ERIK HANS KLIJN, JOOP KOPPENJAN,
WOUTER SPEKKINK, AND
RIANNE WARSEN

GOVERNANCE NETWORKS IN THE PUBLIC SECTOR

Second Edition

GOVERNANCE NETWORKS IN THE PUBLIC SECTOR

Governance Networks in the Public Sector presents a comprehensive study of governance networks and the management of complexities in network settings. Public, private, and non-profit organisations are increasingly faced with complex, wicked problems when making decisions, developing policies, or delivering services in the public sector. These activities take place in networks of interdependent actors guided by diverging and sometimes conflicting perceptions and strategies. As a result, these networks are dominated by cognitive, strategic, and institutional complexities. Dealing with these complexities requires sophisticated forms of coordination: network management.

This book provides a conceptual framework and analytical tools to study the complexities involved in handling wicked problems in governance networks in the public sector. This book also discusses strategies and management recommendations for government, business, and third sector organisations operating in and governing networks. This second edition of the book is a truly revised edition, incorporating recent developments in network governance theory and practice, such as the influences of traditional and social media on network governance processes.

This volume is an essential text for advanced students of public management, public administration, public policy, and political science, and for public managers and policymakers.

Erik Hans Klijn is Professor of Public Administration at Erasmus University Rotterdam, the Netherlands.

Joop Koppenjan is Professor of Public Administration at Erasmus University Rotterdam, the Netherlands.

Wouter Spekkink is Assistant Professor in the Department of Public Administration and Sociology at Erasmus University Rotterdam, the Netherlands.

Rianne Warsen is Assistant Professor in the Department of Public Administration and Sociology (DPAS) at Erasmus University Rotterdam, the Netherlands.

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PREFACE

This second edition of *Governance Networks in the Public Sector* is truly a revised edition. We changed the structure and content of this book, and the author team was enriched by two new authors.

What did not change is the core message of this book: the importance of the governance network perspective in understanding complex societal issues in order to develop public policies and public services and goods that are both effective and legitimate. Our societies are challenged by highly complex problems, such as climate change, migration, inequality, lack of affordable housing, (mental) health issues, crime, the depletion of natural resources, and environmental degradation. Moreover, interdependencies among actors that grapple with these challenges are only increasing. In these circumstances, a perspective that focusses on governance networks and attempts to govern these is more relevant than ever. The aim of this book also remains the same; we aim to provide a comprehensive theoretical framework, to study, understand, and provide guidance on the governance of problem solving, policymaking, and service delivery within the public sector. This includes a guide on how to analyse decision-making processes in networks as is elaborated in Chapter 9.

However, to improve the readability of this book we have made numerous changes. This revised edition is more concise than the previous edition. All chapters are rewritten, some drastically. Furthermore, this edition incorporates new research and developments in governance network theory in the last decade and contains updated case illustrations. It also pays more attention to media influences on network governance, as this aspect has received considerably more attention in governance network research since the previous edition of this book in 2016.

We owe a great deal of gratitude to many scholars and practitioners with whom we have been collaborating during the last couple of years. We are also indebted to the students who followed our courses at the Erasmus University and elsewhere, whose questions helped to sharpen and refine our ideas on governance networks. Finally, we are indebted to Catherine O'Dea, who helped us with the language editing of this book.

We hope this book finds its way to students, researchers, and practitioners all over the world and helps to increase their capabilities to study, understand, and govern the complexities that characterise processes of problem solving, policymaking, and public service delivery in governance networks within the public sector.

Erik Hans Klijn, Joop Koppenjan,
Wouter Spekkink, and Rianne Warsen

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GOVERNANCE NETWORKS IN THE PUBLIC SECTOR

An introduction

1.1   Introduction: governance networks for a network society

The tough negotiations at climate summits like those in Paris (2015) or Dubai (2023) show how difficult it is to solve complex societal problems. The many conflicts, impasses, and last-minute agreements show that it is difficult not only to arrive at an agreement but also to implement it. Complex societal problems involve many actors, each with their own objectives, resources, and strategies. If these actors want to have any hope of reaching and implementing agreements, they must be prepared to collaborate (Kickert et al., 1997; Ansell & Gash, 2008; Emerson & Nabatchi, 2015).

The difficulties involved in arriving at, and implementing, climate agreements are exemplary of many of the contemporary problems faced by governments. Many other examples exist, such as conflicts over the realisation of public infrastructure (such as roads, airports, wind turbines), reluctant collaboration in energy transition projects or urban renewal efforts, coordination problems in realising integrated solutions and services (for instance in fighting crime or providing integrated healthcare for youth or elderly people), and resistance to the establishment of new asylum centres.

These problems evolve in networks of actors, in which these actors try to influence the way in which problems are governed (Koppenjan & Klijn, 2004; Koliba et al., 2019; Morçöl, 2023). To solve problems in these governance networks, the involved actors must collaborate. This is not easy, as actors may disagree on the nature of the problems or may not be interested in dealing with them in the first place. Therefore, to realise policies to solve problems or provide public services, governance networks need to be managed (Klijn & Koppenjan, 2012; Kapucu & Hu, 2020; Keast et al., 2023).

The mission of this book is to equip readers with the skills and knowledge necessary to analyse and understand the complexities that impede collaboration in governance networks. Detailed insights into network management strategies designed to enhance collaboration are also provided. Through this work, we seek to prepare readers to navigate and address the intricate challenges that governance networks face, fostering solutions that successfully balance the actors' diverse aspirations and values that affect, or are affected by, complex societal problems.

In this chapter, we lay the groundwork for this endeavour. We start with a clear articulation of the problem statement that guides our journey and introduce the theoretical foundations of this book. In Section 1.2, we explain what makes problems in governance networks complex. Section 1.3 presents a historical overview of research on networks. In Section 1.4, we discuss why traditional approaches to policymaking and service delivery fall short of resolving complex societal issues. Section 1.5 explains how networks can be governed. The theoretical concepts that are central to the rest of this book are presented in Section 1.6 (governance) and Section 1.7 (complexities). Section 1.8 provides an overview of the various chapters in this book.

1.2 Changes in society: towards a network society and the rise of wicked problems

Society and the role of government have changed drastically in the last four decades. Various terms have been used for these shifts in society, but probably the best known is Castells' network society. Castells (2000) observed how rapid changes in ICT and other technologies have catalysed the emergence of an increasingly interconnected world. Similarly, public, private, and societal actors have become increasingly interdependent in their efforts to resolve complex societal issues.

The network society is also characterised by individualisation (certainly in the Western world; see Bauman, 2000), social fragmentation, and the decline of trust relations in societies (Putnam, 2000). Castells argues that the development of the network society leads not only to the disintegration of existing social patterns but also to the rise of new social groups. These can be new social entities that form around new services, such as local energy cooperations, or social protest movements that challenge the social changes brought about by the network society, such as the yellow vests (*gilets jaunes*) movement in France, Black Lives Matter, and Extinction Rebellion.

Another crucial characteristic of the network society – one that is often overlooked – is the development of mass communication and social media. Social media in particular came to the forefront during the US elections of 2016, where social media and fake news had a crucial influence on the elections. New communication technologies enable more individualised

communication through social media and, at the same time, put traditional media under severe pressure (Bennett, 2016). The traditional media increasingly need to compete with other media and draw readers' attention by making the news more sensational. For instance, to attract attention, traditional media may use dramatic and personalised frames when reporting the news (Bennett, 2016). Various authors (Altheide & Snow, 1979; Hjarvard, 2008; Landerer, 2013) have argued that we live in a mediatised society where commercial media rules and the pressure for attention (thus to gain enough readers, followers, and so on) has resulted in a situation where these commercial media rules have penetrated all other societal spheres, such as politics (politicians need media attention more than anything else for re-election) (see Esser & Strömbäck, 2014), personal life (our life has become a media event on social media), and entertainment (see Hjarvard, 2008). Society's mediatisation has significant consequences for democratic governance processes.

Government, business, and civil society in our contemporary network society are increasingly faced with complex societal problems, such as climate change, aging society, natural resource scarcity, digital workforce, gender inequality, and poverty. Some refer to these problems as Grand Challenges (e.g., Eisenhardt et al., 2016; George et al., 2016; O'Flynn, 2021a). George et al. (2016) define Grand Challenges as critical barriers that, if tackled, would help to solve important societal problems, potentially with global impact. According to Eisenhardt et al. (2016), Grand Challenges have intertwined technical and social elements and affect a large number of actors in profound ways. Although they emphasise that the solutions to Grand Challenges are unknown, they also suggest that they are potentially solvable, requiring interdisciplinary collaboration as well as political action. Grand Challenges can be seen as a type of wicked problem (Rittel & Webber, 1973; Head, 2022). Wicked problems have in common that they involve difficult issues that require in-depth knowledge of their nature and possible solutions. More importantly, wicked problems are contested; they involve many actors with different perceptions of the nature of the problem, and its solution. Furthermore, wicked problems often cut across organisations' traditional jurisdictions, divisions of responsibilities between government layers (local, regional, national, supranational), and the traditional boundaries between the public, private, and societal domains. We discuss the nature of wicked problems in more detail in Chapter 2.

1.2.1   *From government to governance*

The changes in society can be summarised with the expression 'network society', and the changes in our public sphere can be captured by the phrase 'from government to governance' (Pierre & Peters, 2000). In tackling societal problems, governments are increasingly dependent on other actors' resources to

solve these problems. This dependency results in more frequent interactions between actors, resulting in the emergence of governance networks: networks of enduring patterns of social relations between actors involved in dealing with a societal problem, policy, or public service (Marin & Mayntz, 1991; Thompson et al., 1991; Marsh & Rhodes, 1992; Kickert et al., 1997; Sørensen & Torfing, 2009; Kapucu & Hu, 2020).

The existence of governance networks has far-reaching consequences for how governments handle societal problems. Traditional methods for dealing with problems, policymaking, and public service delivery view complex issues as an intellectual design question and approach them by giving research and expertise a central role and assigning them to specialised units in hierarchically organised bureaucracies. This approach no longer suffices. The wicked problems that confront governments, private companies, and societal groups in contemporary society require a novel approach that involves interactions between a wide range of stakeholders (Koppenjan & Klijn, 2004; Weber & Khademian, 2008; Hoppe, 2011; Koliba et al., 2019). The literature usually describes this development as a shift from government to governance (Pierre & Peters, 2000; Osborne, 2006; Klijn & Koppenjan, 2012). As Pierre and Peters (2000, p. 194) state, 'The strength of the state has become contextual and entrepreneurial rather than, as was previously the case, something derived from the constitutional and legal strength of the state institutions'. A recent version of this argument is that public value, which can be defined as policies and services that have value for the public and are valued by the public (Torfing et al., 2021, p. 193), is no longer generated solely by the government but co-created by a diverse array of actors (Bryson et al., 2017; Osborne, 2020; Mazzucato & Ryan-Collins, 2022).

Before we elaborate the idea of governance and relate it to the concept of networks, we need to explore the historical roots of networks (Section 1.3) and identify the differences in two other broad perspectives on how policies are developed and implemented: the traditional public administration perspective and the new public management perspective (Section 1.4).

1.3   Networks: a brief historical overview

The idea that policy is formed and implemented in networks is not new, and neither is the idea of networks itself. It has a long tradition in political science, organisational science, and public administration (Kickert et al., 1997). We can roughly distinguish three types of research traditions that used the concept of networks in the past and on which governance network theories build. Table 1.1 briefly presents the three traditions and their main focus.

Research on *policy networks* is rooted in a political science tradition that focuses on actors that participate in decision making in policy networks and have power and access to decision making. This stream of work can be traced

TABLE 1.1 Research traditions of governance networks

	Policy networks	*Service delivery and implementation networks*	*Managing networks*
Main origin	Political science	Organisational science/ inter-organisational theory	Public administration
Focus	Decision making and effects, closure, and power relations on issue and agenda setting	Inter-organisational coordination, effective policy/ service delivery, integrated policy/ services	Solving societal problems, managing horizontal relations, connecting networks to traditional institutions, deliberation processes
Main research questions	– Which actors are involved in decision making (what is the network around the decision)? – What is the nature of the power relations/ entry to the network? – What are the effects on decision making?	– What does the network around service delivery look like? – How are networks around complex integrated services coordinated? – What mechanisms are effective and efficient (contracting, partnerships, etc.)?	– How can networks around societal problems be managed? – How should networks be organised and connected to traditional institutions? – How can the variety of content be improved? How can various value judgements be combined?
History	Starts with the pluralist political science research of the 1960s and continues to research on subsystems, policy communities, and policy networks	Starts with the first inter-organisational theorists that focus on inter-organisational coordination and continues to research on service delivery, contracting, and implementation	Starts in the mid-1970s with work on inter-governmental relations (Hanf & Scharpf, 1978) and continues with analyses of new forms of management, including their effects and requirements

back to the famous discussions in the 1960s on whether power was dispersed among various competing groups (Dahl, 1961) or concentrated (Hunter, 1953). This tradition continued in the research on agenda forming, which focused on how issues came onto the agenda of media, politicians, and governmental decision makers (Cobb & Elder, 1983; Kingdon, 2011), and in literature on decision making in closed communities of politicians, interest groups, and bureaucrats (called subsystems or subgovernments (see Freeman & Steevens, 1987; Ripley & Franklin, 1987). It also served as a basis for British research on policy communities and policy networks in the 1980s and 1990s (Jordan, 1990; Marsh & Rhodes, 1992; Rhodes, 1996).

Research on *inter-organisational* service delivery and policy implementation has its roots in organisational theory and adopts an inter-organisational perspective, which has a long tradition in organisational science and starts in the 1960s with the early work on inter-organisational coordination (Levine & White, 1961; Rogers & Whetten, 1982). The central assumption – as in all modern network theories – is that organisations need resources from other organisations for their survival and that they therefore need to interact with these organisations. If these interactions are sustained, networks emerge. In this perspective, which is relevant for both public and private organisations, there is a particular emphasis on complex services, viewing networks as vehicles for service delivery and implementation. This research tradition focuses on coordination (mechanisms) and on how products and services come about (Hjern & Porter, 1981).

Research on *managing networks* is predominantly situated in public administration and focuses on solving public policy problems through and in networks. It stresses the complexity of decision making involved in achieving policy outcomes. It starts more or less in the 1970s with research on inter-organisational decision making and implementation (Hanf & Scharpf, 1978). It focuses on existing networks involving policy initiatives and implementation, and on reconstructing and improving the networks and decision-making processes taking place within them (Marin & Mayntz, 1991; Kooiman, 1993). It is also concerned with deliberation between actors, including the possible outcomes and value conflicts that arise when actors try to achieve workable solutions for policy problems.

Each of these traditions emphasises different types of networks. The policy networks tradition focuses on the relation between the state and interest groups and its influence on public policymaking, the service delivery and implementation tradition focuses on coordination problems in delivering public services in a fragmented setting, and the managing networks tradition centres on solving complex policy problems through horizontal coordination between interdependent actors.

Despite these differences, the traditions all use the word, network, extensively and focus on horizontal coordination mechanisms between actors

(mostly organisations). They are also all interested in the relations between actors and see outcomes and performance as the result of interactions between a variety of actors, rather than as the result of actions and policy of one actor alone. In addition, all three traditions challenge the traditional administrative model in which policy is designed by elected politicians and then implemented by a 'neutral' administration.

1.4   Networks, traditional government, new public management: a comparison

The governance network approach presents an image of public policymaking and service delivery that differs not only from the traditional public administration (TPA) model, but also from the new public management (NPM) model that evolved in the 1970s and 1980s as a response to TPA.

In the TPA model, problems, policies, and services are assigned to specialised governmental units (Osborne, 2006; Hughes, 2017). Integration and coordination are realised by command and control within the bureaucracy, characterised by task differentiation and procedures. This bureaucratic model of organising government has been followed worldwide. In Western democracies, the political decisions regarding problems, policies, and services are taken by elected officials at the top of bureaucracies, who in turn are held accountable by representative bodies of elected politicians (parliaments, councils, and so on). These political decisions are implemented in a neutral way by civil servants who follow rules and ideally are inspired by a motivation to serve the public interest. The governmental bureaucracy is professionalised and aims to produce effective policies and services in a way that does justice to the principles of equality, legitimacy, and legality. Complexities are dealt with by deconstructing them into separate tasks that are assigned to specialised units in which they are processed as intellectual design challenges with the input of policy analysts, professionals, and scientific knowledge.

The success of this model has resulted in an ever-increasing number of tasks, personnel, organisational units, and budgets, gradually resulting in the Big Government problem (Rose, 1981). The size of the government and the many tasks that it took on made it increasingly difficult to control budgets, motivate civil servants, and coordinate units and policies from the centre. TPA increasingly fails to deliver coherent and integral policies and services that meet the specific needs of clients, citizens, and society.

In response to these criticisms, the NPM approach emerged in the 1970s and 1980s. NPM focuses on improving the efficiency and effectiveness of policies and public service delivery using (performance) management and com petition (Hood, 1991). Politicians define goals (Osborne & Gaebler, 1992), and (public) managers are responsible for managing the policymaking process and public service delivery. They translate goals into output

indicators and performance indicators, and then – through a competitive ten-
dering process – decide who can best deliver the service. In NPM, the use of
business instruments, such as strategic and performance management tech-
niques, is seen as crucial (Hughes, 2017). Governments act as principals of
private partners that are considered self-interested agents that pursue profits
and compete with one another. Public managers use strict contract manage-
ment to align goals and keep the agent to the contract. The market-oriented
nature of NPM also means that citizens are viewed primarily as clients of
public services and policies, rather than as voters or constituents as in the
TPA model.

   The idea of governance networks constitutes a significant break with these
two earlier perspectives. This does not mean that governance networks have
fully replaced the other models (Christensen & Lægreid, 2010; Koppenjan
et al., 2019). In the practice of public decision making and service delivery,
the three models co-exist. These three probably most dominant perspectives
in public administration theory are elaborated in Table 1.2.

1.5   Governance as network governance:
 a conceptual clarification

As mentioned in Section 1.1, the network perspective is intertwined with
the shift from government to governance. However, although many authors
acknowledge the importance of governance, it is often unclear what exactly
they mean by it and how their understanding of it relates to networks – a
link that is crucial for this book. Authors use the term governance in different
ways (Kooiman, 1993; Pierre & Peters, 2000; Bevin, 2013; Ansell & Torfing,
2022).

   In the literature, we can identify four dominant meanings of the term
governance (see also Van Kersbergen & Van Waarden, 2004; Frederickson,
2005):

- Governance as *good governance* or *corporate governance*. In this view,
  governance refers to the principles of a properly functioning public admin-
  istration. Such an administration is characterised by the fair treatment
  of citizens and an unambiguous organisation that adheres to the basic
  principles of the rule of law. The emphasis here is on the internal opera-
  tion of government, rather than on how governments operate in networks.
  This version of governance can be found in numerous documents of, for
  instance, the World Bank and is the inspiration for good governance indi-
  cators (Anheier et al., 2018; Kaufmann & Kraay, 2023). These indicators
  are based primarily on classical government principles such as the rule of
  law, freedom of the press, and lack of corruption.

TABLE 1.2 Three dominant perspectives in public administration

	Traditional public administration	*New public management*	*Governance network*
Focus	Differentiation and coordination within bureaucracy	Internal functioning of governmental bodies and contractual relations	Relations between governments and with other actors (inter-organisational focus)
Objectives	Production of effective and uniform policies and services according to principles of equality, legitimacy, and legality	Improving effectiveness and efficiency of public service delivery and public organisations	Improving inter-organisational coordination and quality of policymaking and service delivery
Core ideas/ management techniques	Uses hierarchy and command and control; line management; building on rule following, loyalty, and civil servants' public service orientation; policy cycle as control mechanism	Uses business and market instruments (modern management techniques, market mechanisms, performance indicators, consumer boards) to improve service delivery	Uses network management: activating actors, organising research and information gathering (joint fact-finding), exploring content, arranging, process rules, and so forth
Politics	Politicians set goals that are implemented by the executive in a neutral way Both civil servants and elected administrators are held accountable by representative bodies of elected politicians	Politicians set goals Policies and services are implemented by independent agencies or market parties guided by performance indicators	Goals are developed and negotiated during interaction processes, with no sharp distinction between formation, implementation, and delivery of policies and services Politicians are part of these processes, facilitate these processes, and set boundary conditions for these processes

(*Continued*)

TABLE 1.2 (Continued)

	Traditional public administration	New public management	Governance network
Complexity in society	Complexity is dealt with by deconstruction and assigning tasks to specialised units. It is treated as an intellectual design process with input from policy analysts, professionals, and scientific knowledge	Complexity requires the setting of clear goals and allowing implementers discretionary space to realise outcomes. It is important to avoid complex interactions with society, and market incentives are used to govern implementing units	Complexity requires interaction and network relations given interdependencies. Taking part in complexity by interacting with actors in society is unavoidable and/or necessary to reach effective and supported outcomes

- Governance as *new public management* or *market governance*, aimed at improving performance and accountability (Kettl, 2000; Pollitt & Bouckaert, 2017). As discussed in Section 1.4, under this definition of governance, governments' role is to steer rather than to row (Osborne & Gaebler, 1992). Government should set goals and formulate policies. The implementation of policies and the delivery of services are best left to other organisations or separate public agencies. These agencies are held accountable using clear performance indicators and other market mechanisms, such as contracts, competition, and benchmarks. Although some authors characterise NPM as a governance approach, this approach involves a dominant role for government, which sets goals in a top-down manner and requires other actors to give account. In this sense, it may result in practices that are at least as hierarchical and bureaucratic as those of the TPA model.
- Governance as *multi-level governance* or *inter-governmental relations*. In some studies, governance is described as multi-level government or inter-governmental governance. Although these two strands of literature differ from each other and not all the literature in these fields explicitly uses the network concept, their common theme is the difficulty of achieving results in a multi-actor setting. This literature stresses that public actors from various policy areas and governmental levels are needed to address

societal problems, because such problems tend to cross the boundaries of public organisations and their hierarchical levels. The issues involved often relate to the economic regeneration of deprived areas or to environmental and pollution problems (Agranoff & McGuire, 2003; Bache & Flinders, 2004; Marks & Hooge, 2004). This literature focuses on public actors and pays little attention to the role of private and societal actors in networks.

- Governance as *network governance*. Authors writing on network governance consider the concepts of governance and the network to be tightly interconnected. Governance takes place within networks of public and non-public actors, and the interaction between these groups makes processes complex and difficult to manage. The focus here is on complex interaction processes in a network of public, private, and societal actors, including individuals, groups, organisations, and groups of organisations (Rhodes, 1996; Kickert et al., 1997; Sørensen & Torfing, 2007: Koliba et al., 2019; Kapucu & Hu, 2020). Consequently, governance is understood to require steering and management strategies that are different from those used in TPA and NPM.

Although these conceptualisations of governance are different, they share some elements. All of them emphasise the *process* of governing rather than the *structure* of government. They also acknowledge the limits of governmental power. This supports the notion that governments, in dealing with complexities, shift from a government approach – where they use their formal hierarchical position to unilaterally impose solutions – to governance, where their focus is on the process through which outcomes are achieved. However, in our view, the use of the governance concept in the first two meanings of the word can be misleading. The literature on good governance emphasises classical government themes and shows little interest in complex multi-actor policy processes. The top-down nature of the NPM perspective raises the question of whether it actually involves a shift from government to governance. Although the NPM perspective does see a role for non-public actors in the implementation of public services, it conceptualises the relationship between government and implementers as a vertical principal–agent relationship. This is at odds with the multi-actor complex processes theorised under the governance heading, in which horizontal relationships between actors play a key role. Another argument against the first two meanings of governance is that, if we classify these as governance approaches, virtually anything that involves government, including classical government perspectives and top-down steering, can be classified as such. A concept that includes everything is meaningless.

Therefore, we consider the terms governance and network governance as equivalent. We use the term network governance to distinguish our interpretation of governance from other interpretations that exist in the literature.

1.6   Defining governance networks and network governance

Network governance takes place within governance networks. Although governance networks are conceptualised in a variety of ways, most definitions have common characteristics:

- Governance networks address complex policy problems that cannot be solved by one actor alone but require the collective actions of several actors (Mandell, 2001; Koppenjan & Klijn, 2004).
- Governance networks consist of actors who are dependent upon one another because they need one another's resources to solve problems (Hanf & Scharpf, 1978).
- Because of these interdependencies, actors (are forced to) interact with one another and patterns of interactions are formed (Hanf & Scharpf, 1978; Agranoff & McGuire, 2003).
- Governance networks are characterised by enduring interactions among a relatively stable set of actors (Laumann & Knoke, 1987).

We elaborate these characteristics of governance networks in Part I of this book.

In this book, we use the term, governance network, to describe the web of relationships between autonomous yet interdependent government, business, and civil society actors through which policymaking, implementation, and service delivery take place. More specifically, we define *governance networks as more or less stable patterns of social relations between mutually dependent actors, which cluster around a policy problem, a policy programme, and/or a set of resources and which emerge, are sustained, and are changed through a series of interactions* (compare Koppenjan & Klijn, 2004). We define the interaction processes within these governance networks as *network processes: interactions between actors in which actors exchange and pool resources to address problems and to realise and implement policies and public services.*

Governance network processes entail both conflict and collaboration. Conflict occurs because actors are autonomous and might have conflicting interests and objectives. This tension is always present in governance networks and is one of the reasons why the processes that occur within them are erratic and difficult to manage. Collaboration occurs because actors are dependent on one another's resources and therefore need to collaborate. These topics are dealt with extensively in this book.

In addition to the term governance network, in this book we use the following core concepts: actor strategies, network management, and network governance. We define these concepts as follows:

- *Actor strategies are series of coherent and more or less deliberate actions that actors in the network take to influence the content, course, and outcomes of network governance in accordance with their perceptions of the problem or situation at hand.*

- *Network management refers to deliberate strategies aimed at facilitating and guiding the interactions and/or changing the features of the network with the intention to collaborate further in network governance.* See Chapter 5.
- *Network governance (which includes both actor strategies and network management strategies) consists of the collection of actors' interactions within a governance network, influencing policymaking and public service delivery to solve public problems* (Frederickson, 2005; Bryson et al., 2006).

Network management strategies can be distinguished from actor strategies in that they focus on guiding and coordinating interactions between others. These are strategies of actors that take a more or less impartial position and aim for further collaboration or mediate among other actors. Actors' strategies are strategies used by actors aimed at realising their own objectives. They are not impartial, and they are not focused on furthering collaboration *between others*.

In the literature, other terms are used that mean more or less the same as network management, such as meta-governance (Jessop, 2002; Sørensen & Torfing, 2007), collaborative governance (Ansell & Gash, 2008; Bryson et al., 2015; Emerson & Nabatchi, 2015), or collaborative management (O'Leary & Bingham, 2009). In this book, we confine ourselves to using the term network management, which is most commonly used in network literature.

1.7   Complexity in governance networks

Complexity is an inherent characteristic of governance networks that are confronted with societal problems and that try to develop policies and services to deal with these. We can distinguish three major types of complexity that characterise governance networks: substantive, strategic, and institutional complexity. In this section, we briefly address these.

1.7.1   Substantive complexity

Substantive complexity within governance networks is caused not so much by the lack of information and knowledge as by the uncertain and ambiguous nature of problems. This nature makes consensus on the definition of problems, their causes, and solutions unlikely. Problem solving, policymaking, and service delivery in the public sector involve a wide set of actors. These actors have different perceptions of the situation and also interpret available information differently. Thus, collecting information and tapping into knowledge cannot solve substantive complexity when the meaning of information is interpreted in different ways (Sabatier, 1988, 2007; Rein & Schön,

1992). Research activities and the mobilisation of expertise, therefore, do not necessarily lead to reduced substantive complexity – in fact, under certain circumstances, they may even exacerbate it (Lindblom & Cohen, 1979; Koppenjan & Klijn, 2004; Hoppe, 2011).

1.7.2   *Strategic complexity*

Strategic complexity in governance networks springs from the strategic choices that actors make with regard to problems, policies, and services (Allison & Zelikow, 1999; Axelrod, 2006; Kingdon, 2011; Scharpf, 2018). In a complex society, characterised by horizontalisation and network formation, actors have the discretion to make their own choices. Because actors ground their strategies in unique perceptions, which other actors often do not acknowledge or are unaware of, a large variety of strategies may emerge. Moreover, actors are *reflective*, which means that they might change their perceptions and strategies. This makes their behaviour unpredictable. Furthermore, actors respond to, and anticipate, one another's strategic moves. This further compounds the unpredictability of actors' strategies and their influence on the interaction process. Thus, strategic complexity concerns the erratic and unpredictable nature of interaction processes within governance networks (see also Teisman et al., 2009; Gerrits, 2012). This strategic complexity is difficult to reduce and can never be eliminated completely.

1.7.3   *Institutional complexity*

Finally, governance networks are characterised by institutional complexity. Not only does dealing with complex problems, policies, and services require the involvement of various actors, but also these actors often work from different institutional backgrounds (March & Olsen, 1989; Lowndes & Roberts, 2013; Scott, 2013). Complex problems, policies, and services typically cut across existing demarcations between organisations, administrative levels, and networks. Consequently, actors' behaviour is guided by different rules, originating from different organisations, administrative levels, and networks, making interaction between them difficult. Thus, interaction in governance networks is characterised by clashes between divergent institutional regimes and displays institutional complexity. Therefore, for all actors, there is a high degree of uncertainty about the rules that will guide the interaction with other actors. Institutional complexity, like the other forms of complexity, cannot simply be solved. It is often not possible to directly change networks' existing institutional characteristics, as they are anchored in formal legal frames and in deeply rooted informal norms and convictions (Koppenjan & Klijn, 2004).

1.7.4   *Mapping and managing complexities in governance networks*

Given these complexities, traditional hierarchical forms of government, or the market-oriented alternatives provided by NPM, are not suited to dealing with complex problems in network situations. Interdependencies make it impossible for any of the involved actors to act in isolation, or as principals and agents (Hanf & Scharpf, 1978; Kickert et al., 1997; Crosby & Bryson, 2005; McGuire & Agranoff, 2011; Kapucu & Hu, 2020). Governance network processes require actors to understand these substantive, strategic, and institutional complexities and find ways to adequately address them. In this book, we apply the concepts and ideas provided by governance network theory in our search for ways to map and manage substantive, strategic, and institutional complexities.

Governance network theory provides theoretical concepts and normative starting points for analysing and assessing complex processes of problem solving, public policymaking, and service delivery in network settings and the roles that perceptions, strategic interactions, and institutions play in this. The network approach distinguishes itself from other, more rational approaches to problem solving, policymaking, and service delivery by using the multi-actor nature of interaction settings and the presence of diverging and sometimes conflicting perceptions, objectives, and institutions as the starting point for analysis. It investigates the consequences of this view for the way in which governance network processes evolve and for how these processes can be designed and managed. Thus, the governance network approach links theory building and analysis closely to a management perspective. In this sense, it is also a normative approach; it connects analysis to managerial intervention (see Kickert et al., 1997). Managing a network successfully requires understanding its intricacies and knowing what interventions are needed to enhance its performance.

Therefore, this book not only provides concepts for understanding and analysing complexities in governance networks, but also develops recommendations for practitioners about how these complexities can be governed. It provides prescriptions for strategies to be used by actors within networks as well as for network management aimed at improving the quality of interactions between parties and the functioning of networks as a whole.

These recommendations are not focused exclusively on the effectiveness of governance network processes. Governance networks and network management are not simply instruments to arrive at effective solutions for wicked problems. As a normative perspective, the network approach envisions that, within governance networks, the various legitimate perceptions and interests must be acknowledged and vindicated. Network management has to address and balance various competing aspirations and public values, including democratic legitimacy and accountability (Stoker, 2006; Klijn & Skelcher, 2007;

Sørensen & Torfing, 2007; Bryson et al., 2017; O'Flynn, 2021b). These normative considerations guide our analysis and recommendations throughout this book, but they are explicitly dealt with in Part III on the normative issues involved in network governance.

1.8   Objective and structure of this book

This book addresses the question of how substantive, strategic, and institutional complexities that characterise governance networks can be analysed and managed in an effective, democratically legitimate, and accountable way, given the features of these complexities, uncertainties, and the sources from which they stem. To answer this question, this book is organised as follows.

In Part I, Governance Networks, the nature of the substantive (Chapter 2), strategic (Chapter 3), and institutional (Chapter 4) complexities that characterise governance networks in the public sector is discussed.

Part II, Network Governance, deals with the question of how these complexities can be managed. Chapter 5 discusses network management strategies aimed at substantive and strategic complexities. Chapter 6 presents network management strategies addressing institutional complexity.

Part III, Normative Issues, focuses on normative dimensions of governance in networks. Chapter 7 discusses how network governance can contribute to the democratic legitimacy and accountability of governance networks. Chapter 8 describes how the evaluation of processes in governance networks differs from traditional evaluation methods.

Part IV, Syntheses and Conclusions, consists of two chapters. Chapter 9 provides analytical steps to analyse governance networks, and Chapter 10 presents conclusions and reflections.

Our ambition with this book is to deepen readers' understanding of governance networks, the complexities that arise in them, and the strategies for managing these complexities. By doing so, we aim to advance the study and theoretical development of governance networks, as well as to advance the capacity of practitioners to guide processes in networks in an effective and legitimate manner.

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PART 1

Governance networks

2

SUBSTANTIVE COMPLEXITY IN GOVERNANCE NETWORKS

Multiple perceptions and contested knowledge

2.1   Substantive complexity: an introduction

In addressing complex problems, actors in governance networks are confronted with substantive complexity. Substantive complexity occurs when actors in these networks experience difficulties in understanding the nature of the problem at hand. These difficulties may result from the fact that problems have multiple aspects or are of a technical nature, making them hard to understand without in-depth expertise. However, these difficulties also occur because actors in these networks have different perceptions of the nature of problems and the effectiveness of potential solutions. We can witness big differences in how actors perceive problems in a variety of policy processes, such as the debate on the benefits and risks of vaccination (Harmsen, 2014; ten Kate et al., 2022), discussions on climate change (Wolsink, 2007), and the debate regarding health impacts of radiation from 5G mobile networks (Kostoff et al., 2020; Karipidis et al., 2021). Substantive complexity is not limited to issues with an emphasis on technological components, because the same type of discussion can be found in the context of social problems like poverty, inequality, and crime.

Many societal problems for which governments seek solutions are hard to grasp. On closer analysis, their content, causes, and effects are characterised by complexities that allow for different perceptions regarding the nature of the problem and prevent the development of straightforward solutions. Efforts to find the truth by collecting information or doing research often result in conflicts over facts and the piling up of research reports with which participants in the network try to convince one another (see DeLeon, 1988; Schön & Rein, 1994; Koppenjan & Klijn, 2004; Kapucu & Hu, 2020). This

may result in debates on the reliability of information, facts, and experts. So, instead of reducing complexity, information gathering may enhance it. With the rise of social media and ongoing mediatisation, substantive complexity is further deepened. The production of fake news and the emergence of conspiracy theories in an increasingly polarised environment undermine confidence in government, media, experts, and science, and in the information that they provide (Bennett, 2016).

These observations raise questions concerning the nature of the substantive complexity that characterises complex problems in governance networks. In this chapter, we seek to answer these questions by first defining our understanding of complex problems (Section 2.2). We then discuss two sources of substantive complexity. In Section 2.3, we address the existence of various perceptions as a source of substantive complexity. In Section 2.4, we explain why the involvement of information, experts, and (scientific) research may produce rather than resolve substantive complexity. In Section 2.5, we discuss the role of media and mediatisation as developments that deepen substantive complexity. In the concluding section, we outline the direction for analysing substantive complexity and developing ways to deal with it.

2.2　A typology of substantively complex problems: the 'wickedness' of problems

Problems can be seen as gaps between an existing or an expected situation and a desired situation. Solving problems in the context of governance networks requires solutions in terms of policies and public services that need to be designed, agreed upon, and implemented. The degree to which problems can be solved varies from easily solvable in the case of relatively simple and known problems to more difficult or even unsolvable problems. In the latter case, the literature speaks of wicked problems, also referred to as ill-structured, intractable, untamed problems (Rittel & Webber, 1973; Head, 2022). Wicked problems are problems that are hard to delineate, that have no straightforward solution, that are not well understood, and that affect or are affected by multiple actors with different and sometimes conflicting perceptions, interests, and values (Weber & Khademian, 2008; Head, 2022). Wicked problems are problems with a high level of substantive complexity. Some authors even speak of super-wicked problems if problems cut across various jurisdictions or policy domains and include a time dimension. This time dimension implies the existence of time pressure to deal with them, because over time they become harder to solve (Lazarus, 2009; Levin et al., 2012).

Of course, not all problems are wicked. Some scholars argue that the term, wicked problem, has become a fad and that the concept is stretched, as a result of which almost all problems are called wicked. Therefore, it is important to differentiate between types of problems and to acknowledge

that problems can vary in the extent to which they are wicked (Peters, 2017; Turnbull & Hoppe, 2019). We distinguish four types of problems, based on two sources of substantive complexity (Douglas & Wildavsky, 1982; Roberts, 2000; Koppenjan & Klijn, 2004; Hoppe, 2011; Head, 2022). The first source is uncertainty or conflict about the nature of the problem. Actors may have different perceptions of what the problem is, what solutions are needed, how they should be dealt with and by whom. These different perceptions result from differences in the underlying objectives, beliefs, and values to which actors adhere. In airport planning for instance, economic values – underlying the objectives of those who propagate the growth of aviation activities – may conflict with environmental values – such as the reduction of CO_2 emissions – propounded by environmentalists. As the underlying beliefs and values of different perceptions are hard to change, this source of complexity is difficult to deal with.

The second source of complexity stems from uncertainty or conflict about the existing information and knowledge on the issue, including its consequences, its causes, and its solutions. As stated above, it is not so much a lack of information or knowledge that causes complexity. Often, there is information, but the status and/or interpretation of information, data, and expertise is contested. There may be a heated debate about what the facts are. This debate may even be fuelled by fake news and conspiracy theories. In the case of airport planning, a knowledge conflict may arise over how much noise is produced by aeroplanes, how it should be measured, and the possible damaging health effects of noise on inhabitants in the neighbourhood. Research may be suspected of being partisan and manipulated.

Given these two sources of substantive complexity, four types of problems can be identified (see Table 2.1):

- *Tamed technical problems* (type 1) are characterised by consensus regarding the nature of the problem, and there is little uncertainty regarding the knowledge on the issue, its consequences, causes, and solutions. For these problems, technical solutions are available or easy to develop by gathering information, engaging experts, and conducting research.
- *Untamed technical problems* (type 2) are characterised by consensus regarding the nature of the problem. Everyone agrees that they must be solved, but technical solutions are missing or contested. There is uncertainty or conflict about the knowledge on the issue and its solutions. In pursuit of a solution, experts may compete with one another, and knowledge conflicts may emerge.
- *Untamed political problems* (type 3) are problems for which technical solutions are available, so there is little uncertainty about the knowledge on the issue and its solution. However, there is little agreement on the nature of the problem. Relevant stakeholders hold different perspectives.

TABLE 2.1 Four types of problems

		Uncertainty or conflict about the nature of the problem	
		Low	*High*
Uncertainty or conflict about information and knowledge of the issue	**Low**	Tamed technical problems	Untamed political problems
	High	Untamed technical problems	Wicked problems

Source: Based on Hoppe (2011).

Consequently, the application of technical solutions is obstructed by value-based conflicts. Consider, for example, the scientific capability to manipulate the gender of a human embryo. The technique exists, but application of this technique is highly controversial.

- Finally, some problems are characterised by both knowledge uncertainty and value conflicts. As explained earlier, these problems are called *wicked problems* (type 4).

2.2.1 Wicked problems in governance networks

Most of the problems in governance networks have a more or less wicked character. Problems may vary in the extent of their wickedness (Head, 2022), but for untamed and wicked problems the question arises as to whether these problems can be tamed, for example, by seeking consensus on problem definition or existing knowledge on the topic. In the literature, it is stated that wicked problems are, given their characteristics, practically unsolvable (Rittel & Webber, 1973; Termeer et al., 2019). However, it cannot be ruled out that wicked problems are tamed or at least that substantive complexity is reduced. Reducing substantive complexity may be one of the missions of governance within networks. On the other hand, the dynamic nature of problems may also result in tamed problems becoming more complex or even wicked problems. In the current social climate of polarisation, in which fake news and conspiracy theories compete with facts and knowledge, one might argue that substantive complexity is more likely to increase than to decrease (compare Poletta & Callaham, 2017; Fischer, 2019).

How to manage substantive complexity is the subject of Chapter 5. Here, we can already state that taming substantive complexity is often not possible, giving rise to the question: what then? Understanding substantive complexity, and knowing how to analyse it, is the first step towards dealing with it. Therefore, in the remainder of this chapter, we specify the wicked nature of problems in governance networks by delving into the two main sources

of substantive complexity. First, in Section 2.3, we discuss the existence of multiple problem perceptions in governance networks and their implications. Then, in Section 2.4, we discuss the role of (scientific) knowledge as a source of substantive complexity.

2.3 What causes substantive complexity? Cause 1: the presence of multiple problem perceptions

One reason why problems are complex is that they are not objective facts or 'things' waiting to be discovered and resolved by policymakers. Rather, they are situations perceived as problems by actors affected by them. So, problems are of a subjective nature. They are social constructions: actors' perceptions of what makes a situation problematic (Cobb & Elder, 1983; Spector & Kitsuse, 2001; Hoppe, 2011). These perceptions can be views of individuals, but they can also be shared by a group of individuals, an organisation, a network, or a community.

A problem is a *perceived* gap between an existing or an expected situation and a desired situation. A situation is never inherently problematic. Actors may begin to see a situation as problematic when they are confronted with new solutions or with other situations that they perceive as preferable. The American political scientist, Kingdon, stated in his famous book on agenda building: 'If you have only four fingers on one hand, that's not a problem, that is a situation' (Kingdon, 2011, p. 109). Only after we experience more preferable situations does a situation become problematic. When an actor perceives situations or conditions as problematic, the actor aims to devote attention, energy, and resources to this issue to decrease or eliminate the gap between the existing and the desired situation.

2.3.1 What perceptions are

In understanding substantive complexity, it is important to acknowledge the importance of perceptions. In the literature, various concepts are used to refer to what we call *perceptions*. These include problem definitions (Cobb & Elder, 1983; Dery, 1984; Kingdon, 2011), situation definitions (Merton, 1968), social constructs (Berger & Luckmann, 1966), and frames (Rein & Schön, 1992). Although each term has specific connotations, they all refer to how actors process and interpret information regarding their environment. In this book, we confine ourselves to the use of the problem perception concept. We define a problem perception as *a more or less coherent set of beliefs, ideas, and opinions that actors have about the policy problem and the situation in which they find themselves* (compare Dery, 1984). Besides problem perceptions, which refer to the existing or the expected problem situation, there are perceptions of potential solutions; perceptions of contextual constraints; and

perceptions of other actors involved in, or affected by, the problem situation. Together, these result in a perception of the situation based on which an actor determines his/her behaviour (Schneider & Ingram, 2005).

2.3.2 *Diverging and conflicting problem perceptions*

Defining problems as perceptions implies that, in governance networks with various actors involved, different problem perceptions exist. Actors within networks do not necessarily agree that a problem exists or what it is about. Actors may perceive the same situation in very different ways. Rein and Schön (1992, p. 147) speak of 'different views of the world', creating 'multiple social realities, interests, groups and policy constituencies'. We often implicitly assume that our partners in debate share our problem perception, whereas in reality they might hold a very different understanding of the situation or even focus on totally different problems (Dery, 1984). Figure 2.1 visualises the existence of various perceptions in a problem situation. Box 2.1 provides an example of multiple perceptions.
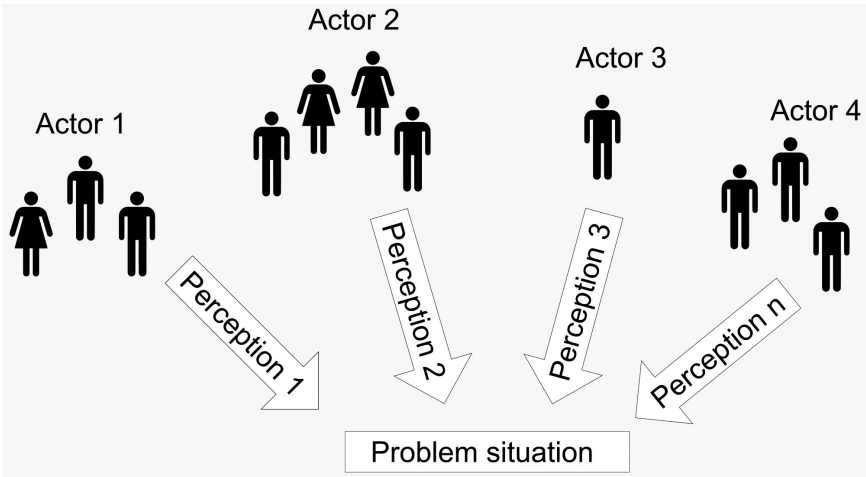

FIGURE 2.1   Multiple perceptions of a problem situation.

BOX 2.1   DIVERGING PERCEPTIONS IN THE VACCINATION DEBATE

Health organisations worldwide express concerns about falling vaccination rates (RIVM, 2023; Seither et al., 2023; United Nations, 2023), in particular Western European countries and the United States. Whereas in the past high

vaccination rates were sufficient to prevent outbreaks of vaccine-preventable diseases, vaccine scepticism currently endangers these vaccination rates. The decreasing vaccine rate increases the risk of outbreaks, as shown by the alarming increase in measles in Europe and the UK in 2023 (Roxby, 2024). The contemporary debate on vaccination reveals divergent and sometimes strongly conflicting perceptions on the use of vaccines.

Vaccines are most commonly perceived as an effective solution to several highly contagious and sometimes dangerous diseases. Not only do they prevent individuals from becoming seriously ill, they also prevent the spread of the disease, and large-scale vaccination creates herd immunity. Being vaccinated might thus also help protect others from becoming ill; this provides also a social motive to be vaccinated.

However, there are also other perspectives. Some object to the large-scale vaccination programmes for contagious diseases like measles, Covid, or small-pox, because they feel that it takes away individual freedom or consider it as unwanted government control. Vaccines then are not only a solution (to disease) but also a problem (infringement on personal freedom). Media report about this perspective as vaccine scepticism and the anti-vax movement. Others focus on potential risks or side effects of vaccines and worry that vaccines are unsafe. For example, a claim published in 1998 suggested that vaccines against measles, mumps, and rubella may cause autism. Even though scientific evidence suggests that this is not the case, the 1998 hypothesis might influence parents' decision to have their children vaccinated (DeStefano & Thompson, 2004). Also, for other vaccines, such as the vaccines against COVID-19 or HPV, worries about long-term effects, safety issues, or negative side-effects might impact the vaccination rate.

Furthermore, research conducted with highly educated parents (ten Kate et al., 2021, 2022) reveals an individualist epistemology, which focuses on obtaining and assessing information individually. This is often combined with a sceptical attitude towards external sources of information. People want to find out for themselves what is true and not blindly follow the advice of others. From a nature-centred view on health, vaccines might be considered unnatural. Individuals then place their trust in their intuition and in more 'natural' methods to deal with the risk of illness. Similarly, in some conservative religious areas, people struggle with the idea of vaccines, believing that their fate is in God's hands.

All in all, diverging perceptions regarding vaccines might pose a challenge to dealing with complex healthcare issues, like the outbreak of diseases (like measles) or preventing the spread of new contagious diseases (such as COVID-19).

2.3.3   The implications of problem perceptions

Perceptions may be social constructions that do not necessarily reflect reality, but they are not without consequences in the real world. The well-known Thomas theorem states: 'if men define situations as real, they are real in their consequences' (Thomas & Thomas, 1928, pp. 571–572). Actors base their behaviours and actions on their problem perceptions. Therefore, perceptions determine the direction in which a solution for a problem is sought. Perceptions on problems and solutions also have implications for who should be involved, or who should lead, in the problem-solving process (Spector & Kitsuse, 2001; Schneider & Ingram, 2005; Hoppe, 2011). For instance, if the problem of crime in a neighbourhood is considered to be an issue of poor law enforcement, the problem will be channelled towards a different set of actors than if it is seen as a consequence of socioeconomic disadvantages. The first problem perception implies that the police, prosecution, courts, and probation service should be in the lead, whereas the latter suggests that the problem is a concern of professionals such as social workers and local policymakers (Prins, 2014; see also Weine et al., 2017; Cann, 2021).

2.3.4   The process of framing problem perceptions

Because the way in which problems are perceived has consequences for how they are dealt with, the definition of a problem often becomes the subject of debate and conflict. Determining the nature of the problem allocates power. Whoever is in a position to determine how a problem is framed also determines the scope within which solutions are sought (Schattschneider, 1960). Therefore, actors in networks may engage in the activity of consciously framing a problem situation.

   Rein and Schön (1992, p. 146) refer to the processes by which problem perceptions come about as the *framing of the problem*: 'Framing is, in our use of the term, a way of selecting, organizing, interpreting and making sense of a complex reality so as to provide guideposts for knowing, analysing, persuading and acting'. These processes of framing may be spontaneous, but often actors are actively involved in consciously influencing actors' problem perception and the joint definition of the problem. Rein and Schön (1992, p. 153) call these activities as *naming and framing*. They state: '(t)he complementary process of naming and framing socially constructs the situation, defines what is problematic about it, and suggests what courses of action are appropriate to it'. Framing is the building-up of an argument, story, or narrative in which a certain perception of a problem situation, its causes, solutions, and affected actors is presented in a coherent way in an attempt to make sense of a situation, indicate

courses of actions, and convince others. In this activity, argumentation and storytelling are important:

> From a problematic situation that is vague and ambiguous … each story selects and names different features and relations that become "things" of the story …. Things are selected for attention and named in such a way as to fit the frame constructed for the situation.
> *(Schön & Rein, 1994, p. 26; see also Roe, 1994; Bevir, 2011)*

Framing by itself is an unavoidable and necessary process for actors within networks to make sense of situations of substantive complexity. At the same time, this process is not neutral, but guided by an actor's deeper beliefs and interests, resulting in a subjective interpretation of the problem situation. Framing is an activity to arrive at a shared understanding of the situation in order to achieve joint action and collaboration.

Framing can be considered a conscious activity to convince others of one's own problem perception (Fischbacher-Smith, 2016; Stone, 2022). However, it may result in a competition between different problem perceptions or even in a conflict over what the problem is about, whereby actors may try to impose their problem definition upon others.

Framing activities can take various forms. Framing can consist of naming: the use of well-chosen and notable words and sound bites to qualify or disqualify a problem, situation, solution, or actor. Examples include speaking of a 'tsunami of immigrants' (United Nations, 2015), referring to COVID-19 vaccinations as 'vaccine dictatorship' (Chehayeb, 2022; Connolly, 2022), or characterising trials against celebrities or politicians as a 'witch hunt' (Fox News, 2023; Manns & Burridge, 2023). Framing can also take the shape of presenting more elaborate arguments or stories about the problem, its causes, the appropriate solution, and who should be involved in addressing the problem. Once actors accept a certain story – the literature also speaks of 'narrative' (Shenhav, 2006) – further arguments and proposals for solutions must match the logic of the dominant story. Some actors may use framing to simply disqualify a solution and, in that way, substantiate their blocking power to prevent the realisation of certain solutions. Besides naming and storytelling, framing is also achieved using images and videos. For example, protesters against the construction of wind turbines in the Netherlands countered official plans and reports of the Dutch government by placing photo-shopped pictures on the internet showing 140-metre-high turbines next to landmark church towers (see also Coleman, 2010; Rojas-Padilla et al., 2022).

In governance networks, actors engage in framing to influence the problem perceptions of other participants in the network and to influence the debate on problems and solutions. Framing strategies are also used to attract attention and support from politicians, policymakers, or the media for a

particular problem perception or perception of the solution (Cobb & Elder, 1983; Baumgartner & Jones, 2009; de Bruijn, 2019). Those who do not engage in the problem-framing process run the risk of their problem perceptions not being heard and not being part of the problem-solving process within the governance network (Hoppe, 1999, 2010).

What is more, as framing consists of the selection of certain aspects of a problem situation while leaving others out, it may result in policy solutions that are biased, misinterpreting problem situations and creating benefits for some and disadvantages for others (Weible & Moore, 2010; Fischbacher-Smith, 2016). Box 2.2 provides an example of framing.

BOX 2.2   FRAMING IN THE MIGRATION DEBATE

One of the policy areas where framing is clearly applied to influence the debate is migration. Béland (2020) shows how Donald Trump frequently frames migrants as criminals and a danger to national security. This frame is also used in European countries dealing with migration from Africa and the Middle East. Migrants are then framed as dangerous, either to national safety or to the socioeconomic situation of citizens of a particular country (see, e.g., Brouwer et al., 2017). With the use of words like tsunami or invasion, actors plead for limited (or no) access for migrants and asylum seekers to their country. In contrast, presenting refugees and migrants as humans or 'people like us' is often part of a frame that calls for more solidarity and generous reception of migrants. Angela Merkel (chancellor of Germany 2005–2022) emphasised solidarity with her well-known quote '*Wir schaffen das*' [We can do this], emphasising Germany's ability to host migrants because of its economic strength and developed society (Mushaben, 2017). When Russia invaded Ukraine in February 2022, a narrative emerged of European countries and their citizens welcoming Ukrainian refugees, even though anti-migrant rhetoric dominated the topic of migration until that juncture (Egan, 2022; Lubbe, 2022; Bansak et al., 2023).

Images can play a significant role in this regard. In his book *Free the Map*, Henk van Houtum (2023) demonstrates how images can reinforce a frame. An image depicting migration towards Europe with massive red arrows flowing into Europe supports the frame that migrants are overwhelming Europe like a tsunami or an invasion, suggesting a massive increase in migrant flows towards Europe. The image does not show the movements of others, such as migration within Europe or emigration from the EU towards other countries. Moreover, the image implies that migration poses a 'danger' or 'threat' to EU citizens. The fact that many of these migrants are refuges forced to leave their homeland and embark on a long, perilous journey to reach the safety of Europe is a story that his map does not tell (van Houtum, 2023).

Images can thus reinforce frames. However, they can also play a role in frame changes. When, in September 2015, the photos of the drowned toddler, Alan Kurdi, dominated the news, the migration frame changed. Before that event, migrants were framed mainly as a homogeneous group seeking to reach Western European countries, legally or illegally, and were portrayed as a threat to the well-being of citizens in countries like the UK, France, and the Netherlands (Klein & Amis, 2021). After the publication of the photo, several changes occurred, including 'changes to the set of emotions constitutive of the frame, the level of intensity at which these were expressed, and the language used' (Klein & Amis, 2021, p. 1338). Compassion for refugees and shame regarding the refusal to accommodate refugees became more apparent emotions in the debate. In contrast, emotions like fear – that these migrants would cause trouble – or anger – that politicians would do more for migrants than for citizens – became subordinate. Changes in language included a decrease in the use of the term migrant and an increase in the term refugee, along with the absence of dehumanising language (Klein & Amis, 2021).

Not all attempts at framing are successful. In particular, problem formulations that do not match important framing principles – such as being culturally acceptable, politically correct, economically relevant, and/or making suggestions for action (see Cobb & Elder, 1983; Kingdon, 2011; de Bruijn, 2019, for more information on framing principles) – run the risk of being rejected. On the other hand, the way in which these principles work is not straightforward: sometimes, violating these principles, for instance by making culturally or politically incorrect statements, is a successful way of attracting attention.

2.3.5   *Problem framing as an argumentation game*

Because of the existence of various problem perceptions among different actors, the problem-solving process within governance networks often takes the shape of an argumentation game. An argumentation game is a debate in which actors engage in problem framing by promoting their problem perceptions and stories to try to convince others, to impose their perceptions upon others, or to negotiate a consensus about the nature of the problem or solutions that do justice to the variety of perceptions (Fischer & Forester, 1993; Fischer & Gottweis, 2012; Stone, 2022). In these argumentation games, actors may succeed in arriving at joint perceptions that allow them to seek common solutions. This is called *frame alignment* (Snow et al., 1986; Prins, 2014). In practice, it is difficult to align frames and stories, and only possible to a certain extent, if at all. Argumentation games have a

clear power dimension, which becomes particularly visible when actors exercise power to try to impose their perceptions upon others, try to undermine their opponents' perceptions, or set rules about what arguments and forms of expression are valid (Foucault, 1980; Habermas, 1981; Hajer, 1995; Hajer & Versteeg, 2005).

In these argumentation games, conflicting views and misunderstandings may result in impasses. These impasses occur when actors in a governance network do not wish to reflect upon their own problem perception or actively engage in fighting the perceptions, frames, and stories of others. Parties may also, unintentionally, talk at cross purposes. Enduring blockages and stagnations of this kind are referred to as dialogues of the deaf: interactions in which actors try to convince one another but only reinforce their own perceptions and end up in a substantive impasse (DeLeon, 1988; van Eeten & Roe, 2000; Termeer & Kessener, 2007). An example of such a substantive impasse is the debate on gun control in the United States. Proponents advocate gun control, such as background checks and bans on assault weapons and high-capacity magazines. These restrictions would reduce gun violence and mass shootings and prevent conflicts from becoming more violent. Opponents of strict gun control laws argue that they infringe upon the right to self-defence and that gun control does not reduce suicide or prevent criminals from acquiring guns. These opposing coalitions have contrary points of views, and it is not to be expected that these can be aligned. Dealing with substantive uncertainty in this case implies seeking to arrive at an improved situation (i.e., strengthening background check systems, banning particular types of weapons, or regulating untraceable ghost guns) without the perspective of consensus or frame alignment.

2.3.6   Why problem perceptions are hard to change

To deal with complex problems and arrive at joint action, it is necessary to deal with the presence of diverging and conflicting perceptions. However, aligning perceptions is difficult because they are hard to change. Perceptions are embedded in a larger set of ideas, beliefs, and norms and values that individuals or groups may hold and share based on previous experiences, education, and socialisation. As perceptions represent and reflect deeper beliefs and identities of actors, groups, and communities, actors will withstand information that challenges the correctness of a problem perception and its accompanying solution (Berger & Luckmann, 1966; White, 1992). Hence, a strong immunity exists to alternative perceptions, frames, and countervoices. Thus, the embedded nature of perceptions explains why they are not easily changed (Knowles & Linn, 2004; Gorman & Gornman, 2021).

The observation that perceptions are difficult to influence does not mean that they cannot be changed at all. When new information becomes available, for instance on new solutions or on (unintended) consequences of earlier

actions, judgements about the nature and the seriousness of the problem may change. Disruptive events and dramatic personal experiences may also result in a modification of perceptions. It may also be that actors reflect on their problem perceptions or engage in a dialogue with other actors and, as a result, adapt their perceptions. Rein and Schön (1992) speak in such cases of *frame reflection* and *reframing* (see also Laws & Rein, 2003). Sabatier and Jenkins-Smith (1993) are less optimistic about the possibilities of reflection and dialogue. They state that reflection and learning are restricted mostly to the marginal parts of what they call a belief or belief system (e.g., perceptions regarding the choice of instruments) and do not affect the core of the belief system (the objectives and underlying convictions, norms, and values). In groups, organisations, or networks, changes in beliefs are most likely to occur because of personnel turnover or shifts in power relations (Sabatier & Jenkins-Smith, 1993; Sabatier & Weible, 2007).

Analysing the structure of the argumentation game by mapping the perceptions, stories, and arguments put forward in the debate may be a first step to bridging the differences that underlie wicked problems and dialogues of the deaf. In this way leads may be found for a constructive dialogue between the contending parties (van Eeten, 1999; Head, 2022). Network management activities might stimulate actors in a network to break the impasse and bring actors with different perceptions together in search of an acceptable solution for all actors involved. In Chapter 5, these activities are presented. First, however, we turn to a second source of complexity: the role of information gathering, experts, and science.

2.4   What causes substantive complexity? Cause 2: the role of information gathering, experts, and (scientific) knowledge

The first source of substantive complexity, as discussed in Section 2.3, is the presence of various problem perceptions and their implications. A second source stems from the role of information gathering, experts, and (scientific) knowledge in these processes. Although gathering information, involving experts, and initiating scientific research might sound like an obvious solution to address substantive complexity, instead it often proves, in itself, to be a source of substantive complexity (Koppenjan & Klijn, 2004). Below, we discuss two responses to substantive complexity to which actors often turn and explain why they are counterproductive.

2.4.1   Response Type I: information gathering, expert knowledge, and (scientific) research

The standard response to substantive complexity is to gather information, involve experts, and commission research. In these cases, complexity is

regarded as a lack of knowledge about the facts. Problems are perceived to be technical in nature. The assumption underlying Type I responses is that objective information about the nature of the problem, its causes, possible interventions, and their consequences provided by experts will help solve this lack of knowledge. This response to substantive complexity is based on the expectation that experts and (scientific) research will provide objective, indisputable knowledge and conclusive and authoritative answers to problems. Although actors in governance networks may argue about the seriousness and nature of problems, 'at some point the data become too telling to ignore' (Rosenau, 1993, p. 248; compare Nowotny et al., 2001). Many develop ments of policy in areas such as healthcare, the environment, infrastructure, and water management are inspired by this view on science and knowledge. Policymakers, including politicians, strive for *evidence-based policies* (Pawson, 2006). Large research institutes, often financed by the government, are supposed to provide 'objective' information, which then is accepted as an authoritative starting point for policy development and government intervention. This instrumental view on the use of (scientific) knowledge suggests that information gathering and science will give answers to complex problems on which policies can be based (see Weiss, 1977; Nowotny et al., 2001; Collins & Evans, 2007).

2.4.2   Response Type II: counterexpertise

Information gathering and the involvement of experts often do not live up to the expectation of complexity reduction. Expert knowledge and research outcomes may be embraced by the party that invited the experts and commissioned the research, but other stakeholders will not necessarily accept this information. They may respond by seeking their own experts and initiating their own research. This is the second type of response to complexity that frequently occurs: initiatives to produce counterexpertise. Parties seek expertise and research results that support their own problem perceptions. The shortcomings perceived in the research of others motivate them to try to do better themselves and to convince other parties with the information and knowledge that they produce.

2.4.3   Outcomes of Type I and Type II responses: report rains and dialogues of the deaf

From a democratic point of view, Type II responses to complexity are not necessarily problematic. The various knowledge contributions to the debate may enrich the substantive arguments. As deliberation is seen as an important characteristic of democracy, claims to truth are not supposed to be grounded solely on the knowledge monopoly of, for instance, research institutes funded

by the government. Rather, knowledge claims should be challenged by countervailing forces in a dialectical process that can result in informed decisions. Science and democracy, then, go hand in hand (Habermas, 1981; Dryzek, 2000; in't Veld, 2010).

In practice though, parties are not always focused on dialogue and truth finding, but on winning. They may use research and its findings as ammunition in the struggle for power (see Oreskes & Conway, 2010; Sharman & Perkins, 2017). They may shop around to find experts who will support their standpoints, engage in cherry-picking by presenting only those research find ings that fit their position, and use research to discredit undesirable solutions. Research and policy analysis then acquire the function of policy advocacy: activities aimed at selectively gathering evidence for the support of a particular policy or class of policies, or for weakening the support for others. Research questions and strategies may be commissioned by one of the stakeholders and the resultant findings then used as ammunition in an argumentation battle within the network (Sabatier & Jenkins-Smith, 1993; Koppenjan & Klijn, 2004; Parkhurst, 2017). Consequently, the disagreement over knowledge and truth escalates. In response to counterexpertise, the commissioner of the initial research may decide to undertake more research in the hope of refuting the critique of its earlier findings. Other actors may decide to become involved in this struggle for knowledge and truth. The result is a knowledge conflict in which parties fire reports at one another, creating a report rain that results in information overload and making it increasingly difficult to determine what is true. In recent decades, this pattern has been strengthened by the rise of social media. Social media provide stakeholders with the opportunity to express all kinds of opinions and suspicions that obscure what is known. Conspiracy theories of complot thinkers and the rise of Artificial Intelligence and deepfake make it increasingly difficult to be certain about facts and truth (Nichols, 2017; O'Connor & Weatherall, 2019; Schick, 2020). Box 2.3 presents an example of knowledge conflicts.

BOX 2.3   KNOWLEDGE CONTROVERSIES REGARDING CLIMATE CHANGE

In the development of public policy, knowledge and information often play a pivotal role. This is also the case for policies addressing climate change. Knowledge on climate change and climate sciences is thus closely linked to climate policy and is supposed to provide a factual basis for action on climate (Sarewitz, 2011). However, our knowledge on this topic is far from complete, nor do we agree on 'the facts'. There are quite some uncertainties and knowledge conflicts regarding climate change. We still face significant uncertainty over climate change and its impact. We do not know how much CO_2 will be emitted

and how much the temperatures will rise as a result. We are not sure about the precise consequences of rising temperatures, nor do we know to what degree proposed measures will be able to stop or limit global warming (e.g., Pindyck, 2021). Policy measures to address climate change touch on complex causal mechanisms, and not all are fully known (Berry et al., 2016).

The knowledge conflicts regarding climate change and global warming matter as regards policy design and implementation. Knowledge might be controversial and can become political in nature. The question then is about whose evidence, arguments, and knowledge are influential. In their study, Sharman and Perkins (2017) show how knowledge conflicts might influence decision making on climate policy implementation. They compare the role of knowledge conflicts on climate change and global warming in climate policies in New Zealand and the UK. In both countries, knowledge conflicts existed, but in New Zealand the arguments used to justify certain policies were based on largely uncontested knowledge. In contrast, knowledge controversy hindered policy implementation in the UK because actors who were sceptical about the presented scientific knowledge on this topic had a direct influence on decision making. Their perspective was clearly presented in the media, entered the political debate, and hindered the implementation of climate action (Sharman & Perkins, 2017).

In these struggles over knowledge, conflicting research findings often do not lead to a substantive debate among actors. As a result, there is no knowledge sharing, learning, or alignment of insights. Complexity and confusion only increase. One of the risks of these knowledge conflicts is that not all parties have equal opportunity to access or assess information. Experts, policymakers, institutionalised interest groups, and the media are the most influential actors. Weakly organised interest groups are not always heard. Politicians and citizens are flooded with information overload and an array of interpretations. Actors may succeed in preventing facts about a problem situation from being revealed. Notorious examples include strategies of the tobacco, pharmaceutical, and fossil fuel industries, which, although aware of the negative impacts of their activities, for decades financed scientific research to produce findings that suggest the opposite in order to influence public opinion and undermine the formation of a scientific consensus (Oreskes & Conway, 2010). Other authors point to alarming stories about scientific results showing major environmental or security threats, spread by pressure groups and governments, that are then broadly discussed in the media but prove ultimately to be untenable. The background to this pattern is organisations' interest in spreading this information; that is, to stay in business (Wildavsky, 1995; Patterson et al., 2021).

An even more far-reaching risk of these responses to substantive complexity is that it will result in a flight from rationalism. It may be that politicians and policymakers accept the idea that solving problems is essentially political in nature, implying that expertise and scientific knowledge cannot and should not play a role. This may result in decisions and policies without solid substantive foundation or in compromises that cannot hold in light of available scientific knowledge – the production of negotiated nonsense (de Bruijn et al., 2010; Fischer, 2019).

2.4.4   *Divergence and frames in knowledge production*

The expectation that scientific research will lead to clear outcomes and tame complexity is often not borne out in practice. Obviously, each research effort is limited in its design and execution. Choices are made about delineating the subject, the research question, the theoretical starting points, concept definitions, indicators, measurement and analytical methods, and interpretations of data. No matter how solid the arguments for these choices may be, they are always arbitrary to some degree. Frequently, scientists disagree about matters of delineation, assumptions about indicators, methods, or interpretations.

The famous political scientist Wildavsky (1987) stated that the mission of policy analysis is 'to speak truth to power'. However, to expect that science speaks truth to those in power is too simple. Uncertainty and debate are essential characteristics of scientific practices, and scientists do not always agree. This implies that they do not always have conclusive answers to solve substantive complexities (Nowotny et al., 2001; Polanyi, 2009; Sarewitz, 2017). Moreover, in contrast to expectations, research is not value free. Research decisions are influenced by hierarchical relations, financial considerations, and ideologically inspired beliefs. Research questions are prompted by perceptions about what is relevant. The scientific domain is not isolated from societal conflict and dominant perceptions of problems within networks and society. The relationship between knowledge production and policymaking is better seen as a two-way street: not only does scientific research aim to influence policy, but also, at the same time, policy practice influences science (Collins & Evans, 2007; in't Veld, 2010). These insights underline that research outcomes and experts' advice will not and should not automatically be accepted as authoritative in debates regarding complex problems in governance networks.

2.4.5   *Towards a Type III response*

From the patterns distinguished above, we can conclude that research commissioned by one of the stakeholders is not necessarily authoritative or

acceptable for other actors and often adds to, rather than reduces, substantive complexity. Type I and Type II responses are not suited to dealing with substantive complexity. A *Type III response* is needed. Information gathering, expertise, and scientific research can play a role in addressing substantive complexity, but only if the actors involved are aware of the variety of problem perceptions. Experts and scientific knowledge have to gain authoritativeness within networks in which actors interact. This requires a rethinking of how the role of experts and knowledge should be organised in processes of problem solving, policymaking, and service delivery within governance networks (Hess & Ostrom, 2006; Steel et al., 2017; Head, 2022).

2.5 Media attention and substantive complexity

We have so far highlighted two important causes of substantive complexity: actors' differences in perceptions and the role of knowledge. Given these two causes, we also need to address the role of the media and increasing mediatisation. This development has important consequences for the way in which societal problems are perceived, discussed, and handled (Cobb & Elder, 1983; Bennett, 2016).

First, media attention is crucial for focusing attention on problem perceptions and how they are framed. This chapter has already highlighted that policy problems can be framed in certain ways and consequently bias how they are perceived. Media are an extremely important channel through which problems are framed and through which actors can achieve wider reach (and recognition) of their policy framing (Cobb & Elder, 1983; Baumgartner & Jones, 2009). Moreover, both traditional media and social media choose frames themselves. They are not a neutral medium of the message.

The literature on mediatisation argues that media, as an institution, use specific rules when bringing the news. The most important rules relate to journalistic professionalism (e.g., separating news from opinion, use of multiple sources, hearing both sides) and to the commercial viability of the news outlet (e.g., number of viewers or followers). Mediatisation literature argues that commercial rules have become more dominant. This leads to biases to keep the news attractive and reach a large public (newsworthiness) (see Mazzoleni & Schultz, 1999; Hjarvard, 2008; Landerer, 2013; Bennett, 2016). To attract more attention, media frame news messages in a specific way. Bennett (2016) mentions that media tend to:

- Dramatise news; they tend to focus on drama and conflicts (Baumgartner & Jones, 2009, p. 104) and in general over-emphasise negative elements in news items.
- Personalise news items; media tend to focus on personal traits and storylines of individuals involved in the news.

- Use fragmentation; media tend to focus on isolated events rather than on the background and context of events.
- Use authority–disorder bias; media not only tend to present news as a game between two opposing parties, but also tend to focus on the authority–disorder bias. This means that media present events as a violation of order and emphasise authorities' (in)competence to restore order.

As a result of these biases, news is often presented in a personalised and dramatised way. It offers quick and simple readings without explaining the often difficult and complex background of governance processes. This trend is even more prominent in social media than in traditional media, partly because social media outlets do not adhere to the professional codes that traditional media usually respect. Gossip channels providing gossip about celebrities and political figures are an extreme example. Their prime target is to attract as many people as possible. Sometimes, this also holds for bloggers, as more viewers or visitors mean more potential gains from advertising (Bennett, 2016). The number of followers, views, or likes is directly linked to the profitability of the outlet. These developments in the media landscape have several consequences for knowledge production in general and for discussions about problems and solutions in networks specifically (see Hajer, 2009; Bennett, 2016; Persily & Tucker, 2020), entailing several consequences for the substance of network governance processes.

1 First, it contributes to simplifying complex social problems and their solutions. This limits the possibility to have an informed discussion about them. The complexity of issues is less well represented in the media anyhow, because the media's format rules require posts to be short, repetitive, and easy to understand (see Bennett, 2016). So, this fosters relatively simple incomplete, over more encompassing complex, views on social problems (see also Edelman, 1988). As complicated dimensions and contexts are hardly discussed in media, adequate analysis and sophisticated solutions have less chance to emerge and receive support.
2 Second, as media tend to emphasise negative news and focus on conflicts, an antagonistic image is presented of social problems, involved actors' interests, and possible available solutions (Edelman, 1988; Bennett, 2016). Media use conflict frames and report on actors' behaviour in such a way that it draws more attention (Baumgartner & Jones, 2009; Bennett, 2016). This stimulates actors in the network to communicate their unique and strong interest position rather than voice compromises or advocate consensus solutions, thus making it more difficult to reach compromises and win–win situations (Esser & Strömbäck, 2014). Unsurprisingly, (scarce) research finds a negative relation between media attention and governance network performance (Klijn & Korthagen, 2018).

So, media attention tends to simplify the conceptualisation of social problems and enhance conflict. The recent emergence of fake news and conspiracy theories tends to enforce this, as this type of news emphasises conflict and antagonistic positions and leads to increasing ideological segregation (see González-Bailón et al., 2023).

2.6   Conclusion: dealing with substantive complexity

In this chapter, we have argued that substantive complexity results from the fact that, within a problem situation, various actors are involved. These actors have diverging and sometimes conflicting perceptions of the problem. Given these perceptions, they will judge knowledge and information differently. When parties consider insufficiently the fact that they have different perceptions, knowledge conflicts and asymmetrical debates are the result.

Information gathering, the use of experts, and conducting research then prove to be counterproductive: the variety of interpretations and the impasse between parties is strengthened rather than reduced. The tendency of media to dramatise events and ignore the complexity of issues might put pressure on actors to take a stand rather than to search for compromises.

Substantive complexity requires a different response. It requires clarification, reflection, and communication on relevant parties' various problem perceptions and on the assumptions and values that underlie these. It requires a search for a joint understanding of what the problem situation is about. Only when parties are aware of the existence of different perceptions and values is it possible to discover common ground on which decisions can be taken to deal with the problem situation. Rein and Schön (1992, p. 150) speak of a 'frame-reflective discourse': 'a policy discourse in which participants want to reflect on the frame conflicts implicit in their controversy and explore the potentials for their resolution'. This, however, does not necessarily mean that all parties must agree on a joint problem perception and that consensus is required. Often, this proves to be difficult or even impossible. Actors may not be willing or able to reflect upon their perceptions. In those cases, the challenge is to arrive at joint actions despite differences and despite the persistence of substantive complexity. A first step in dealing with this challenge is to gain knowledge of the various perceptions that exist within a problem situation. There needs to be awareness that problems can be perceived in various ways. When actors become stuck in dialogues of the deaf, insights into the debate's argumentation structure are important. As far as the involvement of experts and the role of research are concerned, these need to be organised in such a way that knowledge becomes meaningful and authoritative in the debate. In Chapter 5, we further elaborate on the way in which substantive complexity in governance networks can be dealt with.

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3

STRATEGIC COMPLEXITY IN GOVERNANCE NETWORKS

Strategic interactions of actors in processes

3.1 Strategic complexity in governance networks: introduction

Complexity in governance networks is not caused only by diverging or conflicting perceptions of the nature of problems addressed, that is, substantive complexity (as elaborated in Chapter 2). It also stems from strategic complexity: the evolving interaction process among the actors involved in public policymaking and implementation and public service delivery (Allison & Zelikow, 1999; Koppenjan & Klijn, 2004; Kingdon, 2011; Howlett et al., 2017). Strategic complexity results from the presence of multiple autonomous yet interdependent parties – each with their own perceptions, objectives, and strategies. These actors' behaviour with regard to problems and solutions results in erratic interaction processes that evolve in often unpredictable ways. Furthermore, actors make decisions in multiple arenas. Although not all actors have access to every arena, decisions made within these arenas can still impact them, as these decisions influence the overall interaction process (Ostrom, 1986, 2011; Scharpf, 1997; Sabatier & Weible, 2007; Baumgartner & Jones, 2009). As a result, the process develops in an erratic rather than a linear fashion. There are conflicts and stagnations, outcomes are uncertain, and, above all, parties have difficulties coordinating their strategies (compare Allison & Zelikow, 1999; Huxham & Vangen, 2005; Bryson et al., 2015). Box 3.1 provides an example of strategic complexity.

BOX 3.1   STRATEGIC COMPLEXITY IN AID PROVIDED TO FAMILIES IN MULTI-PROBLEM SITUATIONS

A strong example of strategic complexity in governance networks is the problems that arise from poor coordination between actors providing care to families in multi-problem situations. These are 'families whose life situation is characterized by a plurality of particularly complex problems in various areas of life' (Tausendfreund et al., 2016, p. 4). The problems that they face are an interwoven complex of, for example, parenting problems, financial problems, psychiatric problems, health problems, housing problems, and repeated contact with social authorities or the criminal justice system (Tausendfreund et al., 2016). Families in multi-problem situations often receive support from multiple organisations from different domains, such as social services agencies, mental health services, substance abuse treatment centres, family counselling centres, child welfare organisations, financial aid services, legal aid societies, and housing assistance, educational support, and community-based programmes. These organisations may invest a lot of time, money, and capacity in supporting families in multi-problem situations, but often with limited success (Joosse et al., 2019).

The lack of effectiveness of the aid provided to families in multi-problem situations can be partly explained by the involved care providers' uncoordinated perceptions and strategies. Families that face various problems at the same time deal with an equally diverse array of healthcare workers and other professionals, with different specialisations and perspectives (Bodden & Deković, 2015; Tausendfreund et al., 2016). Moreover, the involved organisations receive budgets for their own specific tasks, and they are typically held accountable only for their performance on those tasks, discouraging them from collaborating across domains (Joosse et al., 2019). This leads to fragmentation in the support given to multi-problem families and to problems in the communication and coordination between professionals (Tausendfreund et al., 2016). This can lead to solutions that address only one aspect of the problem or work only temporarily. For example, financial problems that are resolved in the short term might return in the longer term if the aid recipients' other problems are not tackled as well. Poor coordination and the lack of an integrated approach may thus lead to families in multi-problem situations not receiving the care that they require. Their situation may even worsen as a result of poorly coordinated interventions (Joosse et al., 2019). The lack of an integrated approach also leads to additional stress for multi-problem families because they have to navigate the bureaucratic maze created by the involvement of multiple agencies.

In this chapter, we present core concepts that can be used to analyse strategic complexity, and we discuss mechanisms that clarify how strategic complexity comes about. In Section 3.2, we present the elements that make up interaction processes within networks: actors, dependencies, strategies, and arenas. Section 3.3 details how interactions evolve in rounds with impasses and breakthroughs. Section 3.4 discusses the possible outcomes of interaction processes. Section 3.5 explores the nature of strategic complexity in network processes in greater depth. Section 3.6 provides a summary of this chapter.

3.2 Governance network processes as strategic games: core concepts

In this section, we present the core concepts that we use to describe and analyse governance network processes: actors, their resources, their interdependencies, and their strategies, and the arenas in which actors enact their strategies.

3.2.1 Actors

Within governance network processes, a multitude of autonomous yet interdependent actors are involved in problem solving and public service delivery. Actors can be defined as individuals, informal groups of individuals, organisations (public and semi-public organisations from different layers of government, private organisations, non-governmental organisations (NGOs), interest groups), and groups of organisations that have the status and capacity to autonomously and actively enact strategies aimed at influencing the content, course, and outcomes of social interaction processes (Scharpf, 1997). To put it more simply: actors have the capacity to act. However, this definition is not completely satisfactory. Individuals, groups, or organisations who are currently not active and possibly even absent from arenas of decision making may become active in the future. Furthermore, parties may be affected by problems, (planned) projects, or (proposed) policies without having the chance to participate. Therefore, we use the term actors in more or less the same way as Freeman (1984, p. 46) defined the concept of stakeholders: actors are individuals, groups, and (groups of) organisations that can affect, or that are affected by, problems, projects, or policies (see also Bryson, 2004).

The concept of actor is not as straightforward as it might seem. Even with the help of the above definition, it is not always easy to identify or delineate who within a governance network process is actually acting. For instance, groups or organisations may be internally divided, having bureaus or individuals that act on their own. Governments, for instance, consist of various bureaus, layers, and agencies with specific tasks, objectives, and strategies that are not necessarily aligned and may even contradict one another. In such cases, it is more useful to view disaggregated units as actors in their own right (Allison & Zelikow, 1999; de Bruijn & ten Heuvelhof, 2018).

3.2.2 Resources and dependencies

What links actors in governance networks is that they depend upon one another. This dependency springs from the fact that, in order to make and implement policies, solve a public problem, or deliver a public service, resources are required that are not possessed by any one actor, but are dispersed over various actors. Resources include the whole range of formal and informal means that parties possess in order to achieve their objectives. This may include formal competencies and decision-making powers (authority), not only clearly identifiable resources such as money and/or organisational and personnel capacity, but also less tangible resources such as information, knowledge, strategic capability, and legitimacy. In the literature, various categorisations of resources can be found (Rogers & Whetten, 1982; Koliba et al., 2019). In this book, we distinguish the following categories of resources:

- *Competencies (authority)*: this resource concerns actors' formal/juridical authority to make certain decisions – for instance, the authority of a governmental body to develop or implement a policy regarding immigration, or of a municipality to issue permits for certain activities, or of a policeman to fine or arrest an offender. These resources are typically held by public or semi-public actors. Through outsourcing, certain competencies may be delegated to private organisations (e.g., private providers of public services). In a democratic state governed by the rule of law, citizens, NGOs, and private organisations have rights and obligations that can function as resources.
- *Financial resources*: these resources are the financial means and budgets that actors have available to realise a solution or service and cover the cost of their activities, including the costs related to participating in network processes.
- *Production resources*: these resources relate to the tangible means and tools needed to deal with a problem or realise a solution or service. One can think of owning land in an urban restructuring project or of the ownership of construction equipment and materials in the case of the construction of infrastructure. In the delivery of services, the presence of a building and of an IT system may be important production resources.
- *Information and knowledge*: information and knowledge may concern the nature of the problem at hand or the solutions considered. They may also relate to regulations and laws that apply or to the characteristics, preferences, and strategic strengths of the actors that are needed or affected. Information and knowledge can be available within certain organisations or be in the possession of professionals or experts. Implementation bodies, local NGOs, and citizens may possess unique local information.

Information and knowledge may be of a formal, explicit nature, such that it can be easily exchanged (e.g., information recorded in documents). Information and knowledge can also be implicit and tacit (Polanyi, 2009). This last type of knowledge is difficult to transfer to other actors. Actors must participate in decision-making processes in order to include their implicit knowledge.

- *Strategic capabilities*: strategic capabilities refer to actors' skills to navigate in network processes and to use their resources strategically. Actors' influence is linked not only directly to the resources that they possess, but also to their ability to actually use them. Actors' strategic capabilities are also related to their organising capacity, the number and quality of their relationships with relevant actors (Kapucu & Hu, 2020), and their skills to access and use social media and mass media (Kingdon, 2011; Bennett, 2016). Actors with relatively weak tangible resources but strong strategic capabilities may still be able to exercise important influence on network processes.
- *Legitimacy*: this resource refers to the extent to which an actor's actions and the role that this actor fulfils are considered justified. It also refers to the support experienced by this actor in undertaking his/her activities. Legitimacy can stem from formal sources, such as elections, but it may also stem from more informal sources, such as an actor's reputation and the trust between actors (Huxham & Vangen, 2005; Purdy, 2012).

3.2.3 Interdependencies

Within networks, most actors are dependent upon other actors, implying that they need other actors' resources in order to realise their objectives. Such dependencies can be mutual or unilateral. Also, an interdependency may be asymmetrical if one actor depends more heavily on the other than vice versa. Scharpf (1978) argued that an actor's degree of dependence on other actors is determined by the importance that this actor attaches to resources 'owned' by the others and by the possibility of substituting these resources or acquiring them through other actors. The importance and the substitutability of these resources determine dependency relations (see Table 3.1).

TABLE 3.1 Typology of dependency relations between actors

	Substitutability of the resource	
	High	*Low*
Importance of the resource		
Great	Low dependency	High dependency
Small	Independence	Low dependency

If actor A requires a resource from actor B to achieve actor A's objectives, and if the importance of this resource is high and its substitutability is low, then actor A is highly dependent on actor B. These (inter)dependencies are an important source of power in governance networks. If actors hold resources that are indispensable and hard to substitute, they can refuse to invest their resources in collective processes of problem solving and service delivery and thereby block these processes. In these circumstances, we say that the actor possesses blocking or veto power (see Tsebelis, 1990). This makes interaction processes within networks vulnerable: they can easily be blocked by a few actors, whereas realising a joint solution requires the collaboration of many.

Veto power is an important characteristic of governance networks and creates their relatively horizontal character. None of the actors can force his/her will upon the others. It is exactly because of this veto power that the European Union (EU) operates not as an organisation but as a network of interdependent member states. Within the EU, the member states' veto power makes it difficult to arrive at effective and efficient decision making and joint action, thereby inhibiting the possibilities to develop joint policies and address problems like migration and climate change.

As the resources that give rise to interdependencies are dispersed across actors, power relationships are rarely purely hierarchical in nature. Despite their formal hierarchical position, governments depend on the commitment of resources by others to achieve their objectives. Hierarchical steering and command and control have limited effects in governance networks, because actors usually cannot be forced to commit their resources but rather have to be persuaded to do so. As a result, relationships within networks are more or less horizontal in nature: actors need to exchange resources and negotiate and coordinate their strategies in order to be able to accomplish their objectives and to function in a stable and sustainable way (Kickert et al., 1997; Rhodes, 1997).

This, however, does not mean that power differences in governance networks do not exist. These still arise as a result of asymmetries in dependencies and the possession of resources. Power inequalities also arise from the fact that access to some resources may be exclusive to certain types of actors. For example, compared with citizens and community groups, large companies typically have a lot more finance, personnel, knowledge, and relations. Moreover, some decision-making competencies are available only to governmental actors (Purdy, 2012; Kapucu & Hu, 2020). The fact that governments have exclusive access to certain competencies is one of the reasons why governments often still have a special role to play in governance processes, and thus why the rise of governance networks does not necessarily lead to a hollowing out of the state (Peters & Pierre, 1998; Milward & Provan, 2000). Power inequalities are therefore an important characteristic of network processes,

as various authors have emphasised (Sørensen & Torfing, 2007; Ansell & Gash, 2008; Bryson et al., 2015; Emerson & Nabatchi, 2015).

3.2.4   Strategies

Strategic interaction processes emerge when actors recognise that they depend on others for the realisation of their objectives. They develop strategies to influence other actors in an attempt to achieve their objectives. Various definitions and conceptualisations of strategies exist (compare Mintzberg & Quin, 1988; Allison & Zelikow, 1999; Axelrod, 2006; Sabatier & Weible, 2007; Bryson & George, 2024). Here, we define *strategies* as *series of actions or intentions for actions by actors involving the use or the withholding of their resources in interaction processes in order to accomplish their objectives.*

Actors are not necessarily open or honest about their strategies. Even if they formulate objectives and intended actions in publicly accessible documents, these stated objectives may not reflect the actual strategies that they deploy. Stated objectives may even be part of a strategy to mislead other actors. Therefore, it is not always easy to reconstruct actors' strategies. The most reliable indicators of actors' strategies are actors' actual behaviours in governance network processes. Strategies may reveal themselves as repetitive patterns in what actors actually say and do over time.

As the above definition indicates, strategies consist of objectives (the what) and actions to accomplish these objectives (the how). We first elaborate the relationship between strategies and objectives.

Actors' strategies are informed by their perceptions: the beliefs, images, and opinions that they have of themselves, their environment (see Chapter 2), the problems and opportunities at hand, the other actors involved, and (inter)dependencies. The objectives that actors pursue through their strategies are concrete translations of (some of) these perceptions (see Figure 3.1). Objectives are concrete results or outcomes that actors want to achieve (Keeney, 2009). They are more concrete and operational than the perceptions from which they are translated. In the translation to objectives, actors typically need to make choices and prioritise. For example, a water board in an agricultural area may have the problem perception that the water quality in the ditches around agricultural fields is poor. In choosing objectives,
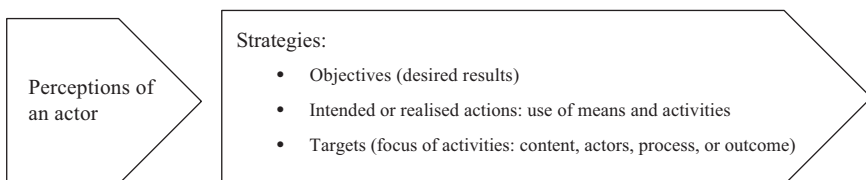

FIGURE 3.1   Strategies as goal–means combinations based on perceptions.

water boards may decide to give priority to reducing the use of pesticides and herbicides instead of reducing the pollution of surface water by heavy metals, despite the fact that both can be considered environmental problems. Thus, actors' perceptions are not perfect predictors of the concrete objectives that actors formulate.

Besides objectives, strategies consist of actions and intended actions, which specify *how* actors want to accomplish their substantive goals. We can distinguish between three broad categories of strategies. Strategies may include objectives and actions aimed at influencing (1) the content of the network process and its outcomes, (2) other participating actors, and (3) the way in which the process evolves.

The first type of strategy is aimed at influencing the substance of interactions in a favourable direction. These strategies can include promoting specific problem definitions or perspectives, drawing attention to particular issues, rallying support around preferred solutions, and contributing to the creation of innovative responses. Stakeholders may also strive to elevate certain values over others, discredit or marginalise alternative viewpoints, and more. Such activities are largely encapsulated in the concept of framing, as discussed in the seminal works of Cobb and Elder (1983), Kingdon (2011), and Rein and Schön (1996), with further advancements explored in Chapter 2.

A second type of strategy for stakeholders is to establish their stance in relation to other actors. At one end of the spectrum, actors may decide to completely ignore other actors and attempt to realise a solution by themselves or to impose their own solutions on others. Such strategies are likely to be adopted by actors who perceive their dependencies on others to be low (Koppenjan & Klijn, 2004). Conversely, when actors perceive a high degree of dependency on others, they are more likely to seek collaboration in order to realise joint solutions (Ansell & Gash, 2008).

Another, similar strategy is to form coalitions in order to develop a common voice and thereby have a stronger standing in their interactions with others (Sabatier & Jenkins-Smith, 1993). When actors perceive the activities of others as clashing with their interests, they may seek confrontation with those actors. They may attempt to block the solutions that those actors propose or attempt to block them from participating in interactions altogether (Schelling, 1980).

Some actors may avoid becoming involved in interactions, for example, because they perceive the issues at hand to be of low marginal interest to them. However, if others deem the resources of these actors essential, they may try to convince them of the benefits of participation (Kickert et al., 1997; Sørensen & Torfing, 2007; O'Leary & Vij, 2012; Bryson & George, 2024). It is also possible for actors to decide not to participate, but leave it to others to come up with solutions, as they expect to be able to benefit from these solutions without having to invest their own resources. This kind of opportunistic

behaviour is known as free riding (see, e.g., Olson, 1965; Williamson, 1996; Ostrom, 2011; de Bruijn & ten Heuvelhof, 2018). Finally, it is possible for actors to delay their investment in solutions until it is certain that the solutions can actually be realised (wait and see) or only cooperate until they have achieved their own goals (hit and run).

A third type of strategy available for actors within network processes is to exert control over the tempo and progression of the interaction process itself. Actors may attempt to decelerate or entirely halt the process, particularly when it seems to be veering towards an outcome that may be detrimental to their interests. To achieve this, they might deploy strategies such as obstructing decision making or advocating for postponements. They could argue for the necessity of extended deliberation or call for more comprehensive research, thereby introducing delays that serve their strategic purposes. Other actors may try to speed up decision making, for instance to nail down the support for a favourable outcome that exists at a particular juncture.

These types of strategies are not mutually exclusive and may be combined. In deploying strategies in order to accomplish objectives, actors use resources and instruments. As indicated earlier, these resources may be money, organisation, personnel, authority, legitimacy, strategic capability, mobilisation power, among others. Instruments may refer to regulative, economic, or communicative instruments (Hood, 1983; Howlett, 2009). Regulative instruments may include (the call for) legislation or the use of contracts. Economic instruments may imply the granting of subsidies or imposing fines. Communicative instruments may include the use of (social) media or the publication of reports or white papers.

3.2.5   *How rational are strategies?*

Ideally, strategies are developed and deployed in a coherent way. Actions are supposed to support the achievement of the objectives and to reinforce one another. Of course, in practice strategies may fall short in this respect in the way in which they are both conceived and implemented. Given time pressure and information shortages, strategic choices are made under conditions of bounded rationality (Simon, 1955; Lindblom, 1959). Moreover, actors often simultaneously pursue multiple objectives that are not necessarily aligned and even may be contradictory. As a result, they may have an ambiguous strategy towards a proposal or solution.

Furthermore, we consider actors not to be purely rational actors who base their decisions solely on calculations. Their behaviour is also shaped by perceptions, rules, considerations regarding appropriateness, and by non-rational elements such as sympathies, antipathies, passions, loyalties, and rules (Crozier & Friedberg 1980; Lowndes & Roberts, 2013; Neumann, 2017; Cristofaro et al., 2023). This means that not all strategies are planned and well

thought through, but, even when well planned, given the uncertainty of the strategic answers of others, the success of strategies is not guaranteed (Mintzberg & Quin, 1988; Bryson & George, 2024).

3.2.6 The dynamics of strategies

During interaction processes, actors do not stick to just one strategy. They are reflective, see or anticipate the strategic moves of others, learn what other actors are after, and, on the basis of those insights, they may adapt their own strategies and perhaps even their goals and perceptions. Although perceptions and – to a lesser extent – objectives in general are very stable and hard to influence, over time they may change gradually or abruptly, for instance under the influence of invasive or threatening events in the environment (Cobb & Elder, 1983; Mintzberg & Quin, 1988; Baumgartner & Jones, 2009; Kingdon, 2011). For example, Russia's invasion of Ukraine in 2022 dramatically changed perceptions of the international security situation in Europe, the necessity for investments in military defence capacity at both national and international levels, and the role of institutes like the EU and NATO. As a result, objectives and strategies were adapted. So, during interaction processes, strategies are reconsidered and adapted or new strategies may emerge. Box 3.2 illustrates strategies and the complexities that arise from them.

BOX 3.2   STRATEGIES IN THE CASE OF LITHIUM MINING IN PORTUGAL

Under the green transition banner, the race for critical minerals like lithium, cobalt, and nickel has accelerated around the world, as these materials are needed for the production of, among other things, batteries to power electric cars. The pressure to realise climate goals boosts the demand for these materials and increases countries' dependency on China, which has major deposits of many of these minerals within its borders. To reduce this dependency, many countries seek extraction sites for the minerals within their own region. In Europe, the EU has set a target of sourcing at least 10 per cent of Europe's raw materials from local suppliers.

In the mountainous Barroso region in northeast Portugal, Savannah Resources, a UK mining company, aims to develop Western Europe's largest open-pit lithium mine. Barroso borders the Peneda-Gerês National Park, and Barroso itself is recognised by the Food and Agriculture Organisation as a globally important agricultural heritage system of outstanding landscapes. Local communities are resisting the mining plan for fear of damage to living conditions and the environment. Similar resistance against new mining initiatives to

satisfy the demand for critical minerals is occurring in other countries, such as Sweden, Serbia, and Bosnia.

In the village of Covas do Barroso, residents have developed various strategies to resist the mining activities. They have started a legal procedure against the mining company, as the mines are located largely on the communities' common grounds, the *baldios*. They also organise protest meetings. As the mining company has already started preparatory activities, the residents are considering ways to hinder these activities, for instance by putting up roadblocks. In addition, they are seeking media attention to make their concerns public and put pressure on the government to reconsider Savannah's permit to develop the mine.

However, the Portuguese government sees the development of the mine as an extraordinary opportunity to contribute to the EU's ambitions. What is more, lithium would contribute €1 billion to Portugal's GDP each year. After an environmental impact assessment and a competitive tendering procedure, Savannah was granted the concession for the mining in 2017. Savannah will produce enough lithium for 500,000 electric cars on an annual basis over a period of 14 years.

The Boticas municipality, which includes Covas do Barroso, has also filed a lawsuit to fight the permit given to Savannah. The region produces Barroso honey and Barroso meat and fears that the Barroso mine will threaten tourism and the sale of local products. Moreover, in November 2023 a corruption scandal came to light that involved the director of the national environmental agency that approved the mine's environmental impact assessment. In response to this scandal, the prime minister António Casta resigned. The mayor of Boticas argued that this shows that the permit procedure was not transparent. He has also stated that sufficient substantive reasons exist to have the permit revoked. The mines are located too close to villages for instance.

The Savannah mining company has not awaited the verdict of the lawsuits but has already started preparatory activities in the areas that are not part of the common grounds. It has also bought land from private owners. The company's CEO acknowledges that, until recently, the company has not successfully communicated the positive story about the mines. The company will therefore improve its communication to detail the many measures being taken by it to minimise environmental impacts and to say that the mining activities will bring jobs and prosperity to the region.

The conflicting interests, perceptions, and strategies of the various parties involved make the lithium mining in Barroso a highly controversial activity, characterised by a high level of strategic complexity. As a result, the personal, societal, and financial costs of this conflict are high and the question arises as to whether and how the risks and detriments can be mitigated and contradictory interests reconciled.

3.2.7   Arenas: places where actors enact their strategies

Within governance network processes, actors enact their strategies in one or more arenas. An arena is a specific place or institutional setting where a specific set of actors meets and interacts (Allison & Zelikow, 1999; Koppenjan & Klijn, 2004; O'Leary & Vij, 2012; Purdy, 2012; Bryson et al., 2015; Emerson & Nabatchi, 2015). Arenas may be formal decision-making bodies, like municipal or provincial councils, parliaments, boards of public or private organisations, or management and project teams. They may also be informal settings or platforms like ad hoc gatherings, community initiatives, expert meetings, and informal lobbies, or virtual settings like debates and comments in social media (Ansell & Gash, 2018).

As networks cover a wide set of actors, dispersed over various levels of government and policy areas, interactions within a process may unfold simultaneously in different arenas. For instance, in decision making on airport expansion, issues such as transport, economy, employment, planning and zoning, noise, safety, and so forth play a role. Consequently, decisions about the future of airports are made in the context of various types of policies in multiple arenas and at multiple government levels. Most actors participate in only some of these arenas and generally do not have access to all of them. Certain actors (or interests) may not be represented in any arena at all (Cohen et al., 1976, p. 25; Richardson, 2000). The arena concept is further discussed in Box 3.3 in relation to the Dalian PX protest in China.

BOX 3.3   ARENAS IN THE CASE OF THE DALIAN PX PROTEST IN CHINA

Dalian is an international port city in northeast China with over 6 million inhabitants. In 2005, Chinese central government approved the Dalian municipality's initiative to construct a PX plant in its port area, 20 kilometres northeast of the city centre. PX is used as a basic raw material in the manufacture of polyesters, used for fibres (textile) and films. Although Chinese experts say that it is only moderately toxic, on the internet speculations can be found about cancer and damage to the immune system. Inspired by a large protest in June 2007 against the intention to site a PX plant in Xiamen, Dalian citizens began to worry about the construction of the PX plant in Dalian. The municipal bureaus responsible for the project did not respond to the citizens' concerns about the toxicity of PX. In 2010 and 2011, explosions occurred in the Dalian port area, causing public panic. In 2011, Typhoon Muifa struck Dalian and breached one of the PX plant's protective dykes. Rumours spread on social media. No official communication with citizens followed. Some days later, a message on social

media mobilised 12,000 protesters in the city centre, demanding the operation of the plant to be halted and the plant to be relocated. The new governor, only a few months in office, promised in face-to-face conversations with protestors to do so. Two days later, the Dalian municipality confirmed this decision. Then, the word PX was blocked from the internet. In December 2012, the Dalian municipality approved the resumption of production at the PX plant and also initiated a meeting with experts to discuss reallocation options. In July 2013, the reallocation plan was still on the table, but an observer stated that the decision was being prolonged in order to shift the responsibility to future officials.

This overview of events shows that interactions evolved in various arenas, contributing to the fragmented and erratic nature of the process. Decisions on the plant's construction were taken in specific arenas within the Dalian government, responsible for the economic development and operation of the port. At the national level, an arena existed in which proposals were assessed and policies made. Citizens did not have access to these arenas and had no opportunities to be involved. However, the arenas in which the governor communicated with citizens after the protest and the arenas in which the city council decided upon the promises made were apparently loosely coupled to the arenas in which decisions on the port were taken. This may explain why the municipality made promises that other municipal officials considered too costly to implement. The case also shows the role of the virtual arena of social media, of which governmental officials seemed to have been unaware. By not responding to citizens' questions, they did not enter this virtual arena, thus providing citizens with a place in which they could freely express their concerns. This resulted in a build-up of tension and the emergence of a situation in which an anonymous call resulted in the spontaneous mobilisation of protesters. This protest came as a strategic surprise to the government officials, who saw no other way than to make far-reaching concessions in order to regain control (Liu et al., 2016; compare Bekkers et al., 2011, on virtual arenas and strategic surprises in Western countries).

3.3   The evolution of governance network processes: rounds with impasses and breakthroughs

When the perceptions and strategies of parties involved in a network process are more similar, then realising a solution may not be that difficult. However, most often actors find themselves in a complex negotiation process: a process with actors who have different or even conflicting perceptions and whose strategies are unpredictable and not necessarily aimed at collaboration (O'Leary & Vij, 2012; Purdy, 2012).

Interaction processes within governance networks therefore often have a prolonged nature, during which a series of successive decisions regarding a

public problem or service are discussed. Just as there is no single decision maker in governance networks, there is no single or central decision. Moreover, interaction processes in networks do not evolve in a linear way, going through a set of sequential logical phases, from problem definition, to setting goals, to developing solutions, to taking and implementing decisions, to evaluating policies (compare Cohen et al., 1972; Kingdon, 2011; Howlett et al., 2017). Instead, they are characterised by strategic moves through which actors respond to one another, potentially causing unexpected effects on interactions and outcomes. This erratic and dynamic nature of interaction processes is difficult to conceptualise. One way of doing this is by analysing interaction processes as a sequence of rounds (Langley, 1999; Teisman, 2000; Koppenjan & Klijn, 2004). Each round starts with an initiative by one of the parties or another event that activates affected actors. What follows is that, in an unclear or conflictual situation, actors make their initial strategic moves and deliberate about what is to be done. Then, through a series of steps in which actors deploy their strategies, actors search for ways to move forward and find a joint solution.

This process is not without difficulties. The evolution and outcomes of interaction processes within rounds are dependent upon the mix of strategies that actors deploy, often in multiple arenas (Scharpf, 1997; Axelrod, 2006). As a result of what happens in the process, actors may be unwilling to invest in the process (or may use their veto or blocking power), causing the process to stagnate or become blocked. These impasses may even lead to the termination of the interaction process altogether (Huxham & Vangen, 2005; O'Leary & Vij, 2012; Bryson & George, 2024). However, it is also possible for actors to be able to adapt their strategies in such a way that they achieve breakthroughs, settling their differences and moving towards collaboration (Ostrom, 1990; Koppenjan & Klijn, 2004; Fuller, 2011).

A round ends with a crucial decision: a decision that changes the course of events, the constellation of actors, the content of the process, or all three of these characteristics. Issues that were salient in the previous round can be (partly) resolved, but it is also possible that these issues are no longer considered relevant and new issues emerge. The shift towards another round can be accompanied by a redefinition of the original problem and a transposition of actors' strategic positions and objectives, so that the scope for solutions is changed. The process then assumes a new direction that is difficult to predict in advance.

The process in the next round does not always take a completely new course. Because of actors' investments, commitments, and promises, path dependencies can emerge (Pierson, 2000; Howlett, 2009; Lowndes & Roberts, 2013). Path dependencies capture the idea that decisions that were previously made cannot be easily reversed, for example, because such a reversal entails prohibitive financial, technical, social, and/or political costs

(Gerrits & Marks, 2008). If these costs prevent actors from moving in a new direction, even if they desire to do so, we speak of lock-in. These concepts thus capture the idea that earlier rounds constrain the space within which further solutions can be sought in the following rounds.

However, a significant change in the course of the interaction process can certainly occur, for example, as a result of major changes in the societal, economic, and/or political environment of the interaction process. Examples of such major changes include changes in the political atmosphere and government transitions, economic fluctuations, the advent of new technologies, and the catalytic impact of focusing events such as landmark reports, public mobilisations, or unforeseen incidents and catastrophes. In addition to such major developments, significant changes can result from, for example, a sudden increase in media attention on the issues being debated. These developments can cause significant changes in the group of actors involved in an interaction process, and in the nature of perceptions, objectives, and strategies. Earlier decisions may be repealed, and the interaction process may be aborted or taken in an entirely different direction (compare Baumgartner & Jones, 2009; Kingdon, 2011). When this happens, the new round that follows constitutes a 'whole new ball game'.

This shifting back and forth between impasses and breakthroughs in various rounds under changing circumstances gives the interaction process an erratic appearance. Figure 3.2 visualises this erratic nature of interaction processes, made up of the enactment of strategies in arenas, moving through different rounds. The vertical axis represents the development of the content of plans; the horizontal axis, the development over time. The direction of the arrows indicates the degree to which the process fluctuates substantively. The concept of rounds is exemplified in Box 3.4 by the case of the extension of Amsterdam Airport Schiphol.
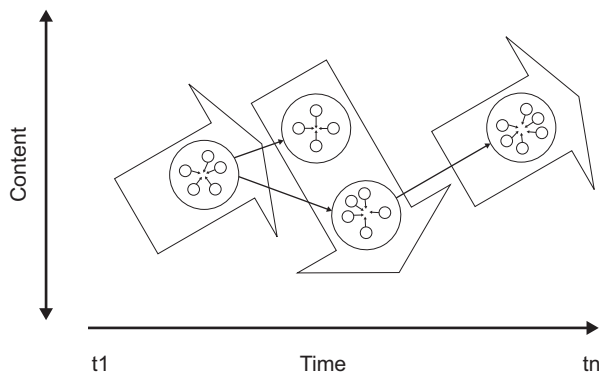
FIGURE 3.2 Rounds in decision making.

Source: Adapted from Koppenjan and Klijn (2004).

BOX 3.4   ROUNDS IN THE DECISION MAKING ON THE EXTENSION OF AMSTERDAM AIRPORT SCHIPHOL

In the Netherlands, since 1988, a policymaking process has unfolded, aimed at combining the growth of Amsterdam Airport Schiphol with the realisation of environmental objectives, such as reducing noise nuisance. Traditionally, decisions on the airport's development were taken by the airport's owners, the publicly owned Schiphol Group, and the Ministry of Transportation. In a number of sequential rounds, a shifting set of actors interacted to realise policy outcomes.

Round one: 1988–1995

This round started with the central government's crucial decision to use an innovative participatory method to develop measures to accommodate the further growth of Schiphol. Schiphol, the Ministry of Transport, the Ministry of Housing, Spatial Planning, and the Environment, and local and regional governments negotiated a growth scenario and developed a new model for calculating noise impacts and a zoning scheme that specified the number of houses allowed near Schiphol. They also agreed on subsidies for the insulation of houses. Critics from non-participating environmental groups were sidelined. In response, in April 1994, the environmental groups bought a strategically situated piece of land (to plant a forest, the *Bulderbos* – the roaring forest). This acquisition rendered Schiphol dependent on lengthy expropriation procedures. The round ended in 1995 when Parliament approved the expansion plans (the crucial decision), thus allowing growth and the construction of a fifth runway.

Round two: 1996–2004

The second round started when residents and environmental groups initiated legal proceedings because Schiphol exceeded the agreed-upon noise limits in 1997 and 1998. In 1998, the Ministry of Transportation initiated the TOPS platform (temporary consultation platform Schiphol). Environmental groups, Schiphol, and the ministry were asked to draft an advice on how to accommodate a yearly increase of 20,000 flights and on how to regulate noise nuisance. The debate in TOPS was blocked, but Schiphol and the ministry negotiated the new regulatory system bilaterally. By deciding not to codify the new regulatory system through normal spatial legislation, but to draft a special Schiphol law, they reduced the possibilities for appeal. In July 2002, this law was ratified by Parliament (the crucial decision).

Round three: 2006–2008

The third round started in a situation of low trust. Like in 1999, the noise limits prescribed in the new law were exceeded in 2006 and 2007. In 2006, the government installed a working group in which Schiphol, the airline company KLM, several ministries, regional and local governments, and residents' platforms participated. The environmental groups did not participate. The assignment of this Alders Table, named after the independent chairman Hans Alders, was to revise the existing noise regulation system. Schiphol formulated five growth scenarios for further examination. The preferred scenario anticipated a growth to 600,000 flights a year in 2020. Residents resisted this prospect and formulated a sixth alternative scenario. Halfway through the process, it was concluded that the residents' representatives did not represent all the residents affected, and some additional residents' platforms were allowed to join. In 2008, the Alders Table presented its report. It suggested allowing a growth to 510,000 flights. Non-hub-related flights (approximately 70,000 flights) could be moved to regional airports. Unlike the outcomes of the former rounds, this compromise was supported by all the parties involved. The round ended with the government following the Alders advice, deciding in 2008 to move non-hub Schiphol flights to regional airports (the crucial event/decision) (Huys & Koppenjan, 2010).

Round four: 2015–2024

In 2015, the Schiphol Environment Council was established (the crucial decision) as a follow-up to the Alders Table to discuss measures to deal with the ongoing nuisance caused by Schiphol in its environment. However, in 2019, the residents left the council, citing a perceived lack of progress. Pieter van Geel was appointed as a new independent advisor. He stated in an advice that Schiphol should be treated as normal public infrastructure without the legal exemptions that it was granted in the past. At this time, the political support for Schiphol was diminishing. This was driven partly by the perception that the contribution of main ports like Schiphol and the Port of Rotterdam to the Dutch economy had decreased. The reduced use of Schiphol during the Covid pandemic also influenced the perceived importance of Schiphol (Baart, 2023). In 2022, the government decided to reduce the number of allowed flights from 500,000 to 440,000 a year in order to be able to comply with the requirements to grant a permit under the Dutch Nature Conservation Act. The airline companies KLM, Easyjet, and Transavia started a legal procedure against the Dutch state, and the United States announced countermeasures because US carriers' flights would also be affected. In January 2024, the government announced a postponement of the reduction in flight numbers (the crucial decision), as the EU, after strong lobbies by air carriers, needed more time to decide on the approval of this decision (Neujeffski & Hoedeman, 2023; Benjamin, 2024).

3.4 Outcomes of governance network processes

The outcomes of an interaction process within governance networks may consist of public policies, solutions to problems, and the provision of public services (Innes & Booher, 1999; Emerson & Nabatchi, 2015; Kapucu & Hu, 2020). These outcomes do not necessarily reflect actors' goals at the outset of the process. Outcomes develop under the influence of various strategies and events that manifest themselves in assorted rounds and arenas. They may also be the unintended result of various uncoordinated strategies and events. Furthermore, outcomes are not realised only at the end of the process. They may be produced during the process as intermediate products of rounds. Outcomes can be categorised into three groups: substantive, process, and institutional.

Examples of *substantive outcomes* include the realisation of a public project (e.g., the construction of a motorway), a policy (e.g., regulations regarding asylum procedures), or a service (e.g., education that meets certain qualitative standards). The failure to produce such results can also be seen as a substantive outcome (Huxham & Vangen, 2005; Osborne, 2010).

Process outcomes are of a less tangible nature, such as the quality of the interaction process by which the substantive outcome was realised, including duration, transaction costs incurred, fairness, transparency, and the democratic nature of the process (Williamson, 1979; Sørensen & Torfing, 2007; Koppenjan, 2024).

Institutional outcomes refer to the effects of the interaction process on the more enduring relationships among actors that will have an effect on future interactions. This may include the development of trust, a shared set of rules and outlooks, and institutional arrangements that will help them to jointly address future challenges (Mandell & Keast, 2008; Klijn et al., 2010; Emerson & Nabachi, 2015). In Chapter 8, we discuss in detail how outcomes of governance network processes can be evaluated.

3.5 Strategic complexity: unpredictability, fragmentation, and mediatisation

Dealing with complex problems and providing public services requires the coordination of actors' strategies in governance network processes. The problem with achieving this coordination is that actors' interests, perceptions, and strategies diverge and conflict. This is an important source of strategic complexity; but what makes coordination even more difficult is that the choice and enactment of actors' strategies is highly unpredictable and subject to change. This is the case especially when parties respond to, and anticipate, one another's behaviour. Although actors can attempt to anticipate other parties' strategies, they cannot be certain that their assessment will prove to be correct. As a result, a complicated, unpredictable dynamic of actions and

counteractions emerges (Scharpf, 1997; Koppenjan & Klijn, 2004; ten Heuvelhof et al., 2009). This is one source of strategic complexity.

The unpredictability of interaction processes is amplified by major changes in the environment that, as we have discussed previously, can lead to a 'whole new ball game'. These changes, whether political, economic, or social, may develop gradually or emerge abruptly, rendering them difficult to predict. Although unpredictability is a key driver of strategic complexity, such complexity can also arise from limited flexibility. Past decisions can constrain current options, making some actions prohibitively expensive for actors today. As already noted, this may cause actors to become locked into undesirable situations. The way in which decisions in the past preclude certain courses of action in the present is also a source of strategic complexity.

Yet another source of strategic complexity is the fragmented nature of interaction processes. Interactions typically take place in more than one arena, meaning that the course and content of governance processes are determined by decisions made by actors in various locations on the basis of very different perceptions and rationalities. This fragmentation makes influencing and steering interaction processes very difficult. Most actors will participate in only some arenas, perhaps because of limited time and resources, but it is also possible that certain arenas are inaccessible to them (Koppenjan & Klijn, 2004; Baumgartner & Jones, 2009; Kingdon, 2011; Ostrom, 2011). Actors have limited opportunities to influence decisions in arenas in which they are not involved. In addition, it can be difficult for actors to keep an overview of the interactions that take place across different arenas. Actors may even be entirely unaware of some of the interactions that take place. Consequently, they can be confronted with strategic surprises: unexpected decisions made in other arenas in which they do not participate but that nevertheless have major consequences for them.

Within a network, and even within a specific arena, actors can participate in multiple processes concurrently. Consequently, these processes influence one another. Actors' strategies may be informed and inspired by their anticipation of, and responses to, what happens in other, indirectly related arenas and processes. For example, they may attempt to recoup losses that they have experienced elsewhere.

Yet, the existence of various arenas and the presence of multiple processes do not have to be detrimental to attempts to arrive at coordination and joint solutions. They also provide actors with opportunities. A loss in one arena or process can be compensated by a gain in another, and vice versa. Through couplings, new trade-offs can be realised between processes. Because of this, it is conceivable that, in one interaction process, support for unpopular measures is created because compensation is realised in another process. Furthermore, the coupling of processes may have mitigating effects on the conflicts and on actors' strategies. After all, the bill for an actor's strategic

misbehaviour in one process may fall due in another (Taylor, 1987; Axelrod, 2006; de Bruijn & ten Heuvelhof, 2018). Anticipating these mechanisms, actors' strategies may even be explicitly focused on coupling arenas and processes or – when they believe that such coupling will jeopardise their desired option – on decoupling.

A source of strategic complexity that has recently gained prominence is media attention on issues. This is not an entirely new topic. The classical agenda studies (Cobb & Elder, 1983) from the 1960s and 1970s emphasised that creating media attention is important to get (new) issues onto the political agenda and to get politicians and others to act on those issues. Later agenda studies emphasised that media create additional (strategic) complexity in interactions because of the entrance of new actors and the fact that actors react strategically to media attention (see Walgrave & van Aelst, 2006; Kingdon, 2011). In other words, even when the governance literature focused solely on traditional mass media, the role and impact of media on governance processes were considered important influences on the dynamics of interactions (see Walgrave & van Aelst, 2006, for an overview).

However, the mediatisation of society (see Chapter 1) and the growing importance of social media increase the effects of media on interaction processes in networks. The mediatisation of society entails an increase in the influence of media and the penetration of (commercial) media rules about the presentation of news throughout society (Hjarvard, 2008; Bennett & Pfetsch, 2018). Although theories on the effects of media on governance processes are still scarce, the emerging literature suggests a few obvious effects (see Klijn & Korthagen, 2018; Schillemans & Pierre, 2019):

- Effects on actors' strategic behaviour: as media attention is strongly focused on negative news and frames interaction in terms of struggle and conflict (Bennett, 2016), actors are more motivated to take a firm stance once the media highlight the interaction. This fosters conflictual strategies over compromising or exploring strategies to show to the outside world that actors defend their positions to the best of their abilities (see Spörer-Wagner & Marcinkowski, 2010). Media attention thus makes it more difficult to arrive at agreement, and more managerial effort is needed to connect actors (also see Chapter 5).
- Effects on trust building in networks: negative media attention and conflictual strategies also make it more difficult to build and maintain trust relations between actors. This is important, as trust is one of the crucial factors that correlate to successful outcomes in networks (see Provan et al., 2009; Klijn et al., 2010; Markovic, 2017). We return to this in Chapters 4 and 6.
- Effects on the openness or closure of networks: media attention also puts pressure on networks. In particular, actors who have difficulty accessing networks, such as citizen groups and environmental pressure groups, use

media extensively not only to seek attention for their issues and positions, but also to become active participants in the interactions (see Korthagen, 2015). These actors are shown to use personalisation and dramatisation explicitly and thus to adapt to mediatisation to attract more media attention.

- Effects on political involvement in policy issues: mediatisation and the penetration of media rules in politics create a situation in which politicians consider their appearance and visibility in the media as crucial (Esser & Strömbäck, 2014). This means that politicians and media follow each other even more than is presented in the classical agenda theory. Thus, issues that attract media attention are taken up very quickly by politicians and vice versa, creating a positive feedback loop that sometimes culminates in hype (see Opperhuizen et al., 2019, for empirical examples). A less extreme version of this argument can be found in Baumgartner and Jones' (2009) work. This (sudden) political attention creates intensive interactions between actors and intervenes deep into existing decision-making and negotiation processes, reinforcing the effects discussed above.

Thus, the effect of media attention is likely to result in more strategic complexity as the number of actor increases, their strategies become more outspoken, and the interactions are probably more conflictual. However, media attention may also cause strategies to change rapidly in a relatively short time, thus enhancing the unpredictability of network processes.

3.6   Conclusion: dealing with strategic complexity

Joint policymaking, problem solving, and service delivery in governance networks involve understanding strategic complexity (compare Ansell & Gash, 2008; Bryson et al., 2015; Bianchi et al., 2021). Strategic complexity stems not only from the presence of many actors or their diverging or conflicting interests, but also from the unpredictability of actors' choice and enactment of strategies, the presence of various rounds, arenas, and other processes, and the effects of mediatisation. Prior to the start of an interaction process or a specific round, it is hard to predict how the strategic interactions will unfold. Parties will not position themselves until the process has begun, and, furthermore, unexpected events may occur that cause parties to alter their strategies.

These processes show that governance network processes are social interaction processes. This results in recommendations for handling complexity that have little in common with the advice derived from rational models. Activities such as gathering information, clarifying the problem, reducing the number of actors, making one actor responsible, taking clear decisions, and ensuring implementation are unlikely to work (Dunn, 1981; Walker, 2000). Only in

interaction will actors be able to deal with strategic complexity and will positions and standpoints become clear. Complexities may become tangible only gradually, when the exchange of information, the revealing of strategies, and the communication over interests result in the emergence of a negotiated environment, thus enhancing conditions for common action and joint outcomes.

At the same time, this chapter demonstrates the vulnerability of these processes: interactions may derail, initial cooperation may slide into conflict, and unexpected changes in the environment may suddenly obliterate long-running investments in mutual problem solving. Moreover, the environment within which interactions unfold can be so complex and the hostility and distrust between actors so deeply rooted that the coordination of strategies in order to realise joint outcomes is challenging. Coordination requires network management and sets high demands on the availability of resources and gamesmanship (Lynn, 1993).

In Chapter 5, we present network management strategies that are available for actors involved in governance network processes to arrive at coordinated efforts to deal with substantive and strategic complexity in governance network processes. Before doing so, in Chapter 4 we discuss the institutional complexity that characterises governance networks.

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4

INSTITUTIONS AND INSTITUTIONAL COMPLEXITY IN GOVERNANCE NETWORKS

4.1   Institutional characteristics of networks: introduction

The previous chapters have focused on substantive and strategic complexity in interaction processes that occur in governance networks. In this chapter, we focus on the institutional structures within which these complex interaction processes take place. Why are institutional characteristics of networks important? The main argument for this is that institutional characteristics, in this case those of networks, influence the interaction processes and decisions that take place in these networks and thus their outcomes (North, 1990; Scharpf, 1997). For instance, the rules of networks, as one type of institutional characteristic, influence interactions and outcomes in these networks. They – more or less – delineate what actors can do and what their interaction possibilities are. We can compare this to grammar rules in a language. These rules enable us to speak in a way that is understandable to others, structuring how we phrase things and what we can (and cannot) say. Just as the rules of grammar lend structure to our speech and writing, so too do network rules provide structure to interactions within networks.

4.1.1   What are institutional characteristics of networks?

Giddens (1984, p. 24) wrote that institutions 'by definition are the more enduring features of social life'. The adjectives institutional and institutionalised signify that we are dealing with characteristics of the network *as a whole* rather than those of individual actors or interaction processes that unfold within the network. They also signify that we are dealing with characteristics that are much more stable than other phenomena in governance networks, such as perceptions and strategies. Institutional characteristics are relatively inert.

In the governance networks context, enduring institutional characteristics usually refer to two aspects, namely (1) institutionalised sets of rules that structure and constrain the behaviour of actors in the network (North, 1990) and (2) more or less stable patterns of social relations between actors.

Institutional rules organise and regulate actors' (inter)actions and help to make (inter)actions understandable and to some extent predictable to those that share the same rules (Burns & Flam, 1987). They regulate, among other things, the actors that are part of the network, their roles and competences in the network, how they exchange information, and how outcomes of inter-actions in the network are to be evaluated. Institutional rules can be formal or informal in nature (see also Ostrom, 1986; Klijn, 1996; Scharpf, 1997). Formal rules are consciously created and made explicit (e.g., laws are a typical example), whereas informal rules emerge in passing during interaction, without necessarily being made explicit (e.g., norms may emerge in this way). Rules are trans-situational: they are applicable to more than one situation, and actors use them over and over again. In that way, actors constantly reproduce and sustain the rules every time they abide by them. Thus, rules are recognised and reproduced for a considerable period in the history of a network (Cohen, 1989). However, in the long term, institutional rules may undergo (usually subtle) change, as actors reinterpret their meaning. This reinterpretation may be necessary, for example, if there is a change in the circumstances in which they are used. Actors may then reinterpret the rules to adapt them to the changed circumstances.

Stable patterns of social relations can take various forms, of which inter-action patterns between actors are the best known and studied. Interaction patterns reveal who interacts regularly with whom and provide insight into actors' positions in the network. Patterns of social relations can also be patterns of information seeking between actors or patterns of trust relations. The structures formed by these relationships may be analysed through, for example, social network analysis (SNA) (Wasserman & Faust, 1994; Kapucu & Hu, 2020). SNA may be used to determine, among other things, the actors in the network that are central or peripheral, and where clusters of heavily interconnected actors exist in the network. It can also provide information about how densely connected a network as a whole is, and how closely connected different parts of a network are.

Whereas strategic interactions between actors can be highly erratic, institutions often appear to be almost inert, although they certainly do evolve gradually over longer periods of time. For example, relationships between actors do not just stop when a given interaction process concludes (e.g., a project, a decision-making process). Rather, the relationship between the involved actors is likely to last and develop through multiple such interaction processes. Depending on the nature and quality of these interactions, their relationship might strengthen (e.g., by building up trust) or weaken (e.g., by losing trust).

Of course, the two dimensions of institutions – rules and patterns of social relations – influence each other. Rules that guide actors' behaviour in their interactions are confirmed and subtly altered throughout interaction processes, but at the same time can influence the patterns of relationships between actors.

4.1.2   Institutional complexity

Like the substantive and strategic aspects of networks, institutional aspects of networks can be a source of complexity. Institutional complexity arises when the rules of the network are unclear or when a network is characterised by a large number of rules that are conflicting or ambiguous. It is thus most directly related to institutional rules. Poorly developed relationships (e.g., a low density of relationships or low levels of trust) can also contribute to institutional complexity, because relationships serve as the channels through which rules are communicated and agreed upon. When these relationships are not well established, the chances for rules to be widely accepted and shared diminish, making it harder to develop common rules. Institutional complexity arises relatively easily in emerging networks, where new relationships between actors are forged (see Box 4.1). These actors typically come from different, well-established networks in which they have become acquainted with certain sets of rules. These rules are likely to be different from the sets of rules to which other actors in the emerging network have been exposed, as these other actors come from other established networks. When actors do not share rules, they are more likely to experience their interactions as unpredictable and confusing, because the various actors involved in the interactions follow different sets of rules. This, then, leads to a situation akin to the parable of the Tower of Babel in the Christian Old Testament, where actors have difficulty working together because they do not speak the same language (also see March & Olsen, 1989; Ostrom, 2007). Mature networks will be more likely to have developed a coherent set of rules, partly facilitated by stable patterns of relationships through which rules, norms, and values can diffuse. However, governance networks never exist in an institutional vacuum, and, in mature networks, institutional complexity may arise as a result of changes in the wider institutional environment. These changes may cause tensions between the institutional rules used in the network and those used in the wider institutional environment.

In the remainder of this chapter, we discuss the institutional aspects of governance networks in more detail and we further explain how institutional complexity in networks may arise. Before doing so, we offer a further introduction in Section 4.2 to the understanding of institutions on which we build in this book.

BOX 4.1   INSTITUTIONAL COMPLEXITY: HEALTH PREVENTION NETWORKS

Public health issues, such as obesity, alcohol addiction, or drug use, are complex problems that are intertwined with other social problems. Alcohol abuse among young people, for example, is not only a medical problem but also strongly related to life circumstances and to cultural, economic, and environmental factors. These factors are beyond the influence of the public health sector (Kickbusch, 2010). Unsurprisingly, attention is increasingly being paid to more integrated policies to tackle these complex health problems. These integrated policies connect health policy measures to other policies and interventions. This approach may be referred to as integrated public health policy, but various other terms are also in use, such as health in all policies and public policies for better health (Kickbusch, 2013). In this type of policy, various organisations in different sectors are integrated in health-oriented networks. Examples include networks addressing obesity or alcohol problems among youths. These networks bring together, for instance, healthcare organisations and sport organisations, schools, policymakers, and so on. The number of involved actors varies across projects and countries, but these health prevention networks can be found in many countries.

   Although offering new possibilities, these prevention networks also entail considerable institutional complexity:

- Actors are strongly tied to their sectoral background and will have had few interactions with one another. Therefore, these networks are generally less well developed and have a low density of interactions, making it more difficult for actors to reach one another.
- The sectoral background is likely to be accompanied by strongly different fundamental perceptions about the importance of various causes for problems and may therefore cause misunderstandings and maybe even conflict about the factors on which to concentrate efforts.
- Network arrangements for facilitating coordination are not likely to exist for these newly constructed networks.
- Actors coming from different sectoral backgrounds will work from different institutional rules, and these different rules (think of reward rules, such as subsidy conditions and priorities) are likely to differ and clash with one another.

Addressing this institutional complexity is likely to require intensive network management (see Peters et al., 2017, for evidence).

4.2   Institutional theories

There is a variety of perspectives on institutions (see Peters, 2012; Scott, 2014). What these have in common is that they provide a supra-individual explanation for the interactions between actors: they explain actors' courses of action based on the institutional context in which these actors are embedded. Institutional theories thus take a different starting point for explaining what actors do than rational choice theories, which explain actors' actions as the result of calculated behaviour through which actors choose actions that are most in line with their personal preferences (see March & Olsen, 1989, for an elaborate discussion on the differences between institutional theories and rational choice theories). However, the two views are not necessarily mutually exclusive. For example, some versions of rational choice theory hold that institutions influence the costs and benefits of different courses of actions that actors might take, thereby indirectly influencing actors' calculations of the preferred course of action. This view on institutions, which is prevalent in economics, emphasises an understanding of institutions as formal rules (e.g., laws and regulations) through which typically (public) actors may structure the behaviour of private actors (but also the behaviour of other public actors). There are also (sociological) perspectives on institutions that step away from the idea of calculated decision making by theorising that actors' behaviour is guided *primarily* by institutions, with an emphasis on institutions that take the form of informal rules (e.g., norms and conventions). These perspectives attempt to explain why actors frequently engage in behaviour that, from an economic point of view, may not be rational. Rather than choosing courses of action that are most in line with their preferences, according to this view actors choose courses of action that they believe are, for example, most appropriate in the situation in which they find themselves.

The above shows that different perspectives on institutions are not necessarily in agreement. Exposure to the different varieties of institutional theories can therefore be a confusing experience. Scott (2014) developed a useful typology of institutions that encompasses a broad variety of views by making a distinction between three different types of institutions, namely, regulative, normative, and cultural-cognitive institutions. An important strength of this typology is that it clarifies distinctions between different understandings of institutions, while also showing how they are complementary. Table 4.1 gives an overview of the most important differences between the three views on institutions.

In the regulatory view, institutional rules are explicitly set and monitored, they restrict behaviour, and they are maintained by all sorts of sanctions. These rules are typically laid down in laws, regulations, and contracts. Their sanctioning may involve the use of (legal) force, such as fines, court orders, and prison sentences. As mentioned previously, this view is dominant in

TABLE 4.1 Types of institutional theory

	Regulative theories	*Normative theories*	*Cognitive theories*
Basis for compliance	Expedience	Social obligation	Taken-for-grantedness Shared understanding
Mechanisms for creation and maintenance	Coercive	Normative	Mimetic
Action logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Laws Sanctions Rewards	Certification Accreditation	Common beliefs Shared logics of action Mimicry
Basis of legitimacy	Legally sanctioned	Morally governed	Culturally supported Conceptually correct
Affect	Fear Guilt/Innocence	Shame/Honour	Certainty/Confusion

Adapted from Scott (2014, p. 60).

institutional theories used in economics and it is compatible with rational choice theories. Institutions are understood to be situated outside individuals, as external, contextual factors that function as an incentive structure that determines the costs and benefits of different courses of action that actors may choose. This approach can be found in public choice theory and neo-institutional theory in economics (see Kiser & Ostrom, 1982; Ostrom, 1986; North, 1990; Williamson, 1996). Here, rules operate, for example, as a protection against other actors' opportunistic behaviour (see the neo-institutional approach in Williamson, 1996).

The normative view of institutional rules emphasises the role of norms in prescribing the courses of action that are appropriate, as well as the ends that are appropriate for actors to pursue. Norms are underpinned by values, which in this context can be understood as what actors view as preferred or desirable. Norms are also closely associated with the concept of roles, in the sense that norms may prescribe appropriate goals and courses of action for actors in particular positions (Scott, 2014). To some extent, normative institutions can be understood as a softer version of regulative institutions: whereas regulative institutions prescribe what actors *must* do or *must not* do, norms prescribe what actors *ought to do* or *ought not to do*. Also, like regulative institutions, norms may be sanctioned, but not through the use of (legal) force. Rather, sanctions take a more informal shape, such as exclusion from a group, being refused entry somewhere, or being reprimanded. Another important difference between regulative and normative institutional rules is that the former are understood to be situated outside of individuals, whereas the latter are understood to exist in actors' minds; they are shared rules that actors internalise.

The cognitive view of institutions also appears regularly in sociological theories. Like the normative view, it conceptualises institutions as being internalised by actors. In this case, institutions refer to 'shared conceptions that constitute the nature of reality and create the frames through which meaning is made' (Scott, 2014, p. 67). In other words, institutions are understood as deeply held beliefs through which actors understand the world around them. These deeply held beliefs can also be understood to constitute rules for certain courses of action, but, in this case, these rules are followed because they are taken for granted as 'the way we do things' (Scott, 2014). Given that, through these rules, actors give meaning to the world around them, breaking them is likely to lead to surprise and confusion.

The difference between the regulative perspective on the one hand and the normative and cognitive view on the other hand is that, in the first perspective, rules emerge as a deliberate action of actors (think of drafting a constitution), whereas, in the latter perspectives, rules emerge as a product of repeated human interactions in which rules are continuously reinforced or gradually changed through reinterpretation (March & Olsen, 1989; Scott, 2014).

The three types of institutions form a continuum (see Figure 4.1) 'from the conscious to the unconscious, from the legally enforced to the taken-for-granted' (Hoffman, 1997, p. 36). They can also be understood to lie on a continuum between formal rules (regulative institutions) and informal rules (normative and cognitive institutions).

As discussed further below, the analytical distinction between the different types of institutions is useful because it raises different implications for how these institutions can be analysed and influenced. However, in practice, the distinction between them is not always clear-cut: many institutions encountered in practice are multi-faceted, in that they have regulative, normative, *and* cognitive dimensions. If we take public healthcare as an example, we see that, in most countries, there are laws and regulations (regulative institutions)

Conscious / external structures / formal

Regulative institutions

Normative institutions

Cognitive institutions

Unconscious / internalised / informal
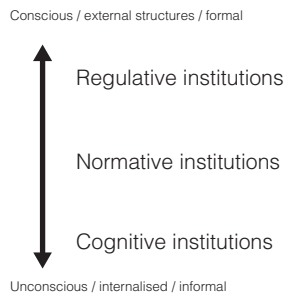
FIGURE 4.1   Different kinds of institutions on a continuum from the conscious to the unconscious and from external structures to internalised, shared rules

that specify the conditions under which health services are provided (e.g., at what price and by whom). These are underpinned by norms (normative institutions) on, for example, who should have access to healthcare and the conditions under which this access can be obtained (e.g., healthcare ought to be equally available to everyone versus healthcare as a privilege). Finally, these norms are themselves underpinned by taken-for-granted ideas (cognitive institutions) about, for example, the degree to which access to healthcare is a fundamental human right.

4.3 Institutional rules in governance networks

4.3.1 Institutional rules structure interactions

In governance networks, the main role of institutional rules is to structure the interaction processes that occur within them. Building on the typology of institutions discussed above, we can distinguish between three ways in which institutional rules structure interaction: regulative, normative, and cognitive. Regulative institutions constrain what is allowed in interactions. These consist of formal rules that are made explicit (e.g., by writing them down somewhere) and that are actively monitored and sanctioned. Normative institutions shape what actors consider appropriate conduct in their interactions. Norms can be made explicit, for example through certification, education, and information campaigns, but many norms are informal and implicit in nature. They are primarily anchored in the minds of people active in the networks in which the norms are shared. Understanding what the norms are in a given network requires actors to be socialised into them (Burns & Flam, 1987; Peters, 2012). It may thus take longer for newcomers to become acquainted with norms than is the case with regulative institutions. This is even truer for cognitive institutions, which are entirely informal rules that actors tend to follow without reflection. Like norms, actors learn to follow these rules by being part of a network for an extended period of time. However, given that they are difficult for actors to reflect on, they are also much more difficult to make explicit. Actors become acquainted with them primarily by directly observing the behaviour of others (Berger & Luckmann, 1966).

The typology has implications for how rules can be analysed. Regulative rules are easiest to identify, because they are codified in legal texts and jurisprudence. Normative rules *can* also be made explicit in texts, but very often they are shared among actors on an informal basis. One would need to speak with participants in a network or analyse comments that they make in public, for example, to understand the normative rules in that network. As discussed previously, cognitive rules are most difficult to make explicit and typically require one to immerse oneself in situations where these cognitive institutions exist.

The typology also suggests different ways of influencing the institutional rules of networks. The regulative view suggests that rules can be changed in order to create (external) incentives that influence the outcome of actors' calculations and, through that, the choices that actors make. The normative view suggests that the courses of action taken by actors can be influenced by changing norms and values through information, persuasion, and education. The cognitive view suggests that rules are influenced by changing day-to-day routines and ways of doing (for instance by role models, storytelling). This may be the most difficult way to influence rules. As mentioned previously, the three views complement one another. Changing formal rules may lead to new taken-for-granted patterns of behaviour and new implicit rules.

In summary, the typology of regulative, normative, and cognitive institutional rules is useful for understanding the different ways in which these rules regulate interactions, the different ways in which actors become acquainted with them, and the different ways in which they can be influenced.

4.3.2 A typology of different functions of institutional rules in governance networks

Another approach to distinguishing different types of rules is to focus on their functions. One of the most influential typologies that takes this approach is that of Ostrom (Ostrom, 1986, 2007; Ostrom et al., 1994). The typology outlined here is inspired by Ostrom's typology.

Position rules specify actors' positions in networks and the types of actions that actors in a given position can take. For example, in the healthcare sector, position rules may specify roles for healthcare providers, clients, and insurers and specify the actions that actors in these different roles may take. Position rules may also specify how many actors are allowed to be in a certain position in the network. This is closely related to *boundary rules*, which are also known as entry and exit rules. These rules define the actors that are eligible to enter a certain position in the network and how actors may leave. They can also specify *how* actors can enter or leave a certain position in the network.

Decision-making rules specify how different types of decisions are made in the network. Such rules could specify, for example, whether decisions need to be made jointly by multiple actors or whether a specific actor has the authority to make decisions (or a combination thereof). These rules may also specify how decision making should proceed in terms of certain actions that actors in given positions must take at specific junctures in the decision-making process (or under certain circumstances). Decision-making rules can also specify how conflicts will be resolved when these arise.

Information rules specify the information that should be available to which actors in the network and authorise information flows between

different positions in the network. The rules may also specify the frequency of information exchange, as well as the language or jargon used in information exchanges.

Reward rules specify rewards for different kinds of behaviour. These rules may be formalised, such as in the form of subsidy rules, but the criteria through which actors evaluate behaviour and outcomes in a network may also be informal in nature.

Scope rules define the focus of a network, thus the kinds of issues and sets of outcomes that the network is supposed to address.

Closely related to scope rules are *product rules*, which set professional standards for the outcomes produced by the network (e.g., standards for products or services). For example, in the healthcare sector, product rules set various standards for the quality of the healthcare that is to be provided. Examples are provided in Table 4.2.

The combination of the typologies of institutional rules discussed above provides a powerful framework to analyse the rules that structure interactions in network governance. Analysing the different functional types of rules in governance networks (position rules, boundary rules, decision-making rules, and so forth) can already give us a detailed understanding of the possibilities for interactions that occur in a given network.

TABLE 4.2 Examples of the different types of institutional rules in healthcare provision networks

Aspects	Examples
Position rules	Rules that specify the position and the health inspection in a healthcare network and the activities that the health inspection is allowed to undertake
Boundary rules	Rules that specify the types of organisations that are allowed to provide healthcare, how they can become a certified organisation, and how they can terminate their activities
Decision-making rules	Rules that specify the yearly increase/decrease in prices of healthcare services
Information rules	Rules about the type of information that hospitals have to provide to clients, public organisations, financiers, etc.
Reward rules	Rules that specify how much health insurers are allowed to charge for different types of insurance
Scope rules	Rules about what are considered accepted, scientifically grounded healthcare practices
Product rules	Rules that specify the minimum standards of healthcare that hospitals have to provide

4.3.3 Manifestation of rules in networks: network arrangements and contracts

We have discussed the idea of rules in networks in general and also emphasised that rules can be formal and more informal. These rules manifest in many ways in networks. The most obvious are rules that are not part of the network itself but of society as a whole. These rules are also valid in networks. If networks cross sectoral boundaries, these networks are therefore also likely to be exposed to many (sectoral) rules. Rules also become visible in organisational arrangements, established in networks through covenants, contracts, or other agreements between actors.

Regarding organisational arrangements, a well-known distinction is that between mandated and voluntary networks (Mandell, 1990; Kenis & Provan, 2009; Iborra et al., 2018). Voluntary networks are created in a bottom-up fashion by professional or interdependent organisations. Mandated networks are created or organised by public actors in a top-down fashion to serve specific policy goals. Mandated networks are more heavily regulated and often contain position rules that specify who is in charge and each organisation's role. These networks are most often initiated by public actors as part of established policy programmes and usually entail explicit boundary rules and reward rules (such as subsidies). Voluntary networks generally have fewer established rules but may also have more informal rules, especially when they are sustained for a long period.

Rules also materialise in the organisational arrangement in which the network is moulded. Several authors have distinguished various forms in which cooperation between actors in networks can be organised. Mulford and Rogers (1982) distinguish between three different coordination strategies: mutual adjustment, alliance, and corporate. In the first structure, coordination is achieved by mutual informal rules and based on voluntary commitment. Alliance is a coordination form where coordination is meant to be achieved without formal hierarchy, through negotiated rules among the parties. Corporate is a strategy where formal hierarchy is achieved by inserting new organisational entities that have the power to organise the cooperation. In the latter case, the participating organisations surrender some of their authority to the newly established organisational unit.

A similar distinction is made in a well-known article by Provan and Kenis (2008), who distinguish three (ideal) types of network forms: shared governance, lead organisation, and network administrative organisation (NAO). In the shared governance form, networks are coordinated by the network members themselves, who make decisions together. Power is more or less symmetrical. A network of the lead organisation form is coordinated by one of the actors in the network. Coordination is then more centralised and brokered than in the shared governance form (Provan & Kenis, 2008, p. 235).

In the third form, the NAO, a separate administrative entity is established to coordinate activities. The NAO, then, is crucial in the coordination activities in the network and acts as broker between the network actors. Thus, in the last structure, we find very different position and boundary rules than in, for instance, the shared governance form. An example of an NAO network is offered in Box 4.2.

Contracts are another concrete manifestation of rules in networks. These can be very concrete, relating to specific products or services that actors provide. For instance, partnerships between public and private actors often are (also) moulded in contracts. A specific example of this is the moulding of collaboration between public actors and private firms in a Design, Build, Finance, and Maintain contract. Such a contract specifies actors' positions (position rules), but also payment and responsibilities of the partners (reward rules and decision-making rules), and what partners need to communicate to one another (information rules).

Of course, such a contract can never be complete. Partnerships can last for a long time, and unexpected things will happen that were not foreseen when the contracts were drafted. Therefore, network management strategies are indispensable for dealing with unexpected circumstances that may arise (see Koppenjan et al., 2022).

BOX 4.2   AN NAO-GOVERNED NETWORK: THE CANTERBURY CLINICAL NETWORK IN NEW ZEALAND

In health systems worldwide, initiatives have been taken to integrate health and social services in order to address problems of accessibility, quality, continuity, and costs caused by the wide range of disciplines, organisations, and services involved. For clients with multiple chronic illnesses and social needs in particular, fragmented healthcare systems have difficulty coordinating and collaborating to provide adequate care. A variety of integrated-care models have been developed and piloted in various countries (Breton et al., 2017). Here, we discuss the Canterbury Clinical Network (CCN) that has been functioning in the Canterbury region in New Zealand since 2009. The planning and provision of health services in this region was the responsibility of a District Health Board. The establishment of the CCN was a response to the regular gridlock with patients backing up into the emergency department of the main hospital in Christchurch, facing long waits as the hospital ran out of beds. Also, the healthcare system in the district as a whole faced a financial deficit. Without changes, the health system was deemed unsustainable (Centre for Policy on Ageing, 2016).

The CCN aims to improve the coordination and collaboration between general practitioners, community care, and hospitals to prevent unnecessary

hospital admissions and provide clients with the varying levels of medical and social support that they need to be able to function again in everyday life. The network includes general practitioners, practice and community nurses, pharmacists, contract service providers (including home care), health professionals, primary health organisations, and the Canterbury District Health Board. These members of the network signed the CCN Alliance Agreement and the CCN Charter, committing themselves to act in good faith and to reach consensus decisions on the basis of 'best for patient, best for system' (Centre for Policy on Ageing, 2016). Within the district, activity-based payments for hospitals were replaced with bottom-up budgeting for each specialty, and contracts for externally provided services were replaced with a form of alliance contracting where maximum collective gain can be realised if all parties support one another and agree to share any losses (Breton et al., 2017).

The CCN is governed by the alliance leadership team (ALT), in which representatives of the alliance parties participate, led by an independent chair. This NAO further comprises the alliance support team, made up of senior executives from the alliance members. It provides advice and guidance to the ALT. The alliance support team is supported by the programme office, led by the programme director. The programme office coordinates the alliance's activities and provides operational support to the various CCN workgroups. These workgroups focus on projects regarding services to target groups and areas of work (e.g., elderly people, children and youth, mental health, rural health) and the transformation and implementation of services.

Important CCN achievements over time include improved communication between general practitioners, medical specialists, nurses, pharmacists, and service care providers; (electronic) information sharing and referral quality; and the development of documented clinical guidance pathways. The latter are shared care plans for patients that can be created, read, and updated by almost any clinician, regardless of location (Centre for Policy on Ageing, 2016). Overall, the CCN contributed to the reduction of hospital admissions especially of elderly clients and the shift to the provision of care at home for acutely unwell patients (McGeoch et al., 2022). Furthermore, the financial performance of the district improved. As a result of the positive experiences with the CCN and other pilot alliances, New Zealand has moved to use this governance model across the entire country (Centre for Policy on Ageing, 2016).

Besides providing an example of what an NAO-governed organisation looks like, the CCN shows that the governance structure is accompanied by an alliance agreement among participants. It also entails a supportive funding scheme by the responsible governmental body, in this case the District Health Board, illustrating that the governance structure is multi-dimensional and embedded in a wider governance context. Support from this wider context is an important condition for success (Ostrom, 1990).

4.4   Relationships as an institutional dimension of governance networks

As mentioned at the beginning of this chapter, institutional rules form one of two institutional dimensions of governance networks. The other dimension is that of relationships (i.e., stable patterns of interactions). Like institutional rules, relationships constitute the more enduring features of governance networks (Giddens, 1984) and emerge from the repeated interactions between actors. At the same time, once established, relationships serve as a kind of underlying infrastructure that enables and constrains interactions (Borgatti & Lopez-Kidwell, 2011). The interaction patterns that form relationships are often quite logical, in the sense that actors who interact frequently with one another are also dependent on one another's resources to achieve their goals. Thus, a municipality that wants to initiate a new extension of the city has intensive contacts with non-profit housing associations and private developers. The literature on networks also shows that many networks have a sectoral character (Wamsley, 1985; Laumann & Knoke, 1987; Marsh & Rhodes, 1992). In various policy sectors, such as healthcare, public housing, justice, traffic and transport, and so forth, many actors are linked, as they are part of policy programmes or sectors. Also, these actors share an interest in the funding made available for the realisation of sectoral policy and the services and products linked to it. For this reason, service delivery networks have a much higher interaction density than most decision-making networks: the former have been allocated resources, whereas the latter have not yet.

There are important relationships between institutional rules and relationships. Relationships can serve as conduits through which actors communicate rules, norms, and beliefs (Mische, 2011) and therefore play an important role in shaping the institutional rules that come to dominate a given network. As already discussed, institutional rules may also prescribe the positions that certain actors take in a network, who is to interact with whom, and even details such as the frequency of interaction between certain actors. We discuss relationships in more detail in the following sections.

Like institutional rules, relationships give governance networks a structure. However, in this case, that structure can be expressed in terms of more or less stable patterns of relationships between actors. These relationships often arise from interdependencies between actors: actors need one another because knowledge is dispersed and the means to achieve interesting (innovative) products, services, or policies may not be available to one actor alone. Thus, the maintenance of relationships with others is important for actors.

The relational structure of governance networks can be examined quantitatively using SNA methods and techniques (Wasserman & Faust, 1994). This allows us, for example, to analyse properties of a governance network such as the density of relationships, the existence of cliques (e.g., groups

of actors that are more heavily connected amongst themselves than they are to others), structural holes (parts of the network that are poorly connected), and the extent to which the network is centralised (i.e., can we distinguish between parts of the network that are more central versus parts of the network that are peripheral?). In addition to focusing on such network-level measures, we can also examine the structure of relationships to study the positions of particular actors in it. For example, we can examine how central or peripheral specific actors are and whether they are strategically positioned, for example by acting as a linking pin between parts of the network that are otherwise poorly connected, or by being closely connected to resourceful actors. These are just a few examples of ways in which to analyse the relational structure of governance networks. In some approaches to studying governance networks, these types of analyses are a key focus (e.g., Lewis, 2010; Kapucu & Hu, 2020). This approach explores, for example, the influence of networks' relational structure on their effectiveness in achieving outcomes (for classical examples, see Laumann & Knoke, 1987; more recent examples include Considine et al., 2009; Lewis et al., 2017; Kapucu & Hu, 2020).

SNA emphasises the patterns formed by relationships in a network. It is also possible to focus attention on the quality of the relationships themselves, and this is our focus here. A key concept in this approach is that of trust. Contract theory and inter-organisational theory argue that the specificity of a problem situation, its uniqueness, and the difficult marketability of knowledge make it difficult to maintain long-term relations solely through contracts (see Ring & van de Ven, 1992; Lane & Bachmann, 1998; Nooteboom, 2002). As mentioned previously, contracts cannot foresee all unexpected circumstances, which often occur in governance networks, for example as a result of strategic complexity. For this reason, many authors emphasise the importance of trust between actors to maintain relationships and achieve successful cooperation. Not only is trust expected to have a positive effect on cooperation, but also it is an important condition for realising innovation (see, for instance, Lundvall 1993; Lane & Bachmann, 1998; Klijn et al., 2016; Markovic, 2017). Trust is thus a valuable characteristic in networks (see, e.g., Provan et al., 2009; Klijn et al., 2010; Markovic, 2017). In what follows, we discuss what trust is and the important advantages of trust for cooperation in networks. We also discuss factors that might influence the creation and sustainment of trust.

4.4.1   *What is trust?*

Trust is regarded as the perception of the good intentions of other actors. Rousseau et al. (1998, p. 395) define trust as 'a psychological state comprising the intention to accept vulnerability based upon positive expectations of

the intentions or behaviour of another'. This relates to most observations made in contract theory, where trust is defined as a situation where an actor believes that another actor will refrain from opportunistic behaviour even when the opportunity for that occurs (see Lyons & Mehta, 1997; Nooteboom, 2002). On both sides, trust concerns an expectation about the intention of another actor and entails the expectation that the other actor will respect the interests of the trusting actor. Thus, we can define trust as 'the expectation of an actor A that another actor B will abstain from opportunistic behaviour when an opportunity for that emerges' (see Klijn et al., 2010, p. 196). This concerns the expectation of actor A that the other actor B will take actor A's interests into account. Trust as a stable perception does not have to be reciprocal. It is, however, unlikely that non-reciprocal expectations and the resulting behaviour patterns can be sustained for long. Also, trust must be confirmed and result in a mutual advantage for its partners. Thus, trust is given to partners within certain limits. When expectations are repeatedly violated, the trust in another actor will be reconsidered or may even disappear entirely. On the other hand, trust cannot be based only on rational calculation, but also requires an element of altruism (see Zucker, 1986; Fukuyama, 1995; Lyons & Mehta, 1997; Lane & Bachmann, 1998). If trust were based purely on calculated behaviour, it would hardly be resistant to uncertainty and unexpected developments, especially if we assume that actors are characterised by bounded rationality. Actors cannot assess every possible risk and potential threat. Thus, the essence of trust is that an actor is vulnerable to other actors and presumes shared expectations with these actors. When actions do not fit expectations or agreements are not honoured, the other actor is given the benefit of the doubt on the grounds of previous experience; but that benefit of the doubt is not given endlessly and has to be warranted by the other actor.

4.4.2   The meaning of trust in networks

Networks can be characterised by more or less trust between the actors. As actors have different interests and perceptions, it is not likely that high levels of trust will be found among actors in newly emerging networks. This aligns with the idea that trust is built through repeated interactions (Huxham & Vangen, 2005). Huxham and Vangen speak of a trust cycle in which an initially low level of trust can grow as a result of repeated interactions and mutually trustful behaviour. In emerging networks, trust is likely to develop from a more calculated type of trust into an altruistic type: when partners share no prior history and are working together for the first time, trust must be created on the expectation that cooperation will be beneficial to both parties. If this cooperation continues and is strengthened, altruistic trust, where actors are more likely to give one another the benefit of the doubt, becomes

more important (see Lyons & Mehta, 1997; Rousseau et al., 1998; Sako, 1998). Trust thus builds up slowly, but it can disappear very quickly if it is betrayed (Huxham & Vangen, 2005). The level of trust between actors can also be influenced by other factors, such as past interactions (Provan et al., 2009; Lewis, 2011), actors' reputation (Edelenbos & Klijn, 2007), and the presence and nature of binding network rules (Klijn, 2001). Box 4.3 discusses how trust enhances network performance.

BOX 4.3   TRUST ENHANCES NETWORK PERFORMANCE

Klijn, Steijn, and Edelenbos (2010) looked at the effect on network performance of the level of trust in environmental projects. The research concerns a wide variety of environmental networks dealing with area development, water management projects, and urban development projects in the Netherlands. The average number of actors involved in the networks around these projects is slightly more than 12. To measure performance, they used the perceived performance of respondents involved in an environmental project. They measured performance by five items that included aspects like the innovativeness of solutions, the degree to which the solutions dealt with the problems in the environmental project, the cost-effectiveness of the solutions, and so on. To measure trust, they used five items derived from the alliance and contractual literature. These five items are:

Agreement trust	The parties in this project generally live up to the agreements made with one another
Benefit of the doubt	The parties in this project give one another the benefit of the doubt
Reliability	The parties in this project take into account the interests of other parties
Absence of opportunistic behaviour	Parties do not use the contributions of other actors for their own advantage
Goodwill trust	Parties in this project can assume that the intentions of the other parties are good in principle

Their research shows that a strong relation exists between the level of respondents' perceived trust in the network and the network's performance. These results were verified in later research comparing environmental networks in the Netherlands with similar networks in Spain (or, more precisely, Catalonia) and Taiwan. A strong positive correlation between trust and network performance was found in all three countries (Klijn et al., 2016).

4.4.3 Why is trust valuable in networks?

The question of why trust is valuable has a range of answers that mention possible benefits of trust. Looking at the available literature, we see four groups of factors that are often mentioned: reducing transaction costs, improving relationships, the facilitation of learning, and stimulating innovation. We discuss each advantage below:

- Reducing transaction costs: trust reduces risks in interactions and the possibility of actors engaging in opportunistic behaviour; networks with higher levels of trust between actors thus have less need for extensive contractual safeguards.
- Improving investments and stability in relations: actors who trust one another tend to invest more in their relationship. As a result, their relation tends to become more stable (Ring & van de Ven, 1992; Nooteboom et al., 1997; Huxham & Vangen 2005).
- Stimulating learning and the exchange of knowledge: as networks deal with wicked problems, they require actors to negotiate definitions of problems and solutions, which in turn requires knowledge exchange between actors. Knowledge exchange will occur only if the actors have a reasonable level of trust in one another.
- Stimulating innovation: the wicked problems with which networks deal frequently require innovative solutions. Given that innovation processes are uncertain and risky, they will occur only under the condition of a minimum level of trust among the actors (see, for instance, Parker & Vaidya, 2001; Klijn et al., 2010).

4.5 Institutional change

Institutional rules and relationships in networks are relatively stable, but they are not completely static. As the activities of actors in networks are usually regulated by overlapping sets of rules and as these rules are abstract and ambiguous, it is not always obvious which rules apply to a specific situation and how they must be applied. Actors thus constantly have to interpret the meaning of rules for the specific situation in which they find themselves and apply them accordingly. These interpretations and applications of rules can generate new variations of those rules, meaning that the rules can gradually evolve over time (Mahoney & Thelen, 2010). Box 4.4 offers an illustration of this.

Rules can also be changed deliberately. For example, if actors find that existing institutional rules hinder collaboration, they may attempt to change those rules. The conscious changing of rules may also be inspired by disruptive changes in the environment of the network, such as wars and pandemics.

Consciously changing institutional rules can also occur as a consequence of institutional design, a type of network management strategy discussed in detail in Chapter 6.

Institutional change through reinterpretation and institutional change through conscious design have different dynamics. Change as a result of reinterpretation is incremental, emerging from subtle shifts in how people understand and apply existing rules over time. Because these adjustments are minor and widespread, significant change accumulates slowly, becoming noticeable only when viewed across long periods. With conscious design, big changes can occur more suddenly, giving the institutional change process a more punctuated nature in which periods of relative stability are sometimes interrupted by relatively short and intense episodes of transformation (Lowndes & Roberts, 2013).

Institutional change can also take the form of changes in the patterns of relationships in a network. As discussed in this chapter, there is a close relationship between institutional rules and patterns of relationships. As institutional rules can, for example, determine the positions of actors in a network, and influence the types of interactions that take place between actors, changes in these rules will typically also lead to changes in relationships. The reverse can also be true: if the relationships between actors themselves change to a point where they require a new kind of arrangement or contract, actors may attempt to change institutional rules accordingly.

BOX 4.4   RULES NEED INTERPRETATION: THE EXAMPLE OF COUNTRY DIFFERENCES IN PUBLIC–PRIVATE PARTNERSHIPS

Since the 1980s, public–private partnerships (PPPs) have emerged worldwide as a practice to deliver public services and public infrastructures like roads, railways, and buildings. The UK played a pioneering role in PPP development. The private finance initiative (PFI) model was developed by the Conservative government in the UK in the early 1990s. It has undergone various updates under the name of PPP and PF2 since then and has evolved into an important standard of PPP practices (Spackman, 2002; Osborne, 2007). Among other countries, Australia, New Zealand, Canada, South Africa, Finland, Belgium, and the Netherlands have set up programmes that build on the UK example, introducing UK-inspired contractual partnership, governed by Design, Build, Finance, and Maintenance (DBFM) or Design, Build, Finance, Maintenance, and Operations (DBFMO) contracts. In DBFM(O) contracts, the private consortium finances the project upfront and needs to recoup its investments during the project (Yescombe, 2007). The consortium needs loans from banks

and equity from private investors. This differs from traditional public infrastructure provision in which public organisations determine the requirements and finance the project and the private organisations only realise the asset. Using DBFM(O) transfers financial risks to the private party. As a result, banks and equity providers become involved in the project. The expectation is that this will lead to a better management of risk, lower costs, and better availability of the infrastructure (Hodge et al., 2010; Verweij & Van Meerkerk, 2021).

DBFM(O) contracts have emerged across the world, and the ways in which they are applied vary considerably. Warsen et al. (2020) show that practitioners in Canada prefer a very different governance approach than those in the Netherlands regarding the application of DBFM(O) contract rules. Practitioners in Canada prefer a new public management approach, where performance indicators are the core and sanctioning and enforcing the contractual agreements are important. Dutch practitioners prefer a more governance-oriented approach with a strong focus on collaboration and negotiation as a solution to unmet contract agreements and other unexpected issues. As someone remarked:

> real relation management achieves so much. I am not sure it is specific to DBFM projects, except that you need to work with each other for a long period. So, in DBFM projects, it is probably even more important to steer the relation actively. So not every time put the contract first, but first discuss this together.
>
> (Koppenjan et al., 2022, p. 1016)

Empirical research on Dutch DBFM(O) projects reveals that this focus on collaboration has increased over time, illustrating the gradual evolution of DMFM(O) rules and the role of collaboration therein based on their constant reinterpretation (Koppenjan et al., 2022).

The example of DBFM(O) in Canada and the Netherlands illustrates how the gradual evolution of rules can result in a situation where similar sets of rules are used very differently in different countries. The course of these evolutionary processes is also influenced by the wider institutional environment in which they take place: they are likely to evolve in a way that increases their fit with formal and informal rules that are already in place.

4.6   Conclusion

In this chapter, we explored the institutional characteristics of networks. These are the more stable characteristics of the network as opposed to characteristics that are attached to actors, such as perceptions and strategies. We distinguished two institutional aspects of networks: (1) the rules of the network,

manifested in contracts, formal arrangements, and valid public rules and (2) patterns of social relations, including interaction patterns between the actors in the network and trust relations between actors.

Analysing the institutional features of the network informs the conditions and limitations under which interactions in networks take place and thus are important to understand. This elucidates how the network functions and helps us understand how interactions in networks can be influenced and the limitations of these attempts. We discuss these managerial strategies (and their limitations) in the next two chapters.

The idea that institutions are formed over time and are difficult to change is important. Rules form over time and change only when a significant number of actors in a network cease to follow them or explicitly want to change them. Similarly, patterns of social relations change only if many actors choose different strategies and interact with different actors, or if trust relations come under pressure, for instance as a result of repeated violation of that trust. In that sense, institutions are the infrastructure of our social life and also represent social capital, which is a highly valuable commodity (see Putnam, 2000; Lewis, 2011; Fukuyama, 1995).

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PART 2

Network governance

5

NETWORK MANAGEMENT

Managing strategic and substantive complexity

5.1   Introduction: why is network management necessary?

In Part 1 of this book, the complexities of governing challenging problems in networks were elaborated. This resulted in the conclusion that, although the nature of the challenges that confront societies and governments requires collaboration, this collaboration does not come about by itself. The diverging or even conflicting perceptions and strategies of actors involved in, or affected by, attempts to address problems in networks may hamper their ability to coordinate their activities. Institutional conditions may hamper concerted action. As a result, the potential of governance networks may remain under-utilised and the creation of (public) values impeded or reversed. Interaction processes may stagnate, or even not start at all. They may result in prolonged dialogues of the deaf with high transaction costs and unwanted outcomes. To arrive at collaboration in governance networks, some form of guidance is often needed. This guidance is referred to as network management. In Chapter 1, we defined network management as *all deliberate strategies aimed at facilitating and guiding the interactions and/or changing the features of the network with the intention to collaborate further in network governance.* The need for network management has been confirmed by several studies conducted over the last decade. In general, these studies find a strong correlation between network management strategies and network performance (see Meier & O'Toole, 2007; Klijn et al., 2010; Kelman et al., 2013; Cristofoli et al., 2015; Markovic, 2017). This positive correlation between network management and network performance is confirmed by a meta-analysis (see George et al., 2024), providing a strong indication that network management is indeed important.

5.1.1   Network management: what is it?

Network management differs from more traditional ways of dealing with complexities in problem solving, policymaking, and public service delivery. Traditionally, the importance of proceeding through the phases of the policy-making cycle is emphasised. This implies:

- searching for an authoritative problem definition through information gathering and acquiring expert knowledge;
- formulating objectives in the early stages of the cycle and narrowing the scope for solutions to those that match the stated objectives;
- limiting the number of actors to those necessary to realise and implement solutions;
- addressing institutional complexities by enhancing central control, reducing institutional rights, and channelling solutions towards existing organisations or outsourcing tasks to dedicated organisations or the market.

Network management takes a very different approach. In dealing with substantive and strategic complexities, it aims to further the awareness of the existence of a plurality of perceptions and preferences. It also aims to enhance substantive variety to broaden the space within which solutions are sought. Network management also strongly emphasises the importance of activating and connecting multiple actors. Complex problems require integral solutions that can only be realised by combining resources of multiple parties. Network management deals with institutional complexities by exploring and aligning institutional rules and arrangements. It aspires to create favourable conditions for collaboration within the network, while safeguarding public values, such as democratic legitimacy and accountability, and countervailing powers. Table 5.1 captures the main characteristics of network management by contrasting them with the traditional approach.

In the literature on governance networks, collaborative governance, and interactive governance, various terms are used to refer to efforts to coordinate the interaction among actors. Ansell and Gash (2008) use the term facilitating leadership, Popp et al. (2014) write of network leadership, and yet others use terms like collaborative governance (Emerson & Nabatchi, 2015) or meta-governance (Sørensen & Torfing, 2007). We prefer the term network management, as it more precisely captures the idea of managing within networks.

Although network management is often assumed to be a task for government, this is not necessarily true. It may well be that private actors or non-profit actors take on the network manager role. What is more, the network manager role can shift from one actor to another during interaction processes in the network. It may also be that network management is absent

TABLE 5.1 Traditional and network approaches to managing

	Traditional approach	*Network approach*
Response to substantive complexity	Searching for an authoritative problem definition by information gathering, expert knowledge, and (scientific) research	Furthering awareness of plurality of perceptions; enhancing substantive variety in search of common grounds for joint interaction
Response to strategic complexity	Reducing the number of actors; structuring the process by phases; imposing solutions and roles	Activating and connecting various actors that are affected or whose resources are needed
Response to institutional complexity	Enhancing central control; reducing institutional rights; channelling problems to existing organisations; outsourcing tasks to dedicated organisations or the market	Enhancing and adapting institutional rules and arrangements; empowering actors, safeguarding public values, and countervailing powers

at times or even throughout the entire process. Actors can deploy network management strategies by themselves, but the network manager role can be formalised when a network manager is explicitly assigned or chosen. In the latter case, it is crucial for the parties in the network to be able to trust this actor's impartiality. The network manager must also have sufficient resources and competencies, and must be perceived as authoritative (Edelenbos et al., 2011; Cristofoli et al., 2015; Macciò & Cristofoli, 2017).

5.1.2 Network management: managing processes within networks versus managing the network as a whole

In previous chapters, we distinguished substantive, strategic, and institutional complexity. Substantive and strategic complexity are strongly interconnected and occur in interaction processes in networks, whereas institutional complexity stems from institutional characteristics of the network as a whole. We therefore make a distinction between network management aimed at processes that unfold in networks on the one hand (this chapter) and network management aimed at influencing the network's institutional dimensions on the other (Chapter 6) (Mandell, 1990; Kickert et al., 1997; Klijn & Koppenjan, 2016). Management strategies aimed at influencing processes try to influence actors' perceptions, strategies, and interactions in order to enhance collaboration and realise effective and legitimate solutions and services.

These strategies do not explicitly address the network's institutional structure (rules, actors' positions, resource divisions) but consider these more or less as given and work within them.

Management strategies aimed at the network's institutional characteristics try to change actors' positions or the institutional rules. These are potentially drastic interventions that may change the conditions under which actors interact. At the same time, these changes are more difficult to bring about and to control than process management strategies. Therefore, network management strategies are more often focused on guiding network processes than on changing a network's institutional structure. The management of the network structure is addressed in Chapter 6. The remainder of this chapter focuses on the management of interactions and processes in networks.

5.2   Network management aimed at network processes

The presence of a wide set of actors in a network can result in a variety of perceptions (substantive complexity, see Chapter 2), and actors pursuing diverging and conflicting strategies in different arenas lead to unpredictable interaction processes with potentially high transaction costs (strategic complexity, see Chapter 3). Attempts to manage either substantive or strategic complexity have an impact on the other type of complexity: levers for dealing with substantive complexities may be found in managing strategies and interactions, and interactions can often be managed by influencing perceptions or the availability of knowledge. Therefore, the use of network management to address substantive and strategic complexity in network processes is discussed together in this chapter.

Various categorisations of strategies to manage processes within networks exist in the literature. The nature of these categories ranges from more content-oriented strategies (facilitating the flow of knowledge, synthesising actors' perceptions, the use of branding) to more interaction-oriented strategies (activating actors and creating organisational arrangements) (see, e.g., Agranoff & McGuire, 2001; Provan & Kenis, 2008; Popp et al., 2014). Following this line of thought, we distinguish three categories of network management strategies that can be used to deal with substantive and strategic complexity:

1 exploring problems and solutions
2 connecting actors and managing their interactions
3 arranging interactions.

These network management strategies are aimed at furthering substantive and actor variety and widening the scope for exploring joint actions and solutions. This often entails occasional interventions in existing processes,

TABLE 5.2 Overview of network management strategies

Types of strategy	*Exploring problems and solutions*	*Connecting actors and managing interactions*	*Arranging interactions*
Scope	Strategies that address the variety of perceptions, the search for solutions, and the use of scientific knowledge and expertise	Strategies that influence participation and the interactions between actors	Strategies aimed at establishing ad hoc organisational arrangements and temporary process rules that guide interaction
What	• aligning perceptions and frame reflection • exploring solutions • organising joint research • creating and using brands	• (selective) activation of actors • facilitation of actors and interactions • mediation and conflict regulation	• establishing, e.g., covenants, contracts, platforms, project organisations • designing and negotiating rules regarding the scope of interactions, participation, information use, decision making, and conflict regulation

but network management can also assume a more extensive role, involving the deliberate design and meticulous management of interaction processes from the ground up. Table 5.2 clarifies the three types of strategies discussed in this chapter.

The network management strategies presented in Table 5.2 try to achieve several aims in network processes:

1 bring necessary actors and resources together in order to solve problems in the most effective and efficient way;
2 explore the various problem perceptions and interests that are at stake in complex problem settings;
3 secure the democratic character of network processes in terms of access, values represented, and so on (see also Chapter 7).

In the next sections, all types of strategies are discussed more extensively.

5.3   Network management strategy 1: exploring problems and solutions

Within networks dealing with complex problems, perceptions of problems and solutions diverge and change continuously. Processes of framing,

argumentation games, and knowledge conflicts make it hard to align perceptions and arrive at collaboration and agreements on solutions. Network management strategies seek to enhance the awareness of the existence of a plurality of perceptions and encourage frame reflection.

In this light, it makes little sense to focus on determining the exact nature of the problem, or on setting goals that solutions should realise. Such choices will not hold for long. An early fixation of the problem formulation, objectives, and solution does not give appropriate consideration to the fact that actors only learn step by step about the opportunities and risks that exist in a problem-solving process. These opportunities and risks also depend on the dynamics resulting from external developments and actors' strategic moves. Early fixation leads to the exclusion of alternative perceptions, and consequently opportunities for learning and enrichment will be missed. Moreover, resistance, politicisation, and turbulence will likely arise. This inhibits cross-frame learning and the creation of common ground for joint action (Koppenjan & Klijn, 2004; de Bruijn & ten Heuvelhof, 2018). Therefore, early fixations of problem definitions should be avoided. Rather, managing the content of governance processes is a matter of exploring.

5.3.1 Exploring perceptions and strategies

5.3.1.1 Awareness of the plurality of perceptions

Management strategies aimed at dealing with a plurality of perceptions may firstly aim to make actors aware of the existence of multiple perceptions. Often, actors may simply not be aware of the fact that others do not share their perceptions. Even if they are aware of this, it may be that they do not acknowledge their dependencies upon actors that view problems and solutions differently. To enhance awareness, management efforts may be directed at furthering frame reflection and learning (Schön & Rein, 1994; Weible & Sabatier, 2007). This includes attempts to get the involved parties to think about the content of their perceptions by confronting them with those of others (Levy & Merry, 1986; Termeer & Koppenjan, 1997). This may imply bringing together actors that represent different views, including those whose views are underrepresented in the wider debate. By consciously introducing new actors and ensuring that roles such as the devil's advocate (criticising views and ideas that are taken for granted), the entrepreneur (taking the initiative, pushing for further exploration of ideas), and the mediator (connecting different views) are filled, network managers can attempt to advance reflection on perceptions. A clear example of creating awareness and involving various actors with different perceptions is the Sacramento Water Forum process (see Box 5.1).

BOX 5.1   MANAGING THE SACRAMENTO WATER FORUM PROCESS, CALIFORNIA, USA

The City of Sacramento, at the junction of the Sacramento and American Rivers, engaged in a Water Forum process for the management of the Lower American River. Historically, local entities, such as the Sacramento City and County, acted independently in river governance (Connick, 2003; Mandell & Keast, 2008), leading to conflicts such as over the city's water treatment expansion. By 1990, the growing population strained water resources, prompting Sacramento County to restrict further growth in 1993 in the absence of additional surface water. The city and the county, anticipating environmental opposition to their plans, collaborated on a regional strategy that made use of *interest-based negotiation.* They hired a consultant to initiate the Sacramento Area Water Forum Process, involving stakeholders in a consensus-oriented process.

Making connections and designing the process (1991–1993)

In 1991, the City and County of Sacramento jointly established the City–County Office of Metropolitan Water Planning (CCOMWP), with its Executive Director answering to both the City Manager and the County executive. The CCOMWP initiated the Water Forum to negotiate regional water management and habitat preservation. The initial meetings in 1993 involved multiple stakeholders, including representatives of the City and County, other water districts, environmentalists, businesses, agricultural leaders, and citizen groups. The City Council and County Board of Supervisors approved the plan, creating a technical advisory committee (TAC) with representatives from all the county's water purveyors and the Sacramento Metropolitan Water Authority. Additionally, an Advisory Committee with environmentalists and business representatives was established. The Advisory Committee and the TAC developed a consensus process plan, identifying new stakeholders for inclusion. As there were many stakeholders, a core working group was formed with representatives to formulate the Sacramento Area Water Plan.

Facilitating the Water Forum process (1993–2000)

To initiate the process, a consultant was hired, aiming to bring to the table 'those who are directly affected by the issue, those who could make change happen, and those who could block change' (Connick, 2003, p. 18). After six years, the process culminated in a Memorandum of Understanding (MOU) for the Water Forum Agreement. The MOU was signed in January 2001 by all

stakeholders. The MOU committed signatories to collaborative efforts on water issues for the next 30 years.

After 2000: new connections, process redesign, and process management

The Water Forum Agreement led to the creation of the Water Forum Successor Effort (WFSE), ensuring ongoing collaboration. It focuses on two main goals: reliable and safe provision of water and preservation of fishery, wildlife, and the recreational and aesthetic value of the American River. The WFSE's core group meets on a monthly basis. Full plenary meetings take place six times a year. Although the WFSE has no governing or regulatory power, many of its recommendations have been accepted and implemented by the signatories.

Assessing the Water Forum process

During the MOU development, stakeholders faced disagreements, and several issues were removed from the discussion. The slow progress in achieving results caused frustration among many actors, leading some to consider lawsuits, though none have been filed so far. Despite these challenges, relationships formed, and the support given by the state suggests that it saw no better alternative. Historically, water issues in California often led to legal disputes. The Water Forum has changed this dynamic in Northern California, with former adversaries now collaborating to negotiate emerging issues. Since the MOU signing, agencies have established new partnerships and joint programmes and have approached water issues as a regional affair. Water purveyors, previously focused on individual concerns, are now collaborating for regional benefits. Finally, there is now a statewide recognition of the American River's value (Koppenjan et al., 2008; Mandell & Keast, 2008).

5.3.1.2   Alignment of perceptions

Once actors are aware of the relevance of the plurality of perceptions (and their underlying values), it becomes possible to attempt alignment of perceptions. Perception alignment may be aimed at arriving at consensus on problems, or at developing a more encompassing shared problem perception that integrates the various perceptions of those involved. Perception and frame alignment may require the involvement of mediators to make perceptions explicit and to identify overlaps, compatibilities, complementarities, and joint interests. Mediators may also help actors develop new ways of looking at the situation at hand and thereby develop entirely new frames (Hajer, 2009).

5.3.2   *Furthering substantive variety*

Processes of policymaking and public services development often display a remarkable lack of creativity regarding the solutions that are considered. Fixation on one single problem formulation or solution easily triggers conflicts between parties. Debates that stem from such conflicts rarely lead to an enrichment of ideas on problems and solutions. In these situations, network management strategies can focus on preventing early fixation on a specific problem and/or solution and stimulate increasing the variety of solutions considered (Schön & Rein, 1994; Forester, 2009). A variety of options offers actors more opportunities to arrive at a solution that suits them and may provide the starting point for bridging differences. One way to increase variety is by consciously broadening the substantive scope of the issues on which actors develop problem and solution definitions. This is referred to as scope optimisation (Cobb & Elder, 1983; Forester, 1989). For example, a governmental agency plans to build a new highway through an urban area to solve what it perceives as an infrastructural problem. Its plans quickly meet an impasse as a result of opposition from residents. These residents are concerned about impacts such as increased noise and decreased property values. One approach to resolve the impasse could be to reframe the project as one of broader area development, prompting the government to position its traffic problem in a wider context and allowing for the inclusion of other problem and solution definitions related to the quality of the public space in the area. Tunnels, allowing the highway to run partially underground, might limit noise disturbance, leave room for area development, add green spaces to the neighbourhood, and so on. Moreover, it may pave the way to involving additional actors and resources. Consequently, this may lead to a richer design that integrates more perceptions and can mobilise more solutions (Koppenjan & Enserink, 2009).

Strategies to enhance the variety of options for solutions can consist of introducing new ideas or new actors. This can for instance be done by organising a creative competition in which various design teams are asked to develop a solution on the basis of a general description of a problem situation or programme of demands (Wheelwright & Clark, 1992; Teisman, 1997). This analysis or programme should be general to allow various problem perceptions and the generation of differing solutions.

5.3.3   *Goal intertwinement, win–win solutions, package deals, and compensation*

Dealing with the plurality of perceptions on complex problems does not necessarily imply that actors have to reach consensus to arrive at a joint solution. Often, they can realise the latter by developing solutions that do justice to the various problem perceptions and goals of actors involved, even if these

do not align. These solutions are referred to as *win–win solutions* (Dery, 1984). Win–win solutions are solutions that satisfy the values of different actors in the network (see Box 5.2 for an example). To achieve win–win solutions, scope optimalisation, as discussed earlier, is necessary as well as achieving variety in solutions. After all, it is unlikely that win–win solutions will be achieved without exploring alternative possible solutions (Fischer, 2003; Koppenjan & Klijn, 2004).

BOX 5.2   WIN–WIN SOLUTION SECURING BIODIVERSITY IN THE SURINAME RIVER BASIN

A domain in which win–win solutions are frequently pursued is in the management of protected areas. In these areas, conflicts frequently arise between the different kinds of values that stakeholders attach to the area (Ruiz-Frau et al., 2011; Djosetro & Behagel, 2020). For example, the ambition to protect the rich biodiversity of natural ecosystems can be at odds with the traditions of indigenous communities or the economic interests of local farmers or companies. This could lead to conflicts and mistrust between the involved parties (Manzoor Rashid et al., 2013; Best et al., 2021).

The involved actors may attempt to resolve such tensions by adopting collaborative approaches to the governance of such areas. For example, in the Upper River Suriname Basin, the values of different actors were integrated through the use of participatory scenario planning (PSP), participatory 3-dimensional modelling (P3DM), and a serious game called the Trade-off! The PSP process brought together various stakeholders, including government, the private sector, non-governmental organisations, and academic institutions, to envision possible future pathways for the landscape. This allowed for the inclusion of diverse perspectives and values in the development of scenario narratives. P3DM provided a holistic visualisation of the landscape, improving accessibility and understanding for diverse groups, including semi- or illiterate individuals. Trade-off! allowed for the exploration of trade-offs between different forms of land use and the consideration of multiple values in decision making. These approaches contribute to plans that integrate the different values attached by actors to protected areas.

Achieving genuine win–win solutions, where multiple stakeholders find mutually beneficial outcomes, often presents a formidable challenge. However, pursuing the creation of synergies among diverse interests and values is a critical endeavour in any context, be it environmental sustainability, economic development, or social equity. The network management efforts described in this example might contribute to the realisation of such win–win solutions.

When designs for specific problem solutions offer limited opportunities for intertwining objectives, the creation of *package deals* may be considered. This involves the consideration of a wider package of measures that considers several problems and their solutions simultaneously (Dery, 1984; Forester, 2009). This creates opportunities for mutually acceptable trade-offs, allowing actors to meet some of their objectives. Package deals might also mean that each actor accepts an outcome that they view less favourably on one issue in exchange for an outcome that they view more favourably on another issue. Through such trade-offs, the incurred losses become acceptable for the actors that then support the package as a whole. Making package deals often means that specific issues, arenas, or games are linked to one another so that the scope for a solution is enhanced. Sometimes, solutions or package deals manage to combine a number of objectives, but at the same time produce negative effects for others. There are still opportunities to take the latter's interests into account. Another option, when a solution implies an unavoidable deterioration for certain actors, is to offer compensation (Braybrooke & Lindblom, 1963; Susskind & Field, 1996). This principle is, for instance, used by the European Union regarding the Birds Directive and the Habitat Directive. Activities – such as road construction or the development of business parks – in designated areas are allowed only when the damage to a species or ecosystems is compensated by creating or enlarging a comparable habitat elsewhere. The principle of compensation for losses may be directly linked to achieving a concrete solution, policy, or service in a specific process at a specific location. Compensation may also consist of offering opportunities for gains in other areas or in future interaction processes within the governance network (Axelrod, 2006).

5.3.4   Reframing

The network management strategies discussed in this section so far are aimed at connecting perceptions and finding solutions that marry the perceptions of as many actors as possible. Sometimes, more drastic changes in perceptions are needed to break through impasses. This more radical intervention is often called reframing. It is used to radically change the way in which actors perceive situations. Crises are often used by (public) actors to employ strategies of reframing, as these enhance the credibility and urgency of the message that different perceptions are needed. Reframing might make use of storytelling, in which a perception is presented using narratives, metaphors, or anecdotes to convey the message in such a way that it appeals to relevant actors and becomes memorable. For example, in the Netherlands, the Ministry of Water Management developed a video animation to show the impact of rising water levels to convince stakeholders of the severity of this problem and illustrate

the urgency for them to join a collaborative, inter-governmental initiative to develop policies to counter this threat.

Network management, in the form of reframing, may also aim to challenge dominant problem perceptions if these exclude alternative perceptions and cause lock-in in specific directions that are not representative of the wider range of existing views. Such dominant frames may be challenged by inviting actors to come up with alternative argumentations that provide a fully-fledged and credible countervoice. One strategy to break the impasse when actors are fixated on entrenched ideas is to introduce an outsider with radical ideas. The primary goal of this approach is not necessarily the (complete) adoption of these ideas; rather, it encourages actors to broaden their thinking and consider a wider array of options. This can be instrumental in diminishing their attachment to previously rigid ideas (for a successful example, see Klijn, 2001). Chapter 2 stated that the structure of argumentation may explain the difficulty of aligning perceptions and arriving at joint actions. More specifically, in NIMBY (not-in-my-backyard) protests, local stakeholders resisting, for example, the construction of, for instance, roads, wind turbines, or power plants – as they experience the negative impacts – are often unable to provide fully-fledged alternatives to these plans. They limit themselves to listing objections to aspects of the government's proposals, without bringing forward serious alternative solutions. Network management strategies may then focus on stimulating actors to develop comprehensive, well-developed alternatives.

5.3.5   Storytelling and vision development

Another way for network managers to influence perceptions is to engage in storytelling or present a vision. By doing so, the network manager aims to influence the content or direction of an ongoing debate regarding a certain problem or solution (Fischer, 2003). What is more, this strategy allows the network manager to proactively initiate a particular debate. By pitching a certain problem perception or telling a story, network management can create a sense of urgency among network actors to join the process and invest their resources. Storytelling might make use of *sensitising concepts*. These guiding concepts make actors sensitive to certain developments, problems, and solutions. Public-private partnership (PPP) is an example of a sensitising concept. This concept is used to persuade private parties to participate in public projects (for instance, in the construction of roads, water projects, or public buildings like schools, hospitals, prisons) or to legitimate public participation in private initiatives. It holds the promise of combining the best of both words: the (public) values of the public sector and the efficiency and effectiveness of the private sector. It promises a synergy between the two. The PPP concept has another characteristic that is typical for sensitising concepts: it is ambiguous. It can mean various things, and, combined with its positive

connotation, it has the potential to make different actors with different perceptions enthusiastic about participating.

An example of the successful development of a vision to steer a network is the way in which the Indonesian government embraced the concept of sustainable corridor development and assigned various areas that were to be developed using this concept. The idea of sustainable corridor development suggests connecting areas with economic potential by creating a transport infrastructure as the backbone. Investments in these corridors are guided by the expectation that government investments stimulate private and societal investments, thus creating a multiplier effect (Srivastava, 2011). By explicitly setting sustainability as the objective, the measures taken focus not only on economic benefits, but also on social and environmental impacts and the improvement of residents' economic situation. As the vision of sustainable corridor development became the cornerstone of Indonesia's regional development policy, all further choices regarding the design and management of the process had to take this vision into account. The vision shaped and constrained the problem perceptions and solutions discussed, the set of actors invited to participate, and the rules that guided the further interaction process and the decisions taken (Djais, 2024).

Another, very specific way of storytelling, rapidly gaining popularity in the public sector, is branding (Eshuis & Klijn, 2012), on which we elaborate in the next section.

5.3.6   *Branding: creating new images and associations*

Branding is a slightly different way of influencing actor perceptions in governance networks. Public actors increasingly use brands and branding as a governance strategy to achieve public goals. Examples include, for instance, the increasing use of place brands to promote cities and enhance economic activities and tourism or connect citizens to the city. Brands can be defined as 'a symbolic construct that consists of a name, term, sign, symbol, or design, or a combination of these, created deliberately to identify a phenomenon and differentiate it from similar phenomena by adding particular meaning to it' (Eshuis & Klijn, 2012, p. 19). A brand is not the product, policy, or service itself, but it gives (additional) meaning and value to the product and it distinguishes it from other products, policies, or services (Kapferer, 1992). Brands contain typical brand elements such as logos, slogans (e.g., Make American Great Again), symbols, and other visual or auditive elements (Arvidson, 2006). Branding provides a product or policy with specific associations that can enhance support, direct actors to problem definitions, and create enthusiasm. Thus, branding can be considered a form of framing and storytelling. It creates an image that evokes associations with people. For example, branding a policy as interactive leads to positive associations such as responsiveness, co-creation, and participation. It clearly distinguishes the policy from

classic policy initiatives, which are top-down. Branding is a strategy that differs significantly from most other well-known governance strategies, as it relies more on visual images, on associations that actors have with the brand, and last but not least on emotions rather than rational arguments (Eshuis & Klijn, 2012; Eshuis et al., 2018). Thus, it seems more able to tackle the increasing media attention addressed in earlier chapters. Media tend to border on fostering dramatic news and personalised stories. Brands, with their images and short slogans, are easy to communicate with the media and attract more attention than extensive policy documents. Thus, branding can be considered a network management strategy. It can be strengthened by combining it with other strategies (see Box 5.3 for an example).

5.3.7 Exploring as organising knowledge processes

In Chapter 2, we argued that, in dealing with wicked problems, research and (scientific) knowledge rarely lead to a reduction in uncertainty about con tent. When experts and research findings are not accepted by actors that participate in processes within networks, this may result in knowledge conflicts, report wars, and information overload that contribute to strategic complexity instead of reducing it. This jeopardises the authoritativeness of (scientific) knowledge and may result in actors concluding that expertise and science are just opinions. This undermines the ambition to base policies on evidence and opens the way for conspiracy theories, fact-free policies, and 'negotiated nonsense' (de Bruijn & ten Heuvelhof, 2018).

If scientists and experts are expected to solve substantive complexity and provide policymakers with evidence-based solutions, they are manoeuvred into a vulnerable position. This is even more true when governments use research findings and experts strategically, for example to legitimise and impose their own problem perceptions and solutions. This was the case in many European countries during the Covid outbreak in 2020 when policymakers relied heavily on scientific insights. The Dutch government, for example, frequently organised press conferences on the development of COVID-19, with the prime minister, ministers, and scientific experts (often the head of the Outbreak Management Team) as the main speakers. Involving scientists and experts is considered better than fact-free politics. However, it also bears risks. When research findings are tightly coupled to decisions on solutions, they easily become the target of opponents' strategies. As a result, the research findings and the role of experts will be politicised, and the potential contribution of (scientific) research to cross-frame learning and the development of negotiated knowledge will be undermined (Jasanoff, 2004; Forester, 2009). What is more, scientific research findings are not always conclusive, and experts and scientists may differ in their opinions (Beck, 2011). In order to contribute constructively to the process of solving complex problems in governance networks, knowledge

production and the involvement of experts should be organised in such a way that expertise and findings are accepted by the other actors (Hajer, 2009; Turnhout et al., 2013).

For experts and scientific knowledge to be accepted in the network process, the organisation of research activities and the involvement of experts must meet certain conditions, which can be created through network management strategies (Jasanoff, 1994; Turnhout et al., 2013). These strategies are discussed below. The result of research, managed according to these principles, is not objective knowledge that will erase all the substantive complexities in governance networks once and for all. Instead, it generates inter-subjective knowledge on the basis of scientific insight available at that point in time, and it contributes to the quality of problem solving and the legitimacy of the selected policies and services.

5.3.7.1 Parallel linking of exploring problems and solutions and knowledge production

Scientific knowledge and expertise should not be organised as ex ante inputs of evidence for the process in which actors explore problems and solutions. Such a linear approach to knowledge production and sharing does not match the dynamic and erratic nature of network processes. Instead, research and the involvement of experts should be separated from the strategic interaction process, as a parallel research arena. Knowledge questions and conflicts emerging in the arena where strategic interactions take place can then be brought into the research arena as research questions. Research findings can subsequently be fed back into the interaction arena, not as a decisive answer to what should be done, but to inform the debate. This may result in new questions for the research arena. In this way, research may contribute constructively to the debates in the interaction arena.

5.3.7.2 A facilitating role for research instead of science for policy

Network management strategies should be aimed at giving research and experts a facilitating role. This implies that they will not generate ready-made solutions but facilitate the interaction between stakeholders (Hajer, 2009; Turnhout et al., 2013). Important roles include providing insights into the effects of solutions proposed by parties and demonstrating the degree to which actors' diverse preferences may lead to different or comparable outcomes. They may indicate the standpoints that can be maintained in light of current scientific knowledge and the questions that cannot be conclusively answered. Research may uncover aspects of a problem that have received little attention or lead to refining earlier opinions. Research can thus contribute to a situation where conflict transforms into a learning process in which actors explore opportunities for new solutions. By ensuring that research

findings do not become too tightly coupled to decisions on solutions, conflicts over research and the role of experts can be prevented.

5.3.7.3. Joint commissioning of research activities

Network management activities seek to stimulate network actors to collaborate in commissioning research and involving experts. As research is always conducted within a specific problem frame (see Chapter 3) that will influence the choices made with regard to demarcation, assumptions, methods, and interpretation of data, it is important that these matters are subjects of deliberation between the network actors. This will prevent research from serving the interest of only one or some of the actors and taking the shape of policy advocacy. What is more, joint commissioning of research may contribute to the convergence of actors' ideas and insights. If actors want to influence joint research activities, they will be forced to consider the research questions that must be addressed and will have to reach agreement about the assumptions and criteria that will serve as the basis for judging the findings. This negotiation and argumentation process encourages joint image building. At the same time, researchers can be asked to explain their assumptions, methods, and outcomes to the stakeholders. This contributes to the quality and focus of research activities and to the transparency and acceptance of the research choices. Furthermore, joint commissioning allows for the integration of this knowledge with other sources of knowledge needed to address wicked problems, such as scientific knowledge, managers' tacit knowledge, implementers' practical knowledge, and the local knowledge of residents and pressure groups, informed by internet communities (Head, 2008; Beck, 2011).

5.3.7.4 Boundary work

The network strategies discussed above imply a strong linkage between strategic interaction processes and processes of knowledge production and sharing. This strong linkage requires provisions that guarantee the autonomy of researchers and establish clear boundaries (Calton & Payne, 2003; Jasanoff, 2004; Van Meerkerk & Edelenbos, 2018). Researchers must be able to do their research autonomously without pressure from stakeholders to change or ignore findings. They should do their work on the basis of rules for qualitatively good and scientifically responsible research. However, the rules of the scientific game are far from self-evident and uncontested (Van Meerkerk & Edelenbos, 2018). That is why it is all the more important to be explicit about boundaries, responsibilities, and the way in which knowledge problems and disputes will be handled. This can be done by negotiating agreements between stakeholders and researchers and embedding these agreements in, for instance, a contract or a covenant. Another possible arrangement can be the establishment of a scientific forum, consisting of scholars who are

respected and regarded as authoritative by both experts and stakeholders. This forum can be charged with assessing, from a scientific viewpoint, the design, implementation, and findings of research activities during various stages of the interaction process. Furthermore, if a difference of opinion or conflict arises about research designs or interpretations of research data, such a forum can advise and, if necessary, mediate or arbitrate.

5.4   Network management strategy 2: Connecting actors and managing their interactions

Connecting strategies aim to initiate and facilitate interactions between actors and help reach joint outcomes or resolve deadlocks in the interactions. These network management strategies are needed, as strategic complexity hinders actors from coordinating their activities and may prevent them from joining interaction processes. The unpredictability of other actors' actions, the possibility of strategic surprises, the high transaction costs of participation, and the uncertainty of outcomes may make it unattractive or even dangerous for actors to become involved. It may also be that actors are not aware of their dependencies on others and do not appreciate the opportunities that collaboration offers. Actors may become stuck in conflict-inducing or avoidance tactics, and interactions may stagnate or be blocked either by actors' lack of commitment or by conflict. Network management strategies aim to overcome these barriers to collaboration. Below, we discuss strategies aimed at connecting actors and managing their interactions.

5.4.1   Selective activation of actors

Connecting activities bring together parties from different organisations, with different perceptions, resources, and preferences. In this way, demarcations of problems, organisations, sectors, and domains are redrawn, arenas, processes, and even networks can be connected, and new opportunities are created for resource exchange and the realisation of solutions (Crozier & Friedberg, 1980; Van Meerkerk & Edelenbos, 2018). This activity can be undertaken to initiate an interaction process within a network, but also during the various rounds of an ongoing process.

Scharpf (1978) speaks of *selective activation*. This strategy implies that the network manager has to make a decision about who is to be activated or connected, and who is not. The choice can be based on considerations of effectiveness and efficiency: in that case, it concerns actors whose resources are needed to realise a certain solution. However, this presupposes that the network manager has a clear idea of what the problem is about and the resources that are needed. Given the complex nature of the problem situation and the existence of diverging and perhaps conflicting perceptions and strategies, this is usually not the case. Connecting activities will more likely be driven by the intention

to broaden the scope of the interaction process beyond existing problem definitions and to explore new opportunities. Besides considerations of effectiveness and efficiency, democratic considerations may result in attempts to activate actors that are potentially affected by either the problem situation or possible solutions (Bryson, 2004; Sørensen & Torfing, 2007). The success of connecting activities depends on, among other things, actors' willingness to participate and invest their time and resources. This may not be self-evident, also given the strategic complexities involved, and requires efforts by the network manager to persuade actors of the potential benefits of participation.

However, connections are not necessarily fruitful and do not always offer the prospect of opportunities for goal intertwinement and positive outcomes. They can also be dysfunctional, for instance when actors have an interest in the continuation of the existing problem situation. Although most actors recognise the importance and consequences of climate change, this does not mean that they are always prepared to adapt their behaviour and activities accordingly. For example, companies may have an interest in oil and coal extraction, intensive air traffic, or the felling of forests for economic purposes. However, ending connections with certain actors, or preventing actors from joining the interaction process uninvited, may often prove too difficult. External events or interventions from outside are often needed to legitimise the exclusion of actors. As network managers typically do not have hierarchical means to exclude actors from interaction, they may simply have to wait for the right moment before actors, arenas, and games can be disconnected.

5.4.2   *Facilitating interaction*

Network management strategies may also be aimed at creating conditions for collaboration in ongoing interaction processes. In such cases, the network manager focuses on the procedural role and acts as a facilitator or process manager. Facilitation covers a large number of activities, all of which are procedural in nature (Ansell & Gash, 2012; Van Meerkerk & Edelenbos, 2018). Parties should be aware of the fact that they themselves are responsible for the progress and the outcome of the process, not the network manager. During an interaction process, a network manager may engage in the following activities:

- exploring and explicating benefits of participation for parties in order to motivate them to invest their resources and stay connected during the various rounds of the interaction process;
- providing meeting facilities, drawing up the agenda, administering the interaction, and providing the necessary information and information systems;

- investing in the social aspects of cooperation and furthering the building of trust and the creation of a favourable climate in which parties meet;
- furthering interactions by asking actors to understand one another's values, perceptions, and objectives, articulating parties' concerns, and seeking ways to accommodate these;
- signalling opportunities and threats in the environment of the interaction process and challenging parties to come up with proposals to use these in order to improve the quality and progress of cooperation;
- ensuring a level playing field for actors involved by signalling information differences, underrepresentation, and capacity limitations among actors; putting these on the agenda and making proposals to resolve them and empowering actors if necessary.

BOX 5.3   LEADER CASE IN SPAIN: CONNECTIVE STRATEGIES TO BUILD A NETWORK

In an attempt to strengthen the identity of the GALRMA region in Spain (GALRMA is an acronym for *Muntanya d'Alacant, translated as* mountains of Alicante), various local actors and citizens participated in a network. This network was characterised by the use of connective network management strategies. It started as a series of workshops and then evolved into a formal non-profit organisation aimed at developing the rural area and creating a brand for the region. With its grass roots approach, the GALRMA region became one of the successful examples in the European Union's LEADER programme for rural and regional development.

The strong emphasis on connecting strategies fits with the initial idea of a grassroots approach and the strong emphasis on stakeholder participation. The GALRMA executive hosts a continuous calendar of participatory online and offline events aimed at removing barriers to cooperation. Efforts are devoted to creating a sense of place and a strong brand community based on participation. As one participant says:

> with regards to the people that have been administering ... here, I would give them a 10/10.... They have worked relentlessly and have been helping us through whenever needed.... They are hardworking people that have travelled far and wide to activate the region.

The quote indicates that there is a lot of praise for the management and acknowledgement that connecting strategies result in good connections between the stakeholders. The strong emphasis on connecting strategies, however, also

means that over the years less emphasis has been put on exploring strategies more together. Rural sections develop their own content strategies, implying that there is not so much of a coherent image and policy strategy. This shows the value of using several network management strategies at the same time, as many aspects of governance processes need to be addressed simultaneously (such as binding actors in the network, creating a joint policy content acceptable to all stakeholders, and getting things done) (Ripoll et al., 2024).

5.4.3   *Mediation and arbitration*

Mediation and arbitration differ from facilitation because they happen when conflict has arisen and the interaction process is at an impasse. A distinctive feature of mediation is that it is undertaken with agreement and under the responsibility of the parties involved. In order to enact this strategy, a mediator should not be involved in the conflict and should have no direct ties with either of the disputing parties. During the mediation, this impartial position should be preserved. The role of mediation can be taken up spontaneously by one of the actors within the network process or the wider network, or a mediator can be invited by the parties. Activities that can be undertaken as part of this strategy include:

- exploring standpoints and solutions, for instance through acting as a go-between: enhancing discussion between actors and calling on actors to recognise and respect other parties' perceptions and interests;
- making procedural and substantive proposals;
- signalling the resources that are necessary to resolve the conflict, such as conducting research, involving expert or new actors;
- confronting parties with perceptions and interests of the 'outside world' (Susskind & Field, 1996; Kickert et al., 1997).

Network management may also involve arbitration, which involves actors asking a third party to intervene and impose a solution on them. Arbitration can, for example, be sought by starting legal procedures. This practice occurs more frequently in the US than in Europe but is increasingly common in Europe too. The disadvantages are that legal procedures take a long time and are costly, with uncertain outcomes. As an alternative, non-binding forms of arbitration are sometimes sought, for instance agreed upon at the start in a covenant between actors. In those cases, an authoritative person or a committee of 'wise persons' may be invited to arbitrate. Their suggestions are not legally binding, but when parties agree in advance to commit themselves to the outcome, it is more difficult for them to simply ignore the outcome.

5.5   Network management strategy 3: Arranging the process by organisational structures and furthering process rules

Interaction between parties is likely to come about only when actors perceive the costs and risks of the interaction as acceptable in terms of the financial and societal gains that they hope to achieve. Chapters 2 and 3 have shown that these costs and risks can be considerable, including risks of opportunistic behaviour, high transaction costs, and the offloading of costs and risks to weaker actors within and outside the network. Addressing substantive and strategic complexities requires at least some arrangements and rules to be in place that support interactions and agreement on rules to guide the interaction process (Ostrom, 1986).

Two network management strategies are of importance here. First, network management can be aimed at structuring interactions and can provide meeting places by creating arrangements like contractual agreements or organisational structures such as project groups, workgroups, and so on (Rogers & Whetten, 1982). Second, network management can be focused on furthering agreements on rules to guide the interaction between actors within the process.

5.5.1   Arranging the interaction process

Within network processes, connections between actors are often of an informal and ad hoc nature, certainly at the start of new interaction processes. When actors are interested in continuing their interactions, they may find it helpful to anchor their connections in some way. They may want to arrange their interaction by setting up some kind of organisational structure. This may involve light arrangements that entail few costs and little effort. Light arrangements can consist, for example, of a platform where actors meet regularly or agreements on voluntary information exchange. Such an arrangement can take the nature of a gentleman's agreement or letters of intent. When actors meet for the first time, it may be counterproductive to propose more elaborate and binding arrangements. It is the voluntary nature of the interaction that makes it attractive for actors to participate, certainly when the outcome of the interaction process is still highly uncertain. A more substantial arrangement is appropriate when parties engage in more frequent interaction and the costs and risks involved are higher. In those cases, it makes sense to establish more elaborate organisational arrangements, such as consultation platforms, negotiation tables, and project organisations, covenants, or contracts (Rogers & Whetten, 1982; Kapucu & Hu, 2020).

Organisational arrangements can take diverse forms, such as project groups, steering groups, and consultation platforms (for instance, to enhance citizens' or other stakeholders' participation), and serve a variety of purposes. Project organisations are usually for people at a middle or lower level of the organisations in the network and serve as platforms for daily coordination

of activities. However, they are less suited for including higher officials from participating organisations. For people in higher positions, top-level consultation platforms or negotiation tables may be created. Such people may also participate in steering groups that supervise project organisations, providing direction and making decisions at crucial junctures in the interaction process. Their involvement is essential for feeding back ideas to the various parent organisations and for the creation of external support for the process. If these officeholders are seen as authoritative by others, their involvement may increase actors' willingness to participate in the process.

These arrangements, including project groups and steering committees, not only serve a practical function in that they reduce transaction costs and are an insurance against opportunistic behaviour, but also have a symbolic meaning. They contribute to the trust that actors place in the interaction process. Network management strategies consist of presenting arguments and ideas on how the process might be arranged, given the costs and risks involved and the participating parties' perceptions and ambitions. They will also be focused on inviting and supporting actors to participate in these arrangements and on making resources available to maintain them. Network management should also monitor the appropriateness of the arrangements in place, given developments in the process and its environment, and come up with proposals to update and adapt them where necessary.

5.5.2   Agreement on process rules

Arrangements of network processes do not just consist of organisational provisions, but also concern the rules that guide actors' behaviour in the interaction process. When actors interact, their strategies are guided not only by objectives, but also by the rules that they follow. Rules are 'prescriptions commonly known and used by a set of participants to order repetitive, interdependent relationships' (Ostrom, 1986, p. 5). Within networks, a distinction can be made between process rules and network rules. The latter are discussed in Chapter 4, and their management is the topic of Chapter 6. Network rules are part of the institutional characteristics of governance networks. They are more encompassing than process rules, not limited to a specific interaction process but guiding relationships among actors involved in multiple arenas and interactions within the network. They are also more enduring than process rules, as their validity is not limited to the lifecycle of a specific interaction process. In this chapter, the focus is on process rules, temporary rules explicitly agreed upon by the actors to regulate their inter actions. Process rules thus are formal rules in the sense that they are explicitly agreed upon (and for instance codified in a covenant between actors); but they are not formal rules in the sense that they are not judicially binding rules. If one of the actors breaks the rules, the other actors thus cannot enforce them in

court. This does not mean that sanctions do not exist. The actor that violates the rules is also damaging that actor's reputation with the other actors; and, as networks are characterised by repeated interaction, this is something that actors have to take into account. Breaking process rules damages a participant's reputation, and possibly also other actors' trust in the actor that violates the process rules.

The actors participating in the interaction process have to agree about process rules, otherwise the rules will never work in more or less horizontal networks with autonomous actors. Therefore, these rules have to be negotiated (Healey, 2003; Skelcher et al., 2005; Bryson et al., 2006; de Bruijn et al., 2010). The set of process rules agreed upon by actors in an interaction process may vary. It may be that a very limited number of rules are made explicit and agreed upon, for example, at a specific juncture in the interaction process in order to overcome an impasse or resolve a conflict. It may also be that actors agree on a comprehensive set of rules as a conscious design of the interaction process (a process design). At the start of an interaction process, it may be unwise to propose far-reaching and detailed rules, as this may scare actors off. It is up to the network manager to investigate and judge the extent to which actors are willing to make agreements regarding rules. Of course, a good idea about strengths and weaknesses and about what could go wrong is essential for deciding the type of rules from which the interactions would profit. Actors within network processes can make agreements on various types of rules. Table 5.3 provides an overview of some of the most important rules for structuring interaction processes in networks.

5.5.2.1   Process rules regarding the objectives of the interaction process

The first rules that actors may want to agree upon are the objectives that they are pursuing in their interactions and the issues that will be on the agenda. In addition to desired outcomes, there may be undesired outcomes that the actors want to exclude. These rules thus determine the scope of the interaction process. The network manager's function here is to investigate what parties find attractive, to make proposals for an agenda for the interaction process, and/or suggest rules about how to determine the agenda.

5.5.2.2   Process rules concerning participation

Participation rules concern the conditions under which actors are allowed to enter or exit the process. It may be that the entrance of some actors is not permitted because they have an interest in maintaining the problem situation and have the reputation of blocking solutions. Other actors may be allowed in, not because they have resources to invest but because they are affected by the problem situation or proposed solutions. When necessary and justified,

TABLE 5.3 Types of process design rules

Rules	Description of rules
Rules concerning the interaction objective	Objective of interaction, suggesting the agenda and rules for agenda setting
Rules concerning participation	Indicating participants, their quality, and entry and exit rules and roles
Rules concerning the steps in the interaction process and work methods	Timing and sequence of activities, the deadlines that apply and how these are handled; structuring work activities
Rules about information	Determining between whom, in what manner, and under what conditions information is exchanged, internally as well as externally
Rules about decision making	Determining the criteria and decision rules that apply, who makes decisions, how the decision making will proceed, the mandates that apply, and how conflicts are regulated

certain efforts or contributions can be required from newcomers (ten Heu-velhof et al., 2009; de Bruijn et al., 2010). For example, when parties have made large investments in the interaction process, it is not self-evident that newcomers are welcomed, as they might benefit from the investments of others without contributing themselves. Exit rules may prevent actors from leaving the process once they have cashed in their benefits without contributing to others reaping benefits as well. These rules may therefore put a price upon entering or leaving the process.

5.5.2.3 Process rules regarding process steps, time schedules, and working methods

Parties can try to deal with complexity by making agreements about the steps to be taken and the time frames allowed. In horizontal interaction processes, a traditional phase-wise ordering of policymaking processes (analysis of the problem, design of a solution, decision making, implementation) will not work. Instead, more innovative ways of working can be agreed upon, such as working on different scenarios from the start and rules about the process for selecting these scenarios (Koppenjan & Klijn, 2004). Deadlines can be established in order to accelerate the interaction process and motivate actors to invest their resources. When parties have the idea that something is about to happen, their willingness to participate and to invest resources will increase. However, deadlines can also be counterproductive. They may put the interaction process under pressure, and they may be abused by opponents of the

process and its possible outcomes using delaying tactics (Emerson & Nabatchi, 2015; de Bruijn & ten Heuvelhof, 2018). Parties can also make agreements about how they will structure their interaction, such as agreements about how they organise their meetings, what they report on in those meetings, and so on.

5.5.2.4   Process rules regarding information

Parties will often make agreements about information rules regarding how they will use information or information systems and the extent and nature of the information that is shared with others. Information is a resource, and actors may have diverging interests that influence their perceptions of how the resource should be used. Public parties will emphasise the need for transparency and openness. Private actors may fear that company-sensitive information or innovative ideas will be leaked to competitors, or that information provided to public parties will be used by them to propose unfavourable regulations or contract conditions. Sharing information on citizens and clients may be problematic given privacy considerations. Professional codes of conduct may preclude professionals from sharing information with others. As knowledge is a source of power, actors more generally may be reluctant to provide information to others (Hartley & Benington, 2006). These different interests and perceptions can inhibit interaction and cooperation, and it is important that parties reach agreements that give adequate consideration to the various positions.

5.5.2.5   Rules about making decisions

Parties may want to agree on rules about how decisions regarding the process and its outcomes are made. These include rules that clarify who has the competence to take authoritative decisions and rules regarding how conflicts will be dealt with. An important question here is whether to grant actors veto power. Veto power will enhance actors' willingness to participate, even in situations where conflicts exist and trust is low. If actors have veto power, they can always protect their interests. However, veto power also slows down the decision-making process, as consensus is needed. Actors' right to veto precludes the use of majority rules. This may be a reason to avoid veto power or to weaken it after a certain period. Decision rules may also specify how parties will resolve conflicts. They specify procedures for appealing against a decision and for mediation and arbitration. Such agreements further the transparency of the process and protect parties against opportunistic behaviour. They determine how a conflict will be dealt with before it arises and escalating emotions make any agreement unlikely (O'Toole, 1988; Ostrom, 1990; Burton, 1996; Mandell, 2001). A clear example of a network in which process rules are used as a strategy can be found in Box 5.4.

BOX 5.4   NETWORK MANAGEMENT STRATEGIES FOR CITIZENS' CONSENT TO WIND PARKS

Realising wind parks is an important action in the fight against climate change; such parks help to achieve more carbon-free energy and thus help to address global warning problems. However, they may also lead to perceptual differences and conflicts among involved actors, and certainly citizens. Research shows that, although support for wind turbines in general is fairly high (see Rand & Hoen, 2017, for US figures or Jørgensen et al., 2020, for examples in Denmark), resistance is also possible. Main reasons mentioned in the literature for actors to object to wind parks are the visual pollution generated, the top-down way in which parks are planned and realised, and the uneven division of park revenue (see Devine-Wright, 2013; Rand & Hoen, 2017).

One important way to overcome resistance to wind turbines is to increase citizens' participation to enhance their support and to achieve compensation or share profits (see Devine-Wright, 2013; Jørgensen et al., 2020). The latter strategy has been employed quite a number of times in countries such as Denmark, the Netherlands, and the United States. Research in Denmark, though, shows that compensation schemes do not always have a positive effect, especially if the compensation is not seen as fair and equally distributed (Jørgensen et al., 2020). Langer et al. (2017) show with an experimental design that citizens find transparency and participation very important. Financial participation, including compensation, sharing profits, and so on, is important to citizens but less so than informational transparency (Rand & Hoen, 2017). As mentioned, perceived inequality, especially of financial distribution, works negatively for the acceptance of wind parks (see Jørgensen et al., 2020).

So, the proposed solutions for overcoming these conflicts seem to work only if some conditions are met, and these require active network management. Firstly, (informational) transparency requires clear process rules at the start and communicating those rules to citizens and other involved stakeholders in the network (see Section 5.6). Second, achieving satisfactory levels of participation requires intensive connecting strategies to engage stakeholders. Furthermore, to make compensation schemes work and achieve a feeling of distributional fairness and to ensure that benefits really accrue to local stakeholders, a network requires extensive exploration strategies to develop the right scheme and implement it. Thus realising new solutions for global warming – in this case implementing plans for wind parks - need extensive network management.

5.6   The skills of the network manager: knowing your way around

In this chapter, we have discussed a variety of network management strategies that can be used to facilitate interaction among actors with different

perceptions and strategies in governance networks. Academic research clearly shows that such network management strategies are crucial for success in networks.

To successfully deploy network management strategies aimed at facilitating interaction among actors, the role of the network manager is pivotal (e.g., de Bruijn & ten Heuvelhof, 2018). Network managers clearly need to know a lot about the network to be effective in applying these strategies. Network management is meant to solve interaction problems in networks. This requires the network manager to know his way around the network and to be able to identify problems and weaknesses in the network processes. Network managers have to be willing and able to understand the complexity of networks, the role of the various actors, and the power balance between those actors in the network to be able to influence stakeholders in the network and stimulate interaction (Bovaird & Loeffler, 2015). Selecting the right strategies at the right time also requires strategic thinking. The network manager has to decide on the instrument to use when and where to influence interactions and proposed solutions (Sørensen & Torfing, 2007). As in-depth knowledge of the network is essential for the network manager to operate effectively, in Chapter 9 we present a systematic method by which to analyse the network so that such knowledge is secured.

Besides analytical skills and strategic thinking, network managers require some substantive knowledge on the topic(s) discussed in the network. Although they do not need to be an expert, some knowledge on the topic at hand allows them to be able to ask the right questions, facilitate discussions, and so on (Sørensen & Torfing, 2007). Finally, relational skills are crucial for network managers. To deploy network management strategies effectively, it is also important that the network manager is accepted by the stakeholders in the network. Good relationships, building trust, and open communication between the network manager and the various actors might contribute to the network manager's acceptance by the network participants. Relational skills are also important for facilitating interactions between actors. Network managers who are able to build trust, realise open communication, and resolve tensions among network actors may be better able to stimulate actors to interact (e.g., Agranoff & McGuire, 2001; Macciò & Cristofoli, 2017; Kapucu & Hu, 2020).

A specific quality of network managers is knowing how to deal with media. In earlier chapters, the growing importance of (social) media and mediatisation processes were discussed. Network managers should be aware of the way in which (social) media intervene in network processes, anticipate their influence, and try to make media productive in managing network processes, or at least mitigate their possible negative impact. The means to do so are limited. Media cannot be controlled, but the network manager can influence his/her own behaviour to try to deal with (social) media in the most productive way possible. The extent to which this is possible depends

on resources available and the support that the network manager gets from other actors in the network. If possible, communication with media may be delegated to a specialist or media team. To engage successfully with (social) media, the network manager has to know the media landscape: which are the relevant outlets, influencers, platforms, and journalists? To what extent and in what way are they covering the processes and events relevant for the network? This requires the monitoring of (social) media. Next, a media strategy should be developed to be able both to respond to (social) media coverage of issues relevant to the network and to proactively come up with the network's own story to frame and influence narratives used in the media. Authoritative actors within the network should make media appearances. Ideally, the media strategy should be aligned with, and supported by, the participants in the network. The use of, and interaction with, media can be part of the information rules that actors may agree upon. In order to be successful, media messages should meet the requirements of media logic, but also convey the values, objectives, and stories of the network and its actors. Strategies regarding social media may focus on gathering information or communicating with citizens (Boersma et al., 2019; Mansyur et al., 2020). The media strategy should also include follow-up strategies, such as preparedness to answer questions, provide relevant and timely information, as well as acting in an honest and transparent manner, refraining from attempts to spam, lie, or manipulate the media. Finally, crisis communication might be part of a network media strategy, as conflicts might occur or external events might jeopardise network collaboration and outcomes (Dozier et al., 2013; Mergel, 2015).

There are indications that this job, and the skills required to do it, can be learned. More experienced network managers seem to do better and use a larger variety of strategies (see Edelenbos et al., 2011). However, we must note that, although network management is a very important condition for achieving successful collaboration and outcomes in networks, it does not offer guarantees. Failure may come from choosing the wrong strategies or from incorrect implementation. Yet, even picking the right strategies does not guarantee success. If actors within a network process simply do not want to collaborate, network managers will not be able to perform miracles.

5.7   The limits of network management

Although interdependencies within governance networks are a predominant characteristic of our current network society, it is far from self-evident that, within governance networks, attempts to handle substantive and strategic complexities will be successful. The network management principles are at odds with the ideas about hierarchical steering and project management that

still often dominate the practice of public policymaking and service delivery. Neither are they in line with the expectations of the general public and traditional mass media on how government should deal with complex problems. The call for firm decisions and political leadership is at odds with the prin ciples that underlie network management. Nevertheless, the network strategies set out in this chapter help to make collaborations succeed and to arrive at solutions and services necessary to deal with the challenges that society currently faces. An essential aspect of network management therefore is situational awareness of whether network management efforts can be applied successfully or whether more favourable conditions should be awaited. In addition to this ability to choose the right timing, network management may focus on influencing the conditions under which network processes can be governed successfully. One way to accomplish this is by restructuring networks. This is the topic of the next chapter.

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6

MANAGING INSTITUTIONAL COMPLEXITIES IN GOVERNANCE NETWORKS

6.1 Introduction: institutional network management strategies

Policymaking and service delivery in governance networks are characterised not only by substantive and strategic complexity, but also by institutional complexity. Network processes do not proceed in a green field, but in an institutional context where network arrangements shape and constrain the interactions between parties. Attempts at managing complexity can thus stretch into networks' institutional aspects. Institutional network management strategies are forms of institutional design aimed at changing governance networks' existing institutional characteristics (see Chapter 4) or at building new networks. Institutional network management differs from the network management strategies presented in the previous chapter. Whereas management strategies aimed at substantive and strategic complexities take the network's rules and institutional features as given and focus on perceptions and interactions in network processes, institutional network management strategies focus on networks' institutional characteristics. They thus aim to realise more fundamental and lasting changes.

6.1.1 Managing institutional features of networks: motives and risks

Attempts at changing governance networks' institutional features are fundamental interventions, as they change networks that have evolved over a long period of time under the influence of repeated interactions between actors. Networks and network institutions are not just instruments for tackling

concrete problems in the short run. They are multipurpose vehicles aimed at enabling and supporting societal relations by regulating mutual interactions in dealing with various problem situations. Over time, various societal interests and values become institutionalised in networks. The specific characteristics of networks are an expression of the *modus vivendi* that societal parties have established in the past, and they form the basis for the trust that parties need in complex interaction processes. Networks and network institutions can therefore be viewed as institutional capital. Thus, institutional network management – much more than process management – concerns intervening in a delicate balance that has been established between various societal actors and their interests and values. Therefore, network managers should not engage in institutional network management lightly; there must be good grounds for doing so. Changes in interaction patterns, rules, and arrangements cannot easily be reversed when, in retrospect, undesirable effects occur (Streeck & Thelen, 2005). This means that institutional network management must be undertaken carefully and with restraint. Institutional network management that is motivated by the pursuit of a solution to a concrete problem or the realisation of a specific solution is usually unwise. In such circumstances, an intervention is considered from a specific objective or value, often neglecting the variety of values that might be affected in the long run, or consciously marginalising and weakening the position of other parties (Blom-Hansen, 1997; Koppenjan & Groenewegen, 2005).

Despite these considerations, there may be good reasons to attempt a (re) structuring of networks. From a governance network perspective, a legitimate motive for deploying institutional network management strategies is the observation that certain institutions hinder collaboration or result in systematic underrepresentation of certain actors, interests, or values within the arenas in which network processes unfold. Institutional network management then concerns efforts to remove barriers to interaction and participation and the establishment of institutional rules that enhance collaboration and create a level playing field for all actors, interests, and values involved. Thus, institutional network management is not primarily inspired by motives of effectiveness or efficiency; rather, it concerns breaking through the institutional barriers that hinder interaction, equal access and opportunities, and innovation (Hood & Jackson, 1991; Goodin, 1996; Lowndes & Roberts, 2013).

6.1.2   *Institutional network management strategies*

Institutional network management strategies may be aimed at changing the structure of networks or creating new networks. Chapter 4 explained that the institutional structure of networks can be viewed as a set of institutional rules. It introduced a typology that distinguishes between position rules, boundary

rules, decision-making rules, information rules, reward rules, scope rules, and product rules. Chapter 4 also discussed how institutional rules often combine to form network arrangements. Institutional network management strategies may be aimed at changing or establishing specific institutional rules, network arrangements, or the level of trust within networks. Section 6.2 thus covers the 'what' of institutional network management strategies.

Chapter 4 also discussed the idea that institutions can take different forms, including formal rules (regulative institutions), norms (normative institutions), and deeply held values and beliefs (cognitive institutions). These different forms of institutions also point to different approaches to changing them. The changing of formal rules, for example, can be accomplished by regulation, either imposed or through negotiation among parties. Norms can be influenced by storytelling and persuasion. Storytelling may also work as a strategy for changing cognitive institutions, although deeper values and beliefs are generally difficult to change. Change in cognitive institutions may therefore instead be pursued through changing personnel, changing interaction patterns, changing structures, or exploiting a crisis situation to shake up the network. Section 6.3 discusses approaches to changing the different forms of institutional rules, thereby addressing the 'how' of institutional management strategies. Building on lessons drawn from Sections 6.2 and 6.3, Section 6.4 identifies a number of design principles for building and changing networks. Section 6.5 presents the main conclusions of this chapter.

6.2 Management strategies aimed at the what: changing network rules, arrangements, and trust levels

6.2.1 *Management strategies aimed at formulating or changing network rules*

Institutional network management strategies can aim to formulate or change institutional network rules. In existing networks, the set of rules may be inadequate, outdated, unclear, or incomplete. In new networks, rules may be absent or underdeveloped. This can motivate network managers to engage in strategies aimed at clarifying, updating, changing, and/or replacing network rules or complementing them with new rules. These strategies can be directed towards the various types of rules that characterise networks: position rules, boundary rules, decision-making rules, information rules, reward rules, scope rules, and product rules.

6.2.1.1 *(Re)formulating position rules: creating, abolishing, and transforming actor positions*

One aim of institutional network management is to create or adapt positions of actors within the network. Positions may be added through the creation

or adaptation of organisations with the specific intention to change the inter-dependencies and interaction patterns within the network. For instance, the creation of inspectorates in various policy areas such as health, education, or banking involves the creation of new positions in existing networks. Creating such positions establishes oversight regimes that enhance trust by monitoring the quality of actors and services and limiting strategic behaviour.

Institutional management strategies can also aim to abolish or transform existing positions in networks. Organisations such as ministries or agencies can be abolished, and agencies and public service providers can be placed at arm's length of government or privatised to allow them to work in a more businesslike manner. Conversely, agencies are sometimes brought under political supervision or reintegrated in ministries to enhance governmental control over them (Warner, 2008; Koppenjan, 2012).

The transformation of positions can include the redefinition of roles performed by actors in a network. From a governance network perspective, such a redefinition of roles may be pursued to enhance interactions between actors in a network. This may involve, for example, encouraging public servants to change their role from neutral policymakers or new public management-inspired public managers to that of network managers who facilitate interactions between other actors. Recent debates on the co-creation of public value (Sørensen et al., 2021) suggest that private parties and citizens may be stimulated to take on a more active role in the creation of public policies and services. Private parties are thus stimulated to align their business plans with public values pursued by public actors, and citizens are stimulated to transform their role from that of passive users of public services to active co-producers of such services (also see Voorberg et al., 2015). In a similar vein, professionals may be required to relinquish their traditional role as autonomous experts to collaborate more closely with one another and with administrators, managers, politicians, clients, and families (Noordegraaf, 2007; Koppenjan, 2024).

6.2.1.2 (Re)formulating boundary rules: changing access and exit opportunities

Institutional network management strategies can aim to establish or change boundary rules, that is, the rules that determine how actors may access or leave a network. One possible motivation for doing so is certain resources not being available within the existing network. Another possible reason is that the nature of the problem or the solutions pursued in a network have changed over time, implicating new actors. In the formation of new networks, choices have to be made regarding the actors that are to be involved and those that should be excluded.

Within many networks and policy areas, like public transport or care, the right to develop activities is restricted by law, and strict requirements are set

for actors that are allowed to participate. Actors may have to be officially admitted or certified, or entrance may be regulated through procurement and tendering procedures. These conditions can be specified in agreements, contracts, or regulations. There can also be rules that regulate the exit of actors, for example, to prevent participants from running away from their responsibilities or withdrawing resources once they have made a profit. Interestingly, the European Union, which can be seen as an inter-governmental network, has extended standardised procedures for countries to become a member, but no procedures for countries that want to leave, as illustrated by Brexit.

6.2.1.3   (Re)formulating decision rules

Institutional network management strategies can aim to change or establish rules that specify which decisions within the network are allowed to be taken by which actors. Changes in these rules result in a redistribution of tasks and activities among the actors and arenas involved. An example of this, for instance, is the extensive regulation of decision making in physical planning in many countries. Although the number of procedures and the degree of detail vary, many countries work with rules that specify the types of plans that should be made, the research that should be undertaken to inform decision makers, how stakeholders should be involved, the existing procedures for objection and appeal, and which parties are allowed to take which decisions. Establishing or changing decision rules can change actors' roles and dependencies within networks dramatically, improving or disimproving the possibilities to participate and collaborate.

Decision rules also concern rules for the management of conflicts in the network. The presence of conflict regulation mechanisms reduces uncertainty on how conflicts are handled and contributes to the stability of the network and to the trust that actors may have in the network and its institutions. These rules are typically established during the formation of new networks, although it is of course possible to adjust existing rules on conflict regulation when actors in the network perceive conflicts as being dealt with unsatisfactorily. Conflict regulation typically involves the establishment of rules on how conflicts on solutions, knowledge and facts, and work methods are resolved. They specify how such conflicts will be dealt with, potentially including procedures for appealing against decisions and for mediation and arbitration (Ostrom, 1990).

6.2.1.4   (Re)formulating information rules

Institutional management strategies can target information rules, that is, rules on how and when what information is shared, under what conditions, and

with whom. Information dissemination is essential, as it empowers actors by providing them with the insights needed to coordinate their interactions. An example of this can be found in the discussion about assessments of the performance of schools and public hospitals. Publishing performance data on the web makes it possible for parties other than the governmental inspectorate (parents, students, the media) to be involved in the evaluation of the performance of public organisations. Publishing performance data also initiates discussions and processes of self-steering in networks (Bovens et al., 2014; Koliba et al., 2019).

Adapting information rules or making implicit rules explicit may thus greatly enhance the options for actors to contribute to network processes. Ensuring information sharing and openness may also enhance the transparency of networks and their democratic nature. At the same time, information rules should protect intellectual ownership, sensitive business information, political and diplomatic negotiations, and the privacy of citizens and clients. In this respect, the formulation of information rules is about seeking a balance between confidential and open treatment of information. For example, pharmaceutical companies have an interest in keeping the intellectual property of their medicines to themselves, whereas sharing this information and pooling intellectual property might allow a wider set of actors, including public actors, to answer fundamental research questions and create platforms, tools, databases, and models that foreground the development of safer and more effective medications (Stevens et al., 2016).

6.2.1.5   (Re)formulating reward rules: influencing the pay-off

Networks are characterised by reward or evaluation rules, such as rules that specify costs and benefits for the actors. These reward rules influence actors' behaviour and the strategies that they deploy, and thus create certain interaction patterns in networks. Changing these rules can thus be instrumental in influencing actors' behaviour and interaction patterns. An example of this strategy is the introduction of long-term public–private partnership (PPP) contracts in public infrastructure construction. Granting a contract to a private consortium for 25 or 30 years to design, build, finance, and maintain infrastructure (a DBFM contract) creates new reward rules compared with traditional contracting. Instead of separate contracts for each of these project parts, with a DBFM contract the consortium has a financial incentive to make early investments in order to safeguard good performance during the project's whole lifecycle.

Changing reward rules can also result in a change in the resource distribution within the network. This will have repercussions for the evolving dependencies and interaction patterns. Subsidies may be used to encourage actors to participate in certain networks, to facilitate other actors, or

to pursue certain values that are underrepresented within network arenas. Many environmental and human rights organisations, for example, receive state subsidies for this reason.

In networks involved in public service delivery, there is a big difference between the network being financed by each of the collaborating public service organisations and the network receiving its own financial means from the national government. In the first situation, the collaboration is dependent upon the budgeting practices of the mother organisations, which are not necessarily aligned with the needs of the network. These organisations' performance management systems may not be tailored to collaboration, but only reward activities that match their own objectives. Institutional network management strategies can then be aimed at changing budgeting and performance management systems, given their important impact on the functioning and structure of networks.

6.2.1.6   (Re)formulating scope rules

Scope rules specify the tasks and goals on which the network focuses and thereby implicitly indicate the topics and values that are beyond the scope of the network. Networks are not merely instruments meant to enhance collaboration. They have emerged or are established to accomplish certain goals or public values. Networks can, for instance, be aimed at realising innovation, economic development, providing certain public services, sustainable development, and so forth. This mission may be laid down in an explicit way, but it may also be that it remains implicit or is taken for granted. Institutional strategies can then aim to define or change the scope of the network (changing its direction or widening or narrowing its scope) and/or to make the scope explicit and transparent. (Re)formulating scope rules thus provides the opportunity to clarify a network's mission. In this way, institutional network management strategies can influence the direction of interactions.

6.2.1.7   (Re)formulating product rules

Product rules can be established through formal laws and regulations or as the result of self-regulation within a network. Some product rules are set by certification institutions. Product rules facilitate interaction by specifying the quality and reliability of actors, activities, and products. They make it easier for network actors to choose a partner or supplier or to identify high-quality products and services, thereby reducing transaction costs and increasing trust in networks. They thus offer a powerful way in which to influence interactions in networks.

A well-known example is the establishment of the Forestry Stewardship Council (FSC) in 1993. When efforts to agree on a multilateral convention on deforestation at the Rio Summit in 1992 failed, the FSC was launched

as a non-governmental, multi-stakeholder effort to introduce certification of sustainable timber and forest products (Moog et al., 2015). It has brought together environmental NGOs and businesses in an arrangement that is seen as one of the most advanced examples of governance without direct government involvement (Bell & Hindmoor, 2012).

Once established, product rules can also become a limiting factor, in the sense that they perpetuate existing practices and make it difficult for new ones to be accepted. Institutional network management strategies may be aimed at formulating or changing product rules: rules that set quality standards for products, services, and actors.

Box 6.1 explicates how the introduction of PPP contracts in infrastructure networks can change the various institutional rules discussed above. The introduction of these contracts illustrates a form of institutional network management.

BOX 6.1   HOW THE INTRODUCTION OF DBFM(O) CONTRACTS IN PUBLIC INFRASTRUCTURE PROVISION CHANGES INSTITUTIONAL NETWORK RULES

The introduction of design, build, finance, and maintain/operate (DBFM/ DBFMO) contracts in the realisation and exploitation of public buildings (such as government offices, schools, hospitals, prisons) and road and water infrastructure implies a major restructuring of the network of actors active in these fields. In the last couple of decades, many countries worldwide have started to use these long-term contracts, which often have a contract period of 25 years or even more. These contracts introduce private finance in public infrastructure provision and integrate the various project phases that traditionally are contracted out separately (Hodge & Greve, 2022). This implies a profound intervention in the existing institutional rules that guide the behaviour of the actors in the network.

First of all, position rules are changed, as the contract requires the establishment of a consortium of private parties that accepts responsibility for the financing and coordination of the integrated project realisation. Private finance also implies that banks and private financiers acquire a role in this network, where they previously had none. Besides the creation of new positions, existing roles change. Design activities are transferred to the private sector; governments take up the role of procurer rather than provider. In addition to financing, the coordination of the various project phases is transferred to the private sector.

As far as boundary rules are concerned, tendering and contracting practices are changed to accommodate DBFM(O) practices; this often implies that small contracting firms are excluded, as companies must be of a minimum size to be able to bear the risks involved and have the new expertise required. The

long-term nature of these contracts also limits the possibilities to leave the project before the contract period has ended.

The contract also implies change in decision rules, giving the private consortium that has won the contract the authority to coordinate the project and hire and steer subcontractors. Public actors' authority is limited to the enforcement of the contract. In-between changes of the design and the project, a renowned cause of public project failure, are much more difficult. Banks and private financiers have the authority to decide on the availability of the financial means, thus making it vital to the private consortium to address risks and ensure that deadlines are met. Conflicts can be settled by going to court, but, given the length of these procedures, actors have an incentive to prevent conflicts from escalating.

DBFM(O) contracts have a different scope compared with the traditional contracts that refer to a single project assignment. The integrated nature of the contracts requires the private party to bear the responsibility of the project as a whole, instead of the project being the public party's responsibility.

DBFM(O) contracts also dramatically change the rewards rules for private parties. Whereas financial risks in traditional contracting are limited, here the private company has to finance the project and to recover its investments during the contract period. The contract may also have requirements regarding milestones and performance measures that have to be met in order for government to make payments. In the case of user payment (toll), the private partner has to perform in order to be able to repay its financiers.

Finally, as the introduction of the DBFM(O) contract results in new roles, activities, and relationships, new procedures and standards are needed to guide the processes and products that are part of the new way of realising public infrastructure. This also results in the setting of new product rules, for instance by banks with regard to how they assess project proposals by private consortia seeking finance.

The introduction of DBFM(O) contracts in public infrastructure provision therefore is not simply a matter of choosing another contract form. Actors in the network have to take on new activities, implying that they have to recruit different personal with different skills and expertise, and have to change their standard operation procedures and their internal organisation. The introduction of such contracts also presupposes the presence of banks and private financiers that are willing to enter, and capable of entering, this new market; and these changes have to be realised in coordination with the efforts of others. This is why the first applications of DBFM(O) contracts are slow to take off, have difficulty meeting expectations, and sometimes result in major failures (Davies, 2018; National Audit Office, 2018; Garvin, 2019). Actors are only gradually able to apply for these new roles and, even then, their application requires a stepwise process of learning, internalisation, and mutual adjustment (Koppenjan et al., 2022).

6.2.2   Management strategies aimed at arranging and rearranging networks

The previous section focused on institutional network management strategies aimed at formulating, changing, or abolishing specific institutional rules. However, institutional rules rarely stand alone, but are part of larger network arrangements. The sets of rules that make up these arrangements are often laid down in, for example, covenants, contracts, and agreements or regulations by which networks are established. Where arrangements are formed by rules, changes in one rule will often have repercussions for other rules in the arrangement. It is often the case that institutional rules in arrangements need to be changed in concert, because they presuppose one another. Therefore, institutional management strategies are typically focused on the formation or adaptation of wider arrangements, rather than on individual rules.

Institutional network management of this sort typically aims to shape or reshape institutional arrangements that enable and sustain collaboration between actors. These arrangements may vary from informal and 'light' settings, such as temporary tables, platforms, pilots, and project organisations, supported by for instance covenants or contracts, to more institutionalised and enduring network organisations or networks, involving for example joint ventures, umbrella organisations, or mandated networks (Koppenjan & Klijn, 2004; Ansell & Gash, 2018). Mandated networks are networks established by governments and may have a legal basis (Segato & Raab, 2019; Krogh, 2022).

Each of these arrangements has benefits and drawbacks. Informal organisations are flexible and have low transaction costs, but are also relatively unstable. More formal organisations provide more stability and certainty, but are less flexible, more bureaucratic, and therefore entail higher transaction costs. The choice of arrangement depends on the nature of the joint activities, the number of actors involved, and the type of interest at stake. Some networks are of an informal or local nature, other networks may be deeply institutionalised and represent an important economic sector in the national or global economy. Arrangements that govern these networks may require complex and prolonged legislation projects (Provan & Kenis, 2008; Segato & Raab, 2019; Krogh, 2022).

Provan and Kenis (2008) suggest that the effectiveness of governance structures depends on networks' characteristics: networks with few actors and a high level of consensus and trust are best self-governed, whereas networks with a larger number of participants and a lower level of consensus and trust require more centralised governance structures, where coordination is in the hands of a lead organisation or a network administration organisation (NAO). These different types of arrangements each also have its drawbacks. For example, coordination in decentralised structures is relatively time and energy consuming, potentially leading to actors losing enthusiasm or

dropping out. In this sense, a more centralised network is more efficient, but this can come at the cost of lower commitment on the part of some of the involved actors. The use of a NAO can to some extent strike a balance between inclusivity and efficiency, but entails more bureaucracy than the other types of arrangement (Provan & Kenis, 2008).

Box 6.2 provides an example of how institutional network management strategies regarding the rearrangement of a network are applied in practice.

BOX 6.2   ODISHA: REARRANGING A NETWORK IN RESPONSE TO DISASTER

In 1999, the Odisha region in India was struck by a super cyclone. The cyclone caused massive devastation, killing more than 10,000 people and destroying housing and infrastructure (World Bank, 2014). In almost 18,000 villages, 19 million people were affected by the cyclone (Walch, 2019). The cyclone's disastrous consequences were partly blamed on the government's lack of preparedness and inadequate response. The disaster marked a turning point in disaster management in Odisha, as multiple measures were taken to ensure that the region would be better prepared for disasters in the future. The measures taken are a good example of attempts to (re)arrange networks. The most significant of these was the establishment of the Odisha State Disaster Management Authority, which was the first state agency in India to focus exclusively on disaster management (Iwasaki, 2016). The agency was made responsible for increasing community resilience, promoting a culture of preparedness for disasters, and coordinating the activities of NGOs and other humanitarian organisations. It promoted links between governmental organisations at multiple levels, between different departments, and across local communities (Walch, 2019). The agency also led the construction of 200 new cyclone shelters (Pal et al., 2017).

The disaster also triggered a response from the national government, which drafted and adopted the National Disaster Management Act of 2005, which established a comprehensive institutional framework for disaster management at the national, state, and district levels. As part of this Act, new disaster management authorities were established at the national, state, and district levels (Pal et al., 2017). The Act also encouraged community involvement in planning processes and awareness raising, and created a legal mandate for the establishment of Emergency Support Functions and the activation of Emergency Operation Centres at various levels, enabling a prompt and coordinated response during disasters (Jha et al., 2015).

The many reforms were aimed at shifting from response-oriented disaster management to a proactive and preventative approach. The reforms paid

off when Odisha was struck by another super cyclone in 2013. This time, 38 people died, which is less than 0.4 per cent of the death toll from the 1999 cyclone (World Bank, 2014). Nearly 1 million people were evacuated in a short period of time (Walch, 2019). The Odisha case thus illustrates how institutional network management can be used to successfully shape new institutional arrangements at a large scale, in this case focused on disaster management. It also illustrates that such interventions can take a long time to unfold.

6.2.3   *Building trust*

The institutional network management strategies discussed so far directly target institutional rules and the arrangements that may be formed by sets of institutional rules. However, such changes also influence the relationships between actors in networks, another institutional dimension of networks (see Chapter 4). What is more, institutional management strategies can be deployed to consciously influence the relational dimension of networks in other ways, for example by trying to increase trust among actors or actors' trust in network arrangements.

As discussed in Chapter 4, trust between actors in networks emerges gradually. Actors gradually build trust as they tackle problems and achieve positive outcomes together. Some authors speak of spontaneous trust to indicate its gradual nature and its lack of intentionality (Fox, 1974; Huxham & Vangen, 2005). Other authors suggest that managers are inclined to overestimate the malleability of trust and that actors may even become suspicious about obvious attempts to build trust (Sydow, 1998). To make matters even more difficult, trust can be damaged quickly and dramatically; it is hard to gain but easily lost. This raises the question of what network managers can do, if anything, to enhance trust within networks.

One approach to managing trust is to create favourable conditions under which trust can emerge and flourish. For example, the quality of the way in which interactions within networks are managed is a crucial precondition for the development of trust (Ansell & Gash, 2008). In Chapter 5, the characteristics of skilled and trustworthy network management of network processes were discussed (also see Klijn et al., 2010; Pennink, 2017). In this chapter, we focus on the potential of institutional network management strategies to promote trust. These strategies can aim to enhance the institutional conditions for the development and preservation of trust. Establishing shared institutional rules or making institutional arrangements are examples of this. They establish a shared understanding of positions and responsibilities, and of procedures to deal with unknown issues and conflicts. The presence of an impartial network

manager and of oversight and arbitration mechanisms and parties also contributes to the confidence that actors place in the network: they can expect fair processes and possibilities to turn to mediating and arbitrating bodies if their core interests are harmed. Product rules, such as certifications, are designed to offer actors guarantees about the quality of products and services – potentially, if these rules are monitored and guarded appropriately, also enhancing the trust that actors have in the network of which they are part.

However, one should always be aware of the risks of institutional management strategies, as outcomes are sometimes difficult to predict and usually difficult to reverse. Trust may be damaged, for instance, when trusted institutional practices are changed or replaced by new institutions that have not yet gained actors' trust. Strategies aimed at institutional management can have far-reaching effects on trust between involved parties, as they often directly affect parties' positions and core interests. This underlines the importance of pursuing institutional management strategies in a prudent way. High demands are thus placed on the quality of the process by which institutional management strategies are developed and implemented.

6.3 Institutional network management strategies aimed at the how: regulating, negotiating, convincing, and timing

Beyond focusing on the structure of the network (the what), institutional network management should address how these changes can be implemented: the process through which interventions can take place (the how). The typology of regulative, normative, and cognitive institutions discussed in Chapter 4 provides us with ideas to answer this question. The regulatory view sees institutions as formal institutions such as contracts, laws, and arrangements that create an incentive structure that influences behaviour by providing sanctions and rewards. This implies that institutions and institutional changes come about through the imposition of regulation. The normative and cognitive views see institutions as internalised norms, beliefs, and logics. Changes in these institutions imply actors' acceptance and internalisation of these changes. This requires actors' involvement in institutional change processes or attempts to influence their norms, beliefs, and logics. These theories suggest negotiation and persuasion (e.g., through storytelling) as viable institutional network management strategies. Therefore, in this section we discuss imposition, negotiation, and storytelling as institutional network management strategies. As receptivity to institutional change also depends on external factors such as impactful events or crises, we add a fourth strategy: the timely and productive exploitation of events and crises to bring about changes in the network (Collier & Collier, 1991; Kingdon, 2011; Lowndes & Roberts, 2013).

6.3.1   Imposition of network rules and arrangements

The first strategy to build or change the institutional dimension of networks is to initiate or adapt regulations through which networks are mandated. In order to improve the quality and effectiveness of policies and public services, governmental actors may take the initiative to create networks and oblige agencies and public service organisations to join and collaborate in these networks. Such an initiative involves the establishment of a mandate, a set of network rules that condition the collaboration and the allocation of resources. Typically, these conditions concern compliance to a certain mission and associated performance criteria (Keast & Brown, 2006; Segato & Raab, 2019; Krogh, 2022). During the lifecycle of mandated networks, governments may change the institutional rules that make up the network as well as the resources made available to the network in attempts to influence the network's functioning. Networks may also be completely abolished, for example when the governmental actors that mandate them consider their results unsatisfactory or if the mandate no longer aligns with policy preferences.

In order to impose institutional conditions and changes upon networks, governments must be well informed about the actors involved and the conditions under which they are prepared to collaborate. Only then will they be able to come up with a network design that might work. Here, an interesting paradox emerges, as network collaboration is motivated by the inadequacy of imposing a policy or a solution upon actors given the complexities present, the imposition of collaboration upon these actors would be received with suspicion. A strategy of designing and imposing networks and network rules places high demands on the institutional network manager's information position, resources, and skills. In practice, the imposition of rules and network arrangements often entails processes of lobbying by, and consultation and negotiation with, representatives of (potential) network actors. This brings us to the next institutional network management strategy.

6.3.2   Negotiating network rules and arrangements

One institutional network management strategy is to invite network actors to collaborate on network (re)design. This strategy also entails facilitating and guiding these processes. Actors will typically be invited because they hold resources that are important for the network's intended purposes. For the network to be viable, the prospective actors need to accept it and internalise its rules (Ostrom, 1990). This is more likely to happen if the actors are involved in the (re)development of the network and its rules. Some networks and network rules may be negotiated by the network actors themselves and result in a covenant, a contract, or the establishment of an informal platform or a formal governance network. In other cases, negotiation on the networks

may take place in separate arenas in which only some network actors are represented.

These collaborative processes of institutional design take the form of the network processes discussed in earlier chapters of this book. Thus, they may need to be facilitated and guided, using (some of) the network management strategies discussed in Chapter 5 (see also Koppenjan & Groenewegen, 2005).

6.3.3   *Sensitising concepts and administrative storytelling*

Some institutional network management strategies aim to change normative ideas, informal rules and practices, and shared beliefs and logics within networks through persuasion, using sensitising concepts and administrative storytelling.

Strategies that entail the use of sensitising concepts and administrative storytelling typically occur through communication and dialogue with (potential) network actors. This includes drafting policies, making statements on problems and policies, media appearances, and the use of social media. Sensitising concepts are concepts that make actors sensitive to certain developments, problems, solutions, and ways of working (Pollitt & Hupe, 2011).

A sensitising concept that has drawn a lot of attention in recent administrative theory and practice is that of the co-creation of public value (e.g., Bryson et al., 2017; Torfing et al., 2021). This concept attunes actors to the idea that public value is not created by governments alone, but in interaction between public, private, and civic parties. It thus communicates a greater responsibility for private and civic actors in activities that are traditionally primarily in governments' domain. It also points to the increased importance of public actors' ability to collaborate with others, ideally on an equal footing, in the creation of policies and public services. The introduction of a sensitising concept such as public value co-creation influences also the meaning of other concepts. For example, co-creation of public value is associated with an altered understanding of public leadership, which becomes a form of leadership that can be taken on by public, private, as well as civic actors, with a strong emphasis on negotiating and aligning public values and convening and facilitating arenas in which co-creation can take place. Sensitising concepts can be part of an administrative story, but they can also be used in a standalone manner without such a story. Co-creation of public values fits the administrative story of new public governance, which some scholars use as a label for a broader family of contemporary approaches to public decision making and service delivery as an alternative to new public management (Osborne, 2006, 2010; Koppenjan, 2012, 2024), but is also used outside that context.

Administrative stories aim to illuminate a network's mission, the challenges to be addressed, the rules that should guide actors' behaviour, and the

appropriate network structure and arrangement. These stories can aim to confirm and preserve the existing structure, rules, norms, values, and beliefs, or to change these.

An administrative story or narrative provides a context for ideas, norms, and beliefs about why the network exists and how collaboration should be organised, and makes these acceptable and legitimate. Numerous attempts by political leaders to carry out reforms in the public sector are wrapped in a story (for an overview, see Pollitt & Bouckaert, 2017). These include the story of Big Society, aimed at mobilising citizens, clients, and their informal networks in the provision of services traditionally performed by government, allowing for budget cuts (see Box 6.3). Another story is that of Smart Governance, aimed at the application of the internet, social media, big data, and other new technological innovations (such as AI) in order to exploit their potential for the implementation of innovative policies, public services, and the generation of growth in high-tech sectors of the economy (Scholl, 2021). Sensitising concepts and administrative stories thus can be used by network managers to inspire actors to initiate a network or to change its rules. This is achieved by influencing the ideas, norms, and beliefs of actors in the network and by generating external support and legitimacy by addressing actors in the network's environment, in particular its sponsors and mandators.

BOX 6.3   THE ADMINISTRATIVE STORY OF THE BIG SOCIETY

An institutional network management strategy that aims to change the positions of actors in networks is the promotion of self-steering or self-regulation. In times of austerity, initiatives aimed at introducing or enhancing forms of self-steering gain momentum because of the urgency to achieve cutbacks in governments' public services budgets.

In many countries, policymakers and politicians have followed in the footsteps of Prime Minister Cameron in the UK, who in 2010 launched the idea of the Big Society. This sensitising concept is inspired by the work of Phillip Blond (2010). It is part of an administrative story that states that Big Government and market approaches have eroded traditional social networks, local community, and membership of volunteer associations.

In order to oppose these developments, local communities should regain their ownership of their assets. The answer to many social problems lies in the Big Society. The Big Society idea invites citizens to participate, to show enthusiasm and commitment (Jordan, 2011). In the words of David Cameron: Citizens, clients, informal networks, and societal associations were invited and stimulated to act as co-producers and co-owners of policies and public services. Local governments and service providers were called upon to

include volunteers and clients and their networks in public service networks (Jordan, 2011).

The administrative story of the Big Society was accompanied by additional institutional management strategies such as the establishment of the Big Society Network, which should promote and elaborate the idea of the Big Society Bank, which was supposed to finance social initiatives, for instance by Social Impact Bonds, and pilots in four regions. At the same time, the UK government cut back public budgets, as a greater involvement of citizens and societal groups implies that the government has to do less. Critics of the idea stated that the story merely legitimised cutbacks and that efforts to empower citizens, volunteers, and local communities fell short (Maschette & Garnett, 2023.)

Although the concept of the Big Society disappeared from the Conservatives' political agenda after 2014, the idea itself has had a far-reaching influence on the thinking on how to organise policies and social services, including outside the UK. It resulted in increased acknowledgement of the importance of self-steering and co-creation by citizens and societal groups and commitment to policies that support these (Nederhand et al., 2016).

The Big Society is about a huge culture change, where people, in their everyday lives, in their homes, in their neighbourhoods, in their workplace don't always turn to officials, local authorities or central government for answers to the problems they face but instead feel both free and powerful enough to help themselves and their own communities.

(Cameron, Big Society Speech, 19 July 2010)

6.3.4 Shaking up the network by using crisis situations and big events

Network managers can exploit crisis situations or big events for more radical interventions in the organisation and operation of networks. An example is the nuclear disaster in Fukushima in Japan in 2011, which inspired the German government to accelerate the reform of its energy sector by expediting the closure of its nuclear energy plants. The Russian invasion of Ukraine in 2022 resulted in a radical change in the thinking about the security situation in Europe. It shook up international relations and dependencies worldwide. It also led to the expansion of NATO, the security network in which 30 countries from North America and Europe participate with the membership of Finland and Sweden. It also resulted in the acceptance of Ukraine as a candidate member of the European Union.

Crisis situations and big events may turn existing beliefs and expectations on their head and create opportunities for the evolvement of new perceptions and courses of action. One could also say that these events create critical junctures or policy windows that allow for institutional reforms and innovations, including the adaption of existing networks and the creation of new ones, where these were not possible before because of vested beliefs and interests (Collier & Collier, 1991; Kingdon, 2011; Lowndes & Roberts, 2013). They establish a sense of urgency among the network actors involved, as action is demanded, and they also create an atmosphere of agreement. It is, however, important to use that moment appropriately, as the sense of urgency and willingness to change perceptions will dissipate over time. Critical junctures and policy windows exist only temporarily. In short, using events and crises demands good management and timing.

In practice, the various institutional network management strategies discussed in this section may be applied simultaneously. It is also possible for various actors to deploy different strategies simultaneously. If these strategies are uncoordinated, they will work against one another. When these strategies are applied in a coherent and coordinated way, their effectiveness is likely to be greater. Box 6.4 offers examples of the various institutional network management strategies deployed to stimulate transformations of the German energy sector.

BOX 6.4   ENERGY TRANSITION: TRANSFORMING ENERGY NETWORKS

Since the adoption of the Paris Agreement in 2015, the participating countries have agreed to reach carbon neutrality by mid-century in order to limit global warming. This requires a rapid energy transition from the use of fossil energy sources to renewable sources. The magnitude of this challenge differs from country to country, depending on their reliance on fossil energy sources. Nevertheless, for many countries, this transition implies a major restructuring of the networks involved in the production and distribution of energy. According to the World Economic Forum, Scandinavian countries, the UK, the Netherlands, France, and Spain belong to the Top 10 of what they call green movers, with eighth-placed South Korea as the only non-European nation to feature (World Economic Forum, 2023). Overall, in 2023, 35 countries improved their performance compared with 2022, 17 of which were poorer countries.

Although Germany is not in this Top 10, its *Energiewende* is widely recognised as an inspiring example, resulting in its qualification as the world's first major renewable energy economy (Radtke & Canzler, 2018). The Erneuerbare-Energien-Gesetz (the Renewable Energy Sources Act) was passed in 2000

and updated ever since (Bundesministerium für Wirtschaft und Klimaschutz, n.d.). This law obliged energy companies to purchase green energy from local producers (operators of, for instance, solar panels and wind turbines) at a guaranteed price. A subsidy for the purchase of solar panels was also introduced. These measures made it attractive for households and companies to invest in sustainable energy sources. Many local and citizen-owned energy cooperations emerged. The German government also invested in research and development. As a result, an innovative energy sector developed with new companies that compete with big companies in solar and wind energy worldwide. Consequently, the existing centrally organised and supply-driven system shifted towards a demand-driven and distributive network. In response to the Fukuyama nuclear disaster in Japan in 2011, the German government decided to accelerate plans to close its nuclear power plants (*Atomausstieg*). The energy transition did not evolve without problems though, because it drove up energy prices. Energy companies required the government to compensate the costs of closing nuclear power stations, and the government could not refuse, because it could not afford these companies going bankrupt. Moreover, the Atomausstieg increases Germany's dependence on coals and lignite, jeopardising the attainment of policy targets. In 2018, a commission was established in which energy companies, government, Bundesländer, and NGOs negotiated the phasing out of the use of coal and lignite (the *Kohlaussteig*). Since the Russian invasion of Ukraine in 2022, Germany's dependence on Russian gas has also become problematic. Germany was dependent on Russian gas for 55 per cent of its natural gas supply. As a result, new gas power stations have been built and the closure of coal-fired power stations and coalmines are again under discussion (Wiertz et al., 2023). Another problem is the construction of wind parks and new high-voltage power lines, against which the population has strongly protested (Unnerstall, 2017).

   This short overview of the German energy transition shows that the restructuring of a network is not a once-off decision, but a gradual process in which various decisions are taken and various measures are combined (setting goals, laws, subsidies, negotiations) that influence the course of the process by which the network is restructured. The case also provides an example of exploiting a crisis (the Fukuyama nuclear disaster) to accelerate a change and shows how the dynamics of the process (rising costs) and external developments (the Russian invasion of Ukraine) can complicate the network restructuring process.

6.4   Towards design principles for building and changing networks

Networks are not easy to build or change, even though the discussion of the institutional network management strategies in this chapter might give

that impression. In this section, we examine the difficulties that institutional network management strategies may encounter and reflect on the principles that should guide these strategies in order to arrive at effective and legitimate networks.

6.4.1 The difficulties of dealing with institutional complexities

Institutional network management strategies differ from other network management strategies in that they aim to change networks' institutional features. They are thus an example of institutional design processes. The literature on institutional design highlights multiple difficulties in institutional design that will also affect the success of institutional network management strategies (Goodin, 1996; Lowndes & Roberts, 2013; Head, 2022).

First of all, building and changing networks is not purely an intellectual design process, but a process in which various actors with different motivations, perceptions, and strategies participate. As introducing and changing rules and arrangements can have long-term distributive effects, the affected actors will want to have a say in the process. The outcomes of this process are thus a function not just of considerations about effectiveness and fairness, but also of the power struggles between competing coalitions that occur as the process unfolds. Building and changing networks is predominantly a process of pushing and pulling, in which actors deploy strategies. Attempts at managing these processes require actors to anticipate and respond to these strategies.

Secondly, institutional design processes are themselves governed by certain rules. For example, attempts to establish or change formal laws are governed by legislative procedures and decision rules. The rules that govern institutional design processes can be complicated and lead to lengthy procedures, reducing the manageability of the design process. However, if the rules for these processes are unclear, this can also lead to difficulties. In these circumstances, attempts to establish or change institutions, such as networks, can take the form of negotiations in a garbage-can-type context, that is, they may become unruly and highly unpredictable (Cohen et al., 1972; March & Olsen, 1989; Peters, 2019). During these negotiations, circumstances can change and ideas on the aims of the institutional design process can shift. The process may then move in a direction other than that foreseen by its initiators, leading to results that the initiators did not envisage at the outset.

Thirdly, not all network actors may have access to arenas in which proposals for institutional designs are developed and decided upon (Kiser & Ostrom, 1982; O'Toole, 1988). Formal changes in law, for instance, can be made only by legislative bodies. Negotiations on the formation of PPP contracts in infrastructure governance take place in closed arenas of private business and governments. Citizen collectives are established

in consultation among a selective group of citizens in arenas from which politicians and businesses are often absent. This may result in designs and formal rules that do not take the interests of all relevant and affected actors into account. This may also influence the legitimacy of, and support for, network management strategies.

A fourth difficulty is that it is highly uncertain how decisions aimed at changing a network's institutional characteristics will work out in specific network processes. After all, formal rules on paper are not identical to the rules-in-use within networks (Ostrom, 2007). Formal decisions may, in the short term, break down institutional practices, liquidate organisations, establish new ones, adjust resources, change common outlooks, and so forth. However, that does not mean that a new institutional practice will immediately be established. Even if a fairly comprehensive institutional blueprint is introduced, in practice these new institutional rules will have to be interpreted, accepted, applied, and internalised. Attempts to implement new rules often founder on the resistance of actors involved in the implementation process. As a result, institutional innovations will not be implemented, or be only partly implemented, or be implemented in a deviant way. Even when new rules are accepted, their effective implementation requires a gradual process of learning by doing. Given the complexity of interaction processes within governance networks, many unforeseen circumstances and unintended effects will arise with which parties must learn to deal.

6.4.2   *Dsign principles for building and changing networks*

The above makes clear that institutional network management strategies should address not only the substance of institutional design (the what), but also the process by which they are developed, decided upon, and implemented (the how). In addition, actors should resist the temptation to resolve institutional complexity by simply introducing new, additional rules or proposing new blueprints. The more precisely the (re)design of institutional networks is formulated, the more rigid it will become, making it difficult to apply in the complex day-to-day reality of governance processes. Institutional network management often requires a combination of strategies: proposals to change rules and arrangements should be accompanied by regulation, negotiation, administrative storytelling, and exploiting crises, in addition to attempting to enhance trust. The (re)design of networks is a challenging undertaking, the outcomes of which are hard to predict and only become clear gradually. What is more, institutional network management strategies may lead to the destruction of existing institutional capital and the institutionalisation of failure. Although no recipes exist that can fully prevent mistakes, it is important that insights regarding design principles that can be derived from

network theory (Koppenjan & Klijn, 2004), the literature on institutional design (Goodin, 1996; Lowndes & Roberts, 2013), and design thinking (Head, 2022) guide institutional network management strategies.

The first principle states that institutional design is seldom about creating and implementing grand designs in a green field, but about stepwise changes in existing rules and arrangements, or prudently introducing new designs that have the potential to develop further. These gradual changes acknowledge that new rules and arrangements come about amidst existing ones and require gradual alignment through mutual adaptation and learning. This means that institutional design is a long-term process that requires patience and perseverance. Large transformations that seem unattainable in the short run may come within reach through a series of incremental steps (Lowndes & Roberts, 2013). Moreover, institutional designs are rarely created out of the blue. Instead, institutional design typically involves combining and rethinking existing practices in innovative ways. This ensures that new practices build on existing institutional capital.

The second principle is that institutional designs should be robust. Institutional rules and arrangements should provide stability, predictability, and trust, thus reducing the risk of opportunistic behaviour and high transaction costs that hinder collaboration and innovation. To achieve this robustness, the design should include procedures that prevent institutions from becoming the target of strategies of network actors trying to change the rules for their own benefit. Another way to increase the robustness of institutional designs is to ensure that they enjoy broad support among relevant actors. If an institutional design does not reflect the motives, norms, and beliefs of the actors that it will affect, then it is likely to encounter their resistance.

The third principle, which competes with that of robustness, is that of reversibility, adaptability, and learning. As the process and outcomes of institutional design are uncertain, the reversibility of changes in the event of unexpected impacts would be ideal. However, once institutions have been changed, they are hard to restore. Therefore, it is important to create prototypes and experiment on a small scale or in specific situations before new practices are gradually upscaled. Experimenting with network rules and arrangements followed by evaluation allows for learning and adaptation (Goodin, 1996).

The fourth principle emphasises the importance of the vision and the motivation underlying institutional network management strategies. The aim is not so much to improve the conditions to solve a specific problem, the efficiency of a specific service, or the conditions for attaining a specific constituency's goals. Network theory acknowledges the multipurpose nature of networks and the importance of balancing the various interests involved and accommodating the motivational complexity that characterises network situations. It emphasises improving collaboration among relevant and affected

actors, while taking wider public values and interests into account. This also implies that networks are not only about constraining and shaping network actors' behaviour, but also about empowering weak and underrepresented network actors.

This brings us to the sixth principle, that of fairness, transparency, and democratic legitimacy. As network rules and arrangements have distributive effects, actors should find these to be transparent and fair, and they should include conflict regulation mechanisms and provisions for objection and appeal. In addition, they should be decided upon and applied in a democratic and transparent manner. This refers to the substance of designs, as well as to the way in which they are developed and implemented. Imposing network rules and arrangements is not in line with this principle, just as storytelling may prevent deliberation about the pros and cons of institutional rules and arrangements discussed or implemented.

6.5   Conclusion

Attempts to build or change networks do not happen in a green field. They do not concern a purely rational, intellectual design process. In practice, many actors are involved, with different motives, resources, and strategies. Blueprints will be distorted in the process of pulling and pushing between parties. Rapid and far-reaching changes may shake up the existing network but will require a lot of effort and energy before they result in a new workable and legitimate practice. Often, successful attempts to change the structure and functioning of networks are aimed not at overall changes, but at incremental changes. In general, these strategies will not imply totally new practices but build on earlier proposals and practices implemented elsewhere. Network changes are often realised step by step, after various and persistent management efforts that extend over a considerably long period of time. Small steps can lead to a fundamental transformation of the network and its environment in due course (Lowndes & Roberts, 2013). Attempts at radical changes will probably meet massive resistance from established interests, although under some circumstance – the literature speaks of critical junctures or policy windows – sudden, far-reaching changes may be possible. It is, however, problematic that the effects of radical changes are hard to predict, and these changes themselves are difficult to reverse. Attempts at network formation or changing the existing networks can be imposed by regulation, negotiated among relevant and affected actors, or pursued by persuasion (e.g., by storytelling). In order to arrive at network arrangements that are workable and legitimate, institutional network management should build on the needs and expectations of relevant and affected parties, preferably stepwise and in dialogue in order to allow for experimentation, learning, and ongoing

improvement. This all implies that network formation and restructuring processes should be seen as interaction processes whose success depends heavily on the quality of their management.

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PART 3

Normative issues

7

GOVERNANCE NETWORKS, DEMOCRACY, AND ACCOUNTABILITY

7.1   Introduction: the discussion about democracy and accountability in networks

Imagine the network manager of a complex environmental project in a large city. This manager has to deal with many different actors: political actors on the municipal council, investors and builders, people living or working in the area (e.g., inhabitants, shopkeepers, public transport organisations operating buses). How does the network manager ensure that decisions made in the network are democratically legitimate? Is it sufficient to ensure that the proposal is accepted by the municipal council? That would be the key criterion from a representative democracy point of view. Would the decision be democratically legitimate if it was rejected by the other actors in the network? What if the area has a large investor and that investor's support is necessary for whatever the city council decides? What if inhabitants strongly resist the new plans for restructuring? In contrast to what we are used to in a representative democracy, decision-making processes in networks are not necessarily dominated by governments. Instead, networks often include actors in decision-making processes that are neither elected nor a particular group's official representatives. The interdependencies between these actors in the network – as discussed extensively in previous chapters of this book – raises normative questions regarding the (democratic) legitimacy of governance networks and the decisions taken in these networks. Legitimate decision making in networks seems more complex compared with classic top-down decision making. After all, which actors (are allowed to) participate in governance networks? Who do these actors represent? What is the role of elected officials in governance networks? How fair are the outcomes of decision-making

processes in networks? Who is to be held accountable for the decisions made in the governance network? And to whom?

These normative questions regarding legitimacy and accountability are important. After all, if decisions made in networks are not legitimate, and we cannot hold the actors making these decisions accountable, we might face power abuse and corruption. Therefore, in this chapter we explore the topics of (democratic) legitimacy and accountability in networks. We first turn to the question of legitimacy in networks. To better understand the potential legitimacy issues, we first contrast democratic legitimacy in networks with the classic idea of democratic legitimacy in a representative democracy. Next, we explore alternative views on democracy and democratic legitimacy that might prove a better fit for the idea of networks. Then, we tackle the issue of accountability in networks.

7.2 Understanding democratic legitimacy

The dilemmas presented in the introduction show the importance of addressing democratic legitimacy in networks. There is a lively debate about the relation between democracy and networks; and thus, about what constitutes the democratic legitimacy of networks (for an overview, see Klijn & Skelcher, 2007; Sørensen & Torfing, 2007; Nesti & Graziano, 2020; Mosley & Wong, 2021). In this section, we first address the concept of legitimacy. Then, we explain how legitimacy relates to our views on democracy, presenting three different views on democracy and democratic legitimacy.

7.2.1 What is legitimacy?

Legitimacy can be defined as 'a general preparedness to accept, within a certain margin, a decision whose content is not yet known' (Luhmann, 1975, p. 25). Following Luhmann, legitimacy is related to actors' acceptance of decisions (Scharpf, 1997; Bekkers et al., 2007; Karlsson-Vinkhuyzen, 2016). In general, we can make a distinction between input and output legitimacy (Scharpf, 1997; Karlsson-Vinkhuyzen, 2016). Input legitimacy relates to the legitimacy gained from following the (democratic) process (Scharpf, 1997, p. 14). In a representative democracy, this relates to the principle of (free) voting for people to represent citizens and includes other basic principles of democracy such as transparency and accountability (Bekkers et al., 2007). Output legitimacy refers to the effectiveness and problem-solving quality of the decision-making process. Output legitimacy is thus more tied to the network's performance, addressing effectiveness and efficiency, and giving account of the outcomes (Bekkers et al., 2007, pp. 43–46; Scharpf, 1997; Sørensen & Torfing, 2007; Karlsson-Vinkhuyzen, 2016). To the (classic) distinction between input and output legitimacy, we can add throughput legitimacy (van Buuren et al., 2012).

This type of legitimacy occurs during the policymaking process rather than at the start (input legitimacy) or looking at outcomes (output legitimacy). Throughput legitimacy focuses on the quality of the process and the procedures followed. Is the process transparent? Are all parties treated fairly? To what degree is deliberation possible? Throughput legitimacy fits very well with the idea of governance as a process, in which legitimacy is necessary during that process and not just at its beginning or end.

7.2.2   *Democratic legitimacy in representative democracy*

To assess democratic legitimacy, we often build upon the principles of representative democracy. In representative democracy, democratic legitimacy is tied to elected officials. The best-known definition of representative democracy characterises democracy as: 'that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote' (Schumpeter, 1943, p. 269). Following Schumpeter, the core of democracy consists of elections between parties that create officeholders, such as members of parliaments, members of city councils, elected mayors, and presidents, who are accountable for their decisions and can be 'sacked' in the next elections. Democratic legitimacy then comes from elected actors' involvement in decision making. Representative democracy, as an indirect form of democracy, is often considered a realistic option to achieve public decision making (Schumpeter, 1943; Dahl, 1956). Voting for representatives who are allowed to make decisions is a method to arrive at decisions that reflect the preferences of the majority of citizens without directly involving these citizens.

This view of democracy emphasises the primacy of politics, which is a dominant principle in almost all Western democracies. A precise and universal formulation of this doctrine, that is, one that is relevant to all countries, does not exist. *Grosso modo*, the most important characteristics include (Schumpeter, 1943; Easton, 1965; Pateman, 1970; Held, 2006):

- Elected political officeholders are responsible for making policy and for expressing the values and political visions underlying choices about societal problems. Politicians set the policy agenda and determine priorities.
- Elected representatives weigh various interests against one another in decision-making processes on societal issues. They decide on how to address or prioritise conflicting values (Easton, 1965).
- Elected representatives' judgements prevail over substantive judgements of others, such as sectoral, interest-bound judgements of societal associations.
- Elected political officeholders are accountable for the activities of the entire subordinate bureaucratic apparatus, politicians are in charge, and political–administrative relations have a hierarchical nature.

Obviously, this is more complicated in practice. For example, given the number of employees in the bureaucratic apparatus, it is practically impossible to effectively exercise control as elected officeholders over all these employees. Nevertheless, the normative appeal of the primacy doctrine is strong. In political institutions, the government apparatus, the media, and among the citizenry, the idea remains strong that elected officeholders must determine the course of public policies and are to be held accountable for mistakes. With regard to legitimacy in a governance network, this view of democracy implies that democratic legitimacy has to be achieved by the involvement of elected officeholders.

7.2.2.1   Two alternative views on democratic legitimacy

In representative democracy, representative bodies' decisions are legitimised by the fact that such bodies are chosen by the majority of the people (voting) and that elected officeholders can be 'sacked' and replaced by others. However, representative democracy might also struggle with decreased voter turnout and increasing electoral volatility. Moreover, criticism of representative democracy includes the idea that citizens will become alienated from politics if they only vote and allow elected officials to make all decisions. There are alternative ideas about the essence of democracy and consequently about how democratic legitimacy can be achieved. This implies that there might be multiple sources of democratic legitimacy in governance networks.

Besides the idea of representative democracy, there is another – competing – idea of democracy (Berry, 1970; Pateman, 1970; McPherson, 1979; Held, 2006). This is the participative model of democracy, sometimes also called the developmental model of democracy. In contrast to representative democracy, participative democracy assumes citizens' intensive participation in decision making. Participative democracy is thus a form of direct democracy. Contrary to, for instance, Schumpeter's definition of democracy as a vehicle to achieve decisions, the idea of participative democracy states that democracy is a value in itself. Each citizen's active participation is vital, as it allows citizens a say – and thus direct influence – in public decision making that affects their own lives (e.g., Rousseau, as cited in Michels, 2011). This enhances democracy, but also has an educational function. Active involvement in public decision making contributes to citizens' education in the sense that it makes citizens more competent and helps them to increase their civic skills, such as debating or running a meeting (see Michels, 2011). Furthermore, citizens' active participation leads to more inclusiveness; firstly, because citizens are allowed to express their interests and demands; secondly, because active participation enhances citizens' feelings of belonging, of feeling part of a community (Putnam, 2000). Democratic legitimacy in this model stems from citizens' participation and

contributions. However, active participation by all citizens is often not feasible given both the size of the population and specific groups of citizens' poor representation in participation processes.

Another model of democracy is that of deliberative democracy, a model that builds on Habermas's ideal of *herschafsfreie discussion* (power-free dialogue) between citizens (see Habermas, 1981; for a discussion on deliberate democracy, see also: Dryzek, 2000; Hirst, 2000; Held, 2006). This view on democracy, like the idea of participative democracy, is considered a form of direct democracy. A core characteristic that this model adds to the two views already presented is the open debate among involved stakeholders about solutions (see also Young, 2000; Fischer, 2003; Habermas, 1981). The key to deliberative models of democracy is, to quote Held: 'the transformation of private preferences via a process of deliberation into positions that can withstand public scrutiny and test' (Held, 2006, p. 237). Rather than voting, deliberation is the core mechanism. Stakeholders exchange arguments through public reasoning. It is essential to most forms of deliberative democracy that preferences are not fixed, but can change in debate. Or as Dryzek (2000, p. 2) states: 'The only condition for authentic deliberation is then the requirement that communication induce reflection upon preferences in a non-coercive fashion'. For deliberation to be successful however, another kind of core characteristic of democracy is introduced. This is openness and has to do with rules and practices connected to the process of discussion, information, and plurality of values. Democratic legitimacy in this model comes from the characteristics of the deliberation process (openness) in which those affected by public decision making are able to deliberate in the decision-making process. Deliberative democracy is not about elected officeholders or about achieving as much voice as possible, but about an argumentation process in which actors test arguments and achieve some sort of minimal consensus about solutions. There are some fairly successful examples of citizen councils. However, in this time of fierce discussions on social media, threats, and conspiracy theories, deliberative democracy seems particularly vulnerable, given that information and reasonable debate are crucial in this model of democracy and democratic legitimacy.

In her research, Michels (2011) has shown that citizen participation conducted in accordance with the participative and deliberative democracy models has several positive effects. Citizens gain more knowledge on the issues at stake in the decision-making process, they develop civic skills, they are more engaged, and there is – overall – more support for the decisions being made. However, this effect is limited to the citizens that participate in the decision-making process. As some groups are often underrepresented in participation and deliberative processes, the benefits to democracy as a whole are less clear.

7.2.2.2   Three sources of democratic legitimacy

With regard to democratic legitimacy, the three different views of democracy identify three different sources of legitimacy:

- *Political primacy*: In this first source, legitimacy comes from elected political officeholders' involvement and the procedures to hold them accountable (e.g., voting to elect them, to remove them from office, and hold them accountable, and various rules that protect citizens). This source of legitimacy aligns with the notion of representative democracy.
- *Voice*: In this source of legitimacy, it is not passive influence that is important. Instead, the active ways in which citizens can participate in concrete decision-making processes and the processes by which these decisions are arrived at are the key source of legitimacy. In this source of legitimacy, citizens' (and other actors') real involvement is stressed. Legitimacy comes from the fact that each individual citizen has a say in the decision-making process. This source of legitimacy aligns with the notion of participative democracy. In participation literature, a distinction is often made between width (the subjects on which participation is possible) and depth (the degree to which citizens actually have a say in decisions). A high level in both dimensions results then in a high level of voice.
- *Due deliberation*: This source of democratic legitimacy is strongly connected to the way in which the interaction and deliberation processes are organised. Democratic legitimacy in this view arises out of good deliberation processes, guaranteed by clear and fair process agreements between actors where they share knowledge, explore possible solutions, and exchange value judgements and can safely express them. This source of legitimacy aligns with the notion of deliberative democracy.

These different models of democracy and the sources of democratic legitimacy attached to them are normative points of view that can be used to evaluate the democratic character of governance network processes. Table 7.1 summarises the three discussed models of democracy, their understanding of democratic legitimacy, and the consequences for network governance.

Whether we consider governance networks legitimate depends on which of these three sources we consider. Simultaneously, the three models of democracy show that there is more than one way to assess a network's legitimacy. The fact that not all participants in a governance network are democratically elected might be an issue when viewed through the lens of representative democracy. However, allowing citizens to participate actively in the network or ensuring good deliberation processes in the network might be other relevant ways to establish democratic legitimacy in a network. These might come with challenges. For instance, when we consider voice as the primary

TABLE 7.1 Three views on democracy and their notion of democratic legitimacy

	Representative democracy	*Participative democracy*	*Deliberative democracy*
Core	Election of officeholders through competitive voting	Citizens' active participation	Reasonable debate between informed citizens/actors
Source of legitimacy	Political primacy: involvement of elected officeholders in the decision-making process	Voice: citizens have a direct say and may voice their interests and demands in the decision-making process	Due deliberation: deliberation and the exchange of arguments Transparency and open conditions for free deliberation
Implications for governance networks	Elected officials have to remain in charge to legitimise decision making	All stakeholders should participate actively in the decision-making process	There needs to be rules for sound deliberation processes Representativeness is less important than genuine deliberation
Obstacles in governance networks	Elected officials lack governance possibilities Interdependency makes it difficult to exclude other actors from a role in the decision-making process	Access rules might bar participation Not all actors have similar participation possibilities Underrepresentation of certain groups of actors	There is not always reliable information, accepted by all actors, to form the basis of deliberation

source of democratic legitimacy, it is crucial that all stakeholders participate actively in the decision-making process. However, not all groups have access to the network, and certain groups are often underrepresented in participation processes. For due deliberation, the presence of reliable information and creating a knowledge base that is accepted by all stakeholders are crucial. As discussed in Chapter 2, information is often contested, making due deliberation challenging. So, in governance networks, it is crucial to consider, and do justice to, the conditions for democratic legitimacy in accordance with multiple models of democracy. In the next section, we use political primacy, voice, and due deliberation to formulate criteria for democratic legitimacy in governance networks.

7.3   Democratic legitimacy in networks

We have now taken the first step in our attempt to define some more or less commonly accepted norms for democratic legitimacy. These norms are in general derived from the various extant democratic models. The next question is how these norms or principles apply to governance networks.

As decision-making processes in governance networks are different from traditional decision-making processes, assessing the democratic legitimacy of governance networks requires a reinterpretation of the classic criteria for measuring legitimacy (i.e., political primacy, voice, and due deliberation). To be able to assess the democratic quality and legitimacy of governance networks, we draw on the concept of democratic anchorage (see Sørensen & Torfing, 2005, 2009). This concept aims to provide an answer to the question of the degree to which governance networks contribute to the functioning of democracy in our society. Especially as public decision making in governance networks includes not only elected officeholders, but also stakeholders, governance networks often face questions regarding their democratic legitimacy – at least from a representative democracy perspective. Sørensen and Torfing (2009) state that networks are democratic insofar they are anchored in representative democracy and adhere to democratic norms and rules, institutions, and practices. To assess the democratic anchorage of governance networks, a number of important questions could be asked. These questions might focus on input legitimacy (e.g., addressing the involvement of elected officials and politicians), throughput legitimacy (e.g., focusing on the quality of the deliberation during the decision-making process), or output legitimacy (e.g., the fairness of the outcomes of network processes). Espousing the notion of legitimacy, the different models of democracy, and Sørensen and Torfing's work, we distinguish the following five questions that can be used to assess the legitimacy of governance networks:

1 What is the role of politicians and elected officials in governance networks? Are networks controlled by democratically elected politicians?
2 Who participates in governance networks and how well do they represent the interests of the different groups that are part of the networks?
3 Do governance networks follow democratic rules, that is, a specific set of rules for conduct? What is the quality of deliberative processes in networks?
4 How fair are the outcomes of decision-making processes in governance networks?
5 How about the democratic accountability of governance networks? Are networks accountable to the territorially defined citizenry?

7.3.1   The role of politicians and elected officials in governance networks

From the representative democracy perspective, we elect politicians and officials to represent us in public decision-making processes. We mandate them to make choices in our name, to design, approve, or reject new laws or policies. Legitimacy then is based on the notion of political primacy: the involvement of elected officeholders and the procedures to hold them accountable ensure legitimate decision making. In governance networks, elected politicians and officeholders are no longer the only deciding actors. Instead, they are only one of the many actors in the network. This raises questions concerning their role in the network and the decision-making processes that take place within the network. What role do they play? Are they able to determine the design of the network's organisational structure? Are they allowed to determine the network's composition? Do they have a dominant role in setting the network's goals or managing the network? To what extent are politicians and elected officials involved in decision making? Can they veto decisions? Must they endorse a decision? Or are they sidelined? Can we still hold them accountable for the choices made in the network? Who is accountable for the final decision? How are representative institutions, like a city council, involved in the final decision-making stage? The answers to these questions determine the degree to which political primacy as a source of democratic legitimacy is present in governance networks. The more actively these actors participate to influence the agenda and decisions in a network, the greater the network's democratic anchorage, which also contributes to democratic legitimacy, at least, from the point of view of representative democracy.

7.3.2   Who participates in networks?

The question of who participates in governance networks is first and foremost an important question to assess democratic legitimacy from a participative democracy perspective. Decision-making in governance networks gains legitimacy when all relevant stakeholders are allowed access to the network and also participate actively in the network. They should voice their interests and concerns in order to realise a legitimate decision. When crucial stakeholders are excluded or do not participate actively in the network, this affects the network's legitimacy. Sometimes, it is not possible to include all relevant stakeholders, for example, when the decision affects many individual citizens. Instead, these stakeholders might need a representative. To assess the legitimacy of the network, it is important to check whether all stakeholders are represented and whether they have a say in the decision-making process. If representatives participate in the network, are the people that they represent

able to learn about and assess their representatives' performance? How responsive are the representatives to their constituency? The involvement of all relevant stakeholders is not only recommended in governance networks in light of actors' interdependencies – they need one another's resources to address complex issues – but also crucial for the network's legitimacy from the point of view of participative democracy.

7.3.3 The quality of (democratic and deliberative) processes in networks

Governance networks' legitimacy might also stem from the processes that take place within the network. Building on the idea of throughput legitimacy, this implies that networks should adhere to democratic norms and rules, such as transparency, inclusiveness, and procedural fairness. In assessing networks' democratic legitimacy, one could for example look at whether the network is transparent about its composition and goals. Inclusiveness implies that all actors affected by decision making in the network are allowed to participate (see also the previous section on who participates in networks). Inclusiveness in this respect is not just confined to having access to the network, it also implies that stakeholders are allowed to criticise and have the power to influence decision making in the network. Democratic legitimacy might also come from the deliberative process taking place within the network. To assess the quality of the deliberative process, we focus on due deliberation as a source of legitimacy, addressing questions like: Is there room for exchanging arguments? Is there a genuine dialogue between stakeholders? Is there equal access to information and to the debate? In short, is there a presence of voice and due deliberation?

7.3.4 Fair outcomes in governance networks?

Legitimacy does not come just from the involvement of important stakeholders and elected officeholders or from following democratic norms and rules; it might also come from the output generated by the network. Do the outcomes enhance social justice and contribute to society at large? How do the outcomes affect the various stakeholders? Are there winners and losers or did the network manage to achieve win–win solutions for all? Are the outcomes in the network perceived as fair? Fair outcomes that are beneficial to society might be accepted by citizens even when they or their elected representatives had little control over the decision-making process.

7.3.5 The democratic accountability of governance networks

Finally, networks' democratic anchorage is also determined by the accountability mechanisms in the network. An important question is who can be held

accountable for the decisions made in the network. Of course, this raises the question of whether elected officials – who obtain legitimacy through elections and make decisions in traditional decision-making processes – can be held accountable (see the section on the role of politicians and elected officials in governance networks). However, it might be even more challenging to hold other stakeholders accountable. Without the mechanism of voting that allows citizens to 'sack' their representatives, how can they hold these representatives to account? So, although democratic accountability is obviously important in this case, this is not the only form of accountability. In Section 7.4, we pay more attention to the importance and role of various forms of accountability in governance networks.

To draw conclusions on the democratic legitimacy of governance networks, we can assess its democratic anchorage using the five questions posed above. The questions focus on different sources of legitimacy (political primacy, voice, due deliberation) and on various stages of the decision-making process (input, throughput, and output). Consequently, the answer to the question of whether the network is legitimate is often nuanced. Specific governance networks may show very different degrees of democratic legitimacy. Some networks will score well on one aspect, whereas others will score well on others. Thus, the evaluation of networks' democratic legitimacy is not straightforward.

7.4 Accountability in networks: the problem of many hands

In everyday practice, democratic legitimacy is achieved through various forms of accountability. In the classic representation of policymaking and public service delivery in the context of representative democracy, it is clear how democratic accountability is organised and realised – at least in theory. Elected politicians, representative bodies, and officeholders are responsible for setting policies and can be held accountable by voters in elections. In the case of policymaking and service delivery in governance networks, all these traditional forms of vertical accountability – accountability given to a more highly placed body or superior – are in situ unabated. Considine (2002, p. 23) remarks regarding network accountability: 'Parliaments still expect detailed, descriptive reports which name and shame programs. Citizens' groups still press ministers and civil servants to take responsibility for public programs, even if the programs are delivered by contractors'. However, these accountability mechanisms function in a different setting. They may be weakened, as important decisions may no longer be taken within representative bodies but rather in the opaque arenas of governance networks. In addition, they may be partly replaced or complemented by other accountability mechanisms. These might include administrative accountability where public servants are held accountable by their superiors, legal accountability enforced

by courts, or professional accountability as laid down in various kinds of professional norms. Also, new standards regarding accountable behaviour may supplement old ones. Therefore, we separate the discussion on accountability from our earlier exploration of democratic legitimacy within governance networks. Although democratic accountability serves as a crucial mechanism for upholding democratic standards – as shown in the previous section – the various other forms of accountability may occur in networks too. These forms take centre stage in this part of this chapter. Before addressing the various accountability mechanisms in networks, we first address the concept of accountability.

7.4.1   What is accountability?

Before we explore accountability in networks further, we have to define what it is. We define *accountability* as 'a relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences' (Bovens, 2007, p. 450). The *accountability process* is the process by which an actor, or accounter, renders account to a forum, or an accountee. We call the procedures, instruments, and arrangements by which account is given *accountability mechanisms*. In order to render account, standards are needed about what is considered accountable behaviour and performance. These standards may be derived not only from goals, but also from expectations regarding appropriate behaviour and rules, reflecting norms and values (Bovens et al., 2014; Koliba et al., 2019). The nature of accountability can be vertical, establishing accountable behaviour to superiors higher in the hierarchy, or horizontal, establishing accountable behaviour among and towards actors in the network.

7.4.2   The variety of accountability mechanisms in networks

Networks create different accountability structures and, because they deviate from traditional decision-making processes, they need to combine various accountability mechanisms. An example is when public officials engage in networks to achieve policy goals. They may become network managers trying to achieve a package of goals that satisfies various stakeholders. Because such network managers find themselves in a position of interdependency, they are not able to force a solution in the network through a top-down decision-making process. This situation consequently changes both the accountability mechanisms that guide their behaviour and what is defined as accountable behaviour. Besides being accountable to their political and administrative superiors, they become accountable to the various stakeholders participating in the network. So, for them, being accountable means

taking into account various accountability standards and accountability mechanisms at the same time. Being accountable may become challenging, especially when these requirements are conflicting.

Clearly, governance networks are not devoid of accountability mechanisms or standards. Each participant within the network is still accountable to his/ her own mother organisation: civil servants to bureaucracy and democracy, politicians to their constituency, professionals to their peers, private participants to their CEOs and shareholders, pressure groups to their boards, and member councils. However, accountability in governance networks becomes problematic because, within such networks, various actors co-produce network outcomes. As a result, the 'problem of many hands' arises: in collaboration, it is hard to establish each participant's contribution (Bovens, 2007). Consequently, the existing vertical accountability mechanisms can become less effective. Public administrators will resist being held responsible for performance for which they are dependent upon others. Interdependencies can be used by network actors to shrink responsibilities or blame others for failure.

Thus, in governance networks we can observe the existence of various types of accountability alongside one another. Network managers initiating an urban restructuration process involving citizens, tenants, private investors, shop owners, and municipal departments are still accountable to their superiors in the bureaucracy and to their elected officeholders (say, the city alderman). However, they are also accountable for their behaviour to the other actors in the network, such as citizen groups that fear negative effects of the construction of new dwellings on rents. Moreover, the network manager is subject to other accountability mechanisms that may or may not be formally laid down. Standards such as fair play in negotiations may enter the process as an accountability mechanism. Because a variety of actors are involved whose behaviour is held accountable by various accountees and various accountability mechanisms, accountability becomes complex, and various requirements or mechanisms may not be in line (see Koliba et al., 2019). Table 7.2 presents an overview of the various types of accountability regimes with which governance networks may be confronted.

Democratic accountability refers to relationships between actors (who may be elected officeholders or civil servants participating in networks or operating as network managers) and various potential forums: elected representatives, citizens, or the media. Each type of accountability that falls under the label of democratic accountability (political, social, public) is guided by its own framework and subsequent standards. *Political accountability* implies that politicians and elected officeholders may hold governmental representatives in networks accountable to formal laws and policy goals, but also to informal codes of conduct that are appropriate in the public sector. *Social accountability* refers to accountability mechanisms that guide

TABLE 7.2 Types of accountability that governance networks may face

Type of accountability	Accountable to	Institutional framework	Focus on
Democratic accountability	Political accountability: elected representatives, representative bodies, elected officeholders	Elections, government programmes, laws, statutes, and regulations	Public values, policy goals
	Social accountability (horizontal): citizens, citizen associations	Participation, freedom of information laws, deliberative forums	Deliberation, openness, fairness, reliability, representativeness
	Public accountability: media, public opinion	Journalistic codes of behaviour, journalistic freedom	Goal achievement, determination, media logic (e.g., personalisation, uniqueness)
Legal accountability	Courts	Laws, statutes, contracts	Legality, precedence, reasonableness, due process, substantive rights
Administrative accountability	Bureaucratic accountability: principals, supervisors, managers	Administrative procedures, budgets, organisational charts	Organisational goals, unity of command, loyalty, span of control
	Professional accountability: professional peers and their associations	Professional codes and ethics, certificates, performance standards	Professional norms, expertise, competence
	Collaborative accountability: partners, peers	Gentleman's agreements, process designs, written agreements	Trust, reciprocity, durability of relationships
Market accountability	Private corporate accountability: shareholders/owners	Performance measures, profit, dividend	Efficiency, market share, innovation, profit
	Consumer accountability: consumers, clients, users	Consumer law, product performance measures	Affordability, accessibility, reliability, quality, satisfaction

Source: Adapted from Koliba et al. (2019).

the participation of citizens and other stakeholders. Their participation may be accounted for by formal participation requirements, but also informally, being agreed upon with the parties involved. This is a form of horizontal accountability. *Public accountability* occurs when governments and participants in networks are held accountable by the media, be they traditional media or new social media. The media are traditionally seen as the watchdog of democracy because they communicate policy and political events to a wider audience (see Bennett, 2016). However, media also tend to emphasise conflicts, failure, and guilt, and make the news personal and dramatic. This makes it difficult for network actors to account for what they are doing, as many governance processes and outcomes are far from dramatic, unique, personal, or retraceable to individual efforts. Nevertheless, media still contribute to an increase in transparency, provide an instrument for opposition groups to voice criticism, and fulfil the role of countervailing power (Korthagen, 2015; Patterson, 2000). This applies to both traditional and social media. In addition, social media provide citizens and consumers with the means to criticise policies and services, thus contributing to transparency. They may also cause mobilisation and mass protests. Especially when the mass media start reporting on issues that social media have put on the agenda, actors in governance networks might feel forced to give account of their action, or inaction.

Legal accountability implies that networks and network managers have to comply with legislation and can be brought to court in the event of illegal activities or conflicts. Legal accountability in networks is not very different from legal accountability in traditional decision-making processes. For example, European Union rules for public authorities tendering out services or products do not differ between a traditional setting, where government tenders a product after deciding in detail what the requirements are, and a network setting, for instance if the ambition is to create a public–private partnership. Sometimes, however, it is more difficult to determine who is responsible for outcomes. As actors collaborate, it is not always clear who is responsible for specific decisions and outcomes. In the United States in particular, litigation is a commonly used instrument to settle disagreements, including among participants in governance networks.

Administrative accountability refers to bureaucratic, professional, and collaborative forms of accountability. *Bureaucratic accountability* remains in place in governance networks. Civil servants and network managers are still held accountable by their line managers and their superiors within the governmental apparatus. They may need to meet performance measures, and they have to comply with the existing budgetary regimes; this may limit their freedom to operate within networks or their preparedness to improvise or accommodate requests from other network partners. *Professional accountability* refers to professional communities of peers who hold professionals within

governance networks to account. These may be fully-fledged professionals like medical specialists within health networks, but also semi-professionals within bureaucracies, whose professional codes are less formal and strict, but still may be of considerable influence. Collaboration within governance networks requires these professionals to amend their ways of doing and to be accountable to persons other than their peers. This might conflict with what a professional actually is: an independent expert who acts on the basis of his/her unique education, knowledge, and skills, solely responsible to his/her knowledgeable peers. Governance networks require professionals to engage with other types of actors: politicians, administrators, managers, users, citizens, whom they perceive as laymen. Networks also require them to collaborate with other professionals, which might be challenging too. Dealing with professional accountability, therefore, is an important challenge within networks (Noordegraaf, 2015). *Collaborative accountability* refers to network partners holding one another accountable. The various stakeholders might hold one another accountable on the basis of informal gentleman's agreements, but formal agreements and process designs defining the rules of the game may also govern their interactions. This is considered a form of horizontal accountability.

Market accountability is relevant to governance networks because private parties (consultants, banks, companies) may be important actors in the network. Market accountability can be divided into private corporate accountability and consumer accountability. The difference lies in the forum – the party to whom the actor is accountable. For *private corporate accountability*, these are shareholders or owners. Accountability is then achieved by shareholders/owners holding the representatives of their business accountable for, amongst other things, making profit, increasing market share, and realising targets. *Consumer accountability* may be seen as a countervailing power. Consumers hold private companies and governments accountable for the quality, accessibility, and affordability of policies and services. Their actions may target policy implementers, public goods producers, or service providers. Consumers may seek the attention of the traditional media or use social media to hold private parties, governments, and participants in networks publicly accountable for their actions and performance.

Given the various forms of vertical and horizontal accountability, actors within governance networks might experience challenges or dilemmas regarding how to deal with these forms of accountability. Especially as each forum might expect different things and is focused on different standards when holding an actor accountable, the actor has to balance the interests and demands of various forums. Newman (2004) observes that public servants operating as managers in network-like situations try to construct different meanings of accountability to cope with the new situation of interdependence. On the one hand, they emphasise hierarchy and traditional public values. On the other

hand, however, they stress that working in networks implies being creative and reaching compromise with other stakeholders. There can be tensions between various forms of accountable behaviour: the idea of profit (market accountability) might clash with contributing to society as efficiently as possible (democratic accountability). Bureaucratic accountability might focus on loyalty and achieving organisational goals, whereas social accountability towards citizens is much more focused on participation and deliberation and might require concessions to achieve a joint outcome in the network.

7.4.3 Designing accountability mechanisms for governance networks

Thus, within governance networks, various accountability mechanisms co-exist with standards for accountable behaviour and performance. At first sight, this might lead to optimism regarding the potential for accountability in networks: vertical accountability is not simply hollowed out; rather, within networks, the various accountability mechanisms may potentially reinforce one another. However, this variety can also cause accountability problems. It may result in confusion, mechanisms may be incompatible or undermine one another, and it may well be that they do not cover all network activities: there may be blind spots (compare Willems & van Dooren, 2011).

In order to enhance the accountability of networks, these problems need to be addressed by the actors in the network. A first step may be to make accountability mechanisms and accountability standards more explicit. This step may be followed by attempts to complement, change, or replace these mechanisms and standards. One way to do this is to (re)design and (re)negotiate rules for interactions within networks deliberately, addressing horizontal forms of accountability, such as collaborative accountability. This is referred to as *process design* (see Chapter 4) or – if these efforts aim at more fundamental changes of rules in networks – as *institutional design* (as discussed in Chapter 6). Acknowledging that the opportunities to realise these design efforts are limited and dependent on the context and the support of other actors within and outside the network, in the next section we discuss some design options for strengthening horizontal and vertical accountability in networks.

7.4.4 Enhancing the horizontal and vertical accountability of governance networks

Process design implies the design of an architecture that will initiate and guide the interaction of actors participating in the interaction process. This process architecture specifies the actors that are supposed to participate, the agenda, the resources available, the activities with their projected chronology and timeline, the role division and rules, and the arrangements that will

facilitate the interaction. Process design can be seen as a set of rules upon which the actors agree and that will guide their interactions (Ansell & Gash, 2008; de Bruijn et al., 2010; Bryson et al., 2013). This includes rules regarding the accountability mechanisms used in the network. Process design also explicates and regulates accountability mechanisms and arranges who is accountable for what. Thus, process design can be considered an arrangement to deal with horizontal accountability.

Horizontal accountability does not replace vertical accountability. It may complement, but also conflict with, traditional forms of democratic accountability. In practice, accountability relationships between politicians and network actors are often implicit, governed by diverging expectations and informal rules. Designing vertical accountability mechanisms therefore might include arranging these relationships in a more explicit way. This helps to prevent conflict or tensions between the various forms of accountability. Examples of arrangements that could improve accountability mechanisms in networks or help to mitigate tensions include:

- *Address complexity by information processing.* Politicians should be informed on policy initiatives in a timely manner. This can be done, for instance, by including process rules about how and when elected politicians in governance network processes are informed of progress and content.
- *Address complexity by accepting multiple standards and indicators.* Given the complexity of problems and policies, goals and frameworks that will be used to hold governance networks accountable should not be restricted to one-dimensional output or outcome indicators. It might be hard to formulate quantitative, measurable indicators, as outcomes are often hard to measure. However, the exclusive use of qualitative intentions rather than quantitative result obligations should be prevented as well, as these could give network actors the opportunity to shrink from accountability (Carter, 1989; de Bruijn, 2007). Here, a delicate balancing act is needed. Requirements should not be restricted to outcome indicators, but should also specify standards regarding accountable behaviour within networks and regarding what constitutes an accountable process.
- *Address interdependencies among parties.* Rules to guide the accountability process may include an agreement on the loose coupling of performance and sanctioning. An example is to insert an explain rule. Thus, an agreement whereby actors explicitly explain why they make certain decisions at certain junctures (and for instance diverge from earlier decisions) can prevent the emergence of blame games (de Bruijn et al., 2010).
- *Address dynamics by accepting adjustments.* Given the dynamic nature of governance network processes, goals and preconditions cannot be fixed at the start. So, there is a need to insert rules that allow flexibility but retain

accountability. The previously mentioned argumentation rule is such a rule; but exit rules, which specify the conditions under which actors can exit and the kind of arguments that the actors must put forward are other such rules. Furthermore, by introducing practices such as public hearings at certain points in the governance network process – for instance when impasses block these processes – politicians might bypass the problem of outdated ex ante policy frameworks and information overload. Actively inviting participants to inform politicians allows politicians to make an informed and tailor-made intervention that will be considered legitimate by all stakeholders. However, this requires politicians to be committed to the governance network process and to refrain from attempts to realise electoral gains. Although there are known examples of this type of intervention, it is far from certain that it will be possible in every given situation (compare Koppenjan et al., 2011).

Attempts to align various forms of accountability are always vulnerable. The electoral cycle for instance – a quintessential feature of representative democracy – is an inherent disruption of joint learning experiences regarding the division of roles between representatives and the administration. Furthermore, our proposals are at odds with the dominant political culture, which contains incentives for politicians not to allow themselves to be disciplined by agreements with other actors, but instead to cherish the illusion of political primacy. Also, the politicised and dramatised nature of public debates in the media will not always support politicians to prudently manage their accountability relations with governance network actors. Nevertheless, when actors in a governance network succeed in aligning these various accountability forms, the legitimacy of the network may be enhanced.

7.5   Conclusion: democracy, accountability, and networks

In this chapter, we have explored the relationship between governance networks and democratic legitimacy and accountability. Whether or not networks are considered legitimate depends largely on the perspective of democracy and the associated sources of legitimacy that are considered relevant. We have identified three models of democracy: representative democracy, participative democracy, and deliberative democracy, each resulting in different ideas of the sources that contribute to democratic legitimacy. Regarding these different sources of legitimacy, we explain that democratic legitimacy has to do with the democratic anchorage of governance networks: the degree to which networks are anchored in democratic norms, rules, institutions, and processes. We have posed five criteria – formulated as questions – for assessing the democratic nature of governance networks. These questions can also be used as guidelines for network management, aimed at

strengthening the democratic legitimacy of these networks. Although democratic accountability is an important criterion determining the legitimacy of networks, there are other forms of accountability that might occur in networks. Therefore, the second part of this chapter addresses these various types of accountability. We explain that networks are characterised by the problem of many hands. As many actors are responsible for the eventual outcomes and many different accountability mechanisms are at play simultaneously, accountability may become blurred. The various types of accountability might create tension, focusing on different – and sometimes contradictory – accountability standards. When the various accountability mechanisms are aligned, they provide important checks and balances that contribute to the legitimacy of the network. Explicating accountability mechanisms and organising process design rules are potential solutions to address such accountability issues.

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8

GOVERNANCE NETWORKS AND EVALUATION

8.1   Introduction: the problem of evaluation in networks

The question of whether governance networks are successful or not is often difficult to answer. Take, for instance, the example in Chapter 5 regarding the realisation of wind turbines. Proponents stress that this is a relatively cheap way of providing energy that does not produce CO_2 and is thus a necessity to address climate change. Opponents strongly oppose the realisation of wind turbines and emphasise that wind turbines pollute our view of the horizon, cause noise pollution, and may be unreliable when placed on land, because there is not always enough wind. Yet, offshore wind energy is expensive, and increasing costs reduce suppliers' willingness to engage in the realisation of these offshore wind farms. So, how can a decision to realise wind turbines on land be evaluated? Is it a success because these wind turbines produce clean energy? Or is it a failure because there is no support for the decision among local residents and the actors did not succeed in reaching agreement?

This variety in perceptions and standards used for evaluating whether governance networks and governance network processes are successful or not is quite common and illustrates the difficulties involved in their evaluation. This raises the question of how the performance and outcomes of governance networks can be evaluated. From a network perspective, rational approaches to evaluation are problematic. In Section 8.2, we discuss why evaluations are difficult in the first place. In Section 8.3, we explain why rational approaches to evaluations are particularly problematic in network settings. Next, in Section 8.4, we suggest alternatives from a network perspective to the classical ways of evaluation, emphasising the importance of

learning about complexities. Section 8.5 presents our conclusions regarding performance evaluation and outcomes in networks.

8.2   Evaluation in the public sector

Evaluations to analyse the effects of specific policy programmes became popular after the Second World War. In one of the best-known books about policy implementations, with the telling subtitle *How great hopes in Washington are dashed in Oakland*, Pressman and Wildavsky (1984) show that what is envisaged by a policy's initiators may turn out very differently in implementation processes. They argue that implementation requires many decisions by various actors and that not all decisions are implemented loyally. Their work shows the limitations of a rational, top-down view on policy evaluation from the perspective of a central governmental body (see Rossi et al., 1999). In rational approaches to policymaking and evaluation, a scientifically grounded problem formulation, or at least an objective formulated ex ante by one central actor, is the point of reference for the evaluation of the effects. So, for instance, in policies addressing unemployment, it may be assumed that job training, job search skills, and motivation improve the opportunities for the unemployed to find a job. Therefore, policies would be developed to offer training programmes to improve skills and motivation. The evaluation then would try to assess whether: 1) those policies were implemented, 2) the intended effects (improved skills and motivation) were achieved, and 3) the desired outcome (less unemployment) was realised. Rational approaches to evaluation thus consist of testing assumptions by measuring the effects of policy programmes and checking whether they can be related to the policies' goals and instruments (see Rossi et al., 1999).

Experiences with evaluation studies carried out in the 1970s provide a number of interesting lessons on evaluation. It turns out that goals are not always as clear-cut and neatly formulated as a rational perspective on evaluation assumes, and that goals change and goal displacements occur during the policy process. This makes it hard to evaluate programmes on the basis of their originally formulated goals. Moreover, policymakers do not use many evaluation studies (Weiss, 1977). Those critiques emphasise that evaluation studies are conducted from a more scientific point of view, whereas policymakers have quite different opinions about usable knowledge. From these insights, many critiques have emerged on the rational evaluation perspective (see, e.g., Weiss, 1977; Rossi et al., 1999):

- *Goals are often not clearly stated in measurable terms*. In the ideal world of rational politics, politicians state aims and then decide how to achieve those: politicians set goals – which have to be implemented by others – so that they can concentrate on monitoring the resultant performance. This,

however, assumes a very rational, but also slightly naïve, political view on politics and administration. As many actors may be involved in policymaking processes, policies are often outcomes of negotiation processes. They may include a package of measures that are not necessarily consistent but that are supported by a winning coalition. Often, policies are consciously formulated in vague or abstract terms in order to be able to get the support of various actors. Clarification of the goals and attempts to formulate them in measurable terms would reveal differences of opinion and jeopardise the political decision making on the policy. Furthermore, goals are often not formulated in measurable terms. Politicians do not always want to be held accountable for policy goals, because then they can also be held accountable for failures (see for instance Edelman, 1977). Evaluations are inherently political. Either they are closely related to accountability processes or they provide an opportunity to break through existing policy trajectories and adjust a policy's objectives on the basis of the outcomes of an evaluation (Bovens et al., 2008). These practices have not diminished over the years. On the contrary, quite a few authors argue that the increasing role of the media in political life means that modern politics is more about creating an image than about organising a policy and implementation process (see Elchardus, 2002; Fischer, 2003). Formulating goals ex ante can be very risky because things may go wrong, and it becomes difficult for politicians to adapt their goals and strategies when political and media opinions change. The media can depict the public leader or the politicians as weak or as inconsequential because they diverge from earlier points of view. Thus, the conclusion is that it can be very rational for politicians not to formulate clear goals and performance indicators.

- *Goals are not always fixed but change*. Goals change during policy implementation. In implementation processes, additional information may become available about the policy problem that requires goals and policies to be adapted. The substitution of goals for other goals is called *goal displacement*. In addition to new information becoming available, political reasons can be important in goal displacement: the support for certain solutions may change, creating electoral risks if politicians stick to earlier preferences. However, goals may also be changed when actors learn and find that earlier goals are no longer adequate or sufficient (Koppenjan & Klijn, 2004). If goals change, it is not very useful to evaluate the policy programme using the original goals formulated ex ante. The relevant evaluation question is what policies contribute to the realisation of the actual objectives pursued, not those of the past.
- *It may be difficult to measure effects*. Sometimes, there is a lack of indicators to measure the effects of policies in a satisfactory way. For instance, measuring crime or unemployment is complicated because these are multi-dimensional, complex phenomena. Various definitions of the

concepts exist that include some aspects of the problem and exclude others. Data on these phenomena may be lacking, and the way in which they are measured may be contested. Often, no data are available on the situation before the policy is introduced, making it difficult to identify effects by a systematic before and after comparison of a situation. Regarding the measurement of effects, it is often argued that a distinction can be made between hard and soft dimensions of policy objectives and effects. The argument is that hard values like efficiency can be measured in a relatively easy way by employing quantitative indicators and measurement methods, whereas soft values like the quality of a public service are harder to assess (Hood, 1991; Steenhuisen & van Eeten, 2008; Patton & Campbell-Patton, 2021). As a result, evaluations often focus on hard values, leading to soft values receiving less attention.

- *Determining causality is problematic*. Even if data can be acquired about the programme and the causal patterns, if goals are formulated clearly and do not change, it still is not always easy to connect the policy interventions to the observed results. Furthermore, many policy interventions are often implemented simultaneously, making the measurement of a single intervention difficult; and intervening variables may be the real explanation for effects occurring or not occurring. In measuring the impacts of policies aimed at reducing crime over an extended period, it may be hard to determine whether the reduction is caused by the deployment of additional police or by population aging. It is well known that younger people commit more crimes than older people. Thus, if in a city the number of young people declines, it is not clear whether reductions in crime come from the policy measures employed or from demographic developments.

8.3   Difficulties with evaluation in networks

In a governance network approach, using goals and goal attainment as the point of reference to evaluate possible outcomes is even more problematic. Several characteristics of governance networks and the processes that take place within networks contribute to this (see Provan & Milward, 2001; Koppenjan, 2008; O'Leary & Vij, 2012):

- *Governance networks are characterised by the presence of a variety of goals*. As many actors participate in governance networks, it is very problematic to use goal attainment by a single actor as the assessment criterion to determine the success or failure of the network. As goals differ among the participants in a network, the fact that one actor might achieve its goal does not mean other actors do too. Sometimes, in the case of contradictory goals, one actor achieving its goal even implies that other actors will not be able to reach their goals at all. The presence of a variety of goals makes

it also difficult for an evaluator in the network to decide which goal to pick to evaluate the performance and effectiveness of the network.

- *Governments' claim about the primacy of politics neglects different, legitimate goals of other network actors.* Frequently, governments claim that their objectives are of a different order than those of other parties and, as a result, must be regarded as the central assessment criteria. They refer to the primacy of politics (see Chapter 7) and the role that governments play as the representative of the general interest. There are, however, grounds upon which that claim can be contested. The claim of the primacy of politics is grounded in the notion that democratically elected governments that pursue certain objectives are expressing the will of the majority of the people (see Klijn & Skelcher, 2007; Sørensen & Torfing, 2017), but this disregards the problem of how individual preferences are represented at a collective level. The relation between election results and individual preferences with regard to specific issues is limited by definition (see Arrow, 1963). Furthermore, there can be a broad gap between the programmes on which political officeholders are elected and the concrete objectives targeted by specific government organisations. The problematic nature of the claim that government represents the general interest is also apparent when government organisations (e.g., different departments or levels of government) confront one another in concrete network processes. One governmental organisation may support a project based on economic considerations, whereas another creates blockages based on environmental issues. Which, then, represents the general interest? As a result, the general interest cannot be clearly defined and is of little use as a substantive benchmark. Central in the governance network perspective is the acknowledgement of the interdependency of actors. This makes it unavoidable to take the various goals that actors pursue seriously in assessing success and failure, rather than considering the objectives of one party as the ultimate yardstick for assessment.
- *Goals change during complex interaction processes in governance networks.* The problem of evaluation in networks becomes even more complicated if we realise that goals change during the interaction process that unfolds around issues in networks. Even in networks that are more geared towards implementation, such as service delivery networks, goals change over time (Koppenjan & Klijn, 2004). Given the interaction and negotiation processes that take place in networks, ex ante objectives or problem formulations cannot be used as criteria for assessing outcomes. They do not reflect the criteria that actors use further along and towards the end of the process. When ex ante objectives are used to determine the success or failure of network processes, they are very often likewise exposed as obsolete and irrelevant. Furthermore, they result in a negative assessment of the learning behaviour that parties display during the network process,

as learning may imply a deviation from ex ante objectives and problem formulations.

- *Within governance networks, consensus is often missing.* Because of the presence of a multitude of problem perceptions and objectives that may conflict and change over time within governance network processes, consensus on the nature of problems and the policies and services that are required is often missing (see Chapter 2). Insofar as joint goals are agreed upon in networks, these are seldom unified and coherent. Even in mandated networks, where authors argue that networks have clear purposes and are committed to externally imposed objectives (Provan & Kenis, 2008; Nowell & Milward, 2022), involved actors are likely to have different interpretations of that purpose. Certainly, in more loosely coupled networks, joint goals are mostly packages of goals or goals formulated in a very abstract way. So, the use of agreed-upon goals or imposed goals as the point of departure for evaluations might seem more favourable in evaluating networks, but if these goals are vague, subject to different interpretations, or consist of packages of goals, this might still be problematic from the evaluation perspective. This makes it difficult to assess the network outcomes by using a clear substantive yardstick or clear performance indicators. In a network situation, there are thus no clear substantive yardsticks for comparing the outcomes of problem-solving processes. If actors within a network pursue different goals or have agreed upon a package of goals, a way of dealing with this diversity has to be found when network outcomes are being evaluated.

8.4   Assessment criteria for evaluating outcomes in networks

When governance network processes are viewed as search activities in which the initial complexities are addressed and, whenever possible, made workable through interaction, it seems obvious that the success or failure of these processes can be measured at least partly by the degree to which learning about these complexities has occurred. Given that evaluation in networks cannot focus on the achievement of a goal as the starting point (given that goals are often not shared), learning is an alternative approach to the evaluation of governance networks (Koppenjan & Klijn, 2004; Bryson et al., 2015; Emerson & Nabatchi, 2015; Bianchi et al., 2021). Thus, we need assessment criteria to determine whether learning processes have taken place. The most important criterion is ex post satisficing, which we now introduce.

8.4.1   A starting point for network evaluation: ex post satisficing as evaluation criterion

Network evaluation starts with using the criterion of *ex post satisficing*: the degree to which involved actors in the network are satisfied with the

intermediate and the final results of interaction processes within networks, measured at the end of the process (see Teisman, 2000). With this criterion, it is not one single goal but rather all possible goals of the network actors and thus various (societal) values that are included in the evaluation. It is more or less a kind of overall assessment of all actors and their satisfaction with the outcomes. Individual actors' goal achievement is important (see Hertting & Vedung, 2012), even though – given the existence of multiple, potentially conflicting goals – it is very hard to realise the ex ante goals of all participants in the network. As actors will base their judgements of outcomes on the objectives that they are pursuing at that juncture, the ex post satisficing criterion also incorporates changing goals and learning as objectives in the evaluation. The judgement is based on ex post goals, not on goals formulated ex ante. What is more, this criterion includes transaction costs and judgements on the quality of the process, as, in determining whether they are satisfied, actors will take into account whether they find the realised outcomes worthwhile: do the benefits that they experience justify the investments and efforts that they expended in the process? When this criterion is used for in-between evaluations, when the network processes are ongoing, we might speak of *ex durante satisficing*.

With ex post satisficing, there is a danger of *ex post rationalisation*. Actors may be involved in decision making and service delivery for so long and may have invested so much time and effort in it that they are unwilling to acknowledge that the outcomes are not very rewarding. To check whether this has occurred, it is possible to compare the achieved outcomes with the problem perceptions, interests, and objectives expressed by parties during the process. Thus, the evaluator may do a 'reality check' and ask whether the various actors' satisfaction has any basis in the achieved results relative to the actors' interests. Furthermore, it is important to determine the extent to which relevant and affected actors share this judgement of satisfaction. The use of this criterion may result in a mixed picture: some actors satisfied, other not, or reveal a wide ex post dissatisfaction with the substantive solutions and services provided by the network. In general, network processes can be evaluated as successful when many actors are satisfied and less successful when only a few actors are satisfied.

8.4.2   Learning as precondition for ex post satisficing

To achieve ex post satisficing, learning is a crucial precondition. After all, given the interdependencies between the actors in the network, actors can achieve their own goals only when they learn to mutually adjust their strategies to arrive at joint outcomes and the co-production of policies and services (Provan & Milward, 2001; Head, 2022). Thus, learning will also enhance the network actors' ex post satisficing. We define learning as *the increase in*

knowledge, insights, and work methods shared between parties. Learning can be realised in all dimensions of complexity distinguished in this book. Cognitive learning is related to the substantive complexity in governance network processes, strategic learning implies learning about the strategic complexity of these processes, and institutional learning means learning about the institutional complexity of governance network processes.

Whether learning has occurred can also be assessed by looking at the outcomes of network processes. It can be evaluated by using several criteria that are systematically discussed in the next sections for each type of complexity. These criteria can be used by actors participating in governance network processes (e.g., residents, interest groups, policy implementers, service providers, governments, network managers), but also by actors in the governance network or its environment who were not actively involved in the interaction processes (e.g., accountees in parent organisations, especially politicians, elected officeholders, the media, and independent experts) or by independent researchers doing the evaluation (compare Provan & Milward, 2001).

Assessing whether learning has taken place also helps to mitigate two important limitations of the ex post satisficing criterion discussed above. The first limitation of using ex post satisficing is that actors can be satisfied, but that no new ideas have been developed in the process. In that case, actors are satisfied but no real cognitive learning has taken place. This is not necessarily a bad thing. There may be cases where existing solutions are sufficient to achieve a satisfactory mix that pleases all actors. The complexities that characterise networks and the issues with which they deal make it, however, more likely that there is a relation between learning and ex post satisficing. The criteria discussed under cognitive learning address this first limitation of the ex post satisficing criterion. The other limitation of the ex post satisficing criterion is the possibility that actors within the network are very satisfied but export the cost of their solutions (financial or otherwise) to actors outside the network. This touches upon the ideas of representation and legitimacy as discussed in Chapter 7. The criteria discussed in the section on strategic learning address this second limitation of the ex post satisficing criterion.

8.4.3   Cognitive learning: learning about substantive complexity

We define *cognitive learning* as the increase in shared knowledge and insights about problems, solutions, and their effects, the variety of perceptions on these matters, and possible common grounds for joint problem solving, policymaking, and service delivery. Cognitive learning effects are visible in the alignment of perceptions, the agreement on research outcomes and knowledge, the enrichment of solutions pursued, the realisation of policies and services upon which actors agree and that take the varying interests and

objectives of actors within and outside the network into account, and the extent to which actors are satisfied with these outcomes. Therefore, we suggest the following evaluation criteria to assess the extent of cognitive learning: joint image building, the development of negotiated knowledge, substantive enrichment, and goal intertwinement.

8.4.3.1   Joint image building as evaluation criterion

Joint image building is an indication of the processes of reflection and alignment of perceptions and frames, and the extent to which (scientific) knowledge has gained authoritativeness. It has been accomplished when actors achieve better insight into the nature of the problem and the consequence of solutions and when parties have succeeded in aligning their perceptions, at least in some extent. When participants in general agree on the problem and a common mission and purpose, collaboration and the realisation of joint solutions becomes easier, as opposed to a situation in which they pursue different objectives and strategies (Ansell & Gash, 2008; Mandell & Keast, 2008; Emerson & Nabatchi, 2015). Koschmann et al. (2012) emphasise the need for a compelling story and authoritative texts that give the collaboration direction and shape participants' perceptions. It should, however, be acknowledged that in most situation it will not be possible to realise consensus among all actors on the actual problems and solutions. Moreover, as discussed below, a high level of consensus, although helpful, is not a necessary condition to realise joint actions and support for solutions and services (Koppenjan & Klijn, 2004). That said, in all cases, at least a certain minimum level of consensus is needed to arrive at joint outcomes, and the extent to which this is accomplished is a measure of cognitive learning.

8.4.3.2   Negotiated knowledge as evaluation criterion

The amount of research undertaken is not an indicator for cognitive learning, as it does not guarantee enhanced knowledge or shared insights. When research efforts have been undertaken but parties cannot agree on their meaning and significance, we have a situation of superfluous knowledge. Knowledge has been generated but does not help the process move forward; it enhances substantive complexity. When parties reach consensus on perceptions that are not based on insights from (scientific) knowledge, policies and service that are based on these perceptions may be nothing more than 'negotiated nonsense' (de Bruijn & ten Heuvelhof, 2018). This will probably make it difficult to realise these solutions, and, if they are realised anyway, they will not meet the desired expectations. What is necessary is that actors accept research outcomes as authoritative. Therefore, they have to develop a joint interpretation of these outcomes; this can be called negotiated knowledge:

consensus about problems and solutions that are defensible in light of the available (scientific) knowledge (Ansell & Gash, 2008).

8.4.3.3   Substantive enrichment as criterion

An indicator of cognitive learning is the degree to which intermediate and final solutions have been *substantively enriched* in comparison with earlier proposals, as well as the degree to which they succeed in incorporating various needs of interested third parties (the inclusiveness criterion, see Klijn & Koppenjan, 2000; Provan & Milward, 2001; Head, 2022).

Substantive enrichment can be assessed by looking at the outcomes and judging:

- whether new innovative solutions and integrated services have been achieved;
- whether criticisms on previously developed solutions are addressed adequately. They might be incorporated in the newly developed solutions or addressed adequately by information on the problem and the solution;
- whether the proposals for solutions have changed and have been refined in the course of the process. This can be assessed by comparing the initial (ideas on) solutions with the last versions of the solutions.

8.4.3.4   Goal intertwinement as evaluating criterion

Goal intertwinement measures cognitive learning by looking at the outcomes of governance network processes. It expresses cognitive learning in enriched, innovative, and agreed-upon policies and services that intertwine actors' diverging objectives and/or reduce or compensate the costs and negative side-effects (Fisher et al., 1997; Teisman, 2000). Goal intertwinement can also be regarded as the process of finding a win–win solution (see Box 8.1): solutions or public services that realise the objectives of multiple parties simultaneously (Kickert et al., 1997; see also Huxham & Vangen, 2005, on collaborative advantage). Win–win outcomes constitute an improvement in a problematic situation for all relevant and affected parties. Goal intertwinement often consists of the redefinition of problems in order to widen the scope within which solutions are sought, resulting in the develop ment of packages of measures that combine benefits for a variety of actors. This implies that cognitive learning does not necessarily result in consensus. Joint solutions are possible while different perceptions persist. However, sometimes it may be very hard to realise such an outcome without producing negative effects for at least some actors. In those cases, it may still be possible to create a win–win outcome by using part of the added value created by the solution to compensate parties that experience disadvantages.

Nevertheless, when goal intertwinement is used as a criterion for cognitive learning, explicit attention must be paid to the danger of two or more

parties realising a win–win situation for themselves by passing the costs on to outsiders. So, in addition to the benefits, the costs of a solution must be addressed to examine the intended and unintended effects of solutions for all actors involved (Dery, 2000; Klijn & Koppenjan, 2000).

BOX 8.1   AN EXAMPLE OF A WIN–WIN SITUATION

In the period between 1990 and 2005, Dutch Railways, the Dutch Ministry of Transport, and the Municipality of Delft were involved in a prolonged decision-making process on the building of a railway tunnel to replace the viaduct that cut through the centre of the City of Delft. Dutch Railways was experiencing serious capacity problems on a railway connection on the busiest part of its railway network. After proposing to extend the viaduct by an extra layer in the early 1990s, the Municipality of Delft blocked further decision making. The existing viaduct was already causing many local problems like noise nuisance, health problems, and problems in terms of liveability and physical planning, because it divided the city in two. The ministry, which had to provide the funding for the connection, was not prepared to finance a tunnel. Only after the introduction of various new initiatives – often put forward by the Municipality of Delft, which wanted the problems stemming from the presence of the viaduct to be solved – was a joint solution realised. This implied the redefinition of the project as one of urban regeneration rather than a rail project. This allowed the Municipality of Delft to enter into a partnership with private investors to develop real estate on the land where the viaduct used to be located and on top of the tunnel. With the earnings from this real estate development, the municipality could contribute to the tunnel. In exchange for the ministry's investment in the tunnel, the municipality contributed financially to its construction. Although the interaction processes took more than a decade, the result produced benefits for all the involved parties, who originally seemed to have opposing interests. Dutch Railways got its improved connection, the municipality had created opportunities for socioeconomic revitalisation, and the cost for the ministry remained limited, and, by removing a bottleneck, the project contributed to an improvement in the Dutch railway network, for which the ministry was also responsible (Klijn, 2007).

8.4.4   Strategic learning: process criteria and learning about strategic complexity

We define *strategic learning* as the parties' growing consciousness of one another's involvement and of their mutual dependencies. This learning is reflected in the increased capacity to deal with conflicts of interest in network processes in which cooperation alternates with conflict. In the end,

this means that parties have managed to participate satisfactorily in mutual negotiation processes in the search for problem formulations and solutions that take into account the various objectives and interests (Koppenjan & Klijn, 2004; Voets et al., 2008; Bryson et al., 2015; Bianchi et al., 2021). This becomes clear from the type of strategies that actors deploy, the way in which interaction processes evolve, and the length of the processes. Strategic learning thus has to do with learning during the process. We distinguish between three types of process criteria to evaluate strategic learning: 1) the duration and transaction costs of the process, 2) the quality of the interaction process, and 3) inclusiveness, democratic legitimacy, and accountability.

8.4.4.1 The duration and transaction costs of the process

An obvious way to judge the process is to look at its duration and the transaction costs involved. High transaction costs and long duration may indicate that the process has not been successful (Koppenjan & Klijn, 2004; Voets et al., 2008; Sørensen & Torfing, 2009). However, the length and the transaction costs of processes must be judged in light of the degree to which other positive outcomes are realised, such as enrichment or win–win outcomes. Coordinating actions, generating negotiated knowledge, and intertwining objectives all take time. So, prolonged processes and high interaction costs do not necessarily mean failure, just like fast processes and low transaction costs do not equal success. The latter may imply that decisions have been made too fast and that too little effort has been put into the process, leading to failure. The duration and the transaction costs may be measured by asking participants and observers directly. Note that the ex post satisficing criterion also provides information on how participants judge the trade-off between the substantive outcomes and the duration of the process and the transaction costs involved.

8.4.4.2 The quality of the process

In addition to the duration and the transaction costs of the process, the quality of the process could be examined to determine strategic learning (Innes & Booher, 1999; Voets et al., 2008; Koppenjan, 2024). This concerns the degree to which parties acknowledge their interdependencies and succeed in making the shift from go-alone strategies and power play towards collaboration and negotiation. The occurrence of blockages, stagnation, and breakthroughs also says something about the quality of the process. If dysfunctional blockages and stagnation emerge, it can be concluded that actors have been unable to define a common ground or mutual interest as the basis for mutual action. Blockages and stagnation do not always indicate failure though; they may contribute to the articulation of interests and objectives. They may, in fact, be necessary conditions for goal intertwinement, pressing actors to invest

seriously in negotiation and collaboration. Only when deadlocks become dysfunctional – that is, conflicts escalate and become destructive and stagnation results from feelings of powerlessness and cynicism – do they indicate failure. Breakthroughs indicate that – from a process point of view – actors have progressed and have learned (Koppenjan & Klijn, 2004; Sørensen & Torfing, 2009).

In addition, the extent to which actors have developed process rules, how the process has been managed, and the way in which actors value these mechanisms and efforts in a positive way are indicators of a high-quality process (Ansell & Gash, 2008; Turrini et al., 2010; Bryson et al., 2015; Koliba et al., 2019). To determine strategic learning in this sense, the following points should be considered:

- What type of strategies did actors deploy and did they succeed in shifting towards collaborative strategies?
- Did dysfunctional blockages and stagnations occur and to what extent did actors succeed in realising breakthroughs?
- Did actors arrange their interaction by agreeing on a process design and rules of the game?
- Did forms of process management emerge? Did forms of facilitation, mediation, and arbitration occur?
- How did actors appreciate the quality of the process, the process design, and the process management?

8.4.4.3 Inclusiveness, democratic legitimacy, and accountability

When the quality of the interaction process is being assessed, it is important to determine the degree to which interests of less well-represented parties within or outside the network are taken into account (Kickert et al., 1997; Newman et al., 2004; Purdy, 2012). When the attention of parties in the network is focused on exploring one another's strategies and achieving what they regard as their common interest, it may be that they forget about parties that are less powerful and less well represented and wider public interests. This may result, as mentioned earlier, in the transfer of costs and risks of decisions to these weaker or poorly represented parties and wider society. This issue relates to questions of the inclusiveness, democratic legitimacy, and accountability of network processes also discussed in Chapter 7 (see also Sørensen & Torfing, 2009; Koliba et al., 2019). Assessing the quality of network processes therefore should address the extent to which these processes can be qualified as inclusive, democratic, and accountable. Hertting and Vedung (2012) have argued that accountability procedures might still be important in the evaluation of governance networks. Answering the following evaluation questions regarding

the interaction process might help to determine how inclusive, democratic, and accountable networks are:

- Did political representatives and other accountees hold actors accountable with regard to their behaviour and the outcomes?
- Were the rules and criteria that governed the accountability processes made explicit and were they accepted by the parties involved?
- Was voice ensured: did opportunities exist for third parties to access the process and enter relevant arenas?
- Were conditions of due deliberation ensured in terms of entry rules, transparency, openness, fairness, and quality of argumentation?
- To what extent did the governance network process contribute to the generation of external legitimation and support?

8.4.5   *Institutional learning: developing institutions and learning about institutional complexity*

We define *institutional learning* as the degree to which parties in network processes have developed enduring relations, joint perceptions, institutional rules, and a high level of trust that will support their interactions in ongoing and future network processes. Institutional learning goes beyond temporary relationships, rules, and arrangements that guide interactions within a specific arena or process. Institutional learning refers to the development of network institutions with a more durable character, implying a certain extent of network formation or network change. Institutional learning has emerged when there has been a long-term increase in the strength and nature of relations between parties in a policy game. This results in a decrease in the institutional complexity in the interaction process between parties from different networks, or at least in a situation in which actors are able to handle this complexity in a better way. Actors and networks become linked, and the evolution of policy processes that develop around new problems or proposals for new policies and public services happens under more favourable conditions: supportive institutional arrangements facilitate and support the interaction between parties. Parties know where to find one another, know how to deal with one another, and can better shape their interaction. Another important element is the existence of internal and external support: the support from participating actors and their constituencies, including governments and politicians and secure, long-term availability of resources (Koschmann et al., 2012; Koliba et al., 2019). As a result, the governance network, and the policies and services that are being developed and implemented, will be more robust, resilient, and reliable, because the institutional provisions will neither collapse with the first conflict that occurs nor easily be changed under the influence of just one actor's strategies (Mandell & Keast, 2008; Emerson & Nabatchi, 2015;

Kapucu & Hu, 2020). To assess the extent to which institutional learning has occurred, the following questions must be answered:

- To what extent have actors developed enduring relationships, joint perceptions, institutional rules, and a high level of trust?
- To what extent has the governance network generated internal and external support; and how do actors within and outside the network judge the institutional changes that have occurred?

Box 8.2 presents two concrete examples of evaluation of governance network processes.

BOX 8.2   ASSESSING TWO GOVERNANCE NETWORK PROCESSES

In this box, we assess two cases of collaboration in networks: the Service Integration Project's attempt to integrate human service provision in Goodna, Australia (in the period from 2001 to 2003), and the negotiations on water supply in the Sacramento region, California, USA (from 1993 onwards), resulting in the establishment of the Water Forum in 2001.

The Goodna case is about agencies involved in service delivery working together, committing themselves to a joint programme aimed at changing their former processes and starting collaboration in order to improve the community's level of service provision. Hence, this is a good example of a collaborative network: actors committed to a joint purpose and to changing their way of working.

The debate on the effectiveness of the collaboration in Goodna focuses on the question of whether the lack of observably improved policy service performance means that the collaboration was not effective, or whether perhaps the improved collaboration had an inherent value that cannot be captured by look ing at policy outcomes (Keast et al., 2004). The statement that no improvement in performance was realised is incorrect (Woolwock & Boorman, 2003). The main problem was that actors had difficulty proving these improvements. As they were dependent upon resources of parent organisations in the environment, this was problematic. Insofar as actors within and outside the network were disappointed with the extent to which results were realised, they may have been too impatient. It takes some time before networks take shape and actors learn how to adapt their behaviours so that collaboration becomes effective. The people and the organisations involved seem to have appreciated their improved relationship. One might argue that the performance measured did not reflect all the relevant outcomes accomplished. That said, the collaborating parties would make themselves vulnerable to the outside world if they claimed that improved service delivery could not be measured and that

collaboration was a virtue in its own right. Given their dependence on external resources, convincing the outside world of the benefits of their collaboration was an important prerequisite for the sustainability and resilience of the network. These observations emphasise the need to arrange the relationship between the collaborating actors in the network on the one hand and between the subsidising parties and accountees in parent organisations on the other (see also Chapter 7 on accountability and Koppenjan et al., 2010).

In the Sacramento region case, interaction regarding the governance of the water supply in the region initially took the shape of negotiations between a wide set of actors within a setting that might be better qualified as a coordination network or a proto-collaboration network than a collaboration network (Keast et al., 2007). Initially, the actors did not share goals and were involved in a power game. However, this interaction eventually resulted in the development of a collaboration network: the Water Forum. Actors participating in the Water Forum agreed upon the policy programme underlying this forum. During the forum's operation, these actors evaluated its impact on water supply and the management of the American River Basin positively (see www.waterforum. org). These are major accomplishments, especially in a setting with so many stakeholders, boards, and constituencies involved. In the period preceding the establishment of the Water Forum, between 1991 and 2001, the effectiveness of collaboration is harder to assess. There was no clear, jointly agreed upon ex ante programme. Actors were involved in a bargaining process in which they had to develop a joint course of action. As participants could not foresee the eventual outcome of the difficult and lengthy negotiations, it must have been hard for them to assess the effectiveness of the process while it was still underway. One may expect assessments to have varied among participants and over the course of time, depending upon the course taken by the negotiations and the progress made. From an ex-post perspective, one may conclude that eventually all participants committed themselves to a Memorandum of Understanding; this means that the negotiations were successful. The parties succeeded in realising a win–win situation, without clear losers bearing a disproportionately large share of the costs of the benefits of others. Ex post actors seem to be satisfied with the result, or at least they consider it worthwhile or necessary to stay involved in the process and invest additional resources in expectation of future gains or limitation of future losses (Koppenjan et al., 2010).

8.5   Conclusion: evaluation in networks

In this chapter, we have discussed how the performance and the outcomes of governance networks and governance network processes can be evaluated. We have argued that the evaluation of networks requires a very different approach than the approach adopted in rational evaluation. Instead, we have

TABLE 8.1 Assessment criteria for governance network processes

Evaluation criteria	
Overall	Ex post satisficing
Content	Cognitive learning:
	• Joint image building
	• Negotiated knowledge
	• Substantive enrichment
	• Goal intertwinement
Process	Strategic learning:
	• Transaction costs and duration
	• Quality of the process
	• Inclusiveness, democratic legitimacy, accountability
Network	Institutional learning:
	• The development of relationships, shared perceptions, institutional rules, and a high level of trust
	• Internal and external support for the network (resilience and reliability)

presented a set of criteria to evaluate governance network processes, focusing on learning as an alternative way to evaluate the performance of governance networks. Table 8.1 provides an overview of the criteria.

The use of this set of criteria will not lead to simple statements about the success or failure of governance network processes: it allows for nuanced evaluation, often showing that these processes will be successful in one respect and less successful in others. This may be less satisfactory, but it provides valuable indications about the directions in which efforts can be developed to improve the network's performance.

In addition to assessing governance processes, we need to look for explanations as to why certain things go better than others. In line with the fundamental principles behind governance networks, this diagnosis should be shared by the actors involved. This implies that evaluations and explanatory analyses require the involvement of all the relevant and affected actors. In the next chapter, we unfold a synthesis by presenting an overview of steps to systematically analyse governance network processes. This can be used by both practitioners and researchers in their analysis of governance networks and the policies and services that are developed to deal with the societal challenges addressed in network processes.

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PART 4

Syntheses and conclusions

9

ANALYSING GOVERNANCE NETWORKS

Methodical steps to analyse actors,
processes, and networks

9.1   Introduction: knowing the network

We have argued that governance networks are complex. Nevertheless, that does not mean that they cannot be managed, as we have tried to show in the second part of this book. However, to successfully manage a network, we must first understand it. This is crucial not only for understanding why network processes evolve as they do, but also for being able to apply network management. In other words, understanding (analysing the network) and acting (managing the network) go hand in hand.

9.1.1   Analytical steps for mapping actors, processes, and networks

Understanding network complexities requires us to map their nature and sources. In short, we need a systematic approach, broken down in analytical steps through which to develop understanding of the substantive, strategic, and institutional context of complex problems in networks. In this chapter, we present such a stepwise approach in which we sequentially conduct an actor, a process, and an institutional analysis. Below, we discuss the main outlines of these analytical steps. The approach presented here differs from social network analysis (SNA), which focuses strongly on analysing relational characteristics of networks (mostly interaction patterns) (see Lewis & Chatzopoulou, 2015; Kapucu & Hu, 2020). This relational analysis can be part of the approach presented here, but a complete analysis of substantive, strategic, and institutional complexities requires more than a relational analysis by means of SNA techniques.

In presenting our approach, we focus on the main outlines because our aim is to elucidate the nature and potential of the analyses and their meaning for network governance. When appropriate, we refer to relevant literature and provide more detailed information on methods in boxes. The analysis of actors, processes, and networks aims to provide an overview of the conditions and circumstances under which policymaking and public service delivery in governance networks take place. This analysis will not 'solve' complexities in networks; that would be at odds with the main message of this book. Complexities arise out of the presence of multiple perceptions, actors' strategic behaviour, and the complex institutional settings of governance networks. They cannot simply be 'solved'. However, a systematic analysis can help in understanding them and thinking of ways to deal with them.

The analytical steps presented here result in the drawing of a map of the network that actors can use in their attempts to deal with network complexities. It provides crucial information, such as who the actors are, their perceptions and positions, what the interaction process looks like, and how the network is structured. At the same time, the metaphor of a network map depicts the limitations of the analysis. The question arises as to how reliable that map is. The map may be incomplete or incorrect. A map is abstract and will omit certain things that may turn out to be important for specific questions that arise later. Still, the map does not have to be complete in order to provide actors with at least a certain sense of direction. The depth of analyses may vary: sometimes there is time for in-depth analysis; at other times – in light of time and capacity limitations – a quick scan is more appropriate.

A serious limitation of the map is, of course, that it quickly becomes obsolete. Problems, processes, and networks are dynamic, and these analyses provide only a snapshot of the dynamic whole. Thus, the validity of the map is limited in time and nature and must be adapted frequently in order to keep up with changing insights and positions, developments in actor composition, and the dynamics of interactions. The analysis cannot replace the need for skills, situational awareness, and the ability to improvise, which actors also need to operate in and manage governance networks.

This chapter presents three categories of analytical activities: mapping the actor field involved in a problem situation (*actor analysis*), the characteristics of the governance network process (*process analysis*), and the institutional characteristics of the governance network in which the process evolves (*network analysis*). Within each category of activities, multiple analytical steps are suggested and discussed in subsequent sections. Table 9.1 provides an overview of these steps. In practice, analyses do not have to encompass all steps. Depending on the complexities being tackled and the knowledge requirements formulated, parties may limit the number of methods or steps in the methods. Nevertheless, the analytical steps to a certain extent build on one another, making it unavoidable to combine at least some. New insights emerge when different steps are combined in the analysis. Sections 9.2, 9.3,

and 9.4 present the analytical steps that constitute, respectively, the actor, the process, and the network analysis. In Section 9.5, we make some concluding remarks.

9.2   Actor analysis

The first steps of the analysis are to determine the most important actors, their problem perceptions, and their position with respect to the problem situation. Therefore, we discuss how to identify actors and how to characterise their mutual relations.

9.2.1   Step 1: Identify relevant actors

An actor analysis begins by identifying the key elements: the subject, the specific policy issue, or the process or network that is focused on implementing the relevant policy or service. This will determine the initial empirical scope of the analysis. For example, the analyst might decide to focus on 'service delivery for elderly people in city X', or 'the decision-making process about an environmental plan in municipality Y', or 'the development of a new rail tunnel in region Z'.

   After determining the empirical scope of the analysis, the analyst proceeds by listing the actors involved or those that are considered to be important. These may be governmental, semi-governmental, private, and societal actors at various administrative and/or geographical levels (local, regional, national, international). The following questions can guide the identification of relevant actors:

- Which actors are actively involved in the problem?
- Which actors possess hindrance or realisation power, in the sense that they have authority or other resources that play a role in the emergence or the solution of the problem situation?
- Which actors have the knowledge, insights, and ideas that can contribute to the enrichment of the problem formulation, and thus be considered for the solution?
- Which actors are affected by the interactions in the network, such as service users, inhabitants (in the case of environmental projects), interest groups (environmental or economic interest groups), and so on? And are these groups likely to participate or not (considerations of democratic legitimacy)?
- Which actors can be expected to be involved at any particular juncture?

Clearly, different emphases in these selection criteria will lead to the identification of different actor sets in the analysis (see Bryson, 2004). Thus, the emphasis may be on mapping the hindrance power – especially when

TABLE 9.1 Steps in actor, process, and institutional analysis

Step	Intention	Important questions
Actor analysis		
1. Identify relevant actors	To ascertain the actors that need to be taken into account	• What is the subject at hand? • Who can be distinguished as the acting units (network actors)? • Which actors in the network are important for realising one's own objectives or policy goals? • Which actors have an interest in finding a solution to the problem situation?
2. Reconstruct actors' perceptions	To map actors' perceptions with regard to the problem, the solution, and other actors	• What perceptions do actors hold about aspects such as problem, causes, solutions, and (the competency of) one another? • To what degree do these perceptions differ, are there clear groups? • What obstacles could be caused by differences in perceptions?
3. Analyse actors' positions and dependencies	To ascertain the positions that actors take with regard to the problem situation and how much actors depend on one another	• What resources do different actors have at their disposal? • How important are these resources and can they be acquired elsewhere? • Is there unilateral or mutual dependency? • Are actors critical, dedicated, and/or comparable?
Process analysis		
4. Identify the relevant arenas	To acknowledge coherent groups of actors and interaction situations around demarcated policy issues and/or initiatives that are meaningful to the initiative or network process	• Where are the decisions made that are important to the initiative/interaction process that is being analysed? • Which actors interact in which context (sector, policy content, ad hoc, etc.)? • How coherent are these groups of actors? • Do these groups of actors have relations with one another (linkages)?

5. Identify rounds and analyse interaction therein	To identify crucial decisions and rounds in the decision-making process	• What are crucial decisions and events?
		• Which rounds can be identified?
	To reconstruct interactions by identifying actors' strategies and their interplay and outcomes	• What strategies do actors deploy?
		• What are the dynamics of interactions between strategies in these rounds?
		• What impasses and breakthroughs can be identified?
6. Evaluate the process	To ascertain how the process can be assessed in terms of substantive, strategic, and institutional learning	• What are the substantive, process, and institutional outcomes of the process?
		• How do these outcomes perform in terms of the assessment criteria presented in Chapter 8?
7. Identify network management efforts	To ascertain the network management strategies that were deployed and with what effects	• What network management strategies are deployed?
		• Who are the network managers and what are their qualities?
		• What are the effects of network strategies?

Institutional analysis

8. Identify actors' interaction patterns	Through mapping, to determine the frequency and diversity of interactions of actors, networks, and the actors who belong to them	• Which actors interact frequently and which infrequently?
		• Which actors have a varying contact pattern and which do not?
		• Which actors are central and which are peripheral in the network given their contact pattern?
9. Identify patterns of perceptions and trust relations	By determining the dynamics of perceptions between actors over time, to get a grip on changes in the network	• What patterns of perceptions can be distinguished in the network, what dynamics are visible in these patterns over time, and what are their possible effects?
		• What are the trust relations between actors in the network?
10. Identify institutional rules	To make an inventory of the formal and informal rules	• What formal rules and juridical procedures apply?
		• What informal rules can be distinguished (for instance, with regard to information provision, access opportunities, professional codes, etc.)?
		• What organisational arrangements in the network structure interaction?

seeking support – but also on determining the opportunities for substantive enrichment – especially for generating (new) solutions, or on democratic legitimacy. It is crucial not to limit the analysis solely to actors that have the ability to influence the governance process. Although these actors play a significant role in the effectiveness and efficiency of governance, an analysis should also take into account the legitimacy of these processes. This requires the inclusion of actors that are impacted by the governance process in the analysis.

9.2.1.1   Actors and the choice of the right aggregation levels

An actor is an individual, group, organisation, or coalition of organisations that can act autonomously. However, as many actors are collectives, it may be difficult to establish whether the collective is the actor or whether subgroups within this collective are acting on their own account (see, e.g., Scharpf, 1997). For instance, the national government can be seen as an actor, but on closer scrutiny it may become clear that actually various ministries have their own policies and act upon these. In such a situation, it makes sense to see these ministries as separate actors, rather than consider the national government as a whole as one actor. For the same reason, it makes sense to distinguish between various levels of government, specific divisions within private companies, or specific subgroups of societal actors. Residents, for instance, seldom make up a homogeneous group, as they can have various and conflicting interests. So, the question of which organisational unit should be labelled the actor is important. However, choosing an aggregation level that is too low may lead to a focus on internal fights over subordinated issues that are not crucial for understanding what is happening at the level of the governance process as a whole. The decision rule for choosing the right aggregation level is to select an organisational level as high as possible, without losing information that is of crucial importance to the analysis.

9.2.2   Step 2: Reconstruct actors' perceptions

Central to the second step is the reconstruction of perceptions within governance networks.

9.2.2.1   Making an inventory of (problem) perceptions

Actors have their own perception of the problem situation, their idea of what the problem is, and the policies and services that are needed. As indicated in Chapter 2, substantive complexity stems from the co-existence of diverse perceptions. In Step 2, an inventory is made of the perceptions of the actors

selected for the analysis. A perception may consist of views on various aspects of a problem situation (see also Dery, 1984; Fischer, 2003):

- the typification or description of the situation: an image of what is problematic about it, the norms or standards that indicate why this situation is a problem, and an indication of what is causing this situation;
- an indication of the direction in which solutions can be sought, perhaps also a clear specification of the preferred solution (which actually may be equal to the goal that the actors are pursuing) and of the means and instruments to be used to accomplish this solution;
- an indication of how actors define their own relationship with the problem situation – as being affected by, or being able to affect, the problem situation – and their role in the policies and services that need to be designed and implemented to deal with it;
- an indication of actors' perceptions of the role of other, crucial actors in either the cause or the solution of the problem situation.

In this step of the analysis, the problem perceptions of the different actors involved are mapped systematically with regard to the above four aspects. Sometimes, documents exist where actors have systematically presented their perceptions. Often, however, actors' perceptions are not explicitly documented. They exist only in their minds. In all cases, problem perceptions can be incomplete and even inconsistent in parts. It then becomes the analyst's task to reconstruct the involved actors' problem perceptions to the greatest extent possible. At the same time, the analyst must be cautious not to rely on assumptions about an actor's perceptions on a given issue, because it might be that the actor has not even thought about a certain aspect of a problem, or simply has no opinion on it.

Perceptions can be mapped through both qualitative and quantitative approaches. A qualitative approach, for instance, may involve describing each actor's opinions on the problems at hand and their possible solution directions, based on interviews and written documents (policy documents). An example of a quantitative approach would be to use a survey to collect data on perceptions. Respondents can be presented with a list of statements and asked to indicate (for instance, on a 5-point Likert scale) the extent to which they agree with the statements.

Q methodology can also be used to analyse the discourse in a certain community (which can be a network) by looking at the structure of a debate (Nederhand & Molenveld, 2020). At its core, the method employs a set of statements that respondents rank according to their preferences. These statements can be derived from existing empirical data, but they can also be deduced from theory. Through factor analysis, the structure of actors' perceptions is deduced. Box 9.1 gives an example of an application of Q methodology.

BOX 9.1   Q METHODOLOGY: ANALYSING MANAGERS' OPINIONS ABOUT THE ROLE OF THE MEDIA

In short, Q methodology systematically and scientifically maps underlying inter-subjectivity on a topic. It presents a series of statements representative of the debate on an issue (the Q-set) to the respondents (the P-set), who are asked to sort the statements into a distribution of preference. From this, statistically significant patterns are derived and interpreted (mainly by using factor analysis). The results of a study using Q methodology can be used to describe a population of opinions or preferences (Nederhand & Molenveld, 2020).

 To research the way in which managers employed in organisations with oversight tasks viewed their relationship with the media, Klijn et al. (2016) used Q methodology. An analytical sketch of the literature on the relationship between public managers and media provided the authors with three main categories of literature (public relations, agendas, and mediatisation), each of which provided a significantly different idea about the media–governance relationship. These three categories were used to develop statements (Q-sort statements) in order to capture the way in which public managers experienced their relationship with the media. After respondents had ranked the statements, a factor analysis showed groups of respondents with related opinions. Such factor scores need additional interpretation; this can be done by looking at the statements that are dominant in certain groups. The research revealed three different groups of managers that showed different attitudes to media attention, labelled as adaptors, great communicators, and fatalists (see Klijn et al., 2016). The differences between the groups are presented in Table 9.2.

TABLE 9.2   Three viewpoints on the relationship between media and governance

	View of media	*View of governance*	*Prescription for strategy or course of action*
Adaptors	Media as a natural phenomenon Media can be very dominant and definitely show signs of media logic but can be influenced	Governance processes are inherently complex Governance processes take place in dynamic networks, of which media are an inherent element	Be pragmatic and externally oriented You cannot change much about media Be externally oriented and think what you want to communicate

(Continued)

TABLE 9.2 (Continued)

	View of media	*View of governance*	*Prescription for strategy or course of action*
		Media influence should be taken as it comes and then be managed as well as possible	
Communicators	Media as part of governance processes Media are simply one of the factors that make governance processes complex and are dependent on the dynamics of that process, as well as shaping it	Governance processes can be steered and partly controlled Governance processes are complex and highly dynamic, and all parties attempt to influence the media; however, the media can be an instrument in the hands of public managers to steer and/ or control the dynamic	Communicate strong images Create strong images and communicate them, surf along with the complex decision-making process Strong images and professionalism are the solution; the media can be 'played'
Fatalists	Media as an independent negative force Media are highly biased (negative, want to score points, etc.) and should make more room for balanced news	Media disturb governance and steering Media make governance processes more complex and have a negative influence on these processes Media are a disturbing and often annoying factor for public managers, but not one that can be managed	Let it pass, not much can be done Very difficult to cope with media logic, there is only limited possibility to influence media Strong images and professionalism are not the solution

TABLE 9.3 Summarising the perceptions

Actor	Description of problem perception	Preferred solutions	Perception of own role	Perception of other actors
Actor 1				
Actor 2				
Actor N				

9.2.2.2 Comparing perceptions

To compare actors' perceptions within a network or network process, an overview can be provided, such as the one presented in Table 9.3. This summarising table helps to identify the similarities and differences in actors' perceptions of the problem situation. This knowledge can be used to add to, or refine, the analyst's understanding of the situation. It can furthermore be used to make stakeholders or network managers aware of how other parties view the problem and the policies and services required to deal with it, of where potential conflicts may be expected, but also of the overlaps in perceptions that facilitate agreements, collaboration, and co-production.

9.2.3   Step 3: Analyse actor's positions and dependencies

After identifying the most important actors, their perceptions, goals, and interests, we can take the next step: determining the dependencies between the actors. The degree of dependence between actors can be determined by looking at these actors' resources and what these resources mean to other actors.

9.2.3.1 Types of resources

As a first step, we must distinguish types of resources. As indicated in Chapter 3, we distinguish six types of resources:

- *Financial resources*, meaning money and budgets. These provide opportunities not only to realise solutions, but also to cover the transaction costs entailed by participation in complex interaction processes.
- *Production resources* are typically physical means necessary for realising solutions, policies, and services. In governance processes regarding urban revitalisation, land ownership may be an important production resource. Production resources may also be the building equipment of a construction firm, or the personnel needed. In healthcare, it may be the number of beds in a hospital, the medical equipment, and so on needed to provide care. An important production resource is the (local) information needed to realise feasible and effective solutions, policies, and services.

- *Competencies* concern the formal authority to make certain decisions and to take responsibility for the realisation of specific solutions, policies, and services – for instance, the authority to decide on planning and to make zoning plans, or to issue permits for certain activities that are assigned to specific actors that as a result have important positions within the network. These resources generally rest with public or semi-public actors. However, in private networks too, societal actors may have specific divisions of authority and responsibilities that may influence dependencies. What is more, these actors may have been assigned public tasks and responsibilities, either by law or by private arrangements such as contracts.
- *Information and knowledge* can be available in documents, information systems, organisations, and people (experts, researchers, professionals, and practitioners). Some knowledge and expertise are more easily accessible than other forms of knowledge, such as the knowledge of experts and professionals vis-à-vis the tacit knowledge of practitioners and clients and other stakeholders. The more actors have knowledge that is exclusive and hard to access, the more others depend on them.
- *Strategic capabilities* refer to actors' skills in influencing network processes through strategic use of their resources. In other words, actors' ability to influence network processes derives not only from the possession of resources, but also from their ability to mobilise these to exert influence. This ability depends on, among other things, actors' organising capacity, their relationships with other relevant actors, and their skills in accessing and using social media and mass media.
- *Legitimacy* refers to the support for a certain solution, but also for the process followed, for the methods used to accomplish that, and for the actors involved in that process. Some actors have the ability to attribute or withhold legitimacy. For instance, by voicing support, elected politicians can increase the democratic legitimacy of a certain policy proposal or person in the eyes of the relevant constituencies. Societal groups can do the same by granting legitimacy to policy solutions or denying that legitimacy. Societal groups may look for media attention to increase the public support for their proposals, or to fight the legitimacy of the policies of others. Social media contribute to the legitimacy of ideas, policies, and persons in virtual arenas, with possible crossover to the arenas of mass media and political decision makers. Thus, legitimacy in the network society, where the media have become increasingly important, has also become an important resource.

9.2.3.2   Degree of dependency

When the resources have been mapped, it is important to determine the degree of dependencies between actors. This can be done by means of Scharpf's taxonomy (see Chapter 3) using two criteria: the importance of a resource and its substitutability (Scharpf, 1978).

The degree to which one organisation is dependent upon another organisation is measured by the importance of its resource for the realisation of objectives as well as by the degree of the resource's substitutability, that is, the degree to which it is possible to acquire the resource elsewhere or to replace it with another resource. An analysis by means of these concepts provides an insight into various degrees of dependency (i.e., low, medium, or strong). Furthermore, that dependency may or may not be mutual. This information helps us determine the strength of actors' negotiation positions. For example, when an actor (A) is strongly dependent on another actor (B) for the realisation of its goals, but actor B is not dependent upon actor A, then actor A's negotiation position is weak. Clearly, a network involves many actors and therefore many dependencies that will vary in strength. In principle, these can all be analysed according to the model in Table 9.4.

9.2.3.3 Determine an actor's resource dependency: who are the critical actors?

To determine a specific actor's resource dependency, we need to find out what resources are crucial given their objectives and who holds these resources. As every actor possesses a range of resources, an extensive overview is not very helpful; what is important is mapping the most relevant resources given the issues at hand and the objectives of the actors within the governance network. Next, when the degree of substitutability is assessed, we can determine the degree to which actors are dependent on one another.

Critical actors are actors that own resources that are very important to the problem situation or that can be used to hinder the activities being undertaken in the network process (hindrance power). This perspective has a strong bias towards effectiveness, that is, actors that have a strong capacity to influence governance processes. One might argue that actors that are heavily affected by governance processes should also be considered as *critical*. However, that is a normative point of view, whereas here we focus on an analysis of the empirical reality. That said, affected actors can become critical, for instance if they succeed through (social) media in attracting attention on their views

TABLE 9.4 Analysing dependencies between actors

Actors	Most important resources	For whom?	Degree of substitutability	Dependency: low, medium, high	Critical actor? Yes/No
Actor 1					
Actor 2					
Actor N					

and blocking decisions, as argued in Chapter 3. Tables 9.4 and 9.5 provide a template that can be helpful in analysing actors' positions.

9.2.3.4 Who are dedicated actors?

The dependencies between actors are influenced not only by the resources that they control, but also by the extent to which they are passionate about the problem or the solution, and their willingness to use their resources. The importance that actors attach to a problem or a solution can become clear from their (problem) perceptions. If an actor thinks that a problem is important, he/she will probably be a dedicated actor or might become one. Given information asymmetries and bounded rationality, actors may not yet be participating because they are not yet informed on the consequences of the policies and the ideas that are being discussed in the process, or they may be too occupied with other concerns. When it is unlikely that an actor will experience specific costs or benefits, or when these offset each other, the actor will be less inclined to participate. It is then likely that we are dealing with a non-dedicated actor.

The earlier analysis of actors' perceptions and objectives provides information that can be used to take a next step: determining similarities and differences between actors' problem perceptions and objectives. Filling the cells of Table 9.5 produces an overview of categories of actors that are crucial to the problem situation and the decision-making or service-delivery process related to it, and in what way they are important. Of course, the analyst should be aware that some actors may not have an opinion yet, or will change their

TABLE 9.5 Dependencies of a specific actor

	Dedicated actors		Non-dedicated actors	
	Critical actors	Non-critical actors	Critical actors	Non-critical actors
Comparable perceptions and goals	Actors who are likely to participate and be potential allies	Actors who are likely to participate and be potential allies	Necessary potential actors who are hard to activate	Actors who will not have to be involved at first
Contradictory perceptions and goals	Potential blockers of (certain) changes (biting dogs)	Potential critics of (certain) changes (barking dogs)	Potential blockers who will not act directly (sleeping dogs)	Actors who do not require attention at first

perceptions during the process. The table should be used prudently in order to prevent it from becoming a self-fulfilling prophecy: pushing actors into certain categories, treating them accordingly, and thereby evoking expected behaviours that could have been avoided.

This overview provides an impression of an actor's possible responses to a specific problem formulation and the resultant solution. This can serve as a reason for parties to alter the solution, policies, or services that they propose, or to cash in on potential support by making alliances, especially with dedicated and non-dedicated critical actors. However, mustering support does not completely eliminate the risk of dedicated, critical actors blocking the process. Their critical-actor status gives them veto power over the majority.

Although Table 9.5 seems to emphasise the differences between actors' perceptions, it also provides the opportunity to explore similarities and overlaps between opposing actors and coalitions. It may thus be used to identify opportunities for alignment or reframing of perceptions in order to develop a common ground for negotiation, win–win situations, and/or joint action. The reformulation of problems and solutions can bridge contradictions between parties. In other words, this table also provides suggestions about how positions can be influenced by reformulating problems and adopting sustainable proposals. Therefore, the information in the table can be used to inform network management efforts.

9.2.3.5 Conclusion: dynamics in the analysis

Actors and dependencies can change during interactions. This change can take place because of changes in the problem formulation or in the policies and services that may influence the extent to which actors find them attractive. When other solutions come into the picture, other actors with other resources may become important. Hence, a dependency analysis should be updated frequently.

9.3   Process analysis

The analysis of the interaction process encompasses four analytical steps: 1) identifying the arenas where the actors meet and enact their strategies, 2) reconstructing the interaction process, 3) assessing the interaction process, and 4) identifying and assessing network management strategies.

9.3.1   Step 4: Identify the relevant arenas

Governance network processes take place in arenas: specific places or institutional settings where a specific set of actors meet or interact. Identifying the arena or arenas where interactions take place serves as a first demarcation of the network governance process. It provides an overview of the possible

locations where actors can enact their strategies and take decisions. To identify the most important arenas, the following issues must be addressed:

- To understand the decision-making process, it is essential to identify where and what decisions are made. This involves pinpointing the formal decisions required within the established procedures related to the issues, policies, or services at hand. By doing so, the analyst can discern the formal contexts or settings where these decisions occur. This analysis should be connected to previous steps to ascertain whether distinct subsets of actors are engaged in specific decisions. These subsets could indicate potential arenas for decision making. What organisational arrangements exist to structure these actors' interactions? These may be formal decision-making bodies like parliaments, councils, the cabinet or the board of mayors and aldermen, consultation platforms, steering groups, project organisations, meetings, informal telephone sessions, informal meetings among actors, and so forth.
- Which actors are allowed to participate in the arenas and what is the relative importance of these arenas for the proposals that are being discussed in the governance network process?

This inventory of arenas makes it clear that different places exist where subsets of actors make relevant decisions in the problem-solving process. This is important information, as arenas are not accessible to all actors. This implies that decisions may be taken while some actors do not have any influence. Also, actors may not be informed on what is happening within these arenas. As a result, decisions may come as strategic surprises. The overview of decision-making arenas can be a starting point for actors to determine on which arenas they want to focus their attempts to influence the process, and what linkages between the arenas they want to make or avoid. Given actors' limited capacity and the varying accessibility and importance of arenas, this information can be an important basis for strategy formation and the assessments that actors need to make. The analysis of arenas can thus help the analyst and the involved actors (including the network manager) to identify decisions and the places where they are taken. To be meaningful, the reconstruction of arenas should happen at a carefully chosen level of aggregation. It should not be too high, because that might not tell us much about where exactly decisions are made (e.g., a governmental arena). Neither should it be so low that we would need to distinguish many different arenas, such that we lose overview (e.g., identifying specific meetings between a handful of actors as arenas). So, the analyst must provide a clear reasoning as to why certain arenas are chosen and should be able to indicate why these are the arenas in which decisions are taken. The analysis should also indicate the organisational arrangements that hold the arena in place and the set of actors that are part of the arena.

9.3.2 *Step 5: Identify rounds and analyse interaction therein*

If actors or network managers want more information about the progress of interactions, it is important to analyse the evolution of the interactions. This can be done by identifying rounds, strategies, the process dynamics, and outcomes (see Step 6).

9.3.2.1 *Reconstructing the rounds in interaction processes*

Interaction processes are series of decisions made by actors in dealing with complex problems and developing and implementing solutions, policies, and services. This process may be lengthy and encompass complex interactions on numerous issues, sometimes in considerable detail. To get an understanding of this complexity and to differentiate between more and less important issues, it is helpful to distinguish rounds in this process and to focus the analysis on the interactions within these rounds.

To identify rounds, a first step is to construct a tentative timeline of events and decisions during the process. This can be done systematically with the aid of, for example, event datasets (Van de Ven & Poole, 1990; Spekkink & Boons, 2016). Data for this timeline may be found by an explorative study of the documents containing information on the process. These can be checked in a limited number of explorative interviews with key actors. Next, informed by this timeline, the analyst seeks to identify a limited number of *crucial decisions* and *crucial events* (see Teisman, 2000). These may be considered as demarcations between rounds in the process. To identify crucial decisions or events, the analyst should take three criteria into account – crucial decisions then being decisions that satisfy preferably all three or at least two of these criteria. Crucial decisions and events change:

- the composition of actors in the network process,
- the course of interactions in the network process, and/or
- the content of the network process (the issues discussed).

In the reconstruction, the analyst has to list the crucial decisions first and explain why they are considered crucial. The analyst can start by making a preliminary overview of crucial decisions and events (for instance through documents) and then check these against interviews. The selection of crucial decisions, events, and distinguishing rounds is a matter of choice for the analyst. They are heuristic tools that help to order the analysis. The analyst should be careful not to choose too many crucial decisions, that is, to distinguish too many rounds; otherwise, the reconstruction will not help to reduce the complexity in the analysis. The objective is to define distinct rounds

within the process, each characterised by a unique interaction dynamic or an underlying logic that sets it apart from other rounds.

9.3.2.2 Identifying strategies

Once rounds have been identified, the analysis focuses on what has happened within these rounds. Central to this is identification of the participating actors' strategies. Strategies are recognisable as coherent series of actions through which actors attempt to influence the process. They consist of two dimensions:

- The 'what': the goals or objectives being pursued in terms of outcomes or the way in which the interaction process evolves. It may be that an actor tries to accomplish a certain policy, enhances the use of certain instruments, tries to postpone decision making, aims to disqualify another actor, or offers a certain framing of the problem.
- The 'how': the activities that actors deploy, which can for example be characterised by the degree to which actors seek cooperation or conflict with other actors. Activities can also focus more on content, for example by promoting specific problem definitions or perspectives, drawing attention to particular issues, or rallying support around preferred solutions.

These actions can be directly observed, but the objectives underlying them cannot; therefore, strategies have to be reconstructed. This can be done by identifying actors' actions and the patterns that they have in common. In addition, intentions and objectives as expressed in documents and other public sources and interviews may be used to check these findings, or be used as proxies if other information is missing. Of course, it may be that expressed intentions do not reflect the real strategies used in practice, or that actors misrepresent their objectives and activities for strategic reasons. Therefore, it is important to validate findings with other sources, for instance by asking other actors.

9.3.2.3 Reconstructing process dynamics

The above inventory of strategies is static. In reality, within a decision-making round, interactions unfold dynamically. Strategies are deployed by actors, and other actors will react by deploying their own strategies. This will result in patterns of strategic interactions that can be analysed for 1) the content pattern observed (the discourse) or 2) the type of interactions that dominate (such as conflict and collaboration). A discourse is the sum of the various

substantive arguments that actors present as part their strategies, resulting in a specific argumentation structure. This is thus the substantive side of the unfolding interaction. It may be that actors all use conflicting strategies, as a result of which a controversy emerges and the process stagnates. It may also be that actors deploy collaborative strategies, as a result of which a joint outcome emerges. In reality, various mixes of strategies can be expected, with different effects on the course and the outcome of the process. What is more, during the interaction, actors may change their strategies. After all, a process is characterised by action and reaction. That is why we speak of process dynamics. Within a round, we expect the strategies to influence one another and to develop in a certain direction, producing impasses, conflicts, or breakthroughs. The aim of this analytical step is to reconstruct the way in which these interactions of strategies develop and to assess their impact on the content and course of the process. This can be done by reconstructing the patterns in strategies and/or the argumentation structure of the debate within the round and by conducting a discourse analysis.

9.3.3   Step 6: Evaluate the process

To assess interaction processes within networks, the analyst needs to reconstruct the outcomes of the total process and those of each round. In Chapter 3, we distinguished three types of outcomes. These outcomes may be identified for specific rounds, or for the process as a whole.

- Substantive outcomes are the solutions, policies, or services realised, or the intermediate policy products realised at the end of each round (be it an agreement of understanding, a process design, a plan, a white paper, a bill, a project plan, an implementation plan, and so on).
- Process outcomes are the duration of the process, the transaction costs involved, and the quality of the process in terms of openness, democratic legitimacy, and accountability.
- Institutional outcomes refer to the effects of the process on the network as a whole, more specifically its impact on relationships (strengthened or weakened; changed) and the level of trust realised.

Once the outcomes have been identified, they can be confronted with the evaluation criteria presented in Chapter 8 to determine the extent to which, and in what way, substantive, strategic, and institutional learning has occurred and whether the process can be considered a success or a failure from a network perspective. Of course, the assessment often will not result in simply qualifying a process as a success or a failure, but rather in a more nuanced (and sophisticated) assessment. Evaluations, after all, are aimed at

identifying points for learning and improvement. An assessment of outcomes of governance network processes involves various activities:

- *Assessing content outcomes.* Here, there are several evaluation criteria (see also Chapter 8). First of all, assess whether actors were satisfied with the (preliminary) outcomes. This assessment is a good starting point for evaluating the success of (policy) processes and shows the range of appreciations of the involved actors. It also makes the analyst aware of strengths and weaknesses of the outcomes, as different actors often assess the results in light of different values. Subsequently, the analyst can assess whether actors were successful at arriving at a joint image of the problem situation or even consensus on solutions. Another important assessment is whether goal intertwinement and a win–win solution have been achieved. To assess this, the analyst must identify winners and losers, for example by using the ex post satisficing criterion of the first step: are involved actors satisfied and, if so, how many? This can be done by interviewing the actors and letting them reflect on the achieved outcomes (policies achieved, decisions reached, acceptable solutions, costs), but a survey can also be used. For example, Klijn et al. (2010) used a survey to measure the satisfaction of involved actors. Statements assessed, for example, whether the respondents thought the solutions would be robust and solve the problems at hand, whether solutions were innovative, whether the cost matched the benefits, and so on. In another step, the analyst makes an assessment of enrichment, assessing whether new ideas have been developed – for example by comparing the solutions proposed at the start of the process with those proposed at the end (or in a later round). Enrichment can also be assessed by looking at the critical remarks and comments that have emerged on solutions and how those have been addressed in the further development of these solutions (both in reaction to critics and in terms of adapting the content of proposals). If no changes have been made and there are hardly any reactions to criticism, then the level of enrichment is low. This requires a content analysis of documents and debates.
- *Assessing process outcomes.* This includes the evaluation of duration, transaction costs, process quality, democratic legitimacy, and the level of accountability. For these assessments, the criteria suggested in Chapter 8 can be used. It is difficult to assess duration and transaction costs, as no objective standards are given to determine success or failure. Whether a long duration and high transaction costs have contributed to success or failure should always be assessed in light of the substantive outcomes of the process or the difficulty of the problem addressed. Often, assessing these process outcomes requires either comparison with other processes or an inventory of judgements of actors involved, inside or outside the

network. Using the ex post satisficing criterion may be a way to address this problem. Transaction costs can also be assessed by looking at the duration, impasses, and other financial and non-financial costs associated with a decision. Usually, (societal) cost-benefit analysis is suited to assessing the various transaction costs, although some of the outcomes (such as environmental gains or losses) may be hard to quantify. The democratic legitimacy and accountability of network processes and networks can be assessed by conducting interviews and surveys informed by the criteria developed in Chapter 8.

• *Assessing institutional outcomes*. This involves learning about strategic complexity and analysing how the institutional structure of the network has changed during the process. To determine such changes, the analysis may build on what will be said on mapping the network as a whole in the next steps. A more limited assessment may focus on identifying whether actors have succeeded in establishing arrangements or procedures to support their actions during the process and that remain in place after the specific interaction process has ended (i.e., that have institutionalised). Also, measuring the trust levels of actors involved in the interaction process at the end of the process (or process rounds), using interviews or surveys, may give an indication of the quality of the relationships that have developed among actors as a result of the interaction process.

9.3.4   Step 7: Identify network management efforts

The last step in the process analysis is an analysis of network management strategies. We focus here on strategies directed at the process (see Chapter 5) and not on strategies that have been labelled as institutional design (Chapter 6). Network management strategies have to be demarcated clearly from the actors' strategies already mentioned above. An actor's strategy is clearly aimed at achieving objectives of an individual actor, whereas network management strategies are aimed in principle at facilitating and promoting interactions between actors, exploring content, or arranging interactions. Thus, network management strategies are aimed at the initiation and facilitation of interaction processes and not at achieving a specific goal. However, in reality, often no watershed exists between actors' strategies and network management strategies. The same strategies may be open to various actors, and it will be hard to determine the exact intentions that underlie these activities.

In principle, the analyst has three ways to identify network management strategies:

1 Focus on deadlocks, impasses, and severe conflicts between actors and see whether network strategies are being deployed to resolve them. The advantage of this method is that it makes it relatively easy to identify

activities that can be labelled as network management. In a focused way, activities aimed at solving interaction deadlocks, conflicts, and so on can be identified. However, the disadvantage is that it means that not all network management efforts are traced, only those aimed at conflict resolution. Nevertheless, it does give a first impression of possible network management strategies and the actors deploying these strategies (the network manager(s)).

2 Building on the analysis of strategies conducted in Step 5, check which of these strategies can be seen as network management strategies. This requires comparison of the strategies with the list of network management strategies as presented in Chapter 5 and checking the extent to which these strategies indeed are deployed with the intention of furthering the interaction process instead of particularistic goals. Again, identifying network strategies in this manner also results in identifying the network manager(s).

3 Assess all activities of actors who are identified or assigned as network managers (building on the actor analysis or the first step of this network management analysis). This involves inventorying all the activities of these actors and deciding whether these activities can be qualified as network management.

The next analytical activity in this step may be aimed at assessing the network activities by relating the network management strategies and the way in which they are deployed to the outcomes of the process and the way in which the process evolved (did actors succeed in interacting and collaborating?). To identify network management strategies, the analyst may use document analysis, but also interviews and surveys. One research strategy is to interview actors other than those identified as network managers to ascertain their assessment of the way in which network management has been conducted and the effects accomplished.

9.4   Institutional analysis: analysing the institutional structure of the network

Traditionally, a network analysis is an inventory of relational patterns between actors (Aldrich & Whetten, 1981; Scott, 1991; Wasserman & Faust, 1994; Lewis, 2010; Scott & Carrington, 2014). In most cases, interactions are mapped, but, in some cases, decisions and issues are also mapped (for a good example of this, see Laumann & Knoke, 1987). In both cases, the analysis is almost exclusively quantitative. Data are collected through surveys that are then analysed using dedicated software (Scott, 1991). In this book, as mentioned, we approach network analysis in a somewhat broader sense given that it contains an actor analysis, a process analysis, and an institutional analysis. However, we see network analysis in the classical sense of

a SNA as a highly useful step in this broader analysis. There are also examples of methods that combine analyses of process with analyses of relational structures (e.g., Butts, 2008; Spekkink & Boons, 2016).

In an institutional analysis, three steps can be distinguished: making an inventory of the interaction patterns between actors (Step 8), analysing patterns of perceptions and trust (Step 9), and identifying the rules of the network (Step 10).

9.4.1   Step 8: Identify actors' interaction patterns

After actors have been mapped and their mutual (dependency) positions have been determined, another important question to address is then: what interaction patterns can be found in the network? This offers two important insights that are also relevant for potential attempts to influence the process later on:

- Who are the central actors in the network; or, more specifically, which actors occupy a central place in the network interactions? In SNA, various formal measures of centrality exist (Freeman, 1978).
- What links exist between actors in the network? This translates specifically into such questions as: Which actors have substantial contact with one another? Which actors have no contact with one another? And which actors have only indirect contact (through other actors) with one another?

Important concepts for acquiring these insights are the frequency and the variety of interactions. Frequency concerns knowledge of how often organisations have contact with one another. Interactions between organisations can be very frequent or sporadic. Variety of interactions concerns the diversity of interactions of each actor separately and of the network as a whole. For instance, actors can interact frequently with a very limited set of actors in the network, but they can also interact infrequently with a large array of other actors (which can be organisations or individuals for instance). Analysing the network in terms of these concepts enables the analyst to acquire a better understanding of the network and to distinguish between peripheral and central actors. Central actors are those who have many contacts with other actors or a varied contact pattern, or both. The analysis also provides insights into actors' strategic possibilities. Actors that are central, or that cross boundaries between two actors that have no other connections, have more information, more strategic possibilities, and thus more power (also see Burt, 1992).

9.4.1.1   Qualitative or quantitative inventory

In principle, the questions posed above can be mapped in a quantitative or a qualitative manner. If there are only a few actors and a quick scan is done,

TABLE 9.6 Interaction frequencies between actors

	Actor 1	Actor 2	Actor 3	Actor 4	Actor N
Actor 1	–	Frequent	Rare	Rare	Frequent
Actor 2	Frequent	–	Frequent	Frequent	Frequent
Actor 3	Rare	Frequent	–	Rare	Frequent
Actor 4	Rare	Frequent	Rare	–	Rare
Actor N	Frequent	Frequent	Frequent	Rare	–

then a qualitative impression of interactions will suffice. That impression can be based on a limited inventory of opinions of actors involved or on an estimation by the analyst. The analyst can present his/her findings in a table which, through qualifications such as *frequent* or *rare* (or other qualifications), provides an impression of the pattern of interactions. An example is given in Table 9.6. When we ask actors about the frequency of their interactions, we may receive different, sometimes conflicting, responses. Actor A might report many interactions with Actor B, whereas B might report few interactions with A. Thus, most network analysis requires information from both actors to be able to make a carefully weighed analysis of the patterns.

The example in Table 9.6 shows that Actor 2 has frequent interactions with other actors in the network, so Actor 2 is a central actor. Actor 4 has few interactions with other actors in the network and is thus a peripheral actor. Such a quick qualitative inventory provides a first impression of the interaction patterns and actors' positions in them.

9.4.1.2   Quantitative analysis of interactions in networks

If the network has a large number of organisations and the analyst wants to conduct a detailed analysis of interactions, then quantitative methods are necessary. If the relevant actors are asked (for instance through a survey or semi-structured interviews with set frequency categories such as once a week and once a month) about the frequency and the variety of mutual interactions, a quantitative overview can be acquired. This can be statistically analysed or presented in graph form. Three steps are necessary for this:

- First, the respondent is provided with a list of actors and must then indicate how much contact he/she has with each actor.
- Second, the analyst compiles a crosstabulation with the list of actors on both axes of the table (such as in Table 9.6 for qualitative data), after which a qualification of the intensity of interaction between two actors is placed in each cell.

- Finally, a graphical presentation is made. There are several possibilities for graphical presentations. There are various computer programmes available to further analyse the interaction data (see Scott, 1991; Lewis, 2010). For example, various open-source SNA packages are available for the R environment. An example of an SNA is provided in Box 9.2.

BOX 9.2   EXAMPLE OF A SOCIAL NETWORK ANALYSIS

One of the work packages in a large EU study on innovation (LIPSE, see website www.lipse.org) was research on the networks of civil servants in four cities: Barcelona (Spain), Rotterdam (the Netherlands), Copenhagen (Denmark), and West Lothian (Scotland). The research looked at civil servants' contacts both within and outside the municipality (see Lewis et al., 2014).

Network structures are important for innovation. The literature offers various theories about the social network characteristics that stimulate innovation. On the one hand, innovation is enhanced by the presence of weak ties (not too intensive but diverse contacts) that provide new information and ideas (see Granovetter, 1983). However, the literature also emphasises that strong homogenous ties are necessary because they enhance trust between actors and facilitate risk taking and the flow of valuable information (see McPherson & Smith-Lovin, 1987; Lewis, 2010). The role of boundary spanners who can bridge the gap between different subgroups in a network and allow information to flow from one group to another is also seen as important. Thus, (social) network theory seems to suggest a blend of various characteristics that enhance innovation: weak ties to generate new information and ideas, boundary spanning roles to facilitate that, and social capital and trust to support smooth exchanges.

For the purposes of the study, people were asked to provide information on two different types of networks – work networks and strategic information networks. The first of these (work networks) captures information about networks of people working together and enables an exploration of their patterns of centrality and levels of heterophily. Heterophily is related to connectedness, openness, and the ability to acquire different kinds of information. The second (strategic information seeking) is examined with a focus on the concepts of betweenness, brokerage, and closure in regard to the ego-networks around individuals who are important in network terms. The questions posed to respondents were:

1 Looking back over the last six months, with whom did you work most on projects in the municipality? (List up to five people either inside or outside the municipality and indicate each person's position and organisation or relationship to you).

2   Looking back over the last six months, to whom did you go most when you wanted to get strategic information about something in the municipality (including background information not yet available in reports, and so on)? (List up to five people either inside or outside the municipality and indicate each person's position and organisation or relationship to you).

The nominations provided by each person were then aggregated and used to generate network maps and calculate network measures.

From the comparison of the four municipalities' network structures, a few main conclusions were drawn (see Lewis et al., 2014):

- The formal structure of the municipality has a clear impact on the informal networks. In Copenhagen, its seven separate administrations are reflected in both of the networks examined, whereas Rotterdam and Barcelona have more ties across departments.
- Different groups of people are more important in these networks in each municipality – managers in Copenhagen, directors in Rotterdam, and politicians in Barcelona.
- The SNA identified various brokers and key people, and these differ from formal positions and are also distinct in each municipality.
- Thus, informal networks are also important in creating innovation, especially through access to network support and having a variety of information.

9.4.2   Step 9: Identify patterns of perceptions and trust relations

The analysis of perception patterns builds on the Q-sort analysis mentioned in Step 2, where individual perceptions were analysed. What this step adds is attention to the dynamics and the patterns over a longer period. Thus, this analysis could be used to map the actors' perceptions over time and see whether network actors' perception patterns change. For that, the Q-sort should be performed at least twice, at different junctures. However, more qualitative methods can also be used to analyse perception patterns over time. Termeer (1993) used documents to analyse changes in perceptions on manure policy over a long time period and recoded these qualitative data to provide a quantitative representation of the main changes.

Analysing trust is another important part of this step. Trust is not very easy to measure. People tend to be reluctant to indicate whether other actors can be trusted or not. In essence, trust is a perception (albeit a perception of the intentions of other actors) that can be assessed by asking respondents how they feel about other actors in the network. This can be done with qualitative research methods (interviews) or with quantitative methods (survey items measuring trust; see Box 9.3, Table 9.7).

BOX 9.3   MEASURING TRUST IN NETWORKS THROUGH A SURVEY

To measure trust within the network around environmental projects, Klijn et al. (2010) used five items derived from the literature on trust. They were agreement trust, benefit of the doubt, reliability, absence of opportunistic behaviour, and goodwill trust. Each of these dimensions was captured in a statement (see Table 9.7).

TABLE 9.7 Measurement of trust

Measurement	Item
1. Agreement trust	The parties in this project generally live up to the agreements made with one another
2. Benefit of the doubt	The parties in this project give one another the benefit of the doubt
3. Reliability	The parties in this project keep in mind the intentions of the other parties
4. Absence of opportunistic behaviour	Parties do not use the contributions of other actors for their own advantage
5. Goodwill trust	Parties in this project can assume that the intentions of the other parties are good in principle

Each item could be scored on a 5-point scale. The items were added up to make a score for the respondents' assessment of trust in the network on which they reported. The research shows that trust is a very important predictor of network performance.

9.4.3   Step 10: Identify institutional rules

The analysis of rules is an important step. Insofar as the institutional context is captured in formal rules, an analysis is relatively straightforward. An understanding of this part of the institutional context can be acquired by examining:

- actors' formal authority: this includes actors' authority to make decisions, their property rights, and so forth;
- the formal institutional characteristics of the interaction: these concern the legal frameworks for planning and decision making (participation, obligations, juridical status of decisions, and so on); these legal frameworks are often important conditions for issues such as when decisions must

be made, what the process looks like, which actors have the right to be acknowledged in the process, and so on.

The formal institutional context can be reconstructed by looking at the legally defined authorities, the legally framed plan and consultation procedures, and so on. This requires a content analysis of formal documents (laws, white papers, and so forth). Interviews with stakeholders may also help to map formal rules.

The analysis of the informal institutional context, which is comprised of (often unwritten) informal network rules that actors have formed during their mutual interactions, is much more difficult and labour intensive. Even though they cannot, or can scarcely, be found in written documents, these rules play an important role in what actors find acceptable and unacceptable in their interactions. In essence, analysing informal rules comes down to letting respondents reflect on the most important rules in their network and how they work. This can be done by asking them focused questions about how they select other actors with whom to interact, their habits regarding information exchange, the standards that they use to judge processes and outcomes, and so forth. As a guideline, the typology shown in Table 9.4 can be used. Several interviews can be conducted and rules previously reconstructed with other respondents can be tested to get a reliable picture and confirm the reconstruction of rules from earlier interviews. Box 9.4 provides an example of such reconstructed informal network rules.

BOX 9.4   AN ANALYSIS OF THE RULES GOVERNING THE URBAN RENEWAL NETWORK IN ROTTERDAM

Conflict avoidance was not a common practice in the governance network in which the Rotterdam urban renewal programme was implemented in the 1990s. In fact, there was a tendency to face conflicts head on and fight them. The various council department employees identified strongly with their project group and the neighbourhood. This meant that conflicts could arise between the project group and the municipal government's planning department. In the programme, it was said, 'every project is fought hard for and in every possible way'. On the other hand, these conflicts were tempered by an attitude of working things out together. This attitude tied in very well with the 'roll up your sleeves' rule that was also very dominant in this network. One respondent stated: 'In the Rotterdam tradition, we've always argued in public, made choices and taken decisions based on solid arguments, and after that went and had a pint together in the pub'.

Striving to reach consensus and working it out together depended, in turn, on the rules about the quality of products and the identity of the Rotterdam urban renewal programme. This meant that there were not only fixed standards for evaluating outcomes, but also a certain mutual respect and recognition of one another's qualities and positions that underpinned the interaction rule of working it out together. As another responded stated, 'There is also a certain amount of recognition from parties towards one another, they're very knowledgeable, they're carrying the risks, so they can obviously be trusted'. If after a lengthy battle, however, a decision was finally forced in the project group, then everyone complied with that decision. Or as one of the respondents remarked:

Everyone tries to boost his own position and they make a lot of noise about it, but, in the end, no one quibbles about the final results. Everyone puts up with the fact that an acceptable compromise has been reached.

Source: Klijn (2001)

The analysis of informal rules requires substantial knowledge about the network in question. Generally, one must consider the following when reconstructing the informal rules:

- *Repetitiveness*. This concerns self-evident issues and procedures continually repeated. In short, actors must regard something as repetitious and not as something that occurs incidentally. In various situations, a pattern of action occurs; this is not just the consequence of a repetitive strategic choice of actors, but rather occurs because actors find that this way of acting is fitting and self-evident.
- *Generalisability*. Rules must hold for all, or at least a substantial number of, the actors. In short, rules cannot be linked to just one actor (in which case it is something of a one actor's decision rule); rather, multiple (though not necessarily all) actors in the network must recognise the rule and follow it. This can be investigated by submitting rules previously explicated by respondents to different respondents.

9.5   Conclusion

In this chapter, we have presented a number of analytical steps and methods that may help to map the substantive, strategic, and institutional complexity of networks with which actors are confronted in their attempts to solve

complex problems and to develop and implement policies and services in network settings. Together, the analytical steps provide a comprehensive map of the network and its processes and enable the analyst to relate specific characteristics of the network to one another, provide explanations for the outcomes, identify deadlocks and conflicts, and come up with recommendations for improvement.

However, depending on the analysts' and the stakeholders' research questions, the analysis may be restricted to one, or a limited number, of the steps. This could be related to what the analyst thinks are the main problems in the network. Furthermore, the order of the analytical steps is not set in stone. Depending on the analyst's knowledge demand, it may be more appropriate to apply the steps in a different order. For example, in some cases it may make more sense to first map dependencies and then perceptions, or to do the network analysis before analysing the interaction process.

Together, the analytical steps can achieve several things:

1 Combining the steps provides new insights into the way in which the networks operate. For instance, combining an SNA with an analysis of dependency relations can show whether actors that are dependent on one another and need one another actually have interactions with one another. If not, this shows a potential discrepancy between dependencies and interactions. Another example is that an analysis of perceptions can reveal possible overlaps and possibilities for a network manager to create win–win solutions. These are only two of many examples of how the analytical steps can enhance understanding of the network.
2 The analytical steps and their insights are more or less a precondition for choosing the right network management strategies. After all, network management strategies have to be deployed to address the problems faced by actors in the network. Identifying these and choosing the right strategy require the necessary insights, which can be obtained by performing the analytical steps.
3 Performing the analytical steps stimulates all actors to reflect on their position, perceptions, and strategies in the network. It helps them to make informed choices. To return to the example of dependency and contacts mentioned at point 1: this presents also an opportunity for the network manager to reflect on whether she/he has the 'right' contacts. If the analytical steps reveal that the network manager does not have frequent interaction with the actors that are seen as critical from a resource dependency perspective, this might show the need for a change in strategy.

As is generally the case, there are inherent limitations in these analytical steps. One of them is that networks evolve and consequently any analysis will at some point become outdated. Thus, analyses have to be updated regularly.

Another limitation is that unexpected events inside or outside the network could render the insights derived from these steps obsolete. As emphasised several times in this book: complexity cannot be 'solved', only coped with.

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10

CONCLUSIONS, REFLECTIONS, AND LOOKING AHEAD

The future of network governance

10.1   A governance network approach to problem solving, policymaking, and service delivery in the public sector

In this book, we explored governance processes in complex governance networks. We provided concepts for analysing, managing, and evaluating these processes. The network perspective set out in this book starts with a few core assumptions regarding the characteristics of governance networks:

- In dealing with complex societal problems and realising public services, actors involved are dependent on a wide range of other actors' resources (Scharpf, 1978; Benson, 1982; Ansell & Gash, 2008).
- These actors interact frequently with one another, resulting in patterns of relations and networks of actors in which problems, policies, and public services are governed (Provan & Milward, 1995; Kickert et al., 1997; Kapucu & Hu, 2020).
- The characteristics of these governance networks (e.g., the level of trust, the patterns of relations, and the presence of network rules) influence the interactions that take place within them (Berry et al., 2004; Provan & Kenis, 2008).
- As actors have different perceptions of problems and solutions and pursue different strategies, conflicts are likely and arriving at agreements is difficult (Koppenjan & Klijn, 2004; Emerson & Nabatchi, 2015).
- Realising collaboration and arriving at coordinated and joint actions to deal with these problems require the coordination of activities and the exchange of ideas and resources (Hanf & Scharpf, 1978).

- In order to arrive at collaboration and joint actions in governance networks, it is often necessary to facilitate and guide interactions or to adapt network conditions through network management strategies (Kickert et al., 1997).

These network characteristics make collaboration and achieving good performance in governance networks difficult. This book argues that collaboration and achieving satisfactory outcomes may be hindered by substantive complexity (differences in perceptions and problematic use of information and knowledge), strategic complexity (the various strategies of the various actors and the unpredictable course of the decision-making processes), and institutional complexity (the patterns of relationships within the network, the uncertainty about which rules to follow, and the – sometimes low – levels of trust). This book argues that, given these complexities, efforts to align perceptions, to seek package deals and win–win solutions, and to coordinate strategies and enhance collaboration are more fruitful than pursuing go-alone strategies, whereby actors may try to solve problems, implement policies, or provide services by themselves. Go-alone strategies tend to ignore resource dependencies and other actors' possible veto power. Moreover, go-alone strategies have a tendency to optimise one societal value and ignore other relevant societal values fostered by other actors. Go-alone strategies within governance networks are thus likely to lead to sub-optimal, substantively poor, ineffective, and weakly legitimised solutions, policies, and services. However, the alternative way of governing within networks – engaging in joint action and cooperation – is not without problems either, and comes at a cost. Value differences between actors and conflicting interests and perceptions may lead to conflicts, decision-making processes may take a long time, and cooperation may be difficult to achieve.

Therefore, collaboration and joint action often require network management. Empirical evidence built up in the past 15 years shows that network management is crucial for collaboration and joint action, and for achieving satisfactory outcomes (see Cristofoli et al., 2013; Kapucu & Demirhan, 2019; George et al., 2024). Chapters 5 and 6 discussed various strategies that can be used to manage networks. In the previous chapters of this book, we explored the concepts that make up substantive, strategic, and institutional complexities within governance networks and the network management strategies designed to deal with these complexities. In this final chapter, we bring these concepts together in a conceptual framework that systematically summarises the insights that network theory offers for explaining and managing network processes and outcomes.

10.2 Explanations for governance networks processes

The previous chapters identified various concepts that help to understand problem-solving and public service delivery processes in governance

networks. These concepts (e.g., perceptions, actor strategies, and network characteristics such as the level of trust) are related to one another and together form the conceptual framework of this book. The conceptual framework also summarises theoretical statements made (sometimes implicitly) throughout this book about how these concepts interrelate. Examples of such statements include the observations that (large) differences in perceptions can make collaboration difficult and that certain network management strategies can help overcome differences in perceptions in order to facilitate further collaboration. Table 10.1 identifies the most important relationships hypothesised in this book, including hypotheses about factors that function as barriers or drivers for generating collaborations and good outcomes in networks.

10.2.1   Substantive factors

Substantive factors are barriers in network processes when diverging perceptions exist about the nature, causes, and effects of problems and their solutions (Fischer, 2003). These can result in differences of opinion about the nature of the problem and the quality of the available knowledge and solutions, policies, and services. In this kind of discussion, parties typically either have disagreements or talk past one another. If parties outline and adhere to their own research, differences of opinion and ambiguity about the problem situation are strengthened. Decision-making processes may then result in a dialogue of the deaf or a war of reports. Instead of decreasing knowledge conflicts and substantive complexity, information gathering and research activities may enhance them.

Substantive factors are enablers and can aid in achieving substantive breakthroughs when perceptions are aligned and joint image building occurs or a package deal is created (where there is something for everyone). Alignment and joint image building require at least some mutual understanding of the meaning of situations and events; an understanding can be achieved through reflection on perceptions in which problems and solutions are reconsidered and formulated anew (Fischer, 2003). The availability of new substantive ideas or the decision to include these ideas in the discussion play an important role in accomplishing this reflection. Another example of a substantive factor working as an enabler is when actors succeed in organising research and managing knowledge production in such a way that, instead of fulfilling an advocacy role on behalf of one specific party, these activities support the process of alignment of perceptions and joint image building.

10.2.2   Strategic factors

Strategic factors are barriers when the strategies of actors – whose resources are indispensable for dealing with problem solving, policymaking, or service

TABLE 10.1 Factors that explain the evolution and outcomes of governance network processes

	Barriers	*Enablers*
Substantive factors	• Diverging and conflicting actor perceptions • Unilateral information search behaviour and cognitive fixation • Advocative research • Proposals that do not match parties' perceptions and interests	• Increased cognitive reflection and substantive variety • Joint image building through reflection on perceptions • Joint research efforts • Goal intertwinement
Strategic factors	• Lack of interaction because dependencies and fragmented arenas are not acknowledged • Actors' conflicting strategies and opportunistic behaviour	• Interaction and the coupling of arenas and games • Mutual adjustment of strategies and • collaborative strategies
Institutional factors	• Lack of shared institutions • Institutional characteristics that limit cooperation • Unfavourable relational characteristics of networks	• Shared institutions • Supportive institutions • Favourable relational characteristics of networks
Network management factors	• Lack of systematic network management efforts • Wrong or badly executed network management efforts • Network manager not accepted	• Presence of well-executed network management • Presence of process design and negotiated process rules • Presence of network manager accepted by network actors
External factors	• Events and developments in the context of the network that weaken the support for collaboration and joint outcomes	• Events and developments in the context of the network that strengthen support or create new opportunities for collaboration and joint outcomes

delivery – are uncoordinated, in conflict, or when there is no interaction between actors. Conflicting strategies are usually a consequence of actors' differing perceptions and objectives. Actors may be insufficiently aware of their mutual dependency or may fail to discover a mutual interest. As a result of strategic complexity, actors may be uncertain about who will play what role in the interaction process and about the costs involved. If the risks of

joint action are substantial and costs appear too high, actors might refrain from participation. Also, actors may simply not be interested and be unwilling to invest their resources.

Strategic factors are enablers when parties coordinate their strategies such that their individual actions are no longer in conflict and joint action becomes a possibility (Emerson & Nabatchi, 2015). This can be done by engaging in interaction, by linking arenas, and by mitigating the risk of opportunistic behaviour through, for instance, process agreements. Actors have to formulate a solution, policy, or service that makes it possible to link their objectives and that offers – when some actors have to bear a disproportionate share of the costs – opportunities for compensation (see Chapter 8).

10.2.3   Institutional factors

Institutional factors are barriers to collaboration and good outcomes when shared institutions (patterns of interactions, institutional arrangements, shared rules, and trust) are absent or when these institutions do not support collaborations and joint outcomes. The incompatibility of rules, or the lack of trust, makes the problem-solving process and service delivery something like building the Tower of Babel (parable in the Christian Old Testament) (March & Olsen, 1989).

Institutional factors are enablers when these institutions are well developed and help to reduce the risks of participating in policy games and provide procedures for interaction and managing conflicts. A strong institutional network structure, consisting of well-developed interaction patterns, solid available organisational arrangements, shared rules, and a high level of trust between actors, may result in low transaction costs, as elements that further cooperation do not need to be developed from scratch and parties can rely on existing arrangements.

10.2.4   Network management factors

Explanations for the way in which network processes evolve and for collaboration and joint outcomes can often be found in the presence or absence of network management (Koppenjan & Klijn, 2004). Network management is a barrier to collaboration and good outcomes in networks when it is absent, wrongly applied, or when a network manager is not accepted by the actors in the network. When network management is missing, network actors have to find a way of arriving at collaboration and joint outcomes themselves. However, the substantive, strategic, and institutional complexities that characterise networks make that very difficult. Wrongly applied network management strategies may work counterproductively and disturb attempts to align perceptions and coordinate strategies. If a network manager is not accepted

by the network actors, his/her efforts may be futile and his/her strategies may be opposed.

If network actors apply network management strategies and take the role of network manager, this increases the chances that network processes will evolve smoothly, actors will collaborate, conflicts and deadlocks will be overcome, and win–win solutions and integrated, innovative public policies and services will be realised. This presupposes that network management is applied in a skilful way and that the network manager is accepted by the other actors. Network management requires specific skills and considerable resources that are not always available.

10.2.5   External factors

Network processes and their outcomes are not purely the results of what happens within networks. External developments may also have an influence. The occurrence of crises, accidents, events, but also swings in the political or societal climate, economic or demographic developments (e.g., economic recession, budget cuts, aging, diversification), or the availability of new technologies (e.g., digitalisation, Artificial Intelligence) may lead to changing perceptions, power relations, and institutional structures in governance networks and in the interaction processes within these networks. External developments can act as barriers. They may make formulations of problems and perceptions on the need for services outdated. The support for certain policies, achieved after substantial effort, may dissolve suddenly. The developments may disrupt procedures and network institutions. Conversely, they may open new policy windows for perceptions and solutions and help to dissolve long-lasting blockages or stagnations. However, they do not always influence network processes directly. Their influence depends on the degree to which actors view these developments as threats or opportunities and use them to influence the network process and the content of proposals.

10.2.6   The theoretical framework for analysing governance networks

Going beyond identifying factors as barriers and enablers of governance network processes and their outcomes, we can define causal relationships between the factors in an overarching framework. The theoretical framework of this book (see Figure 10.1) summarises the mechanisms through which the various factors affect governance network processes and their outcomes.

The framework reveals a significant degree of complexity in these causal relationships, which has three main sources. First, there is no clear-cut distinction between causes and effects. The various factors that influence the

Institutional factors

- relational characteristics of the network (density, reachability)
- absence/presence of shared rules, arrangements, trust
- absence/presence of institutions that support collaboration

External developments

Network management
Quality of network management
Quality of process design
Acceptance of network manager

Cognitive factors
- divergent perceptions/joint image building
- unilateral information search/cognitive reflection
- cognitive fixations/variety of content
- advocative/joint research
- pursuit of individual goals/goal intertwinement

Social factors
- lack/presence of interactions
- uncoupled/coupled arenas
- conflicting/collaborative strategies

Interactive process: rounds of interaction with impasses and breakthroughs

content

c_n

c_1

crucial decision 1   *crucial decision 3*

round 1   round 2   round 3   round 4

crucial decision 2   *crucial decision 4*

t_1 course of time t_n

Outcomes
- substantive outcomes
- process outcomes
- institutional outcomes

FIGURE 10.1   Theoretical framework: factors explaining governance networks processes.

course and outcomes of network processes are themselves also influenced by network processes and their (intermediate) outcomes. In other words, there are feedback loops in the causal relationships between factors. Second, the causal relationships between factors in governance networks are often non-linear in nature because of the presence of actors that behave strategically, reflexively, and thus unpredictably. Moreover, learning and adaptation may alter the nature of causal relationships. Third, network processes and their outcomes are influenced by multiple factors at the same time. These influences can strengthen and compensate for one another and form complex configurations of causes whose influence can only be really understood when examined in combination (Rihoux & Ragin, 2009).

Figure 10.1 visualises our proposed framework of factors and causal relationships that explain the evolution and outcomes of governance network processes. The figure is intended to be a heuristic tool to help identify specific factors and relationships. It can also be helpful in designing research where one relation is being researched.

10.3   The future of network governance

In the past decades, the network governance approach has developed into a fully-fledged theoretical perspective, mirroring an organisational and managerial practice that can be found worldwide. The main assumptions and analytical tools of network governance theory have found their way into different fields of academia and practice and seem to have become almost mainstream in public administration.

The number of (empirical) studies applying the ideas of networks and network governance has boomed (Keast et al., 2023; George et al., 2024), and the diversity of research methods applied in studies of network governance has also increased significantly (Voets et al., 2020). In this last section, some brief observations about the direction of network governance theory are offered, along with a positioning of the network governance theory against the other two well-known paradigms: traditional public administration and new public management.

10.3.1   *Networks, traditional public administration, and new public management: strengths and weaknesses*

As proposed in the introduction to this book, governance network theory can be seen as the third great paradigm of public decision making and service delivery, alongside traditional public administration (TPA) and new public management (NPM). Although some authors see the emergence of networks as a reaction to the shortcomings of NPM, we have shown in the introduction that the ideas of multi-actor perspectives and networks predate NPM and that presenting them as a response to NPM is therefore an oversimplification. The three paradigms have in fact existed alongside one another for quite some time. Collaborative and network governance have received more attention over the last decades as a result of societal changes, changes in administrative processes, and growing challenges of large and pressing societal problems such as global warming, the energy transition, and migration.

That being said, it is unlikely that network governance practices will completely replace the practices of TPA and NPM. TPA and NPM practices are deeply institutionalised in many countries and therefore will persist even while new ways of governing are officially embraced. In the literature, this is called layering: new institutions and practices do not replace older ones, but develop as a new layer on top or amidst older ones (Thelen, 2004; Christensen & Lægreid, 2007). Therefore, they have to relate to these existing forms of governing (van der Steen et al., 2018). In many ways, this is desirable, as network governance is not a suitable approach for all situations. Insofar as situations are not characterised by interdependencies, a lack of consensus, and the presence of wicked problems, TPA or NPM may be more

TABLE 10.2 Governance models and their strengths and weaknesses

	Traditional public administration	New public management	Network governance
Strengths	Effective provision of public goods and services, good governance	Performance, efficiency, transparency	Integrative policies and services, participation, tailor-made solutions, public value creations
Weaknesses	Inefficient, fragmentation, no tailor-made solutions, no innovation	Hyper-fragmentation, perverse incentives, cultural confusion	High transaction cost, lengthy processes, lack of transparency, risks of opaque decision making, collusion, and inequality

appropriate. Also, one could argue that network management can flourish only in systems in which TPA is well established, and in which representative democracy and the rule of law provide conditions under which latent dysfunctions of networks are prevented from becoming manifest, such as practices of opaque interest representation, nepotism, and even corruption. Furthermore, NPM might help to mitigate other weaknesses of network governance, such as the risk of endless deliberation without paying attention to transaction costs and accountability (Klijn & Koppenjan, 2012). Table 10.2 provides an overview of strengths and weaknesses of the three governance modes.

Network management strategies are not always applied in their pure form, nor do they completely exclude forms of hierarchy and competition. Network management strategies often flourish in the shadow of hierarchy or market, just as regulation and market instruments are not completely deprived of forms of collaboration, negotiation, and relational contracting (Koppenjan et al., 2019; Vakkuri & Johanson, 2021). Recent governance literature explores how traditional forms of public bureaucracy can be combined with network governance. Ansell et al. (2023), for instance, raise the question of how governments can provide *robust governance* and deal with turbulence – a discussion fuelled by recent crises, and in particular the Covid pandemic. They ask how more dynamic, but temporary, networks can be combined with more stable bureaucratic modes of steering, thereby creating more enduring and sustainable governance structures (see Ansell et al., 2023). This resonates with Mazzucato's (2021) vision for an entrepreneurial government that dares to undertake 'moonshots', referring to US President John F. Kennedy's promise in 1961 to put Americans on the moon within ten years. Some see the European Commission's European Green Deal as a contemporary example of such a moonshot (Zimmermann & Gengnagel, 2023).

Mazzucato's vision for an entrepreneurial government is not simply a call for a return to traditional government. This would overlook the shortcomings of traditional government that allowed NPM to gain a foothold in the first place. Rather, Mazzucato's vision acknowledges the shortcomings of traditional government and embraces the emergence of governance networks, but at the same time calls for a more proactive and assertive role for governments in the governance of networks.

Therefore, the future may bring us a public sector that will increasingly engage in the application of network management practices, alongside persisting hierarchical and NPM practices, but also attempts to align TPA, NPM, and network management, and even the emergence of crossovers and the convergence of practices and ideas.

10.3.2 *Research and theory on network governance*

As discussed earlier in this chapter, governance network theory is now an established paradigm, and research on it has boomed in the past two decades. Nevertheless, not all aspects of governance networks and network management are yet thoroughly understood. In this section, we discuss a number of questions that deserve further clarification in future research.

One of the topics that has received much attention in the literature on networks is the role of the structure of networks and network governance. For instance, Provan and Kenis (2008) distinguish between three forms of network governance (shared governance, lead organisation, network administrative organisation (NAO)). They suggest that large networks with low levels of trust benefit from an NAO and that small networks with a high level of trust can be effectively governed by a shared governance structure. However, the results of research on the influence of organisational arrangements on network processes are ambiguous. Some studies suggest that maintaining networks requires more centralised network arrangements (Provan & Milward, 2001; Huang & Provan, 2007). However, Macciò and Cristofoli's (2017) study shows that an NAO in itself is not a sufficient condition for network endurance and that skilful network managers are also needed. Markovic (2017) explored how network management mediates the influence of organisational form on network performance, finding that network management has strong positive effects in more decentralised networks but less in other networks. In decentralised networks, power is dispersed and network management is crucial. There are also studies that do not find any association between the organisational form of a network and its performance (see Steijn et al., 2011; Kort & Klijn, 2011). The available research so far thus shows that the relation between organisational form and network performance is more complicated than it initially appears. It depends on factors such as

sector, type of activities (e.g., delivery networks versus environmental networks), and network structure (e.g., density, centrality). Additional research and theorising are needed to understand the influence of organisational form on network performance under different sets of conditions.

10.3.2.1 Which network management strategies work?

In the last decade, empirical research has shown that network management is important for achieving collaboration and good outcomes. Survey research (see George et al., 2024) and studies using qualitative comparative analysis (QCA) (Cristofoli et al., 2013; Verweij et al., 2013) more or less confirm this. However, QCA analysis also shows that, although network management is important, it interacts with other conditions (such as the structure of the network) in various ways that make a difference for its effectiveness (see Cristofoli et al., 2023; also Warsen et al., 2019). Furthermore, survey research shows that employing a variety of network management strategies seems to create greater impact on network performance.

These empirical results raise new (research) questions. One of the questions asks which network management strategies actually have the most impact. Klijn et al. (2010) suggested in their research that explorative and connecting strategies are more effective than arranging strategies (aimed at process design and establishing process rules). However, they looked at more or less voluntary environmental networks where a lot of connection is necessary because they are less established and less well organised. It is possible that more tightly organised service delivery networks are less in need of explorative and connecting network management strategies (Cristofoli et al., 2013). This suggests that the type of network management needed is contingent upon context. Context can refer to the type of network (e.g., voluntary versus purpose-oriented), the sector (e.g., environmental policy versus health), or the country in which the network operates. This latter underlines the need for comparisons between countries. Although there is research that confirms the importance of network management in different countries (see Klijn et al., 2015), there is a lack of comparative research that examines how network management works out in different countries. We know that cultures matter for actors' perceptions on governance (e.g., see Warsen et al., 2020), but the effects of this on network management and its impacts are understudied.

10.3.2.2 Trust as universal positive factor

There is strong consensus among (governance) network researchers on the positive effect of trust. Studies from a variety of backgrounds show that trust has strong associations with good network performance (see George et al., 2024, for a meta-analysis of all trust research available at the time of

their study). We can reliably say that trust facilitates complex processes in networks, and it helps to find (innovative) solutions for problems at hand because actors are more likely to share information and take risks to innovate in networks with a higher level of trust. Future research should therefore focus more on what exactly trust achieves in networks and through what exact mechanisms trust has such positive effects. Does it in fact reduce transaction costs in networks, reduce possible conflicting strategies between actors, or generate more information and innovation? In other words, now that research has shown *that* trust matters, it should focus on *how* it matters.

10.3.2.3 Network governance and the co-creation of public value

In the public administration literature, a great deal of attention is currently paid to the co-creation of public value (Alford & O'Flynn, 2009; Osborne et al., 2016; Torfing et al., 2021). The notion of co-creation of public value has strong connections with ideas of network governance theories (Stoker, 2006; Bryson et al., 2017). For example, network management can be seen as an approach to facilitate collaborative processes in which co-creation of public values can thrive (see Sørensen et al., 2021).

This connection is also suggested by the idea that, in networks, values of affected and relevant actors are explored and negotiated through the interactions between these actors in order to find common ground and realise win–win solutions. Nevertheless, the concept of public values cannot be reduced to the idea of shared values. The reference to 'publicness' implies that it has a collective dimension that supersedes values of individuals, organisations, and networks (Alford & O'Flynn, 2009). Therefore, public values refer to values that are shared by communities as a whole, be they local, regional, national, or international. In the context of governance networks, this thus means that networks have to be inclusive and clear about the extent to which they produce negative or positive externalities for stakeholders that are not involved or for broader society. Besides this more substantive approach to values, the concept of public values includes procedural values, such as inclusiveness, fairness, representation, and democratic legitimacy. As argued in this book (see Chapters 7 and 8), these values should drive attempts to manage networks and networks processes and be part of the assessment of their performance. This, however, is not self-evident, given that the network literature often emphasises effectiveness as an important outcome of networks (Provan & Milward, 2001; Turrini et al., 2009). Although the attention given to public values in the network literature has grown, to date few evaluations have been carried out to investigate the extent to which networks actually succeed in realising public values and the conditions that enhance or hinder successful outcomes. This is an important and urgent topic for network

research, as the extent to which networks succeed in accomplishing this influences their legitimacy and continuation.

10.3.2.4 Individual and organisational governance capacity

The literature on governance networks and network management identifies characteristics of networks, network processes, and network management, but less attention is paid to the conditions and capacities of individuals, groups, and organisations that allow them to operate, or hinder them from operating, in networks. In particular, governmental organisations, structured according to the TPA principals and the primacy of politics, have difficulty finding ways in which to align with network realities. In Chapter 6 of this book, the skills of the network manager were discussed, but, again, little was said about the organisational context in which he/she has to operate. Therefore, governance capacity is an important topic for further study by network researchers. Governance capacity, defined as the capacity to collaborate in situations of interdependencies in an effective and legitimate way (see Booher & Innes, 2003; González & Healey, 2005), can refer to individual capacity. This is the capacity and motivation of people within (public) organisations and society involved in solving societal problems to collaborate, to bridge boundaries between organisations, to manage external relations (network management), and to learn from interactions and external contacts. Some individuals and groups have a more positive attitude than others towards collaboration and may have more skills in this respect. To a certain extent, these capacities can be learnt and enhanced. This governance capacity also refers to the capacity of people in governments and (semi-)profit organisations who are engaged in (the implementation of) policymaking and public service delivery. Their professional codes often are not in line with the requirements of collaboration (O'Flynn, 2007; Røiseland et al., 2024). Research on how individual capacities influence actors' behaviours in network may deepen our understanding of how collaboration does or does not come about and provide insights on how to enhance this capacity (for some indications of individual skills, see O'Leary et al., 2012).

Besides individual capacities, the conditions to operate in networks are determined by existing organisational routines of the organisations and their collaborators. Budgets, tasks, and responsibility divisions, coordination mechanisms, leadership, training and administration, and professional ethics may all be aspects of the internal organisational context that influence the operation of organisations in the outside world and more specifically in networks, and of the extent to which they succeed in adopting effective strategies to arrive at collaboration and shared outcomes. Besides identifying organisational barriers and their impacts, further research may reveal innovative ways developed by organisations to meet collaboration

challenges – for instance by integrating budgets, redesigning instruments, establishing teams across departments, introducing reforms, appointing directors or ministers with an integral mission, or inviting citizens to participate as members on commissions of elected bodies. Research on governance capacity is an important next step that will deepen our understanding of the conditions that need to be addressed in order improve the functioning of governance networks and arrive at effective and legitimate network management.

10.3.2.5 The role of (social) media in governance processes

The 2016 elections in the US suddenly made everyone aware of the huge impact of social media on elections, but also of the possibilities of fake news and external actors (in this case, Russia) to influence democratic processes. This subject has been on the agenda of science and practice since then, but has been largely ignored by network scholars so far, although it will have a significant impact for network governance theory as already discussed in this book. For instance, the emergence of fake news and (massive) disinformation and their impact on network governance processes are still under-theorised. We would, for example, expect these developments to have a strong impact on information gathering activities, as well as on the possibilities of frame reflection and the ability to change perceptions based on such reflexive discussions. In general, network governance theory so far has not paid a lot of attention to (social) media and the effects of media on complex decision making in networks. Traditionally, this is more the area of communication studies and political science, but the increasing importance of (social) media attention in networks demands greater attention on this topic (see Bekkers et al., 2011; Liu et al., 2016; Klijn & Korthagen, 2018). For example, we need to build a better understanding of how sudden media attention, with its emphasis on drama and conflict, influences interaction dynamics in network processes. We also require a better understanding of the effect of media on the framing of policy problems and of the role of symbolism, storytelling, and branding as network management strategies (for an exception, see Klijn et al., 2022). Because media have a strong tendency to use frames of conflict and drama, greater attention in network research on the role of media in network governance processes will likely also generate more attention on how they influence substantive, strategic, and institutional complexities in networks and on the strategies that network actors and network managers can apply to handle and mitigate the impacts of (social) media.

Another research question relates to the changing form of leadership shaped by the increasing importance of media in governance. Media attention appears to foster a form of leadership that is more prominent, outspoken, and visible compared with the network management leadership style advocated in this book. That leadership is characterised by long-term dedication

and a certain degree of humbleness, as the network manager has to facilitate interactions and stimulate other actors rather than be always visible as a strong leader (see Klijn & Korthagen, 2018). This growing tension between the two leadership styles creates challenges that need to be addressed by theories on network governance and network management.

10.4   The future of network governance in addressing societal challenges

To conclude, governance network research is not a finished project, but rather in constant development. The introduction of new ideas and concepts is part of this development, but we expect the trend of building empirical evidence for key hypotheses of governance network theory to continue. This will not only increase our understanding of the complex causal relations such as those hypothesised in our conceptual framework, but also offer new puzzles for researchers. At the same time, governance network theory has achieved a level of maturity that creates a solid basis from which practitioners can draw guidance. In particular, a strong evidence base has been built regarding the importance of network management in achieving collaboration and satisfactory outcomes. Practitioners can leverage these insights to design and implement public policies and services that are not only effective in achieving satisfactory outcomes for as many stakeholders as possible, but also do so in a manner that enhances public values, democratic legitimacy, and accountability. Looking forward, we thus anticipate ongoing advancements in the field that will both deepen our theoretical understanding of network governance and provide practical tools for addressing the complex societal challenges with which governments and societies are confronted.

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