

Theories of the Policy Process

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The Network Approach

SILKE ADAM AND HANSPETER KRIESI

Policy making is taking place in policy domain-specific subsystems, which operate more or less independently of one another in a parallel fashion. Policy subsystems consist of a large number of actors dealing with specific policy issues. Political processes in these subsystems are not controlled by state actors alone; rather, they are characterized by interactions of public and private actors. The concern with a larger variety of actors and their interactions has given prominence to various concepts, depending on the research tradition in question. In the UK, one spoke of “policy communities,” in the United States of “iron triangles” or “issue networks,” in the research on interest groups on both sides of the Atlantic, one referred to pluralist or (neo)-corporatist arrangements.

The concept of the policy network is a more recent addition to this inventory. It has several roots. At first, it was strongly influenced by interorganizational theory (Thompson 1967; Benson 1978; Scharpf 1978; Aldrich 1979), which stresses that actors are dependent on each other because they need each other's resources to achieve their goals. This central idea lies at the core of most approaches to networks. At the same time, a virtually independent development occurred in political science, where the concept of policy networks grew out of the research on interest groups and agenda setting (Dowding 1995; Klijn 1997; Marsh 1998; Thatcher 1998; Marsh and Smith 2000).

The image of the policy network represents an intuitively comprehensible metaphor: regular communication and frequent exchange of information lead to the establishment of stable relationships between actors and to the coordination of their mutual interests. As Jegen (2003) points out, however, this intuition does not lead us very far: the difficulties already begin with the definition of policy networks and end with the confusion created by the large number of authors who use this concept in widely different ways. In fact, the network approach is hampered by a truly Babylonian conceptual chaos (Börzel 1998). In addition to employing the concept as a metaphor with limited analytical or explanatory

ambition, we can distinguish between at least three approaches to using the network concept.

First, there is the approach that uses the policy network concept to designate a *distinct, new governing structure*, which is to be distinguished from, on the one hand, vertically organized hierarchical forms and, on the other hand, horizontally organized market structures. The authors of this approach put the accent on the horizontal, self-organizing coordination between private and public actors who are involved in joint negotiating and problem solving. According to this view, governments are not only confronted with markets or hierarchies, but also with networks. Crucially, networks are self-organizing, which means that networks are autonomous and self-governing and that they resist government steering (Rhodes 1997, p. xii).

A second way to use the concept is to apply it *generically* to different types of empirically possible patterns of interaction among public and private actors in policy-specific subsystems. According to this approach, policy networks do not constitute a specifically new governing structure, but instead there is a great variety of patterns of interaction between public and private actors in policy making. In other words, there is a great variety of policy networks, and authors associated with this approach have developed various typologies of policy networks to capture the different forms of public-private actor relations. These typologies often rely on the classical distinction between pluralist and corporatist systems of interest intermediation. Whereas pluralist and corporatist systems of interest involved in policy making and the resulting competition among them, corporatist concepts point to the cooperation between few and central actors.

Third, there is the formalized, quantitative approach of social network analysis. This approach uses the tools of network analysis, which have been developed elsewhere to analyze the complex pattern of interactions of private and public actors in political decision making processes (Marin and Mayntz 1991; Knoke et al. 1996). It focuses on the relations between actors and not on the actors' characteristics. The quantitative analysis of networks results in images of the network structures and summary indices, allowing characterization of their key aspects (degree of centralization, connectedness, density, etc.). The interpretation of the emerging structures is often based on concepts taken from the research on interest groups (Knoke et al. 1996; Kriesi 1982; Sciarini 1995). However, just as with network descriptions and typologies, these structural analyses do not provide much insight into the origins or the dynamic change of networks.

The proliferation of network studies since the nineties points to the theoretical ambition of network research. However, network approaches have been criticized for their shaky theoretical basis. According to Dowding's (1995) critique, the classification of political reality in terms of networks has not allowed us to make much theoretical progress. Dowding's challenge has launched an extended debate, and his scepticism is not shared by all observers. Thus, Thatcher (1998, pp. 404–406) identifies new, promising trends: First, network analyses have been

extended by giving more consideration to factors previously omitted. In particular, the static bias of network analysis is being overcome with the introduction of questions relating to political change and to the impact of policy networks on outcomes and processes. Moreover, external factors such as institutions, ideas, values, strategies, and technologies are now also taken into account as independent determinants of network structures. Second, there are attempts to link the analysis of policy networks to other analytical approaches; policy network approaches incorporate, or are themselves incorporated into, previously distinct models.

Authors such as Dowding (1995), Peters (1998), and Thatcher (1998) attribute the greatest potential to formalized network analysis, which has so far been used only marginally in policy analyses. We believe that the most promising way to proceed is to link quantitative analyses of network structures to the established approaches of policy analysis discussed in this volume. Linking the policy-specific interaction system to the specific factors emphasized by these other theoretical approaches—belief systems, policy images, institutions, exogenous shocks—not only allows the addition of more dynamic elements into the network approach, but also the clarification of the structural basis of the other approaches. Network analysis should, however, be careful not to overreach its possibilities: qualitative analyses should limit themselves to the metaphorical description of networks, while quantitative analyses should model their structural characteristics.

In the remainder of this chapter, we first present the three descriptive approaches to policy networks in some more detail. Second, we present networks conceived as dependent variables. We analyze the influence of external factors on the pattern of interactions between actors, derive hypotheses about their origins from other theoretical approaches, and test them accordingly. Third, we introduce networks as independent variables; such studies analyze the influence of network structures on policies and their success.

DESCRIPTIONS OF POLICY NETWORKS

Policy Networks as a Specific Form of Governance

For Kenis and Schneider (1991), policy networks constitute a new form of governance characterized by the predominance of informal, decentralized, and horizontal relations. Defined in this way, the concept emphasizes that the policy process is not completely and exclusively structured by formal institutional arrangements. Accordingly, governmental organizations are no longer the central steering actors in the policy process. Kenis and Schneider attribute the emergence of the network concept to conceptual and methodological developments and, above all, to the empirical transformation of the policy making process in the post-war period. They observe an increasing scope, sectoralization, decentralization, fragmentation, informatization (increasing importance of information),

and transnationalization of policy making. Moreover, they note a blurring of boundaries between the public and the private spheres. These developments all point to the possibility that the actors who are formally responsible for political decisions, in fact, are not the only or even the most influential decision makers in the process of policy formation and implementation.

While it is rather likely that the discrepancy between formal and informal policy making structures has widened as a result of the just-mentioned developments, we should not assume that such a discrepancy constitutes a novel phenomenon. The model of a unitary, state-centered hierarchical political decision making structure has always been a fiction, quite remote from real-life decision making. Moreover, the extent to which the tendencies referred to above can be considered as new varies considerably from one institutional context to the next. For example, the blurring between the private and the public spheres has long been characteristic of weak states that do not have the required resources for policy making and that have, therefore, always been forced to delegate many public competencies to private actors such as interest associations or private corporations—to “private interest governments,” as they have been aptly called by Streeck and Schmitter (1985). Accordingly, the phenomenon to be captured by the policy network concept is neither as new nor as unique as some of its promoters have suggested.

Policy networks, in this perspective, constitute “(more or less) stable patterns of social relations between interdependent actors, which take shape around policy problems and/or policy programmes” (Kickert, Klijn, and Koppenjan 1997b, p. 6). Government agents do not occupy a dominant position within these networks, and they are not able to unilaterally impose their will, but they can attempt to manage the interdependent relations to promote joint problem solving in policy making (Kickert, Klijn, and Koppenjan 1997a). *Network management* is a form of public management that consists of “coordinating strategies of actors with different goals and preferences with regard to a certain problem or policy measure within an existing network of interorganizational relations” (Kickert, Klijn, and Koppenjan 1997b, p. 10). In contrast to democratic, hierarchical, or market coordination, network management is a “weak” form of governance that promotes mutual adjustment of the behavior of actors in the form of negotiation and consultation by trying to influence their strategies. It seeks to steer by initiating and facilitating interaction processes, by brokering and mediating conflicts, and by shaping network structures (Kickert and Koppenjan 1997, pp. 46–53).

According to Kickert and Koppenjan (1997, pp. 53–58), the success of network management depends on a number of conditions. First of all, many authors consider the *number of actors* to be a crucial condition: the fewer the number of actors involved in interaction processes, the easier it becomes to reach an agreement. However, Kickert and Koppenjan do not believe this factor to be of such importance. After all, the prisoner’s dilemma arises with only two actors. *Complexity* of policy networks constitutes another key factor for their

management, a factor related to the number of actors involved. In this respect, one should keep in mind that an increase in the number of actors and in the diversity of their composition not only increases the complexity of policy networks, but also the number of options for an adequate solution to the problem at hand. The *degree* to which networks are *self-referential* constitutes the third key aspect for network management. If networks are highly self-referential, opportunities for intervention from outside will be limited, because such networks do not take note of steering signals from the outside. Fourth, the *absence of sharp conflicts of interest* is also considered by most authors to be a precondition for network management. As interests are not an objective fact, but are formed in the course of interactions, Kickert and Koppenjan (1997, p. 56) claim, however, that “the scope for finding a joint solution is far greater than may be inferred from the reference to conflicts.” Finally, the higher the *costs* involved, the less actors will be inclined to take up the task of network management.

Typologies of Network Structure in a Policy Subsystem

Many authors take a more encompassing approach to policy networks and consider the concept generically. They usually propose typologies that allow characterization of the different types of structural configurations in policy subsystems. Unfortunately, the various typologies are hardly comparable. As has been noted by van Waarden (1992a, p. 49): “different authors have used similar labels to describe different phenomena, or different labels have been used for similar phenomena. What one author considers as corporatism, another has called clientelism or sponsored pluralism. As a result, differences of opinion may merely reflect differences in definition.”

We propose to make a fresh start with a two-dimensional typology of our own which, we believe, captures the essential network characteristics (see Kriesi, Adam, and Jochum 2006). Social networks consist of two basic elements: a set of actors and the relations between pairs of actors. Accordingly, networks are characterized by two types of variables (Wassermann and Faust 1999, p. 29): composition variables (referring to actors’ attributes) and structural ones (referring to specific types of ties between the actors). The two dimensions of our typology correspond to these two fundamental aspects of social networks. In our typology, actors’ attributes are systematically combined with modes of interaction (for a similar approach, see Scharpf 1997, pp. 43–49).

The first dimension refers to the actors’ attributes. Actors have specific capabilities, perceptions, and preferences. We choose the aspect of *capabilities*, which we consider most fundamental for the way policy networks operate. To characterize a network, we are interested in the distribution of capabilities over the set of actors, that is, in the *power structure* within a policy subsystem (for the power aspect, see also Atkinson and Coleman 1989; Rhodes and Marsh 1992; van Waarden 1992a). The distribution of power constitutes the first dimension of our typology of

network structures. This dimension is above all concerned with whether power is *concentrated* in the hands of one dominant actor or coalition of actors or whether it is *shared* between actors or coalitions of actors. Following the basic insight of the advocacy coalition approach (Sabatier and Jenkins-Smith 1999), we assume that, at a given moment in time, in a given subsystem, the set of actors is likely to be organized into a limited number of coalitions with varying power over the political processes within the subsystem. It is an empirical question whether or not the domain-specific policy making is dominated by one of these coalitions exerting what Baumgartner and Jones (1993) have termed a "policy monopoly."

The existing literature also commonly refers to the relative share of power of different *types of actors*. We consider this aspect as a subsidiary element qualifying the overall distribution of power. When taking into account the composition of the various coalitions, we shall distinguish between state actors, on the one hand, and three types of actors in the system of interest intermediation (political parties, interest groups, and nongovernmental organizations/social movement organizations [NGOs or SMOs]), on the other hand. State actors constitute a special type, because they "have access to a very particular resource: their decisions are considered binding in society and are backed by the possibility of the legitimate use of force" (Coleman and Perl 1999, p. 696). But policy networks typically also involve actors of the three parts of the system of interest intermediation. We should extend the focus of the corporatism-pluralism literature beyond interest groups and take into account that there is a larger range of participants in the policy making process. Coalitions can be composed of one type of actors only (homogeneous) or they can incorporate different actor types (heterogeneous). Including this aspect into the first dimension—distribution of power—allows for a differentiated account of the power structure within the political process.

The second dimension of our typology deals with the interaction mode in policy networks, which refers to the *degree of cooperation* among actors and actor coalitions. We propose to distinguish between three forms: (predominance of) conflict/competition, (predominance of) bargaining/negotiation, and (predominance of) cooperation. Bargaining constitutes an intermediate or ambivalent type characterized by both conflict/competition and cooperation. Adding this dimension should allow us to better connect particular configurations of policy networks to policy dynamics—a connection that policy network analysis so far has had difficulties establishing (see, e.g., Thatcher 1998, p. 397).

By combining the two dimensions, (1) the basic distribution of power (not taking into account the secondary aspects of actor types) and (2) the type of interaction, six types of policy networks can be derived (see Figure 5.1). As we shall argue below, the six types are expected to determine the potential for, and the type of, policy change. The distribution of power qualifies the interaction modes in each case: the concentration of power introduces a hierarchical element into the pattern of interactions. In the case of conflict, we distinguish between a situation of *dominance*, where a dominant coalition with a policy monopoly is

| Distribution of Power | Type of Interaction | | |
|-----------------------|---------------------|-----------------------|--------------------------|
| | Conflict | Bargaining | Cooperation |
| Concentration | Dominance | Asymmetric bargaining | Hierarchical cooperation |
| Fragmentation | Competition | Symmetric bargaining | Horizontal cooperation |

FIGURE 5.1 Typology of Network Structures

challenged by a peripheral, minority coalition and a situation which we call *competition*, where the power differential between the challengers and the (formerly) dominant coalitions is less pronounced. With respect to bargaining, we distinguish between *symmetric* and *asymmetric* bargaining, depending on the power distribution. Similarly, we also distinguish between *horizontal* and *hierarchical cooperation*. In both instances, we follow the suggestion of Scharpf (1997, pp. 197–205) that bargaining/negotiation or cooperation "in the shadow of hierarchy" is conducted under conditions significantly different from those obtaining among actors all of whom are more or less equally powerful.

Formal Network Analysis

There are standard procedures to analyze network structures (Wassermann and Faust 1999). For the formal analysis of policy networks, it is crucial to recognize that networks constitute a system of actors. To analyze such a system, the "variable-based" approach begins by specifying the boundaries of the system, that is, by determining the set of relevant actors belonging to the system. The relevant members in policy networks are usually considered to be the formal organizations or corporate actors who participate in the domain-specific policy making process (Laumann and Knoke 1987). In addition, we might also consider the individual actors representing these formal organizations (e.g., Kriesi and Jegen 2001). The next step is to collect data for the attributes of the complete set of actors and the relationships obtaining between them. Without going into much detail, let us point out that we can measure the two dimensions of our typology with standard questions in interviews or with information based on qualitative analyses of policy case studies. The *distribution of power* may be operationalized by reputational, positional, or participation-based indicators which were originally developed in community power studies on local political elites (Aiken and Mott 1970; Laumann and Pappi 1976; Kriesi 1980). The operationalization of the *interactions* between the actors involved in a policy network based on interview data is also very much inspired by earlier work on political elites and their

involvement in specific policy areas (Laumann and Pappi 1976; Knoke et al. 1996; Kriesi 1980; Kriesi and Jegen 2001; Kriesi, Adam, and Jochum 2006). For qualitative case studies, Serdült and Hirschy (2004) provide a useful two-step procedure for the operationalization of interactions, the so-called APES scheme (actor-process-event scheme) (see also Klöti et al. 2005).

Formal network analyses procedures also allow for the identification of coalition structures. There are two prevailing techniques for identifying such structures: structural equivalence and subgroup cohesion (Laumann and Knoke 1987, p. 12). In the first approach, two or more actors jointly occupy a structurally equivalent position to the extent that they have similar patterns of ties with other actors, regardless of their direct ties to each other. The criterion of subgroup cohesion, by contrast, aggregates actors who maintain dense mutual interactions as "cliques." The first approach is implemented by block-modeling, MDS techniques, or clustering techniques (Wassermann and Faust 1999, chaps. 9 and 10), and the second approach typically uses graph theoretic or MDS techniques (Wassermann and Faust 1999, chap. 7). There is standard software available for the formal analysis of networks (e.g., UCINET, Pajek, GRADAP, and VISONÉ).

Contrary to the variable-based approach, the *generative* approach does not pre-specify the interaction system (Macy and Willer 2002; Cederman 2005). Instead, it specifies the mechanisms responsible for generating the interactions between the agents and then simulates the construction of the interaction system based on theoretical assumptions about the generative mechanisms. In other words, the generative approach models the interactions among the actors directly. In this approach, "explanatory value resides in the specification of (often unobservable) mechanisms and the reconstruction of a process within which they are embedded" (Cederman 2005, p. 867f.). The test of the model lies in the comparison of the configuration emerging from the model-based simulation of the interaction system with the configuration of the empirically observed system. Axelrod's (1984) well-known work on cooperation and Schelling's (1978) classic model of segregation illustrate this so-called *agent-based* approach. Axelrod shows the mechanisms allowing for the emergence of cooperation in anarchic settings; Schelling's model generates a spatial configuration of actors possessing dichotomous "ethnic" traits. This kind of approach allows for the "endogenization of interaction opportunities" and for studying the dynamics of networks (Watts 2003). Modern software technology has paved the way for agent-based modeling.

DETERMINANTS OF POLICY NETWORKS

The descriptive reconstruction of networks is a precondition for understanding their origins. Identifying the determinants of policy networks and connecting these determinants with specific features of policy networks is still largely a research desiderate (Thatcher 1998, p. 396f.; Coleman and Perl 1999, p. 697). Researchers have pointed to a variety of factors that might influence the emergence

and form of policy networks. The relevant factors vary with the territorial and functional specificities of the policy network under study. Networks exist at the transnational, European, national, regional, and local level and can be distinguished according to their macropolitical or domain-specific scope. If, for example, one seeks to analyze policy networks in European countries in sectors, where competences have been shifted to the European Union, one needs to take into account the European, the domestic, and the domain-specific contexts. Accordingly, we distinguish between determinants of policy networks at different territorial levels and of varying scope.

Transnational Contexts

Today, it is often not sufficient to consider only the domestic level when trying to explain the emergence and shape of policy networks (e.g., Coleman and Perl 1999; Richardson 2000; Kriesi, Adam, and Jochum 2006; Rhodes and Marsh 1992). The "internationalized policy environments" (Coleman and Perl 1999, p. 700) may influence policy networks at the national level by redistributing resources, opening up new access points, and creating new venues that allow for reopening matters previously settled at the national level. They may also provide the opportunity for the creation of new transnational policy networks. Most of the work on internationalized policy environments as determinants of policy networks deals with the European Union (e.g., Kriesi, Adam, and Jochum 2006; Peterson 1995, 2003; Kassim 1994; Héritier 1993a; Ansell, Parsons, and Darden 1997). European integration over the past decade has led to the creation of a polity of an unprecedented kind—a system of multilevel governance that encompasses a variety of authoritative institutions at supranational, national, and subnational levels of decision making (Jachtenfuchs and Kohler-Koch 2003; Hooghe and Marks 2001; Cowles, Caporaso, and Risse 2001). The EU is neither an international regime based on intergovernmental bargaining nor a federal state, but a distinctive structure of governance. Coleman and Perl (1999, p. 701ff.) emphasize, however, that the European Union is not the only internationalized policy environment: in addition to multilevel governance structures of the kind we find in the EU, they distinguish international "private regimes," "intergovernmental negotiations," and "loose couplings" that all affect policy networks.

Kriesi, Adam, and Jochum (2006) confirm the importance of the European context for shaping domestic policy networks in agriculture, asylum policy, and European integration. As they show, its impact depends on whether or not a country is a member of the EU as well as on the issue-specific extent of power shifts to the supranational level. Knill and Lehmkuhl (2002) claim that the impact of the European context varies according to the mechanism of Europeanization used: when the EU prescribes an institutional model, there is less freedom at the domestic level than when regulations seek to change domestic opportunity

structures or beliefs and expectations. In his comparative analysis of banking regulations, Coleman (1994) similarly argues that convergence of regulation at the national level depends on the strength of international or intergovernmental structures: with a harmonization of policy goals, a convergence in networks is less likely than with a harmonization of policy instruments.

Transnational context factors, however, are not sufficient to explain the emergence and shape of domestic policy networks (e.g., Cowles, Caporaso, and Risse 2001; H eritier and Knill 2001). Comparing policy networks in seven European countries, Kriesi, Adam, and Jochum (2006) show, for example, that in spite of a common European framework, national networks differ considerably regarding the degree of cooperation within the same policy domain. Research has, therefore, focused on factors at the domestic level that filter or mediate the impact of the transnational context (e.g., H eritier and Knill 2001; Knill and Lehmkuhl 2002; Cowles, Caporaso, and Risse 2001). In such a perspective, transnational contexts serve as a macropolitical opportunity structure that adds new opportunities and constraints for domestic actors. Consequently, these contexts modify the distribution of power at the domestic level, allowing some actors to exploit the new opportunities in order to improve their relative positions in domestic conflicts while disadvantaging others (H eritier and Knill 2001, p. 259).

National Contexts

The national context can be systematically linked to the distribution of power and the type of interaction within policy subsystems, that is, to the two dimensions of our network typology. Thus, both key aspects of policy networks are influenced by the *formal national institutional structure*. Lijphart's (1999) typology of democracies allows us to distinguish between country-specific institutional structures according to the extent to which they concentrate power. Lijphart makes a distinction between "consensus democracies"—that is, countries which share power between several institutions and between different political forces within each institution—and "majoritarian democracies"—democracies that concentrate power in the hands of a few political institutions and actors. Based on Lijphart's assessment of power sharing, we can roughly divide countries into three groups: the group of the consensual-federal democracies (such as Switzerland or Germany), the group of the more majoritarian-unitarian democracies (such as France or the UK), and the intermediary types—either consensual-unitarian (such as the Scandinavian countries, the Netherlands, or Italy) or majoritarian-federal (such as the United States or Spain). We expect institutional power sharing in consensus democracies to contribute to the fragmentation of power within networks, whereas majoritarian democracies are expected to be closer to networks where power is concentrated in the hands of few actors. Moreover, *ceteris paribus*, we expect interaction patterns to be more cooperative in consensus democracies and more competitive in majoritarian democracies.

Coleman (1991) provides an illustration that links the macropolitical distribution of power to the arrangements for formulating and implementing policies. His comparison of monetary policy in the United States and Canada reveals differences that correspond to the macropolitical constraints: within the Westminster parliamentary system in Canada, the central bank is formally tied to the minister of finance, with no informal networks accompanying this relationship. By contrast, in the US, this relationship is defined by formal independence but strong informal ties. He concludes that macropolitical institutions must be incorporated into comparative analysis.

Lijphart's typology mainly characterizes the context of the national parliamentary arena, but it does not have much to say about the *administrative arena*, which is expected to constitute the major context for the interactions between interest groups and the state. The context of this second arena mainly depends on the autonomy and centralization of the state on the one hand and the system of interest associations on the other hand (Katzenstein 1978; Atkinson and Coleman 1989; Kriesi 1994, p. 395; Lehner 1988; Heinz et al. 1993). As Katzenstein (1978) argued, the amount of centralization in society and in the state and the degree of differentiation between the two are the critical variables in the establishment of policy networks. The more centralized and autonomous the state, the greater is its capacity for intervention, that is, the stronger it is. Similarly, the more centralized and autonomous (from their members) the peak interest associations, that is, the stronger they are, the greater their capacity to negotiate and to conclude binding agreements with each other and with their state interlocutors. Strong peak associations constitute the key element of the corporatist model according to Schmitter (1979). It is the combination of the two sides, however, that is crucial for the distribution of power and for the type of interaction in the policy networks: if both sides are equally strong, that is, power is concentrated on both sides, interaction patterns are more centralized and consensus oriented. This is the key hypothesis of the neo-corporatist literature (Schmitter 1981), which has been confirmed by the experience of the small European democracies (e.g., Katzenstein 1984, 1985; Lehmbruch and Schmitter 1982; Schmitter and Lehmbruch 1979). If both sides are equally weak, power is more fragmented and interaction patterns are expected to become more symmetrical and competitive. This has, for example, been illustrated by the failure of hierarchical cooperation (or neo-corporatist concertation) in the British industrial relations of the 1970s (Cox and Hayward 1983; Regini 1987). If the state is much stronger than societal actors, unilateral interventions from state actors become a distinct possibility, as is illustrated by the case of France (Wilson 1987; Wilsford 1988), and if interest associations are much stronger, self-regulatory schemes are the likely result, as is illustrated by many examples from Switzerland (Kriesi 1998, pp. 264–271) and from the agricultural sector more generally. Explaining policy networks in industrial policy, Atkinson and Coleman (1989, p. 65) point out that a weak state tradition, the centrality of legislature, and the presence of a firm-centered industry culture "make it difficult

to meet the organizational requirements for concertation, state-directed and corporatist networks." When comparing patterns of policy networks between the state and industry, van Waarden (1992b) shows that the pluralist networks in the US can be traced back to a weak state and weakly organized civil society, whereas the corporatist networks in the Netherlands are a product of a strong state and strong civil society. Boase (1996) also sees the pluralist networks in the US health policy sector arising as a result of the state's weakness and corporatist networks in Canada arising as a result of the state's strength. Combining the typologies of the two arenas into a single one is a critical task for the specification of the national political context conditions for policy networks (see Kriesi 1994, p. 400).

Organizational sociologists have long been insisting on the difference between the formal and the informal side of structure. Analogously, we should take into account the distinction between the formal institutional structure and the *informal practices and procedures* (see Scharpf 1984, p. 260; Kriesi et al. 1995, p. 33ff.). Similarly, we can distinguish here between political contexts according to the extent to which they induce political actors to *cooperate informally*. There is, of course, the notion that consensus democracies and corporatist structures provide strong incentives for informal cooperation among political actors, while majoritarian democracies and pluralist structures go together with a more competitive or unilateral style of policy making. However, there is not necessarily a one-to-one relationship between the two aspects of the political opportunity structure. Thus, the British style of policy making is known to "emphasize consensus and a desire to avoid the imposition of solutions on sections of society" (Jordan and Richardson 1982, p. 81); in Britain, the concentrated power has traditionally been used (except for the conservative government under Margaret Thatcher) with a certain informal restraint (Punnett 1989, p. 208; Budge et al. 1998, pp. 188–190). By contrast, the Italian style of policy making appears to be more unilateral, although the country has institutions that are rather of the more consensus-democratic type.

Kenis (1991) points to the importance of informal domestic structures for the development of specific networks in Germany, Italy, and the UK in the chemical fiber sector. Among the relevant aspects of the national context, he includes the traditional political orientation towards the economy, the consistency in how industrial adaptation is managed, the degree to which industrial adaptation has become politicized, and the role played by public agencies (Kenis 1991, p. 307). Kriesi, Adam, and Jochum (2006) show that consensus and majoritarian democracies with varying informal styles of policy making yield the expected policy networks in seven European countries—with the exception of Britain: here, networks turned out to be quite fragmented, resembling those of consensus democracies and thus underlining the importance of informal practices and procedures. Knoke et al. (1996) also stress the importance of formal and informal institutional settings for explaining the character of labor policy in Germany, Japan, and the United States. In Japan, with its parliamentary system and an informal single power center jointly occupied by the peak governmental, political, labor, and

business organizations, labor policy can be characterized as a coordinated policy domain. In this domain "all major claimants would have to seek inclusion within the single power center or risk being totally shut out of any say in national policy decision" (Knoke et al. 1996, p. 220). In Germany and the United States, by contrast, there are various power centers: the conservatives are in an alliance with business associations, whereas liberal or socialist parties join together with labor unions. In Germany, these multiple informal power centers come together within a formal parliamentary system where opponents cooperate whenever feasible. In the United States, however, the multiple power centers are operating within a presidential system where "bitterly contending rivals . . . seek to displace one another in the policy making center" (Knoke et al. 1996, p. 220).

Nevertheless, a closer look at the differences between policy domains within countries shows the limitations of general country characteristics for explaining variations in network structures: country-specific configurations vary considerably from one policy domain to the other (Kriesi, Adam, and Jochum 2006; Schneider 1992; Coleman, Skogstad, and Atkinson 1997; Atkinson and Coleman 1985). Atkinson and Coleman (1985), for example, show that within the same country policy networks differ from sector to sector. In the Canadian dairy processing sector, for example, they identify corporatist networks, whereas pluralist networks are found in the pharmaceutical sector. As a result some researchers point to the necessity to take a closer look at the influence of domestic structures: each country may yield different domestic structures in different sectors at different times (Cawson 1985, p. 224; Atkinson and Coleman 1989, p. 66; Boase 1996, p. 294). However, macro institutional considerations are still relevant: it is likely that macropolitical institutions favor the dominance of a particular type of policy network in a specific country (Atkinson and Coleman 1989, p. 67).

Policy-Specific and Domain-Specific Contexts

As policy networks vary within nation states, policy- or domain-specific factors have to be taken into account to explain the emergence and form of policy networks in specific policy subsystems. In addition to the formal and informal institutional arrangements at the national level, researchers have identified *general* policy-specific variables (e.g., Kenis 1991, p. 307; Coleman et al. 1997, p. 276f.; Schneider 1992, p. 126) and *situational* policy-specific variables (e.g., Dudley and Richardson 1996; Rhodes and Marsh 1992, p. 193ff.; Kenis 1991) affecting the structure and change of policy networks. Coleman et al. (1997, p. 276f.) claim that specific features of a policy influence the shape of policy networks. Policies differ according to the incentives and resources they provide for group formation, the expectations they raise among groups or the masses, their visibility/salience for mass publics, and the traceability of their effects. Linking these factors to our typology of policy networks, one could hypothesize that policies which invite group formation produce networks with fragmented network structures. The

clearly influenced by the network's capacity to mediate, and often minimize, the effect of such change." Consequently, policy change cannot be understood as a simple "environmental stimulus and policy network response model" (Stones 1992). Networks play a crucial role in shaping and constructing responses to external factors (see also Peterson 1995; Héritier and Knill 2001).

Early on, researchers highlighted the relationships between structures of sub-systems and policy change. Iron triangles with their closed character were associated with stable, routine policy making. Issue networks, in contrast, were assumed to be more open to innovative policies (for a summary, see Howlett 2002, p. 238f.). Researchers at a later stage sought to fine-tune this relationship between structure and change. Atkinson and Coleman (1989, p. 60ff.), for example, claim that pressure pluralist networks produce reactive industrial policies which are organized around the immediate needs of specific firms, whereas concerted networks are closely linked to anticipatory styles of industrial policies. Boase (1996) draws a similar conclusion based on his comparison of the United States and Canadian health sectors. The lack of society-wide health insurance in the United States is interpreted as a result of the weak state within the pluralist network that only allows for reactive policy choices. Analyzing the agricultural networks in the United States, Canada, and Australia, Coleman et al. (1997) point to the fact that pluralist networks tend to abruptly change policies, whereas corporatist networks are closely interlinked, with negotiated change. In the latter case, there may be limits on how far change will go. Further analysis, they claim, has to show whether different modes of change have an impact on the eventual success of the design and on the implementation of the policy instruments (Coleman et al. 1997, p. 299). The impact of specific types of policy networks on implementation issues is studied by other authors (e.g., Atkinson and Coleman 1985; Schneider 1985). They claim that corporatist networks allow state actors to share the burden for implementation. In his comparison of the German Chemicals Law and the American Toxic Substance Control Act, Schneider (1985) claims that the German cooperative policy networks allow taking implementation issues into account within the formulation phase, whereas the competitive character in the United States leads to conflict postponement and to Congress enacting a skeleton of regulation. Döhler (1991) also connects networks with the success of reform policies. He suggests that highly fragmented as well as highly centralized network structures facilitate the formulation and implementation of neo-conservative reform policies in the health sector of Germany, Britain, and the United States. Policy domains that are characterized by pronounced and legitimate self-government, by contrast, tend to resist a policy that would change their basic mode of operation.

Howlett (2002) connects the insulation of policy networks and the symmetry between interest and discourse networks to the question of change. From his four case studies on Canadian politics, he concludes that sectors with non-insulated networks and a low symmetry between interest and discourse networks are more open for new actors and ideas and thus show changes in policy goals and programs. In sectors with insulated networks and a high symmetry between the two

types of networks, however, change was limited to alterations in instrument types and components, as new actors and ideas could not penetrate policy subsystems. Finally, Josselein (1996) connects the structure of domestic networks with the ways in which national interests are promoted in negotiations in the European Union. He concludes that power distributions in domestic networks determine whether private interests are represented by state actors at the European level or whether private actors pursue their own strategies.

This first glance at the impact of policy networks clearly shows that network structures are not only connected to specific policy outcomes ("what"), but also to the type of change ("how") that creates these outcomes. A systematic analysis of the impact of policy networks requires that we link the types of networks to the types of change creating different outcomes. Accordingly, we propose to connect each network category of our typology with a specific potential for, and type of, policy change. We would like to suggest that the *type of interaction* within a policy network determines the *form* of policy change. In conflictual situations we expect rapid (serial) policy shifts, whereas incremental changes are most likely to result in bargaining situations. Cooperative policy structures are likely to maintain the status quo. The *degree of concentration of power* is expected to determine the *potential* for change: we assume the potential for each type of change to be greater if power is fragmented. If power is fragmented, the scales are more easily tipped in favor of the challenging actor coalition. By contrast, if power is concentrated, challengers lack resources to break the "policy monopoly." Therefore, we expect the potential for serial shifts to be highest in situations in which power is fragmented and interactions are competitive. Héritier and Knill (2001) confirm these expectations when they analyze how nation states mediate the impact of the European input in road haulage and in railway policy: reform is more likely to be triggered by European regulations if domestic constellations are contested and characterized by uneven power structures. Figure 5.2 summarizes this argument.

| Distribution of Power | Type of Interaction | | |
|-----------------------|---|---|--|
| | Conflict | Bargaining | Cooperation |
| Concentration | Moderate potential for rapid (serial) shift | Low to moderate potential for incremental change | Low potential for change—maintenance of status quo |
| Fragmentation | High potential for rapid (serial) shift | Moderate to high potential for incremental change | Low to moderate potential for change—maintenance of status quo |

FIGURE 5.2 Potential and Type of Policy Change

With its distinction of different types of change, this typology links up with the ideas of Hall (1993), who posits three orders of policy change. First-order change implies changes in the settings of policy instruments, which probably resembles more or less our maintenance of the status quo. Second-order change is characterized by the replacement of one policy instrument with another. This type of change has an incremental character. Third-order change entails a dramatic shift in policy goals, which is accompanied by a new ideological paradigm. We have labeled this third-order change as serial shifts. Héritier and Knill (2001, p. 259f.) also distinguish between three types of change: a high degree of change involves a rupture in the overall problem-solving ideology, a medium degree of change is characterized by a mixture of old and new policy elements, and a low degree of change leaves old measures substantially in place.

CONCLUSION

The policy network approach is more an analytical toolbox than a theory (Knill 2000, p. 122; Scott 2000, p. 37; Wasserman and Faust 1999, p. 17; Börzel 1998, p. 254; Dowding 1995, p. 157). Its analytical value lies in the fact that it conceptualizes policy making as a process involving a *diversity* of actors who are mutually *interdependent*. Taking into account the role of state and societal actors in policy making, it synthesizes state- and society-centered approaches (Boase 1996), going beyond a formal description of policy making (Héritier 1993b). Whether state or societal actors dominate this process becomes an empirical question (Knill 2000). However, network approaches do not only include various types of actors, but also require that the interactions between them are taken into account. "The fundamental difference between a social network explanation and a non-network explanation of a process is the inclusion of concepts and information on *relationships* among units in a study" (Wasserman and Faust 1999, p. 6). This implies a change of perspective: actors are no longer regarded as atomized and isolated, but as mutually interlinked. Such a perspective allows the combination of an actor-centered focus with an overall structural perspective. The network approach as an analytical toolbox gains strength to the extent that it allows one to operationalize associated concepts by drawing on formalized network analysis. The mathematical approach to network analysis has the potential to define structural properties of networks and structural attributes of actors in more than metaphorical terms (Wasserman and Faust 1999, p. 17).

As the network approach is not a theory per se, it needs to borrow hypotheses and models from other theories (Thatcher 1998, p. 406f.; Knill 2000, p. 122; Héritier 1993b, p. 143ff.). These other approaches help to identify the dimensions that are relevant to describe different types of policy networks. They also point to factors that might determine the emergence and shape of policy networks. In addition, these approaches are needed for understanding how actors behave within the networks and how exogenous and endogenous factors are connected in determining policy outcomes and change. At the same time, the

network approach may shed light on the structural features of other approaches, leaving behind the often implicit assumption that actors can be regarded as isolated and not mutually interdependent.

This analytical approach with its distinctive perspective on the policy process, its strong methodological foundations, and its hypotheses borrowed from other approaches has certain weaknesses. First, the potential of formal mathematical techniques of network analysis has not been widely explored in the field of policy analysis so far (Knill 2000; Börzel 1998). One of the major problems of network analysis is the lack of an adequate connection between theoretical concepts and sound methodological operationalization (Trezzini 1998, p. 379). Those advancing the methodology often lack knowledge in social science, whereas those employing the network approach in social science often do not use its formal techniques or do not use it correctly.

Second, empirical analysis still has to prove that "networks do not only exist in European and national policy making but are also *relevant* for policy processes and policy outcomes" (Börzel 1998, p. 267). As we have tried to argue, researchers are on the way to disentangling the relations between exogenous determinants of networks, endogenous network dynamics, and the resulting policy outcomes. However, there are also critical voices claiming that policy networks are not the most crucial factor in explaining policy change. Daguette (2000, p. 256), for example, shows that, in the domain of child care policy, significant policy innovation took place in France and the UK without radical restructuring of the policy communities. She attributes more explanatory power to financial pressures in the UK and cultural traditions in France than to the networks themselves. Richardson (2000) also finds it difficult to explain policy change in terms of communities and networks. To understand radical shifts, he claims, one must look elsewhere for the reasons (Richardson 2000, p. 1022). Consequently, one of the main tasks of future research is to show whether and how network analysis improves our understanding of policy outcomes and change.

Third, an approach that needs to borrow its hypotheses from other approaches runs the risk of merely relying on a list of factors that are arbitrarily incorporated (Thatcher 1998, p. 407ff.). Moreover, the methodological foundations of the network approach and incorporated approaches are often not carefully examined and checked for compatibility. As a consequence, it often remains unclear whether the approaches complement or rival each other. If they are rivals, they should be tested against each other. If, however, they complement each other, one has to show why and how these approaches can be combined (see Thatcher 1998, p. 409). These problems of incorporating other approaches leads Daguette (2000, p. 258) to call for a separation: "Although the wish to fill the existing holes of the policy network approach is perfectly understandable from the perspective of its proponents, it might be better to acknowledge the obvious weaknesses of the model but retain its heuristic potential in comparative and temporal analysis." If the linkage of approaches is done carefully, we expect this connection to be promising, increasing the explanatory potential of network approaches.

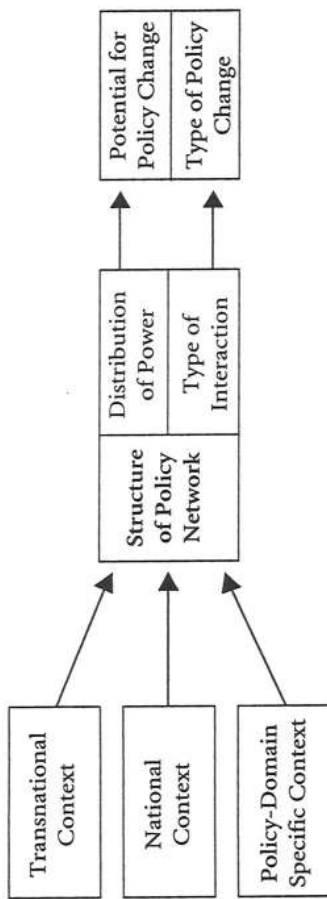


FIGURE 5.3 The Network Approach: Summary

To strengthen the network approach and to overcome some of its limitations, we proposed a descriptive typology of policy networks based on two key dimensions: the distribution of power and the predominant type of interaction. These dimensions capture the two basic elements of networks: actors and their relations. We have indicated that these two dimensions can be measured with standard questionnaires in interviews or with information based on qualitative analyses. Applying formal network analytic procedures to these data allows us to use our typology, not only for single actors, but also for coalition structures (see Kriesi, Adam, and Jochum 2006).

As we aim for more than a description of the policy process, the identified dimensions can be systematically linked to the determinants and to the effects of policy networks. Transnational, national, and policy- or domain-specific factors influence the power distribution and interaction structure within policy networks. However, none of these determinants can be viewed in isolation. Research has made clear that it is not sufficient to focus exclusively on transnational, national, or policy-specific factors. Hypotheses have to be tested that account for the complex interactions of all of these determinants. Consequently, research should no longer aim for national-level or issue-specific generalizations.

The proposed typology of networks also constitutes an independent variable when trying to explain policy change: the type and potential of policy change depend on the power distribution and interaction structure—a hypothesis already supported by empirical research (see Héritier and Knill 2001). Figure 5.3 summarizes our argument about the determinants and impacts of policy networks.

To fully understand policy change or maintenance, this hypothesis needs to be tested in more cases and with different external stimuli. As policy change is a function of exogenous and endogenous factors (e.g., Marsh and Smith 2000, p. 8; Dudley and Richardson 1996, p. 66; Dagueire 2000, p. 258), only a simultaneous analysis of both types of factors can show whether and how policy networks can

resist, alter, or accept environmental stimuli and thus serve as a core variable for understanding policy outcomes. Only when the understanding of how external factors and internal network dynamics influence policies and their changes is improved may we be able to specify which types of policy networks increase the legitimacy and efficiency of policy making (Börzel 1998, p. 267) and which types of networks are open for specific strategies of network management (Kickert et al. 1997a).

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