence and selection help explain policy diffusion. By using stochastic actor-oriented models (SAOMs), Mohrenberg paints a complex picture of how networks change through the selection of network partners as well as through the copying of ideas and so forth. He is thus able to show how networks evolve through the making and breaking of ties as well as through changing the characteristics of the network nodes. As demonstrated by Jürgen Pfeffer and Momin Malik, simulations can also help to understand network dynamics and hence the governance of networks and the efficacy of networked governance. One of their applications is an agent-based model of fictitious legislation in the United States that is supposed to regulate how banks are allowed to be represented on the boards of other banks. The model shows how such regulation can change the network of interlocking directorates of these banks and central characteristics (network measures) of this network.

In contrast, Renate Mayntz analyzes actual changes in international institutions of financial market regulation and describes different types of relations (e.g., recommendations, regulations). She points out that using a network approach may lead to misinterpretations by overemphasizing the network character of social reality (Davies 2011). This is an important note. Again, we should emphasize that by applying the network concept we do not need to presume, as networked governance research often does, that a certain network is organized in a non-hierarchical fashion. It is by using the tools of social network analysis that we can analyze its very structure and analyze its effects on individuals, groups, and their actions. On the basis of such insights, we can develop good practices for leveraging social influence inside networks and intervene in actual governance systems and policies in order to make them more effective at solving social problems or achieving other normative goals such as democracy, fairness, and so forth. This includes providing policy-makers with network-smart best practices (Lubell 2013). The contributions from Heath et al., Korff et al., and Gluesing et al. also address this aspect. Gluesing et al. as well as Schwaninger et al. provide promising tools that foster an understanding of the micro-mechanisms inside networks. Julia Gluesing, Ken Riopelle, and Christina Wasson present a mixed-methods toolbox for the analysis of complex communication patterns in an environmental multi-stakeholder network. On the basis of videos and e-mails, they apply proper-noun networks, text-correlation methods, word comparisons, sentiment analysis, conversation analysis, and the analysis of influence networks. Through these methods, the authors are able to understand the decision-making process by not only identifying powerful players but also by understanding what their roles are in detail, how they argue and influence people, and in what way they are ultimately successful. The authors' approach is especially useful in remedying the power blindness that has been said to be a problem of network governance research. Manuel Schwaninger, Sabine Neuhofer, and Bernhard Kittel discuss the contribution that experiments provide by allowing us to probe much deeper into the driving forces of network behavior at the individual level as well as the effects of structures that we do not find in reality but might want to implement because of their advantages. Taking both perspectives in tandem can help fill a number of lingering voids in networked governance research, strengthen the role of micro-level research, and increase our understanding of the role and formation of power in networks as well as its discursive use.

To summarize the main arguments: We understand governance as all mechanisms and processes that are used by various entities—companies, organizations, as well as states at large and even supra-national or supra-state forms of interaction—to coordinate themselves and to reach and implement decisions. The combination of social network analysis and governance research offers a promising route that can provide a deeper understanding of what governance networks do and can achieve, why they achieve it, and what the social meaning of these networks is. Hence, what is important in social network analysis are relations (not attributes), networks (not groups), the culture and meaning of networks, and the interplay between structure and agency. From this it follows that *networked governance* could adopt at least two perspectives: the governance of networks and governance in and through networks. Examining the governance *of* networks would involve focusing on the ways in which actors try to organize the coordination of action in their networks their networks—that is, for example, the way they influence the very structure of the network in which they are active or the way they intentionally change their own network position. Governance *through* networks, by contrast, would mean using existing networks to achieve the (policy) goals that one is interested in. It would involve exploiting knowledge about the inner structure and workings of a network, and its study could come much closer than the former perspective to what the established discussion on network (ed) governance has been scrutinizing. Still, the focus of study would fall much more on structural details at the individual and the aggregate network level than it has done with most networked governance research so far. Both perspectives are closely interrelated. Networks are structures within which and through which governance takes place. They are both the precondition and the product of human agency. These structures provide actors with resources (e.g., social, political, economic capital) that can then be used by those actors to shape and change the rules under which they interact. Or as Padget and Powell have recently put it: “In the short run, actors create relations; in the long run, relations create actors” (Padgett and Powell 2012, S. 2).

Literaturverzeichnis

Barnes, J. A. (1954). Class and committees in a Norwegian island parish. *Human Relations, 7*, 39–58.

Beckert, J. (2009). The social order of markets. *Theory and Society*, 245–269.

Benz, A. (2004). Einleitung: Governance – Modebgegriff oder nützliches sozialwissenschaftliches Konzept? In *Governance-Regieren in komplexen Regelsystemen. Eine Einführung* (pp. 11–28). Wiesbaden: VS Verlag für Sozialwissenschaften.

Benz, A., Lütz, S., Schimank, U., & Simonis, G. (Eds.). (2007). *Handbuch governance. Theoretische Grundlagen und empirische Anwendungsfelder*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Bevir, W. M. (2007). Governance. In *Encyclopedia of governance* (pp. 364–380). Thousand Oaks: Sage.

Blanco, I., Lowndes, V., & Pratchett, L. (2011). Policy networks and governance networks: Towards greater conceptual clarity. *Political Studies Review, 9*, 297–308. doi:10.1111/j.1478-9302.2011.00239.x.
Bohannan, P. (1959). The impact of money on an African subsistence economy. *Journal of Economic History*, 491–503.
Bohannan, P. (1960). Tribal cohesion in a money economy – A study of the Mambwe People of Northern Rhodesia. *American Anthropologist, 62*, 171–172.
Borgatti, S. P., & Cross, R. (2003). A relational view of information seeking and learning in social networks. *Management Science*, 432–445.
Börzel, T. (2011). Networks: Reified metaphor or governance Panacea? *Public Administration, 89*, 49–63.
Bott, E. (1957). *Family and social network. Roles, norms, and external relationships in ordinary urban families*. London: Tavistock.
Boulding, K. E. (1969). Economics as a moral science. *The American Economic Review, 59*, 1–12.
Bourdieu, P. (1983). Ökonomisches Kapital, kulturelles Kapital, soziales Kapital. In Kreckel R. (Eds.), *Soziale Ungleichheiten. Sonderband 2 der Sozialen Welt* (pp. 183–198). Göttingen: Schwartz.
Bourdieu, P. 1986. The forms of capital. In J. Richardson (Eds.), *Handbook of theory and research for the sociology of education*, 241–258. New York, Greenwood.
Braun, N. (1998). *Socially Embedded Exchange*. Frankfurt am Main u.a.: Peter Lang.
Brown, K., Burgess, J., Festing, M., & Royer, S. (Eds.). (2010). *Value adding. Webs and clusters – Concepts and cases*. München: Rainer Hampp Verlag.
Carrington, P. J., Scott, J., & Wasserman, S. (Eds.). (2005). *Models and methods in social network analysis*. Cambridge: Cambridge University Press.
Jansen, D. (2017). Networks, social capital and knowledge production. In B. Hollstein, W. Matiaske, & K.-U. Schnapp (Eds.), *Networked governance. New research perspectives*. Cham: Springer.
Christopoulos, D. (2017). Governance networks in politics. In B. Hollstein, W. Matiaske, & K.-U. Schnapp (Eds.), *Networked governance. New research perspectives*. Cham: Springer.
Coase, R. H. (1937). The nature of the firm. *Economica*, 386–405.
Coase, R. H. (1960). The problem of social costs. *Journal of Law and Economics, 3*, 1–44.
Coleman, J. S. (1972). Systems of social exchange. *Journal of Mathematical Sociology, 2*, 145–163.
Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 95–120.
Coleman, J. S. (1990). *Foundations of social theory*. Cambridge: Belknap Press of Harvard University Press.
Davies, J. S. (2011). *Challenging governance theory. From networks to hegemony*. Bristol: The Policy Press.
Diaz-Bone, R. (2010). Märkte als Netzwerke. In C. Stegbauer, & R. Häussling (Eds.), *Handbuch Netzwerkforschung* (pp. 615–626). Wiesbaden: VS Verlag für Sozialwissenschaften.
DiMaggio, P. (1994a). Culture and economy. In N. J. Smelser, & R. Swedberg (Eds.), *The handbook of economic sociology* (pp. 27–57). Princeton: Princeton University Press.
DiMaggio, P. (1994b). Meaning and measurement in the sociology of culture: Introduction. *Poetics*, 263–267.
Dominguez, Silvia, & Betina Hollstein (Eds.). (2014). Mixed methods social networks research. Cambridge: Cambridge University Press.
Downs, A. (1957). *An economic theory of democracy*. New York: Harper Collins Publishers.
Drumm, H. J. (1996). Das Paradigma der Neuen Dezentralisation. *Die Betriebswirtschaft, 56*, 7–20.
Elster, J. (2009). *Reason and rationality*. Princeton: Princeton University Press.
Emirbayer, M. (1997). Manifesto for a relational sociology. *American Journal of Sociology, 103*, 281–317.

Emirbayer, M., & Goodwin, J. (1994). Network analysis, culture, and the problem of agency. *American Journal of Sociology*, 1411–1454.

Emirbayer, M., & Goodwin, J. (1996). Symbols, positions, objects: Toward a new theory of revolutions and collective action. *History and Theory*, 358–374.

Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology*, 962–1023.

Esser, H. (1987). Warum die Routine nicht weiterhilft. Überlegungen zur Kritik an der "Variablen-Soziologie". In N. Müller (Eds.), *Problemlösungsoperator Sozialwissenschaft: anwendungsorientierte Modelle der Sozial- und Planungswissenschaften in ihrer Wirksamkeitsproblematik* (pp. 230–245). Stuttgart: Enke.

Fehr, E., & Fischbacher, U. (2003). The nature of human altruism. *Nature*, 785–791.

Fuhse, J. (2015). Theorizing social networks: The relational sociology of and around Harrison White. *International Review of Sociology, 25*, 15–44.

Furubotn, E. G., & Richter, R. (1997). *Institutions and economic theory: The contribution of the new institutional economics*. Ann Arbor: University of Michigan Press.

Fuster, T. (1998). *Die "Good Governance" Diskussion der Jahre 1989 bis 1994: Ein Beitrag zur jüngsten Geschichte der Entwicklungspolitik unter spezieller Berücksichtigung der Weltbank und des DAC*. Bern: Paul Haupt.

Giddens, A. (1984). *The constitution of society, outline of the theory of structuration*. Cambridge: Cambridge University Press.

Gluesing, J., Riopelle, K., & Wasson, C. (2017). Environmental governance in multi-stakeholder contexts: An integrated methods set for examining decision-making. In B. Hollstein, W. Matiaske, & K.-U. Schnapp (Eds.), *Networked governance. New research perspectives*. Cham: Springer.

Granovetter, M. (1985). Economic-action and social-structure – The problem of embeddedness. *American Journal of Sociology*, 481–510.

Heath, S., Fuller, A., & Johnston, B. (2017). How Personal Networks Govern Educational Decisions. In B. Hollstein, W. Matiaske, & K.-U. Schnapp (Eds.), Networked governance. New research perspectives. Cham: Springer.

Henning, C. H. C. A., & Pappi, F. U. (1998). Policy networks: More than a metaphor? *Journal of Theoretical Politics, 10*, 553–575.

Hirschheim, R., & Dibbern, J. (2002). Information systems outsourcing in the new economy – An introduction. In R. Hirschheim, A. Heinzl, & J. Dibbern (Eds.), Information systems outsourcing: Enduring themes, emergent patterns and future directions (pp. 3–23). Berlin: Springer.

Hollstein, B. (2001). *Grenzen sozialer Integration*. Zur Konzeption informeller Beziehungen und Netzwerke. Opladen: Leske + Budrich.

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology, 63*, 597–606.

Homans, G. C. (1950). *The human group*. New York: Brace & Company.

Hollstein, B., Matiaske, W., & Schnapp, K.-U. (2017). Networked governance: Taking networks seriously. In B. Hollstein, W. Matiaske, & K.-U. Schnapp (Eds.), *Networked governance. New research perspectives*. Cham: Springer.

Jansen, D. (2002). Netzwerkansätze in der Organisationsforschung. In J. Allmendinger & T. Hinz (Eds.), *Organisationssoziologie. Sonderheft 42 der Kölner Zeitschrift für Soziologie und Sozialpsychologie* (pp. 88–118). Wiesbaden: Westdeutscher Verlag.

Jansen, D. (2003). Einführung in die Netzwerkanalyse. Grundlagen, Methoden, Anwendungen. Opladen: Leske + Budrich.

Jones, C., Hesterly, W. S., & Borgatti, S. P. (1997). A general theory of network governance: Exchange conditions and social mechanisms. *The Academy of Management Review*, 911–945.

Kenis, P., & Schneider, V. (1991). Policy networks and policy analysis: Scrutinizing a new analytical toolbox. In B. Marin, & R. Mayntz (Eds.), *Policy networks. Empirical evidence and theoretical considerations* (pp. 25–59). Frankfurt a. M.: Campus Verlag.

Koliba, C., Meek, J. W., & Zia, A. (2011). *Governance networks in public administration and public policy*. Boca Raton: CRC Press.

Lazer, D. (2011). Networks in political science: Back to the future. *PS: Political Science & Politics*, 61–68.

Lubell, M. (2013). *Three hard questions about network science*. http://environmentalpolicy.ucdavis.edu/blog/2013/09/292. Zugegriffen: 15.07.2015.

Malinowski, B. (1922). *Argonauts of the western Pacific*. London: G. Routledge & sons.

Matiaske, W. (2004). Pourquois pas? Rational choice as baseline theory for the human resource management. *Management Review, 15*, 249–263.

Matiaske, W. (2013). *Social capital in organisations*. Newcastle upon Tyne: Cambridge Scholar Publishers.

Mayntz, R.. 1987. Politische Steuerung und gesellschaftliche Steuerungsprobleme. Anmerkungen zu einem theoretischen Paradigma. In T. Ellwein, J. J. Hesse, Renate Mayntz, & F. W. Scharpf (Eds.), *Jahrbuch zur Staats- und Verwaltungswissenschaft* (pp. 89–110). Baden-Baden: Nomos.

Mayntz, R. (1993). Modernization and the logic of interorganizational networks. *Knowledge and Policy: The International Journal of Knowledge Transfer and Utilization, 6*, 3–16.

Mayntz, R. (1996). Politische Steuerung: Aufstieg, Niedergang und Transformation einer Theorie. In K. von Beyme, & C. Offe (Eds.), *Politische Theorien in der Ära der Transformation* (pp. 148–168). Opladen: Westdeutscher Verlag.

Mayntz, R. (1998). *New challenges to governance theory*. Florence: Jean Monnet Chair Papers.

Mayntz, R. 2004. Governance im modernen Staat. In A. Benz (Eds.), *Governance-Regieren in komplexen Regelsystemen. Eine Einführung* (pp. 65–76). Wiesbaden: VS Verlag für Sozialwissenschaften.

Mayntz, R. (2009). *Über Governance: Institutionen und Prozesse Politischer Regelung*. Frankfurt: Campus Verlag.

Mayntz, R. (2017). International institutions of financial market governance – A case of network governance? In B. Hollstein, W. Matiaske, & K.-U. Schnapp (Eds.), *Networked governance. New research perspectives*. Cham: Springer.

Mische, A. (2003). Cross-talk in movements: Rethinking the culture-network link. In M. Diani & D. McAdam (Eds.), *Social movements and networks. Relational approaches to collective action* (pp. 258–280). Oxford: Oxford University Press.

Mitchell, J. C. (1969). The concept and use of social networks. In *Social networks in urban situations: Analyses of personal relationships in Central African towns* (pp. 1–50). Manchester: Manchester Universtiy Press.

Mizruchi, M. S. (1994). Social network analysis: Recent achievements and current controversies. *Acta Sociologica, 37*, 329–343.

Moreno, J. L. (1934). Who shall survive? New York: Beacon Press.

Nadel, S. F. (1957). *The theory of social structure*. London: Cohen & West.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.

O'Toole, L. J. (2014). Networks and networking: The public administrative agenda. *Public Administration Review, 75*, 361–371.

Ohno, T. (1988). *Toyota production system: Beyond large-scale production*. Cambridge: Productivity Press.

Olson, M. (1971). *The logic of collective action*. Cambridge: Harvard University Press.

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action. The Political economy of institutions and decisions*. Cambridge: Cambridge University Press.

Padgett, J. F., & Powell, W. W. (2012). The problem of emergence. In *The emergence of organizations and markets* (pp. 1–32). Princeton: Princeton University Press.

Papadopoulos, Y. (2004). Governance und Demokratie. In A. Benz (Eds.), *Governance-Regieren in komplexen Regelsystemen. Eine Einführung* (pp. 215–237). Wiesbaden: VS Verlag für Sozialwissenschaften.

Papadopoulos, Y. (2005). Taking stock of multi-level governance networks. *European Political Science, 4*, 316–327.

Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of work force*. Boston: Havard Business School Press.
Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations. A resource dependence perspective*. New York: Harper & Row.
Piore, M. J., & Sabel, C. F. (1984). *The second industrial divide: Possibilities for prosperity*. New York: Basic Books.
Platteau, J.-P. (2000). *Institutions, social norms, and economic development. Fundamentals of development economics*. Amsterdam: Harwood Academic Publishers.
Plattner, S. (1989). Economic behavior in markets. In *Economic anthropology* (pp. 209–222). Stanford: Stanford University Press.
Polanyi, K. (1944). *The great transformation*. Boston: Beacon.
Polanyi, K. (1957). *Trade and market in the early empires. Economies in history and theory*. Glencoe: Free Press.
Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Simon and Schuster.
Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 1–24.
Powell, W. W. (1990). Neither market nor hierarchy. Network forms of organization. *Research in Organizational Behavior*, 295–336.
Pressman, J. L., & Wildavsky, A. (1973). *Implementation*. Berkeley: University of California Press.
Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.
Robins, G., Bates, L., & Pattison, P. (2011). Network governance and environmental management: Conflict and cooperation. *Public Administration, 89*, 1293–1313.
Roethlisberger, F. J., & Dickson, W. J. (1939). *Management and the worker: An account of a research program conducted by the Western electric company, Hawthorne works, Chicago*. Cambridge: Harvard University Press.
Saxenian, A. L. (1994). *Regional advantage: Culture and competition in silicon valley and route 128*. Cambridge: Harvard University Press.
Scharpf, F. (1975). *Politische Durchsetzbarkeit innerer Reformen*. Göttingen: Schwarze.
Schneider, Volker. (2004). Organizational governance – Governance in organisationen. In A. Benz (Eds.), *Governance-Regieren in komplexen Regelsystemen. Eine Einführung* (pp. 173–192). Wiesbaden: VS Verlag für Sozialwissenschaften.
Schweizer, T. (1996). *Muster sozialer Ordnung: Netzwerkanalyse als Fundament der Sozialethnologie*. Berlin: Reimer.
Scott, J., & Carrington, P. J. (Eds.). (2011). *Sage handbook of social network analysis*. London: Sage.
Sewell, W. H. (2005). *Logics of history: Social theory and social transformation. Chicago studies in practices of meaning*. Chicago: University of Chicago Press.
Simmel, G. (1908). *Soziologie. Untersuchungen über die Formen der Vergesellschaftung*. Leipzig: Duncker & Humblot.
Simon, H. A. (1959). Theories of decision making in economics and behavioural science. *American Economic Review, 49*, 253–283.
Skvoretz, J. (2015). Models of power in exchange networks. In J. D. Wright (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 667–671). Oxford: Elsevier.
Snijders, T. A. B. (2011). Network dynamics. In J. Scott, & P. J. Carrington (Eds.), *Sage handbook of social network analysis* (pp. 501–513). London: Sage.
Sydow, J. (2001). *Strategische Netzwerke – Evolution und Organisation*. Wiesbaden: Gabler.
Torfing, J. (2005). Governance network theory: Towards a second generation. *European Political Science, 4*, 305–315.
Torfing, J.. (2006). Governance networks and their democratic anchorage. In J. Melchior (Eds.), *New spaces of European governance* (pp. 109–128). Wien: facultas.

Torfing, J., & Sørensen, E. (2014). The European debate on governance by networks: Towards a new paradigm? *Policy and Society, 33*, 329–344.

Uzzi, B., & Lancaster, R. (2004). Embeddedness and price formation in the corporate law market. *American Sociological Review, 69*, 319–344.

Wald, A., & D. Jansen. (2007). Netzwerke. In A. Benz, S. Lütz, U. Schimank, & G. Simonis (Eds.), *Handbuch Governance. Theoretische Grundlagen und empirische Anwendungsfelder* (pp. 93–105). Wiesbaden: VS Verlag für Sozialwissenschaften.

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge: Cambridge University Press.

Weber, M. (1972). *Wirtschaft und Gesellschaft*. Tübingen: J.C.B. Mohr.

White, H. C. (1992). *Identity and control: A structural theory of social action*. Princeton: Princeton University Press.

Wigand, R. T., Picot, A., & Reichwald, R. (1997). *Information, organization, and management: Expanding markets and corporate boundaries*. Chichester: Wiley.

Willer, D. (Eds.). (1999). Nework exchance theory. Westport: Praeger Publishers.

Williamson, O. E. (1975). *Markets or hierarchies*. New York: Free Press.

Williamson, O. E. (1981). The economics of organization. The transaction cost approach. *American Journal of Sociology*, 548–577.

Williamson, O. E. (1985). *The economic institutions of capitalism: Firms, markets, relative contracting*. New York: The Free Press.

Wippler, R., & Lindenberg, S. (1987). Collective phenomena and rational choice. In J. C. Alexander, B. Giesen, R. Münch, & N. J. Smelser (Eds.), *The micro-macro link* (pp. 135–152). Berkeley: University of California Press.