ORGANIZING BABYLON – ON THE DIFFERENT CONCEPTIONS OF POLICY NETWORKS

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A 'Babylonian' variety of policy network concepts and applications can be found in the literature. Neither is there a common understanding of what policy networks actually are, nor has it been agreed whether policy networks constitute a mere metaphor, a method, an analytical tool or a proper theory. The aim of this article is to review the state of the art in the field of policy networks. Special attention is given to the German conception of policy networks which is different from the one predominant in the Anglo-Saxon literature. While British and American scholars usually conceive policy networks as a model of state/society relations in a given issue area, German works tend to treat policy networks as an alternative form of governance to hierarchy and market. It is argued that this conception of policy networks goes beyond serving as a mere analytical tool box for studying public policy-making. Yet, both the German and the Anglo-Saxon conception of policy networks face a common challenge: first, it still remains to be systematically shown that policy networks do not only exist but are really relevant to policy-making, and second, the problem of the ambiguity of policy networks has to be tackled, as policy networks can both enhance *and* reduce the efficiency and legitimacy of policy-making.

INTRODUCTION

'Network' has become a fashionable catch-word in recent years – not only in political science but also in a number of other scientific disciplines. Microbiologists describe cells as information networks, ecologists conceptualize the living environment as network systems, computer scientists develop neuronal networks with self-organizing and self-learning capacities. In contemporary social sciences, networks are studied as new forms of social organization in the sociology of science and technology (Callon 1986), in the economics of network industries and network technologies (Katz and Shapiro 1985), in business administration (Thorelli 1986; Powell 1990), and in public policy (Mayntz (ed.) 1983; Marsh and Rhodes 1992; Lehmbruch 1991; Benz, Scharpf and Zintl (eds.) 1992; Grande 1994; Héritier (ed.) 1993). The term network seems to have become 'the new paradigm for the architecture of complexity' (Kenis and Schneider 1991, p. 25).[1]

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However, the use of the network concept varies considerably between and within the different disciplines. They all share a common understanding, a minimal or lowest common denominator definition of a policy network, as a set of relatively stable relationships which are of non-hierarchical and interdependent nature linking a variety of actors, who share common interests with regard to a policy and who exchange resources to pursue these shared interests acknowledging that co-operation is the best way to achieve common goals. Beyond this basic definition, which is not completely uncontroversial either, a large and confusing variety of different understandings and applications of the concept can be found in the literature. Often, authors have only a vague and sometimes ambiguous idea of what a policy network is and hardly make it explicit. Whereas some consider policy networks as a mere metaphor to denote the fact that policy-making involves a large number and wide variety of actors, others acknowledge them to be a valuable analytical tool to analyse the relations between actors interacting with each other in a given policy sector. A third group of scientists perceive policy networks as a method of social structure analysis, but do not agree on using networks analysis as a quantitative or qualitative method. And while most would not contend that policy networks provide at least a useful toolbox for analysing public policy-making, only a small minority confer some theoretical power on the concept.

The aim of this article is to review the different policy network concepts found in the literature. Particular attention will be given to the predominantly German understanding of policy networks as an alternative form of governance to hierarchy and market. This conception has so far been neglected in the Anglo-Saxon literature where policy networks are usually conceived as a model of state/society relations in a given issue area. The article essentially structures the existing literature on policy networks along these two alternative conceptions. The first part is dedicated to what I call the 'interest intermediation school' of policy networks, which is contrasted with works of the 'governance school' in the second part of the article. Finally, the potential of the policy network approach for becoming more than a useful toolbox in analysing public policy-making is discussed. The article concludes that a theoretically ambitious policy network approach is facing two major challenges: first it has to be shown that policy networks do not only exist but are also relevant to public policy-making. And second, the problem of the ambiguity of policy networks has to be tackled as policy networks can both enhance and reduce the efficiency and legitimacy of policy-making.

METHOD, MODEL OR THEORY?

There is a 'Babylonian' variety of different understandings and applications of the policy network concept to be found in the study of policy-making both in the domestic and European context. In order to structure the exist-

ing policy network literature, a first distinction is made along two dimensions:

(1) *Quantitative* versus *qualitative* network analysis
(2) Policy networks as a *typology of interest intermediation* versus policy networks as a *specific form of governance.*

This first distinction is about methods. Both quantitative and qualitative network approaches take networks as an analytical tool. The quantitative approach, however considers network analysis as a method of social structure analysis. The relations between actors are analysed in terms of their cohesion, structural equivalence, spatial representation using quantitative methods such as ascendant hierarchical classification, density tables, block models, etc.[2] The qualitative approach, on the other hand, is more process-oriented. It focuses less on the mere structure of interaction between actors but rather on the content of these interactions using qualitative methods such as in-depth interviews and content and discourse analysis. Yet, the two methodological approaches are not mutually exclusive but complementary (Sciarini 1996, p. 112).[3] This article therefore focuses on the more relevant distinction between policy networks as a typology of interest intermediation and policy networks as a specific form of governance.

Policy networks as a typology of interest intermediation versus policy networks as a specific form of governance

Two different 'schools' of policy networks can be identified in the field of public policy. The more prominent '*interest intermediation school*' interprets policy networks as a generic term for different forms of relationships between interest groups and the state. The '*governance school*', on the other hand, conceives policy networks as a specific form of governance, as a mechanism of mobilizing political resources in situations where these resources are widely dispersed between public and private actors. This narrower conception of policy networks mainly draws on the works in the field of public policy.

The distinction between the two schools is fluid and not always clearly made in the literature. In any case, they are not mutually exclusive (see for example Katzenstein (ed.) 1978; Rhodes 1988; Marsh and Rhodes (eds.) 1992a; Grande 1994; Rhodes 1997). However, there is a major difference between the two schools. The interest intermediation school conceives policy networks as a generic concept which applies to *all kinds* of relations between public and private actors. For the governance school, on the contrary, policy networks only characterize a *specific* form of public-private interaction in public policy (governance), namely the one based on non-hierarchical co-ordination, opposed to hierarchy and market as two inherently distinct modes of governance. In the following, the two schools of policy networks are briefly described and some major works of each school are introduced.

1 Policy networks as a typology of interest intermediation

Research into the relations between the state and societal interests (interest intermediation) was dominated for a long time by different versions of 'pluralism'. In the 1970s, pluralism became increasingly challenged by neo-corporatist theory (cf. Schmitter and Lehmbruch (eds.) 1979). Both models, however, have been repeatedly criticized for their 'lack [of] empirical relevance and, moreover, logical consistency' (Jordan and Schubert 1992, p. 8; cf. Rhodes and Marsh 1992, pp. 1–4). This criticism has prompted a stream of qualifications to the two basic models leading to a variety of 'neologisms' to describe state / group relations such as 'pressure pluralism', 'state corporatism', 'societal corporatism', 'group subgovernment', 'corporate pluralism', 'iron triangles', 'clientelism', 'meso-corporatism' (cf. Jordan and Schubert 1992). These refinements of the two models, however, also appear to be problematic because very often similar labels describe different phenomena, or different labels refer to similar phenomena, which often leads to confusion and misunderstanding in the discussion of state / interest relations. Some authors therefore suggested abandoning the pluralism–neo-corporatism dichotomy and developed a new typology in which the network is a generic label embracing the different types of state / interest relations.[4] For them, 'the network approach presents an alternative[5] to both the pluralist and the corporatist model. The policy network is a meso-level concept of interest group intermediation which can be adopted by authors operating with different models of power distribution in liberal democracies' (Rhodes and Marsh 1992, p. 4; cf. Jordan and Schubert 1992; van Waarden 1992; Kriesi 1994).[6]

The network typologies found in the literature share a common understanding of policy networks as power dependency relationships between the government and interest groups, in which resources are exchanged. The typologies, however, differ from each other according to the dimensions along which the different types of networks are distinguished.

While Grant Jordan and Klaus Schubert base their typology on only three main criteria – the level of institutionalization (stable / unstable), the scope of the policy-making arrangement (sectoral / trans-sectoral), and the number of participants (restricted / open) – (Jordan and Schubert 1992), Frans van Waarden uses seven – actors, function, structure, institutionalization, rules of conduct, power relations, actors' strategies – finally singling out three as the most important to distinguish between existing types of networks: number and type of societal actors involved, major function of the network, and balance of power (van Waarden 1992).

A less complex but as comprehensive policy network classification was developed by Hanspeter Kriesi. Drawing from the works of Schmitter (1974) and Lehmbruch (1979), Kriesi's classification is based on the combination of the two models of structural organization of systems of interest groups (corporatism and pluralism) and the two models of relations between state and interest groups in a political process (concertation and

pressure), whereby corporatism is linked to concertation and pluralism to pressure. Kriesi adds another dimension, the strength of the state (strong and weak state). This produces altogether four types of policy networks, each characterized by a specific set of properties (cf. Kriesi 1994, pp. 392–6; Sciarini 1996).

Michael Atkinson and William Coleman conceptualize six types of policy networks along two different dimensions: (1) the state structure in terms of autonomy and concentration of power, and (2) the capacity to mobilize the interests of employers (Atkinson and Coleman 1989; see also Katzenstein 1978).

Elaborating on Benson's definition of a policy network as 'a cluster or complex of organizations connected to each other by resource dependencies and distinguished from other clusters or complexes by breaks in the structure of resource dependencies' (Benson 1982, p. 148), Rod Rhodes distinguishes five types of networks according to the degree to which their members are integrated, the type of their members, and the distribution of resources among them.[7] He places his network types on a continuum ranging from highly integrated policy communities at the one end and loosely integrated issue networks at the other end; professional networks, inter-governmental networks, and producer networks lie in-between (Rhodes 1988). In contrast to many works on interest intermediation which focus on state/business relations, Rhodes has predominantly used his policy network model to analyse intergovernmental relations (Rhodes 1986; 1986a; 1986b; 1997).[8]

Stephen Wilks and Maurice Wright apply the 'Rhodes model' to the relations between government and industry (Wilks and Wright 1987). They introduce, however, three major modifications of the model. First, they stress the disaggregated nature of policy networks in the policy sectors, suggesting that government–industry relations have to be analysed at the sub-sectoral, not at the sectoral level. Second, they place considerable emphasis on interpersonal relations as a key aspect of the policy network,[9] while Rhodes, drawing from inter-organizational theory, strictly focuses on the structural relationships between institutions. And third, Wilks and Wright redefine the terminology of policy networks. They distinguish between 'policy universe', 'policy community', and 'policy network'. Policy universe is defined as 'the large population of actors and potential actors [who] share a common interest in industrial policy, and may contribute to the policy process on a regular basis'. Policy community is reserved for a more disaggregated system involving those actors and potential actors who share an interest in a particular industry and who interact with one another, 'exchange resources in order to balance and optimize their mutual relationships' (Wilks and Wright 1987, p. 296). And the policy network becomes 'a linking process, the outcome of those exchanges, within a policy community or between a number of policy communities' (Wilks and Wright 1987, p. 297).

A more fundamental distinction between different types of policy net-

works is the one between *heterogeneous* and *homogeneous* networks. This distinction is often overlooked; the vast majority of the policy network literature deals with heterogeneous policy networks, in which the actors involved dispose of *different* interests and resources. This heterogeneity of interests and resources creates a state of interdependence among the actors linking them together in a policy network where they mediate their interests and exchange their resources. Only a few scholars have (also) focused on homogeneous networks, in which the actors have similar interests and resources, such as so-called professional networks (Burley and Mattli 1993), epistemic communities (Haas 1992) and principled issue-networks (Sikkink 1993).[10]

To conclude, the policy network concept of the interest intermediation school has been widely applied to the study of sectoral policy-making in various countries. Policy networks are generally regarded as an *analytical tool* for examining institutionalized exchange relations between the state and organizations of civil society, allowing a more 'fine grain' analysis by taking into account sectoral and sub-sectoral differences,[11] the role played by private and public actors, and formal as well as informal relationships between them. The basic assumption is that the existence of policy networks, which reflect the relative status or power of particular interests in a policy area, influences (though does not determine) policy outcomes.

Some authors, however, strive for a more ambitious use of the policy network concept in studying forms of interest intermediation by attaching some explanatory value to the different network types. The underlying assumption is that the structure of a network has a major influence on the logic of interaction between the members of the networks thus affecting both policy process and policy outcome (Knoke 1990; Lehmbruch 1991; Sciarini 1996 and the empirical case studies in Marin and Mayntz (eds.) 1991a and Marsh and Rhodes (eds.) 1992a). However, no hypotheses have been put forward which systematically link the nature of a policy network with the character and outcome of the policy process (Bressers and O'Toole 1994).

The Anglo-Saxon policy network literature mainly focuses on works of the interest intermediation school. Much less attention has been paid to the governance school. The following section therefore strives to give a more extensive introduction to the governance school focusing on the less known German literature.

2 Policy network as a specific form of governance

In the literature on governance, again two different applications of the concept of policy networks can be identified.

Many authors use policy networks as an *analytical concept* or *model* (especially in the field of policy analysis) to connote the 'structural relationships, interdependencies and dynamics between actors in politics and policy-making' (Schneider 1988, p. 2). In this use, networks provide a per-

spective from which to analyse situations in which a given policy cannot be explained by centrally concerted policy action towards common goals. Rather, the network concept draws attention to the interaction of many separate but interdependent organizations which co-ordinate their actions through interdependencies of resources and interests. Actors, who take an interest in the making of a certain policy and who dispose of resources (material and immaterial) required for the formulation, decision or implementation of the policy, form linkages to exchange these resources. The linkages, which differ in their degree of intensity, normalization, standardization and frequency of interaction, constitute the structures of a network. These 'governance-structures' of a network determine in turn the exchange of resources between the actors. They form points of reference for the actors' calculations of costs and benefits of particular strategies. Thus, the analysis of policy networks allows conclusions to be drawn about the actors' behaviour (Windhoff-Héritier 1994, pp. 85–88). However, policy networks here are only an analytical model, a framework of interpretation, in which different actors are located and linked in their interaction in a policy sector and in which the results of this interaction are analysed. Why and how single actors act, the policy network analysis can only partly account for by the description of the linkages between the actors. Hence, policy network analysis is no substitute for a theoretical explanation: '[N]etwork analysis is no theory *in stricto sensu*, but rather a tool box for describing and measuring regional configurations and their structural characteristics' (Kenis and Schneider 1991, p. 44).[12]

Some authors, however, go beyond the use of networks as an analytical concept. They argue that it is not enough to understand the behaviour of a given individual unit as a product of interorganizational relations (networks). The underlying assumption is that social structures have a greater explanatory power than the personal attributes of individual actors (Wellmann 1988). The pattern of linkages and interaction as a whole should be taken as the unit of analysis. In short, these authors shift the unit of analysis from the individual actor to the set of interrelationships that constitute interorganizational networks. While the analytical network concept describes the context of, and factors leading to, joint policy-making, the concept of networks as interorganizational relationships focuses on the structure and processes through which joint policy-making is organized, i.e. on governance. Policy networks are conceived as a particular form of governance in modern political systems (Kenis and Schneider 1991; Kooiman 1993; Mayntz 1993a). The point of departure is the assumption that modern societies are characterized by societal differentiation, sectoralization and policy growth which lead to political overload and 'governance under pressure' (Jordan and Richardson 1983).[13] 'Modern governance is characterized by decision systems in which territorial and functional differentiation disaggregate effective problem-solving capacity into a collection of sub-systems of actors with specialized tasks and limited competence and

resources' (Hanf and O'Toole 1992, p. 166). The result is a functional interdependence of public and private actors in policy-making. Governments have become increasingly dependent upon the co-operation and joint resource mobilization of policy actors outside their hierarchical control. These changes have favoured the emergence of policy networks as a new form of governance – different from the two conventional forms of governance (hierarchy and market) – which allows governments to mobilize political resources in situations where these resources are widely dispersed between public and private actors (Kenis and Schneider 1991; Marin and Mayntz 1991; Kooiman 1993; Mayntz 1993a; Le Galès 1995). Hence, policy networks are 'une réponse aux problèmes d'efficacité des politiques publiques' (Le Galès 1995, p. 17).

In this view, policy networks are best understood as 'webs of relatively stable and ongoing relationships which mobilize and pool dispersed resources so that collective (or parallel) action can be orchestrated towards the solution of a common policy' (Kenis and Schneider 1991, p. 36). A policy network includes all actors[14] involved in the formulation and implementation of a policy in a policy sector. They are characterized by predominantly *informal* interactions between *public and private*[15] actors with distinctive, but *interdependent interests*, who strive to solve problems of collective action on a central, *non-hierarchical level*.

All in all, policy networks reflect a changed relationship between state and society. There is no longer a strict separation between the two: 'Instead of emanating from a central authority, be this government or the legislature, policy today is in fact *made* in a process involving a plurality of both public and private organizations'. This is why 'the notion of 'policy networks' does not so much represent a new analytical *perspective* but rather signals a real change in the structure of the polity' (Mayntz 1993a, p. 5).

The view of policy networks as a specific form of governance is most explicit in the works of some German public policy scholars like Renate Mayntz, Fritz Scharpf, Patrick Kenis, Volker Schneider, and Edgar Grande (the 'Max-Planck-School').[16] They start from the assumption that modern societies are characterized by functional differentiation and partly autonomous societal subsystems (Kenis and Schneider 1991; Mayntz 1993a). The emergence of these subsystems is closely connected with the ascendance of formal organizations forming interorganizational relations with other organizations on which they depend for resources. In politics, private organizations dispose of important resources and have therefore become increasingly relevant for the formulation and implementation of public policies. In this structural context, policy networks present themselves as a solution to co-ordination problems typical of modern societies.

Under the conditions of environmental uncertainty and increasing international, sectoral and functional overlap of societal sub-systems, policy networks as a mode of governance offer a crucial advantage over the two conventional forms of governance, hierarchy and market.[17] Unlike hier-

archies and markets, policy networks do not necessarily have dysfunctional consequences. While markets are unable to control the production of negative externalities (problems of market failure), hierarchies produce 'losers', who have to bear the costs of a political decision, (exploitation of the minority by the majority; cf. Scharpf 1992). Horizontal self-co-ordination of the actors involved in policy-making (voluntary or compulsive bargaining systems) is, on the other hand, also prone to produce sub-optimal outcomes: such bargaining systems tend to be blocked by dissent, preventing the consensus necessary for the realization of common gains.

There are two main problems discussed in the literature which can render consensus difficult or even impossible in a bargaining system: (1) the bargaining dilemma (known as prisoner's dilemma in game theory and regime theory), i.e. situations in which defection from co-operation is more rewarding for a rational actor than compliance, owing to the risk of being cheated (Scharpf 1992); (2) the structural dilemma, i.e. the interorganizational structure of horizontal co-ordination itself. Horizontal co-ordination between organizations is based on bargaining between the representatives of the organizations. These representatives are not completely autonomous in the bargaining process. They are subject to the control of the members of their organization. These intra-organizational 'constraints' have major consequences for the representatives' orientations of action and the reliability of their commitments made in interorganizational bargaining, rendering the finding of consensus in interorganizational bargaining processes more difficult for two reasons: first, due to the self-interest of the organizational representatives, and second, because of the insecurity caused by intra-organizational control and the need for intra-organizational implementation of interorganizational compromises (involuntary defection). The linkage of intra- and interorganizational decision-making processes in structures of horizontal co-ordination across several levels of government constitutes a bargaining system in which conflicts are not only caused by competing or antagonistic interests but also by the very structure of the system (Benz 1992).[18] Hence, the probability of producing common outcomes in a bargaining system linking together differently structured arenas, different actors and different interest constellations is relatively low (Benz 1992, p. 178).

The dysfunction of horizontal self-co-ordination, however, can be overcome when such co-ordination takes place either in the 'shadow of hierarchy' or within network structures. As hierarchical co-ordination becomes increasingly impossible in interactions across sectoral, organizational and national borders, actors have to rely on horizontal self-co-ordination within networks, which then can serve as a functional equivalent to hierarchy (Scharpf 1993). By combining the autonomy of actors typical for markets with the ability of hierarchies to pursue selected goals and to control their anticipated consequences, policy networks can overcome the major problems of horizontal co-ordination:

(1) Networks are able to intentionally produce collective outcomes *despite* diverging interests of their members through voluntary bargaining (Kenis and Schneider 1991; Mayntz 1993a). Unlike 'exchange' and 'strategic interaction', which are based on the maximization of self-interest through cost-benefit calculations and which are prone to produce bargaining dilemmas, negotiations in policy networks are based on communication and trust and aim at achieving joint outcomes, which have a proper value for the actors. The negotiations to reach a common outcome in policy networks can be guided by either the perspective of reconciliation of interests (bargaining) or the perspective of optimal performance (problem-solving). The question is then under which conditions problem-solving (as the most optimal logic of negotiation to produce common outcomes)[19] dominates over bargaining. Different scholars have dealt with this problem (see Benz, Scharpf and Zintl (eds.) 1992). Solutions suggested are the institutional consolidation of a network (Scharpf 1993), overlapping membership in several networks (Scharpf 1991), the spatial and temporal separation of the search for a common solution from the distribution of costs and benefits (Zintl 1992; Scharpf 1992; Benz 1992; Mayntz 1993, p. 51), or the systematic combination of positive co-ordination (problem-solving) and negative co-ordination that is the consideration of third interests (Scharpf 1994).

(2) Networks can provide additional, informal linkage between the inter- and intra-organizational decision-making arenas. Such informal linkages, based on communication and trust, overlap with institutionalized structures of co-ordination and link different organizations independently from the formal relationships between them. Networks help to overcome the structural dilemma of bargaining systems because they provide redundant possibilities for interaction and communication which can be used to solve decision-making problems (including bargaining dilemma). Networks do not directly serve for decision-making but for the information, communication and exercise of influence in the preparation of decisions. Interaction in networks is not exposed to constraints such as formal rules or assignments of responsibility. Besides, networks reduce transaction cost in situations of complex decision-making as they provide a basis of common knowledge, experience and normative orientation. They also reduce insecurity by promoting the mutual exchange of information. Finally, networks can counterbalance power asymmetries by providing additional channels of influence beyond the formal structures (Benz 1992).

To sum up, in an increasingly complex and dynamic environment, where hierarchical co-ordination is rendered difficult if not impossible and the potential for deregulation is limited because of the problems of market fail-

ure (Kooiman 1993), increasingly governance becomes only feasible within policy networks, providing a framework for the efficient horizontal co-ordination of the interests and actions of public and private corporate actors, mutually dependent on their resources (Kenis and Schneider 1991; Scharpf 1993; Mayntz 1993a).

However, networks are no final solution to decision-making problems in bargaining systems. Because of their self-dynamic, networks become very often 'quasi-institutional' arenas with their own structure of conflict and problems of co-ordination (Benz 1995). Besides, policy networks tend to be very resistant to change (Lehmbruch 1991). Finally, policy networks are often not exposed to democratic control and therefore suffer from a lack of legitimacy (Benz 1995; cf. Scharpf 1993a).[20] Hence, networks themselves create a dilemma: on the one hand, they perform functions necessary to overcome the deficiencies of bargaining systems, on the other, however, they cannot fully take the place of formal institutions because of their own deficiencies.[21]

It should be clear by now that the concept of policy networks as a specific form of governance does not constitute a proper theory. To explain the phenomenon of policy networks as a new mode of governance, the Max-Planck-School draws from the so-called *actor-centred institutionalism*, mainly developed by Renate Mayntz and Fritz Scharp (1995), which is very often combined with other theoretical approaches such as game theory (Scharpf 1992; 1992a; 1993; Zintl 1992), theories of exchange (Marin 1990) or resource dependency theory (Marin 1990; Mayntz 1993; 1993a; Kenis and Schneider 1991).

Actor-centred institutionalism combines rational choice and institutionalist assumptions. Institutions are conceived of as regulatory structures providing opportunities and constraints for rational actors striving to maximize their preferences (Mayntz and Scharpf 1995). A major function of institutions is to overcome problems of collective action by constraining egoistic and opportunistic behaviour (Marin 1990; Scharpf 1992; Zintl 1992). Networks then are conceptualized as informal institutions – not formally organized, reciprocal (non-hierarchical), relative permanent relations and forms of interactions between actors who strive to realize common gains (Scharpf 1993, p. 72). Networks are based on agreed rules for the production of a common outcome. They reduce costs of information and transaction and create mutual trust among the actors diminishing uncertainty and thus the risk of defection (Scharpf 1992). Because of these functions, networks serve as an ideal institutional framework for horizontal self-co-ordination between public and private actors, on which policy-making is relying in an increasingly complex, dynamic and diversified environment where hierarchical co-ordination is rendered dysfunctional.[22] Public and private actors form networks to exchange their resources on which they are mutually dependent for the realization of common gains (policies) (Marin 1990; Kenis and Schneider 1991; Mayntz 1993; 1993a; cf. Rhodes 1988; 1997).

Yet, studies on policy networks are emerging which challenge the rationalist institutionalist approach of the Max-Planck-School by using *cognitive approaches* such as theories of learning or communicative action. The point of departure is a critique of the Max-Planck-School for neglecting the role of consensual knowledge, ideas, beliefs and values in the study of networks (Sabatier 1993; Majone 1993; Singer 1993). It is contended that policy networks are merely based on the common goal to produce certain policy outcomes which allow the actors to realize their self-interests. Members of a network share consensual knowledge and collective ideas and values, a specific belief system, i.e. 'a set of fundamental values, causal beliefs and problem perceptions' (Sabatier 1993, p. 127, my translation). Such '*advocacy coalitions*' (Sabatier 1993) or '*discourse coalitions*' (Singer 1993) are formed to influence policy outcomes according to the collectively shared belief system of their members. Pursuing their goals, advocacy and discourse coalitions do not resort to strategic bargaining but rather rely on processes of communicative action such as policy deliberation (Majone 1993) or policy change through policy learning, i.e. a change in the belief-system of advocacy coalitions (not only in the actors' behaviour as the result of external constraints or the convergence of their exogenously fixed interests) (Sabatier 1993).[23]

All in all, there is a growing number of works on policy networks which acknowledge that ideas, beliefs, values, and consensual knowledge do have explanatory power in the study of policy networks. However, the critique of rational institutionalist approaches towards policy networks overlooks a fundamental point: not only do ideas, beliefs, values, identity and trust matter in policy networks; they are *constitutive* for the logic of interaction between the members of a network. Scholars like Scharpf and Benz are absolutely right in arguing that policy networks offer a solution to problems of collective action by enabling non-strategic action based on communication and mutual trust. Communication and trust distinguish policy networks from other forms of non-hierarchical co-ordination and render them more efficient than those. Yet, by acknowledging the relevance of trust and communicative action (problem-solving, deliberation, arguing) as a way to overcome problems caused by strategic action (maximization of self-interest, bargaining), rational institutionalists start contradicting the basic

		increasing resource		deregulation / privatization	⇒	market failure
complexity		interdependence		inefficiency of		
dynamics	⇒	between	⇒	hierarchical		
diversity		public and private actors		co-ordination		
		in public policy-making		horizontal co-ordination	⇒	*governance through policy networks*

FIGURE 1 *The evolution of policy networks as a new form of governance*

assumptions of their theory, namely that rational actors always strive to maximize their exogenously given interest. The capacity of policy networks to overcome problems of collective action can only be accounted for when actors' preferences and interests are endogenized, i.e. not taken as given and fixed, and the role of shared ideas, values, identities and mutual trust in shaping and changing these interests and preferences is taken on board – something that cannot be done within a rational institutionalist framework.[24]

The latter part of this article has introduced different concepts of policy networks found in the literature and organized them along three dimensions which are summarized in figure 2.

CONCLUSION: BEYOND AN ANALYTICAL TOOLBOX?

> It's new, it's different, it's good looking, *BUY IT NOW* (Le Galés 1995, p. 13).

The aim of this article is to give an overview of the state of the art in the literature on policy networks. In order to clarify the often confusing variety of conceptions and applications of policy networks, the article organizes the different works around two 'schools': the predominantly Anglo-Saxon interest intermediation school, which treats policy networks as a typology of interest intermediation, and the German 'governance school', which conceives of policy networks as a form of governance or governing structure alternative to hierarchy and market. The governance conception of policy networks has only made a very recent appearance in the Anglo-Saxon literature (Rhodes 1997). This neglect is all the more regrettable as the governance conception may offer a more 'theory impregnated' policy network approach (Rhodes 1997, p. 159).

Policy networks have been intensively criticized in the literature (Rhodes 1986b; Atkinson and Coleman 1992; Marsh and Rhodes 1992; Schumann

Quantitative network concept		**Qualitative network concept**
	Interest Intermediation School	*Governance School*
policy networks as analytical tool	policy networks as a typology of state/society relations	policy networks as a model to analyse non-hierarchical forms of interactions between public and private actors in policy-making
policy networks as theoretical approach	structure of policy networks as a determinant of policy process and policy outcome	policy networks as specific form of governance

FIGURE 2 *Concepts of policy networks*

1993; Smith 1993; Dowding 1994, 1995; Mills and Saward 1994; Bressers and O'Toole 1994; Kassim 1994; Thatcher 1995; Rhodes, Bache and George 1996). One of the major reproaches is that policy networks are not able to deploy any explanatory power. The general inability of the interest intermediation school to formulate hypotheses which systematically link the nature of a policy network with the character and outcome of the policy process seems to confirm the judgement that policy networks are not more and not less than a useful toolbox for analysing public policy.

Yet, there is a growing number of empirical works, especially in the field of European policy-making, which convincingly demonstrate the proliferation of policy networks, in which the different actors involved in policy-making (formulation and implementation) co-ordinate their interests through non-hierarchical bargaining[25] (see for example Peterson 1992; Marks 1992, 1993; McAleavey 1993; Grande 1994; Héritier, Knill and Mingers 1996; Bressers, O'Toole and Richardson (eds.) 1994; Schneider, Dang-Nguyen and Werle 1994; Rhodes 1997; Smyrl 1995). Unlike other theories which share a state-centric conception of governance based on a single (national) authority of hierarchical co-ordination in public policy-making, the policy network concept is able to conceptualize the emergence of political structures which are characterized by 'governing without government' (Rhodes 1997).

But policy networks do not only provide an analytical tool to trace and describe such changes towards 'governance without government' (Rosenau 1992). Embedded in a 'metatheoretical' framework, such as resource dependency theory, game theory or communicative action theory, a policy network approach can also provide some explanation for the proliferation of non-hierarchical co-ordination in policy networks. As demonstrated by the Max-Planck-School and others, hierarchical co-ordination (hierarchy) and deregulation (market) increasingly suffer from problems of efficiency and legitimacy in a complex and dynamic context of public policy-making. Policy networks offer themselves as a solution to these problems as they are not only able to pool widely dispersed policy resources but also to include a broad variety of different actors. What makes policy networks special is that they provide a governing structure which facilitates the realization of collective gains or goods among self-interested actors striving to maximize their individual utilities. But it is important to note that policy networks can also have quite the opposite effect. They can inhibit policy change (Lehmbruch 1991), exclude certain actors from the policy-making process (Benz 1995) and are far from being democratically accountable (Rhodes 1997). The Max-Planck-School has advanced a set of propositions of how to organize the non-hierarchical co-ordination in policy networks in order to avoid self-blockage and other structural inefficiencies. The legitimacy of policy networks, however, continues to be a major problem in political systems which are based on the principle of democratic accountability.

To conclude, a theoretically ambitious policy network approach faces two

major challenges. First, it still remains to be shown that policy networks do not only *exist* in European and national policy-making but are also *relevant* for policy process and policy outcome by, for example, enhancing or reducing the efficiency and legitimacy of policy-making. Second, once having empirically demonstrated that policy networks do make a difference, the question of the ambiguity of policy networks has to be tackled, that is the conditions have to be specified under which policy networks may enhance the efficiency and legitimacy of policy-making and under which they deploy the opposite effect. If the two schools joined their forces on dealing with these two major challenges, this could give rise to an interesting new research agenda for the study of policy networks.

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NOTES

1. It would go far beyond the scope of this article to give a comprehensive overview of the emergence of the policy network concept in the literature. For the American literature see Jordan 1990; for the British literature see Rhodes and Marsh 1992, pp. 8–18; for the French literature see Le Galès 1995; Jouve 1995; and for the German literature see Héritier (ed.) 1993. For an overview of the policy network concept in the different scientific disciplines see Rhodes 1990.
2. For an excellent example of a quantitative network analysis see Sciarini 1996; cf. Laumann and Pappi 1976; Laumann and Knoke 1987; Pappi and Knoke 1991.
3. For an attempt to bring together the two concepts in a *policy-area network approach* see Pappi 1993, pp. 90–93.
4. Some authors, however, use networks only to denote a specific type of public-private linkages rather than as an overarching term for state / interest relations. Heclo, for instance, presents his 'issue network' as an alternative to the concept of 'iron triangle', which was used as a model for state-industry relations in the US in the 1950s and 1960s (Heclo 1978).
5. The term 'alternative' may be a little misleading here. Policy networks are understood as an umbrella concept which integrates the different forms of pluralism and corporatism as specific versions of networks. Some authors therefore question the added value of policy networks in analysing different forms of interest intermediation (Hasenteufel 1995). Yet, the governance school conceives of networks in fact as an alternative form of state-society relations different from pluralism and corporatism. Others assume that policy networks have been developed above all as an alternative to structural approaches such as neo-Marxism (Le Galès 1995, p. 17).
6. For policy networks as a better way of understanding the 'configurative aspects of interest intermediation' see also Lehmbruch 1991.
7. The original 'Rhodes model' included only one dimension: the degree of integration (Rhodes 1986). The other two were introduced after Rhodes had acknowledged that he had conflated two dimensions in his model: the degree of integration and the dominance of a particular group (Rhodes and Marsh 1992, p. 21).

8. For the application and evaluation of the Rhodes model in empirical case studies in a range of policy sectors (beyond intergovernmental relations) see Marsh and Rhodes (eds.) 1992a.
9. The emphasis on interpersonal linkages is shared by the French literature on policy networks (Jouve 1995).
10. I am grateful to Adrienne Héritier for pointing out to me the importance of the distinction between heterogeneous and homogeneous policy networks. She also suggested a possibility for conceptually linking the two different types of networks by arguing that homogeneous policy networks might serve as an important resource for actors involved in a heterogeneous network.
11. Many authors point out that one of the major advantages of a meso-level policy networks typology towards state-society relations over traditional macro-level typologies such as strong *vs.* weak states is that the policy networks typology can account for sectoral variations within the states (Wilks and Wright 1987; Lehmbruch 1991; Peterson 1992; Mazey and Richardson (eds.) 1993).
12. It should be clear by now that this branch of the governance school has strong affiliations with the interest intermediation school. They share a common research agenda addressing questions such as how and why networks change, what the relative importance of interpersonal and interorganizational relationships is, how networks affect policy outcomes, and which interests dominate in a policy network. And the scholars of both sides agree that the policy network concept itself is not able to provide complete answers to these questions. '[T]he concept of 'policy networks' is a meso-level one which helps to classify the patterns of relationships between interest groups and governments. But it must be used in conjunction with one of the several theories of the state in order to provide a full explanation of the policy process and its outcomes' (Marsh and Rhodes 1992, p. 268; cf. Kenis and Schneider 1991; Windhoff-Héritier 1994).
13. For a more detailed description of these features of modern societies see Kenis and Schneider 1991, pp. 34–6.
14. While some authors include all kinds of actors – corporate and individual – in their definition of policy networks (Windhoff-Héritier 1994), others conceive of policy networks as purely *interorganizational* relations excluding personal relationships (Marin 1990; Mayntz 1993, 1993a; Pappi 1993; Rhodes 1986, 1995).
15. Most of the authors assume – implicitly or explicitly – that policy networks consist of private and public actors. Only a few apply the concept of policy networks (also) to the study of relations between exclusively public actors (Rhodes 1986, 1986a, 1986b; Peters 1992).
16. Most of the scholars are or were related to the Max-Planck-Institut für Gesellschaftsforschung (MPIGF) located in Cologne, Germany.
17. There is no consensus in the literature whether policy networks constitute an inherently new form of governance. Some authors argue that networks are a hybrid form located somewhere in the middle of a continuum that has market and hierarchy as the two opposing extremes (e.g. Williamson 1985; Kenis and Schneider 1991). This holds true if the underlying analytical dimension is the degree of coupling. Markets are characterized by the absence of structural coupling between the elements, hierarchies by tight coupling, and networks, by definition loosely coupled, lie in-between. Others, however, see policy networks as a qualitatively distinct type of social structure which is characterized by the combination of elements belonging to the other two basic forms of governance: the existence of a plurality of autonomous agents, typical for markets, and the ability to pursue chosen goals through co-ordinated action, typical for hierarchies (Mayntz 1993a, p. 11; cf. Marin 1990, pp. 19–20, 56–58; Powell 1990). A third view emphasizes the character of policy networks as a supplement of hierarchy rather than a substitute for hierarchy (and market) (Benz 1995; Marin 1990).
18. Benz identifies different types of conflicts which are caused by a multi-level decision-making structure, such as the problem of decisions at one level provoking conflicts on another level or 'objective' (common) problems often getting a subjective interest dimen-

sion due to institutional self-interests or the style of decision-making and conflict settlement within an organization (cf. Benz 1992, pp. 159–65).

19. For a discussion of the general differences between bargaining and problem-solving see Scharpf 1992 and Zintl 1992.
20. For networks as a chance to legitimize a political system see Jachtenfuchs and Kohler-Koch 1996, p. 39.
21. According to Benz, this dilemma or 'paradox of interorganizational structures' cannot be finally overcome. Networks and institutions form a dynamic structural context in which politics has to operate in a flexible way. Actors can cope best with this situation if they act 'paradoxically', i.e. act 'as if what is achieved was not intended' (Benz 1995, p. 204).
22. For an attempt to formulate a sophisticated theoretical approach to explain the emergence of policy networks as a form of modern governance under conditions of complexity, dynamics, and diversity see Kooiman 1993).
23. Sabatier, however, points out that policy learning is more likely to occur as a consequence of external shock rather than due to processes of communicative action (Sabatier 1993, pp. 122–6).
24. For the general problem of rational choice approaches to account for processes of communicative action in formal and informal institutions see Müller 1994.
25. This does not imply that European governance is exclusively based on non-hierarchical bargaining in multilevel policy networks. Hierarchical co-ordination and deregulation still play a prominent role in both national and European policy-making. Rather, it is argued that policy networks are becoming an increasingly important feature of European governance owing to their potential for increasing the efficiency and legitimacy of public policy-making.

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