Philip Leifeld

POLICY DEBATES AS DYNAMIC NETWORKS

German Pension Politics and Privatization Discourse

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German Pension Politics and Privatization Discourse

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Preface

The European tradition of network analysis in political science differs somewhat from its American counterpart. It was inspired by work in political sociology in the 1970s and 1980s. In the German and Swiss case, the same research design was employed by generations of researchers: identify the relevant organizations for a policy process, administer a network survey on information exchange or collaboration, influence attribution, venue participation and other network relations, and identify the most central organizations as well as subgroups in order to reveal interest group influence on policy making. In many respects, this is valuable because numerous studies with nearly identical survey questions exist and are now amenable to inferential network analysis, a more recent methodological development (e. g., Leifeld and Schneider 2012; Ingold and Leifeld 2016). On the other hand, the inferences one can generate based on such an approach are limited because only a specific aspect of policy making is captured.

A parallel development in the United States in the 1990s and 2000s was concerned with the structure of policy subsystems and the role of policy beliefs and ideas for their structure. This implies that actors' policy beliefs and verbal interactions matter for a collective understanding of a complex policy problem, an idea that is akin to the notion of political discourse. Yet, more recently, these approaches were influenced by a more collaboration- and collective-action-centered perspective and lost much of their original focus on policy beliefs. In short, the literature on policy networks and the literature on belief systems and advocacy coalitions have been increasingly merged, and the study of advocacy coalitions is now often perceived as interchangeable with the study of policy networks.

This book is an attempt to overcome the methodological limitations of policy network analysis and operationalize the relational elements hidden in political debates. As it turns out, policy debates are complex and dynamic systems that need to be analyzed with scientific scrutiny. The time has come for a more rigorous approach to studying political discourse than the hermeneutic approaches that have been prevalent in the last decades. Only quantitative, relational methods, coupled with a (possibly qualitative) bridge from text to data, will permit a systematic study of policy debates.

After receiving my master's degree in Politics and Public Administration at the University of Konstanz in 2007, I had some experience with policy networks and related approaches. Before I started my doctoral studies at the Max Planck Institute, I co-edited a volume on policy networks (Schneider et al. 2009). For one of the chapters, Volker Schneider at the University of Konstanz advised me to look into ways that network analysis could be combined with the notion of *discourse*. This was a very vague idea that needed to be developed into something that other people could actually use in their own research. For the time being, I contributed ideas to a joint review chapter of existing work with my co-editors (Janning et al. 2009).

In the same year, I joined the PhD program of the Max Planck International Research Network on Aging (MaxNetAging) at the Max Planck Institute for Demographic Research and the Max Planck Institute for Research on Collective Goods. I soon developed an interest in the politics of demographic change and old-age provision, a topic that was both compatible with my newly developing interest in aging research and demography, and my background in the study of politics and policy networks. After talking to a variety of experts on demography and politics, I realized that organized interests were playing important roles in the politics of demography and old-age security, and that one of their main strategies was the deliberate use of the media and other venues to frame the pension debate in ways that supported their material interests. At the time, demographers thought senior citizens' interest groups and peak associations were some of the most influential players in the politics of demographic change. At some point, however, I realized that demographic change was only a phenomenon that caused the debate, but the debate was actually about the future design of a sustainable pension system, one of the subsystems most severely affected by demographic change. It turned out that other types of interest groups like financial market actors and employers' associations were apparently playing a more important role than senior citizens' interest groups in the important reforms of the last decades.

The problem was that existing methods like the survey-based policy network approach or approaches related to policy beliefs were not sufficient to fully capture the dynamics of the debate. I turned to my previous work on discourse networks and started working on a more comprehensive methodological approach. What I wanted was a methodology that would tell me what competing advocacy coalitions or discourse coalitions looked like at any point in time, how they changed over time, and how some actors left their coalitions and joined the political opponent. Later, I also became interested in the behavioral mechanisms that were driving these changes at the micro-level of a debate. Therefore I started combining my existing knowledge on network analysis, policy networks, political discourse, policy beliefs, and programming in order to come up with such a methodology and apply it to German pension politics in order to explain the policy changes that came about in recent years. The results of these developments, which are also the results of my PhD work, are presented in this book.

On the way from the initial idea to the product presented in this book, I received valuable input from a number of people and organizations.

Volker Schneider, Professor of Empirical Theory of the State at the University of Konstanz, triggered my original interest in the role of ideas and policy beliefs in policy networks. He also became my doctoral advisor.

Christoph Engel and Martin Hellwig, the Directors of the Max Planck Institute for Research on Collective Goods in Bonn, realized my potential when they chose to hire me as a PhD student over candidates from economics and other disciplines to which the Max Planck Institute usually provides a home. Christoph Engel became my doctoral co-advisor. I am greatly indebted to him for this exciting and sometimes challenging opportunity to grow up in a truly interdisciplinary environment.

Christoph Knill, then professor in Konstanz and now Professor of Political Science at the University of Munich, served on my committee as the third reviewer.

Without the support of staff and colleagues in the MaxNetAging program, as well as generous funding of my research through MaxNetAging, this research would have taken a different, possibly less ambitious direction. In the context of MaxNetAging, I appreciate the extensive discussions on my topic and the connections and institutional resources I was able to use.

A bottleneck of any discourse network analysis is the manual coding effort required to annotate thousands of political statements. My student assistant Frank Kaiser supported me with this challenging task and provided excellent research assistance to this project.

Research findings can only be important if there is a demand for them. I wish to thank the numerous people who have used my methods and companion software DISCOURSE NETWORK ANALYZER in their own research and who have provided feedback and reported bugs, especially Dana R. Fisher (University of Maryland, College Park), Jeffrey P. Broadbent (University of Minnesota), and other members of the Comparing Climate Change Policy Networks (COMPON) project, where discourse network analysis could be employed in a comparative setting.

The dissertation won two prestigious prizes in 2013. I am deeply grateful for this unexpected honor: In April, I received the Südwestmetall Award, which was sponsored by Südwestmetall, the Employers' Association of the Metal and Electrical Industry in Baden-Württemberg and one of Germany's largest employer federations. The award is presented annually for academic theses of particular importance to the industrial workplace and/or its social–political conditions. In December, I received the Dissertation Award of the Foundation Science and Society at the University of Konstanz ("Stiftung Wissenschaft und Gesellschaft an der Universität Konstanz"), which is a prize for the best dissertation defended at the University of Konstanz in the previous academic year.

Frank Nullmeier, Professor at the Center for Social Policy Research (Zentrum für Sozialpolitik) at the University of Bremen, encouraged me to publish this monograph after inviting me to Bremen to give a talk about the German pension debate. I appreciate his support and the opportunity to publish this work in the Series "Studies in Social Policy Research."

The Research Network of the Statutory Pension Scheme ("Forschungsnetzwerk Alterssicherung – FNA") provided generous funding for the publication of this monograph and gave me the opportunity to use their outreach and dissemination channels to make my work accessible to a broader public. The contribution of FNA helped me to cover parts of the costs associated with the publication.

Finally, in every PhD project, there are ups and downs. I particularly wish to thank my wife Miriam and my parents for their invaluable support during this time.

Konstanz, February 2016 Philip Leifeld

I. The Theory and Methodology of Discourse Networks

1. Introduction

There are many explanations for political outcomes like reforms or status-quo orientation in a policy sector. A subset of these public policy theories is based on ideas, interests, and language. The phenomenon leading to political outcomes in this ideational branch of literature is often called "political discourse". Other names with slightly different connotations are "policy debates", "policy deliberation" and "policy learning". Hereafter, all of these names shall be used interchangeably.

A critical element in many approaches to political discourse is endogeneity. Preferences of political actors, such as interest groups or politicians, are not exogenously given. They rather "emerge" as a result of communication processes and are as such endogenous. Endogenous preferences are in stark contrast to many economic models of preference aggregation or political action, which assume that actors base their strategies rationally on their predefined preferences.

In this book, I present an empirical model of political discourse that does not make any prior assumptions about endogeneity or exogeneity of policy preferences. It rather serves as a measurement device for assessing what a specific discourse looks like. From this starting point, theoretical and empirical explorations into the mechanisms behind the observable macro phenomenon are possible.

The approach I have developed is called "discourse network analysis". It is based on the premise that discourse is a relational phenomenon, which means that actors mutually influence each other (in the endogenous conception of discourse) or at least show certain degrees of similarity or dissimilarity regarding their preferences (in the exogenous version of the phenomenon under scrutiny). A straightforward methodological toolbox for the analysis of discursive structures is therefore social network analysis (Wasserman and Faust 1994).

The book is structured as follows. There are three parts, each associated with a specific goal in mind. The first part deals with the empirical operationalization of existing public policy theories. Chapter 2 gives an overview of all relevant public policy *theories* that are both relational and concerned with ideas or interests. Chapter 3 presents an array of *methodological* approaches to the relational measurement of ideas or interests. I argue that there is a void between the theoretical approaches, which focus mostly on actors and their behavior, and the methods, which mostly deal with the contents of a discourse and neglect actors. The conclusion from the literature review (Chapter 4) therefore synthesizes existing approaches and proposes a canon of requirements for an improved methodology that can operationalize relational and ideational public policy theories.

Chapter 5 proposes such a new methodology for the analysis of political discourse. For any policy debate, a set of six different network representations can be computed: affiliation networks, actor congruence networks, conflict networks, concept congruence networks, time window networks, and attenuation networks. All methods are discussed in detail, and a software implementation in a program called DISCOURSE NETWORK ANALYZER (DNA) is briefly introduced. Some of the core findings of this chapter have been published in Leifeld (2016).

The second part of this book contains a showcase for the methodology elaborated in the first part. German pension politics constitute an ideal case study. It has been subject to a vast amount of hermeneutic public policy analysis. The 2001 Riester reform departs significantly from previous policy trajectories. The political science literature contains many ideational explanations for this "paradigm shift", the explanatory power of which can be assessed by conducting a discourse network analysis.

Chapter 6 introduces the case of pension politics in Germany. It first discusses several theoretical dimensions of pension systems and then classifies the pre- and post-Riester pension system on these dimensions. By drawing on theories of demographic change, the complexity and uncertainty that political actors face is illustrated. These uncertainties constitute the actual significance of ideational explanations. The final section of this chapter draws on the political science literature regarding the pension system and particularly the Riester reform. Several propositions about the development of the discourse and the actor structure over time are distilled in order to formulate them in an empirically testable way by means of discourse network analysis.

Chapter 7 discusses the data source, the coding process and potential validity issues with the news media data used for the analysis. Moreover, the categories used for the content analysis are explained in great detail, and summary statistics are given for each category.

Chapter 8 proceeds with the analysis of German pension politics between 1993 and 2001. After summarizing some general trends over time, a cross-sectional analysis of the cleavage lines in the discourse is conducted. The discourse is clustered both at the actor level and at the level of the contents of the discourse, eventually combining both perspectives. There is evidence for the existence of two specific cleavage lines ("public pay-as-you-go system" versus "private pension system", and "labor" versus "capital"), while other cleavage lines like "old" versus "young" are not visible in the data. Moreover, three distinct ideologies can be identified, which correspond to specific actor groups at the individual level. Finally and most importantly, the pension discourse is analyzed in a dynamic way. There is clear evidence for the existence of a closed policy community in the mid-1990s, which is eventually "cracked up" and replaced by a new advocacy coalition centering around actors from the financial sector around the year 2000. Discourse network analysis and the software implementation are able to provide qualified answers to the questions posed by the theoretical or purely hermeneutic approaches presented in the previous chapter. Parts of this chapter have been published in Leifeld (2013).

The advantage of the methodology presented in the first part of the book is its openness for several paradigmatic conceptions of preferences (endogenous versus exogenous). At the same time, this generality implies a potential disadvantage: while the aggregate structure of a discourse can be reliably measured and analyzed, the data-generating process largely remains a black box. The third part of the book therefore tries to abstract from the specific case study and infer general properties of political discourses. The overarching goal is to develop theoretical models that accurately reflect the aggregate structure of the discourse as it could be observed empirically in the previous part. Macro-outcomes can be explained by describing micro- and meso-level mechanisms, and micro mechanisms are in turn embedded in a macro structure (Bunge 1996: 264 ff.). Following this spirit, the micro- and meso-level mechanisms behind political discourse are modeled in a bottom-up fashion such that a macro structure emerges that is indistinguishable from the macro structure found in the empirical case study.

Chapter 9 employs the attenuation algorithm, one of the methods developed at the beginning of the book, as a measure of ideational contagion in the pension discourse. By controlling for preferences and institutional actor roles, and after matching the dataset with the policy network dataset of Pappi et al. (1995), ideational contagion can be modeled as a function of interest group influence and regular information exchange between actors. An exponential random graph model with dyadic dependence is employed to study who reacts to whom in the pension discourse. Endogenous belief adoption is present, even when controlling for various other effects, and the channels over which mutual reinforcement occurs between actors are identified.

Chapter 10 abstracts almost completely from the pension case study. A formal model of political discourse with exogenous preferences and endogenous belief adoption is presented, and new metrics for the analysis of the model over time are introduced. The implications of the agent-based model are simulated over 10,000 rounds. A comparison between the macro structure of the simulated discourse and the empirical discourse presented in the preceding chapters allows for a validity check. While any single mechanism in the utility function of an agent yields unrealistic results, only a combination of exogenous preferences and endogenous belief adoption provide a sufficiently good match between the theory and the empirical data. This finding suggests that the recurring controversies between proponents of rational-choice theory and proponents of constructivist explanations are largely unwarranted because both elements are necessary to explain the structure of political discourses. A revised version of this chapter has been published in Leifeld (2014).

Finally, Chapter 11 provides a summary of the most important findings in this book and discusses some promising avenues for future research.

2. Actor-centered approaches to discourse

The study of political processes incorporates many different theoretical and methodological approaches, some of which focus on institutions while others focus on actors. Actors change institutions, and institutions in turn determine what actors are in a position to change institutions and how. This results in a constant interplay between both. Comparing the relative strength of institutional explanations vis-à-vis actor-centered explanations does not lead very far because the circularity of causality between actors and institutions implies an infinite regress. Yet there are some junctures on this circuit where exogenous elements can enter the political roundabout.

One such possible juncture is political discourse, which may lead to actor configurations favoring a certain institution. Even without institutional change, a discourse can change over time and modify existing alignments of actors ("discursive institutionalism", see Schmidt 2010). *Why does this happen?*

One possibility is new information in the public discourse. Suppose a discourse is a system of political actors exchanging information about an issue. Then this information may have various origins (cf. Table 2.1): there can be internal or external events, which are both equivalent to "external perturbations" in the language of the Advocacy Coalition Framework (Sabatier and Weible 2007). Internal events are things that happen inside the realm of a system of actors. They are often based on scientific findings (e. g., the development of fertility, mortality, migration and the employment rate), or they are acknowledged more directly (e. g., terrorist attacks, school massacres, natural disasters, etc.). External events are those that happen in other countries or on a global scale, like global warming or epidemics. Another distinction can be made between exogenous and endogenous information. Events are called exogenous if they exist independently of the actors who refer to them. In contrast, endogenously created information convey meaning and are inter-subjectively disputable. If this type of information generation occurs within a system of actors, this is often called "framing" (Goffman 1974).

	internal source	external source
exogenous origin	A internal events	B external events
endogenously created	C framing	D policy diffusion

Table 2.1.: Different kinds of information in the political process

Pieces of information do not simply exist, they are rather combined in ways that are favorable for an actor coalition. The exogenous piece of information that the fertility rate is low, for instance, can be endogenized by stating that the low fertility rate will lead to a collapse of the pay-as-you-go pension system. This type of information generation is the most difficult one to analyze scientifically. If endogenously created information is imported from another actor system and if this leads to institutional change, this is known as policy diffusion. Holzinger et al. (2007), Meseguer (2006a,b), Mooney (2001) and Simmons and Elkins (2004) provide insights on how ideas about policy design spread from country to country. Brooks (2005) has examined international policy diffusion in the case of pension privatization reforms.

In the previous paragraphs, I have characterized political discourse as a system of actors who exchange ideas, and I have hypothesized that new information can be a sufficient condition for institutional change via changing actor configurations. *But how does this change come about?*

In the public policy literature, there are in fact two complementary views when it comes to the preferences of actors. One view treats actors as rational and non-cooperative. They engage in a fight over the primacy of their information. An actor throws a piece of information into the discussion if she or he thinks that this piece of information maximizes their utility. The utility is highest if the information both matches the ideological convictions of the actor and serves to reach a better position in structural terms, possibly by being better integrated in an advocacy coalition or by convincing other actors and making them adopt the information. The other view treats actors as constructivist and cooperative: they learn information from other actors and exogenous sources and collectively make sense of complex technical issues by collaborating.

The former approach converges in two or more stable opponent coalitions with institutional changes occurring after changes in the size, orientation or composition of coalitions. Examples are the Advocacy Coalition Framework

(ACF) or Punctuated Equilibrium Theory. The constructivist or cooperative approach, in contrast, predicts informational convergence of actors and eventually institutional change if the collective understanding of the problem to be tackled does not match the existing institutions anymore. Examples of this approach are the Civic Arena approach or Collective Symbolic Coping. All of these approaches will be sketched in the next sections.

2.1. The Advocacy Coalition Framework

The Advocacy Coalition Framework (Sabatier 1987, 1988, 1993, 1998; Sabatier and Jenkins-Smith 1993; Sabatier and Weible 2007), in short ACF, posits that actor coalitions with competing ideological belief systems engage in within- and between-coalition policy learning processes and that major policy change takes place either if institutions are changed externally or if new information enters the policy subsystem.

The original framework (Sabatier 1987, 1988) starts out with the idea that policy-making should be analyzed at the level of policy subsystems. These are defined as "a set of actors who are involved in dealing with a policy problem such as air-pollution control, mental health, or energy" (Sabatier 1987: 659). This view has subsequently been shared by other approaches to public policy like policy network analysis (for example, Schneider 1988). In fact, Sabatier (1987: 659) contemplates that "it is often useful to begin with a networking approach to identify the actors involved at any particular point in time." This corresponds to the "realist" (in particular "reputational") method of network boundary specification (Laumann et al. 1983). Subsystems also incorporate "potential (latent) actors who would become active if they had the appropriate information", particularly "journalists, analysts, researchers, and others who play important roles in policy formulation and implementation" (Sabatier 1987: 659).

Within a subsystem, actors should be aggregated into "ideologically based coalitions" instead of aggregating them by institutional affiliation or position. In a long-term perspective, these ideological coalitions are rather stable (that is, over a decade or more) although their use of information is subject to fluctuations. The latter is true because the information set about a contentious issue is frequently updated in the political process. Each coalition "can seldom develop a majority position through the raw exercise of power. Instead, they must seek to convince other actors of the soundness of their position concerning the nature of the problem and the consequences of one or more public policy alternatives" (Sabatier 1987: 676). In addition to the use of policy analysis in an advocacy fashion to convince members of the other coalitions, learning also takes place within coalitions: "Members of an advocacy coalition are always seeking to improve their understanding of variable states and causal relationships which are consistent with their policy core" (Sabatier 1987: 678). Summing up, there are usually between two and four (in later versions of the ACF five) advocacy coalitions, which are tied together by ideology. They learn new information about the problem and appropriate policies within coalitions. Nevertheless, coalitions are rather stable because the ideological core is not affected. Coalitions engage in analytical debates to convince each other. Voters are not directly considered by the model.

Ideologies of actors can be decomposed into three types of beliefs, altogether shaping the "belief system" of an actor. *Deep core beliefs* are deeply rooted in the personality and cannot be changed by introducing new information. *Near (policy) core beliefs* are more concrete and relate to "fundamental policy positions" (Sabatier 1987: 667). *Secondary aspects* are directly related to the problem being debated, for example the usefulness of certain instruments or their desired level. In later revisions of the Advocacy Coalition Framework, Sabatier and Jenkins-Smith (1993: 220) differentiate the policy core beliefs into two separate categories, "fundamental normative precepts" and "precepts with a substantial empirical component", later on called "policy core beliefs" and "policy core policy preferences" (Sabatier 1998; Sabatier and Weible 2007). Abstracting from these different labels, the basic idea behind the various types of beliefs is that they are ranked according to their degrees of internalization, adjustability and issue specificity. Beliefs at one end of the continuum are deeply rooted, abstract and cannot be changed by introducing new information, whereas beliefs at the other end of the continuum are superficial, easily adaptable and very specific to a certain issue. According to Sabatier and Weible (2007: 195), "policy core policy preferences might be the stickiest glue that binds coalitions together."

What is the role of state actors in the Advocacy Coalition Framework? Governmental actors or administrative agencies may belong into either of the coalitions. There is no constraint in the model that all state actors must belong to the same coalition. However, there is a revision in the 1993 version of the ACF stating that "within a coalition, administrative agencies will usually advocate more centrist positions than their interest-group allies" (Sabatier and Jenkins-Smith 1993: 213). This is a general tendency of state actors to promote governmental coherence and is in line with pressure pluralism, according to which the state tries not to be captured, by playing off one coalition against the other (Atkinson and Coleman 1989; van Waarden 1992). It is also in line with the European model of corporatism (Schmitter 1974) because it "encourages an administrative agency to arrange compromises among its constituency groups" (Sabatier and Jenkins-Smith 1993: 215). Furthermore, according to the ACF, there is a category of actors called "policy brokers", who act as "facilitators" and are "respected by all parties and viewed as relatively neutral" (Sabatier 1998: 119). Policy brokers are presumably often state actors because of their relative neutrality ascribed to them by the 1993 version of the ACF.

Sabatier stresses that actors actively search for new knowledge and try to improve their understanding of a complex problem. In other words, learning is instrumental (Sabatier 1988: 133). On the other hand, knowledge acquisition is guided by the peers in the same coalition and—although only at the level of secondary beliefs—by constant attempts of the other coalition to shape an actor's perceptions (Sabatier 1988: 119). Most importantly, however, the Advocacy Coalition Framework emphasizes conflict between competing coalitions and stability of this bi- or multipolar actor configuration over decades (cf. hypothesis 5 of the ACF). This matches the observation in the previous section that there must be new information to alter the configurations of actors—otherwise policy stability will prevail. In this perspective, exogenous information ("external perturbations" in the language of the ACF) is better equipped to change actors' beliefs and their overall alignment and hence induce policy change than endogenously shaped information (cf. Table 2.1), which is part of the everyday fight over the adequacy of belief systems:

> "The basic argument of the ACF is that, while policy-oriented learning is an important aspect of policy change and can often alter the secondary aspects of a coalition's belief system, changes in the *policy core* aspects of a governmental program require a perturbation in non-cognitive factors external to the subsystem." (Sabatier 1998: 105)

The ACF incorporates elements both from constructivism and rational choice theory: on the one hand, actors learn actively, and common beliefs tie the members of a coalition together. On the other hand, real public policies are structured like belief systems (Sabatier 1988: 131 f.), and actors strive to (re)design public policies according to their own belief system. In rational-choice terms, they try to maximize the match between their preferences and actual public policy by revising the latter via engaging in a debate game. This game consists of signaling their preferences and delivering evidence for the truthfulness of their claims (the "enlightenment function" of policy analysis, Sabatier and Jenkins-Smith 1993: 4). The precise mechanisms of this game are underspecified in the ACF. Sabatier (1987: 676) argues that the signals are instrumental for "convincing" other actors regarding their secondary beliefs. However, there may be other mechanisms at work, e.g., delivering arguments to the mass public in order to increase the legitimacy of their proposed policies by convincing voters. This would result in a race between coalitions for the highest public legitimacy. In spite of this potential underdetermination, the effect remains the same: advocacy coalitions are stable, and major policy change only occurs after external perturbations.

Another objection to the ACF is made by a collective action scholar: Schlager (1995) suggests that the ACF does not take into account collective action behavior within coalitions. Under this premise, it becomes necessary to identify the policy winners and their stakes. While Sabatier stresses the congruence of the coordination network relation with belief similarity in the network, Schlager (1995) hypothesizes that there may be free-riders within advocacy coalitions. They profit from an envisaged policy change but do not actively pursue common strategies. Sabatier (1998: 116) counters this argument by clarifying that within-coalition coordination is a repeated public goods game with known payoffs, an unknown and potentially infinite time horizon and low information costs. Hence, high levels of cooperation can be expected due to the "shadow of the future" (Axelrod and Hamilton 1981). The ACF scholars support this point by offering empirical evidence for the congruence between belief similarity and cooperation ties (Weible 2005; Zafonte and Sabatier 1998). For contradictory evidence, see Leifeld and Schneider (2012), Fischer and Sciarini (2016), Gerber et al. (2013), König and Bräuninger (1998), and Schneider and Leifeld (2009).

Braun interprets Schlager's criticism in the context of the general debate on the explanatory power of ideas versus interests: "The consequence [of the ACF] is a radical reorientation of policy analysis from interests to belief systems" (Braun 1999: 18). According to Schlager's criticism, he continues, "belief systems and interests co-exist and beliefs are only one factor—but not the most important one—which can contribute to cooperative behaviour in collective action." Following this interpretation, Narath (1999) concludes that the ACF and Schlager's collective action approach are based on two different ontological views of actors, therefore Schlager's suggestions cannot be incorporated into Sabatier's model without altering the very essence of it: "For Edella Schlager", Narath (1999: 55 f.) states, "co-ordinate collective action (and not belief systems) is the 'glue' of the coalitions. [. . .] Such a presupposition is inconsistent with the central features of the belief system concept that presupposes the existence of different socialisation processes producing various belief system structures which should explain the emergence of enduring coalitions within a policy subsystem." This matches my above interpretation of the ACF that actor configurations are an intermediate variable in explaining institutional change. There is a pre-coalition effect which is basically constructivist (in the sense of Checkel 2000): actors attach to other actors because of similar ideas. And there is a post-coalition effect resting on rational-choice assumptions: once coalitions have been established, they fight over the primacy of ideas in order to promote the adoption of their desired policy. This also explains why possible types of coordinated behavior in the ACF are not qualified any further. What kinds of cooperative network relations the members of a coalition maintain is not important for explaining policy change in this model.

The strength of the Advocacy Coalition Framework is that it explains both policy change and policy stability. Policy change may occur via two mechanisms:

- There are new external events or information. Actors learn this information, leave their coalition, and attach to another coalition. This new configuration of coalitions and brokers leads to new power majorities, which can then assert their preferred policy. A fictitious example from pension politics could be that actors learn about the increasing old-age dependency ratio, see the need for a new pension system, and join the advocacy coalition that promotes a capital cover pension system. The latter coalition grows bigger and includes the important decision-makers who can finally assert their pro-privatization reform.
- External perturbations exert a direct influence on the institutions that guide advocacy coalition behavior. The change in institutions leads to new power configurations, and the new majority can assert its preferred policy. A fictitious example could be the following: an aging population of voters changes the composition of the parliamentary chambers. At the same time, population aging promotes the rise of senior citizens' interest groups. These institutional changes promote the prevalence of a pay-as-you-go-oriented advocacy coalition including the important legislative actors as well as sufficient public support for a law that increases the level of pensions.

In both cases, societal actors are at the core of the coalitions while the important decision-makers are pivotal. This is why actor coalitions are roughly stable over many years although, at the same time, policy change can be induced by the fluctuations of some pivotal actors. By employing the same arguments, the ACF can also explain policy stability:

- New external information occurs, but it only touches the secondary beliefs of the actors. The secondary beliefs are changed, but the policy core policy preferences remain stable. A fictitious example could be that a demographic research institute publishes a report about declining fertility despite recent family policy initiatives. The actors frame this piece of information by saying that the family policy measures were not inappropriate, but that increasing economic pressure due to a decreasing employment rate may have altered the priorities of potential parents. Hence they stick to the current policy and additionally demand changes in the labor market.

Considering these hypothesized causal chains as well as their examples, it becomes obvious that the strength of explaining both stability and change is at the same time a limitation of the ACF: if new information is available, it is hardly possible to predict whether it will alter the actors' policy core beliefs, their policy core policy preferences, only their secondary beliefs, or if it is completely rejected. This is particularly difficult because the empirical measurement of belief systems is hard to accomplish. It is also difficult to predict which kind of information reaches which actor, and to which extent this information is actually perceived.

If empirical advocacy coalitions are to be measured, such an analysis must therefore remain rather basic in its aspirations. An advisable strategy could be to measure the coalitions only at the level of policy core policy preferences, which are presumably "the stickiest glue that binds coalitions together" (Sabatier and Weible 2007: 195). This is precisely the measurement strategy pursued in the second part of this book. Policy core policy preferences are not only the most relevant level of beliefs, they are also comparably easy to measure because political actors are forced to reveal these preferences to the public and to their opponents during the between-coalition debates. This circumstance will be exploited in the remainder of this book. Deep core beliefs as well as policy core beliefs are less easy to measure because they are not as often revealed and because it is not clear which of them are relevant for the specific subsystem. Secondary aspects, on the other hand, are subject to fluctuations. They can substantially vary even within coalitions and especially over time (but see Jenkins-Smith et al. 1991, Jenkins-Smith and St. Clair 1993 and especially Henry et al. 2011 for attempts at measuring complete belief systems).

It should also be rather promising to measure the structure of advocacy coalitions instead of directly measuring the mechanisms leading to these actor configurations. First, the mechanisms can be ambiguous because the researcher is not able to observe what kind of learning is really taking place inside the mind of the actors. Second, asking representatives of political organizations about their learning processes in a retrospective design over several years would probably lead to serious distortions, not to mention the low response rate and other validity and reliability issues. Third, testing learning effects in advocacy coalitions is hard to do in an experimental laboratory because of the infinite time horizon, the large number of actors, the unknown generalizability of the external information (as the treatment variable), and because the variety of possible combinations of deep core and policy core beliefs of the participants would lead to very specific constraints on the generalizability of the findings. If one accepts that for now it is only possible to measure advocacy coalitions at the configurational level instead of pinpointing the mechanisms leading to these configurations empirically, speculating about the possible external information leading to the configurations remains the only viable research strategy at the pre-configurational level.

The post-configurational effect is easier to observe. If one can measure the policy core policy preferences of the actors and also the reforms adopted, it is straightforward to relate the former to the latter. In a longitudinal perspective, it is desirable to measure preferences in discrete time periods or even better continuously. If this can be achieved, a major piece of the puzzle has been found because the self-reinforcing behavior of the coalitions can be observed. Once this stability of the coalitions ceases to exist, policy change becomes very likely.

An application of the Advocacy Coalition Framework to an empirical case should thus feature three elements:

1. a description of the advocacy coalitions and the beliefs of their members over time,
2. a set of reforms and their description in terms of content, timing and participating actors, and
3. anecdotal “evidence” of the information or external events that may have caused observed changes in the structure of advocacy coalitions.

The combination of the first two elements may answer the question what kinds of changes in the advocacy coalitions caused policy change. This is a contribution to the very central question of policy analysis: the identification of determinants of policy outcomes. The first element combined with the third one serves to go back along the causal chain and give preliminary evidence on why the antecedent (the observed changes in the structure of coalitions) occurred in the first place.

2.2. Veto player analysis

The measurement of advocacy coalitions nicely integrates with veto player analysis (Tsebelis 1995, 1999, 2000, 2002). The approach builds on the concept of institutional "veto points", which was first developed by Immergut (1990). Veto player analysis is an institutionalist rather than an ideational approach, but veto players are important in the agenda-setting and decision-making stages of the policy cycle. Once a complex policy problem has been identified and preferences have been established, the institutional arena is decisive for the success or failure of a policy proposal.

A veto player is "an individual or collective actor whose agreement (by majority rule for collective actors) is required for a change in policy" (Tsebelis 1995: 301). Examples are parliamentary chambers or constitutional courts. There are usually between one and five veto players in a political system. In polities governed by a coalitions of parties, each party is a separate veto player (with some exceptions where parties are "absorbed" by other actors). These are called "partisan veto players", in contrast to "institutional veto players" (Tsebelis 1995: 302). Veto player theory suggests that the number of veto players in a polity is positively correlated with policy gridlock, or negatively correlated with its productivity in terms of law production (Tsebelis 1999). Veto players are actually an institutionalist approach, but they are disguised as being actor-oriented: Tsebelis frequently talks about the preferences of actors, but he restricts his analysis to institutional actors like the parliament, the ruling party, constitutional courts and other institutions that can veto policy proposals. The foundations of veto player analysis can be found in social choice theory and spatial voting theory (Tsebelis 1995: 296). Veto players can be employed as a theory if political systems are compared, or as a method if a particular policy process is analyzed regarding its veto player configuration.

Tsebelis' basic "idea was to start from the final policy outcome of any political game. [. . .] Every new policy outcome is a departure from a previous policy outcome or [...] from a status quo. For the status quo to change, a certain number of individual or collective decisionmakers have to agree to this change" (Tsebelis 2000: 441). Methodologically speaking, the status quo as well as the veto players' positions must be located in an n-dimensional space, where n refers to the number of issues to be decided upon in the upcoming reform. A typical case is a reform where two issues make up a two-dimensional plane. Indifference curves can be drawn around each player's ideal point. The radius of the indifference curves equals the Euclidean distance between the player and the status quo position. The intersection of all veto players' curves is the "win set of the status quo" and can be defined as "the set of points that are preferred over the status quo by the veto players" (Tsebelis 1999: 594).

Veto player analysis thus allows to predict how the interplay between already established positions leads to policy change or gridlock under certain decision rules. This is precisely where it can aid the ACF, which mainly deals with the formation of those preferences. The ACF falls short of explicating the mechanisms of policy change once coalitions have been altered and the pivotal actors have adopted new positions in the actor space. Veto player analysis can be used to analyze how the coalition-switching behavior of pivotal governmental actors affects the probability of policy change. The actor-centered ACF and the institutionalist veto player approach are thus complementary because they explain different but consecutive stages of the policy process. In other words: it becomes possible to determine whether a given change in the structure of advocacy coalitions is a sufficient condition for policy change or not.

2.3. Punctuated Equilibrium Theory

As should have become clear in the preceding sections, two fundamentally different levels of analysis exist in the study of ideas in public policy making. One level of analysis deals with the formation of ideas or preferences in a boundedly-rational or in a constructivist way while the other level treats preferences as exogenous and analyzes their impact on policy change. Punctuated Equilibrium Theory (Baumgartner and Jones 1991, 2009; Jones and Baumgartner 2005; True et al. 2007) tries to combine both levels and focuses on information processing by political actors as an explanation of both preference formation and policy change or stability. Like in the Advocacy Coalition Framework, political discourse is a central element in the causal chain: "As issues are defined in public discourse in different ways, and as issues rise and fall in the public agenda, existing policies can be either reinforced or questioned" (True et al. 2007: 156).

Baumgartner and Jones start with the observation that policy change is not normally-distributed across time, as incrementalist models of policy change would predict. Instead, there are long phases of policy stability with few rapid and substantial changes. This phenomenon is what they call a punctuated equilibrium, an analogy drawn from evolutionary biology (True et al. 2007: 180). When measuring budget changes over time, the distribution of first-order differences is consequently leptokurtic rather than normal (Jones and Baumgartner 2005: 329). An explanation of these punctuations is attempted at the cognitive, intra-individual level and then generalized to the inter-organizational level.

At the cognitive level, Jones and Baumgartner assume that decision-makers process information in a boundedly rational way when considering which issues in the discourse to focus on. They name attention-driven choice as the decision-making model underlying issue selection (Jones and Baumgartner 2005: 329). Political actors obtain cues about the states of the world from the political discourse, and they have to select from this rich set of information. A decision-maker in a choice situation "would examine an index comprising a weighted combination of indicators and update his or her beliefs based on this index. The decision would be a direct consequence of this updating" (Jones and Baumgartner 2005: 331). In the attention-driven model, one cue is always weighted substantially higher than the others because actors "'lock on' to one indicator, which serves as a heuristic for future decision making" (Jones and Baumgartner 2005: 334). Since cues are themselves rarely normally-distributed, this is claimed to produce the leptokurtic empirical distribution of deviations from previous policies.

This attention-driven model of information processing is assumed to be at work in each organization involved in a policy subsystem.[1] Actors are confronted with cues and select some of them while rejecting others, thus constructing a collective "image"[2] of the policy as it is and should be. The policy image usually prevails over decades until it is contested. Contestation occurs when policy losers or outsiders come up with new interpretations and are able to convince other actors of their policy image. Policy losers or outsiders not only challenge existing *policy images*; they also try to alter the *institutional venues* where decisions on the issue are made and where agenda setting regarding the policy at issue occurs. They can, for example, discuss previously undisclosed topics in the media and involve the mass public to gain support for their policy image, or they can try to bring in new institutional players like the parliament or the constitutional court. The two strategies, policy image shifting and venue shopping, initiate positive feedback loops (Baumgartner and Jones 1991: 1050): once a new institutional arena is involved, new actors are receptive to unconventional images; and in turn, once a collective policy image has been slightly modified, it is more likely that new institutional venues are attracted. "Where images are in flux, one may also expect changes in institutional jurisdictions. Where venues change, the terms of debate may be altered still further" (Baumgartner and Jones 1991: 1049). In addition to a mutual positive feedback loop, changes in policy images are also self-reinforcing. This is the critical-mass argument that is prominent in policy diffusion research (Simmons and Elkins 2004): the more people adopt the altered policy image (as an innovation), the more likely are other actors, particularly policy outsiders, to join the early adopters. Hence if policy change occurs, it is likely to be radical.

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[1] Note two weaknesses here: the authors do not fully specify how individual information processing maps to organizational actors as opposed to individuals (cf. Engel 2010), and they use an overly simplistic cue weighting function instead of considering more sophisticated models (e. g., Glöckner and Betsch 2008).

[2] The construction of policy images is elsewhere described as "framing" (Rein and Schön 1993: 146).

But why are actors able to challenge a policy image or an institutional venue in the first place? It is obvious that changing the policy image has a high utility for policy losers at any point in time. The authors maintain that actors constantly attempt to alter the images and venues, but they fail most of the time:

> "Policymakers need not employ a rational decision model or know in advance exactly how their ideas will be received in a particular institutional venue. Rather, they may search for favorable venues through a trial-and-error process or an evolutionary search. Those uncomfortable in the current venue or with the current image have incentives to seek out more favorable ones. They may search in a variety of arenas at once. Where they find initial success, they continue to search; where their ideas are rejected, they abandon that effort. In this way, we need not assume that strategic actors can predict in advance the single most favorable image or venue for their policies. Successful efforts to shift image and venue may often be the result of evolutionary, rather than rational, search" (Baumgartner and Jones 1991: 1048).

While image and venue change, once initiated, are self-reinforcing, failure in manipulating images and venues is explained via negative feedback loops: a "policy monopoly" is "supported by some powerful idea or image. This image is generally connected to core political values and can be communicated simply and directly to the public. [...] Because a successful policy monopoly systematically dampens pressure for change, we say that it contains a negative feedback process" (True et al. 2007: 159). The consequence of the existence of both positive and negative feedback loops eventually leads to long phases of policy stability which are occasionally punctuated by radical policy change.

Summing up, there are three types of actors (policy winners, policy losers, and outside observers) who try to convey policy images and institutional venues; policy losers try to alter images and venues in a trial-and-error process and occasionally succeed, which initiates a positive feedback mechanism. If they fail, this is due to negative feedback mechanisms going back to the policy winners who have an interest in keeping the old image and venue. Feedback mechanisms thus result in policy stability or radical change, but never in incremental change. The images actors have in mind are generated in a boundedly rational way in the first place by weighting several cues from the political discourse and preferring certain cues over others across time ("heuristics").

Like in the Advocacy Coalition Framework and veto player analysis, voters are not directly involved in the political process. The mass public may, however, be an institutional venue where actors discuss policy images. Another similarity between the ACF and Punctuated Equilibrium Theory is the focus on actor coalitions. Though not made explicit, Punctuated Equilibrium Theory rests on the assumption that two competing advocacy coalitions fight over the primacy of their ideas, just like in the Advocacy Coalition Framework. They are called policy winners and policy losers, respectively. The main difference between the ACF and Punctuated Equilibrium Theory is the belief formation mechanism: "Bounded rationality is the decisionmaking underpinning of both the punctuated-equilibrium and the advocacy coalition approaches, but the theories emphasize different aspects of the process. Punctuated equilibrium is based in serial processing of information and the consequent attention shifts, whereas the advocacy coalition approach traces policy dynamics to the belief systems of coalition participants" (True et al. 2007: 164). Despite the presence of the coalition concept in both approaches, the driver of policy change in Punctuated Equilibrium Theory is therefore agenda setting conditional on information processing heuristics, while the driver of major policy change in the ACF is policy learning conditional on external perturbations. External perturbations are also present in Punctuated Equilibrium Theory (Baumgartner and Jones 1991: 1046), but they are not decisive for policy change. They may affect the policy image some actors have, but whether they really update their image based on the information depends on their heuristics, and whether their image is eventually translated into policy depends on an evolutionary search process.

A consequence of these mechanisms is that political outcomes are largely unpredictable. Much like in chaos theory, small changes in policy images or venues may lead to dramatic, chaotic changes at the macro level, and according to the authors of Punctuated Equilibrium Theory, tracing the very causes of the small changes is at best possible in separate case studies, but never in a sufficiently general way to aid theory-building: "A complete model will not be locally predictable, since we cannot foresee the timing or the outcomes of the punctuations. What will cause the next big shift in attention, change in dimension, or new frame of reference? Immersion in a policy or issue area may lead to inferences about pressures for change, but when will the next attention shift occur in a particular policy area? [...] Punctuated-equilibrium theory predicts a form of systems-level stability, but it will not help us make point-specific predictions for particular policy issues" (True et al. 2007: 179).

What is the role of information in Punctuated Equilibrium Theory according to the typology in Table 2.1 on page 8? Exogenous information—originating both from internal and external sources—is used as cues when constructing policy images; however, actors tend particularly to focus on few cues ("indicator lock"), so the chance of an exogenous piece of information to be incorporated into actual policy-making is substantially lower than in the ACF. A much more important element of Punctuated Equilibrium Theory is framing, i. e., endogenous idea formation on the basis of either exogenous information or biases in information processing as outlined by Jones and Baumgartner (2005: 334).

2.4. Policy paradigms and social learning

Many elements of Punctuated Equilibrium Theory are prominently featured in the theory of policy paradigms devised by Hall (1993). Hall conceives policy-making as social learning. Actors "assimilate new information, including that based on past experience, and apply it to their subsequent actions. Therefore we can define social learning as a deliberate attempt to adjust the goals or techniques of policy in response to past experience and new information. Learning is indicated when policy changes as the result of such a process" (Hall 1993: 278). Hence exogenous information is endogenized, just like in the other actor-centered approaches to political discourse presented so far. This is done in the pursuit of attaining more prominent positions in policy making: "policy experts do not simply 'exert power'; they acquire power in part by trying to influence the political discourse of their day" (Hall 1993: 290). As is the case in the other approaches, political actors are therefore conceptualized as boundedly rational. They have a rational component because they use information strategically in the discourse, but at the same time they adopt the ideas of others in a constructivist way. In fact, learning is not always straightforward; it is rather an erroneous process as proposed by Heclo (1978: 275): "politics finds its sources not only in power but also in uncertainty—men collectively wondering what to do. [. . .] Governments not only 'power' [. . .] they also puzzle."

Policies consist of a set of goals, instruments and settings. Goals are the envisaged impacts a policy is designed for, e. g., securing the financial security of elderly people in the case of pension schemes. Instruments are the policies that are chosen to attain these goals. A pension scheme could be an instrument to avoid old-age poverty. Finally, settings are the concrete level of instruments, for example the amount of money transferred from employees to retirees. This trichotomy is an attempt to specify at which levels and to what degree policy change happens. Policies are organized in paradigms in a Kuhnian sense, but applied to politics instead of science. Normal policy-making occurs as long as policies are contested only at the level of settings or instruments. Actors introduce new ideas into the discourse that challenge existing settings or instruments. These are called anomalies. If the anomalies lead to policy change at the level of settings and instruments, this is called first- and second-order change, respectively, because the underlying policy goals are not affected. Anomalies accumulate slowly, and at some point it may happen that there have been so many anomalies that actors can no longer subscribe to the goals of the current policy, which results in radical policy change, or third-order change.

Quite a similar position as Hall's policy paradigms is taken by Lieberman (2003): policy change is a consequence of frictions between different orders, be they ideational or institutional. Like institutions, ideas "appear in settled, ordered configurations that serve to organize some reasonably broad aspect of political life over some span of time, whether as all-encompassing ideologies or as [. . .] 'programmatic beliefs'" (Lieberman 2003: 701). As soon as an ideational order does not "fit" with the existing institutional or ideational order, policy change becomes likely: "The essential point is to decompose