

The Advocacy Coalition Framework

An Assessment

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The initial version of the advocacy coalition framework (ACF) was developed by Sabatier over a number of years, starting with a year-long research seminar (1981–1982) at the University of Bielefeld and culminating in two very similar papers (Sabatier, 1987, 1988).¹ It emerged out of (1) a search for an alternative to the stages heuristic (Jones, 1977) that was then dominating policy studies, (2) a desire to synthesize the best features of the top-down and bottom-up approaches to policy implementation (Sabatier, 1986), and (3) a commitment to incorporate technical information into a more prominent role in our understanding of the policy process.

In the mid-1980s, Sabatier developed a collaboration with Jenkins-Smith, who had, quite independently, developed very similar conceptions of the role of scien-

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tific information in public policy (Jenkins-Smith, 1988, 1990). Jenkins-Smith and Sabatier devised a strategy of encouraging other scholars to critically evaluate relevant portions of the ACF on policy domains and data sets at their disposal. The result was two symposia involving a total of nine applications of the ACF, which, in turn, led to several amendments (Sabatier and Jenkins-Smith, 1988, 1993; Jenkins-Smith and Sabatier, 1994). Since 1993, the ACF has been applied by a number of scholars in the United States, Canada, Australia, and western Europe, largely on their own initiative.

This chapter first lays out the foundations of the original (1987–1988) version of the ACF. The bulk of the chapter explores a variety of topics on which considerable research has been conducted since the late 1980s. On some topics—most notably, the existence of advocacy coalitions—the evidence has confirmed the basic arguments of the ACF. On several others, the evidence has pointed to the need to revise and/or elaborate the framework. The final section concludes with an assessment of the strengths and limitations of the framework, as well as suggestions for future research.

THE INITIAL (1987–1988) VERSION OF THE ACF

Premises

The initial version of the advocacy coalition framework was based on five basic premises, arising largely out of the literatures on policy implementation and the role of technical information in public policy.

First, theories of the policy process or policy change need to address the role played in the process by technical information concerning the magnitude and facets of the problem, its causes, and the probable impacts of various solutions. Such information clearly plays an important role in many administrative agency decisions (Sabatier, 1978; Crandall and Lave, 1981; Mazur, 1981). Many legislators want to have some knowledge of the severity of the problem and the probable benefits and costs of the proposed statutory or budgetary solutions before they impose those costs (Kingdon, 1984; Krehbiel, 1992; Whiteman, 1995). Finally, the rise of think tanks and policy analysis units both inside and outside government suggests there is a growing market for technical analysis (Jenkins-Smith, 1990; J. A. Smith, 1991).

Second, understanding the process of policy change—and the role of technical information therein—requires a time perspective of a decade or more. This argument for an extended time period comes directly from findings concerning the importance of the “enlightenment function” of policy research. Weiss (1977) argued persuasively that a focus on short-term decisionmaking will underestimate the influence of policy analysis because such research is used primarily to alter the belief systems of policymakers over time. The literature on policy implementation also points to the need for utilizing time frames of a decade or more in or-

der to complete at least one formulation/implementation/reformulation cycle, to obtain a reasonably accurate portrait of success and failure, and to appreciate the variety of strategies actors pursue over time (Bernstein, 1955; Kirst and Jung, 1982; Mazmanian and Sabatier, 1989).

A third basic premise is that the most useful unit of analysis for understanding policy change in modern industrial societies is not any specific governmental organization or program, but a policy subsystem (or domain). A subsystem consists of those actors from a variety of public and private organizations who are actively concerned with a policy problem or issue, such as air pollution control, and who regularly seek to influence public policy in that domain. Policymaking in virtually any subsystem is of sufficient complexity—in terms of understanding the relevant laws and regulations, the magnitude of the problem and the influence of various causal factors, and the set of concerned organizations and individuals—so that actors must specialize if they are to have any influence. An additional rationale for focusing on subsystems as the unit of analysis—rather than on specific organizations or programs—is the repeated finding from bottom-up implementation studies that there is seldom a single dominant program at the local/operational level. Instead, one usually finds a multitude of programs initiated at different levels of government that local actors seek to utilize in pursuit of their own goals (Hjern, Hanf, and Porter, 1978; Hjern and Porter, 1981; Sabatier, 1986).

Fourth, within the subsystem, the ACF argues that our conception of policy subsystems should be broadened from traditional notions of iron triangles—limited to administrative agencies, legislative committees, and interest groups at a single level of government—to include two additional categories of actors: (1) journalists, researchers, and policy analysts, who play important roles in the generation, dissemination, and evaluation of policy ideas (Heclo, 1978; Jordan and Richardson, 1983; Kingdon, 1984; Hall, 1993), and (2) actors at all levels of government active in policy formulation and implementation. In many countries, policy innovations often occur first at a subnational level and are then expanded into nationwide programs (Walker, 1969; Nelson, 1984). Two decades of implementation research have conclusively demonstrated that subnational implementing officials have substantial discretion in deciding exactly how national policy gets translated into thousands of concrete decisions in very diverse local situations (Pressman and Wildavsky, 1973; Rhodes, 1988; Mazmanian and Sabatier, 1989; Scholz et al., 1991). Finally, international treaties and the European Union have increasingly provided an international dimension in many policy domains (Richardson, 1996; Sewell, 1999).

The fifth important premise is that public policies/programs incorporate implicit theories about how to achieve their objectives (Pressman and Wildavsky, 1973; Majone, 1980) and thus can be conceptualized in much the same way as belief systems. They involve value priorities, perceptions of important causal relationships, perceptions of world states (including the magnitude of the problem),

and perceptions/assumptions concerning the efficacy of various policy instruments. This ability to map beliefs and policies on the same "canvas" provides a vehicle for assessing the influence of various actors over time, particularly the role of technical information in policy change.

Structural Overview of the ACF

Figure 6.1 presents a general overview of the 1988 version of the ACF. On the left side are two sets of exogenous variables—one quite stable, the other more dynamic—that affect the constraints and opportunities of subsystem actors (Sabatier, 1988, p.132).

The former variables include the basic constitutional structure, sociocultural values, and natural resources of a political system. Being extremely difficult to change, they are seldom the subject of coalition strategies (except in the very long term). Nevertheless, they clearly affect behavior. For example, Moe (1990) argued that changing the law is typically the focus of coalition strategies in separation-of-powers systems simply because, in such systems, a law once enacted is extremely difficult to overturn. On the other hand, in Westminster-style systems, where the majority party can change any law anytime it wishes, coalitions are more likely to rely upon a variety of more informal, and longer-lasting, arrangements. Likewise, Ashford (1981) argued that policy-oriented learning is more difficult in Britain than in many other countries because of the norms of secrecy that so permeate the civil service.

The second set of factors exogenous to the subsystem are more likely to change over the course of a decade or so. The ACF argues they are a critical prerequisite to major policy change. They include (1) major socioeconomic changes, such as economic dislocations or the rise of social movements (Eisner, 1993); (2) changes in the systemic governing coalition, including "realigning" elections (Burnham, 1970; Brady, 1988); and (3) policy decisions and impacts from other subsystems (Muller, 1995). Changes in tax law, for example, often have major impacts on all sorts of policy subsystems.

Within the subsystem, the ACF assumes that actors can be aggregated into a number (usually one to four) of "advocacy coalitions," each composed of people from various governmental and private organizations that both (1) share a set of normative and causal beliefs and (2) engage in a nontrivial degree of coordinated activity over time. The ACF explicitly argues that most coalitions will include not only interest group leaders, but also agency officials, legislators from multiple levels of government, applied researchers, and perhaps even a few journalists. At any given point in time, the subsystem will usually contain a number of individuals and organizations unassociated with any coalition, but the ACF assumes that most will not be important over the long term because they will either leave (out of frustration or lack of interest) or get incorporated into one of the coalitions.

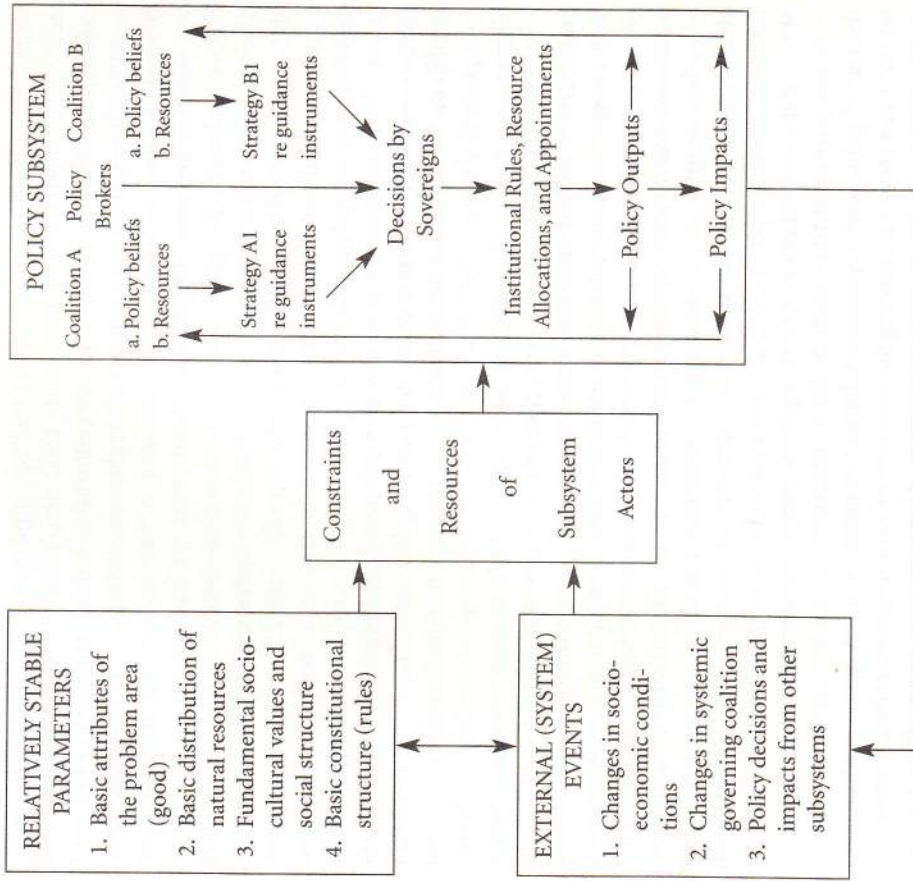


FIGURE 6.1 1988 Diagram of the Advocacy Coalition Framework

SOURCE: Sabatier (1988, p. 132).

The belief systems of each coalition are organized into a hierarchical tripartite structure, with higher/broader levels often constraining more specific beliefs (Peffley and Hurwitz, 1985). At the highest/broadest level, the *deep core* of the shared belief system includes basic ontological and normative beliefs, such as the relative valuation of individual freedom versus social equality, which operate across virtually all policy domains. The familiar left/right scale, which has proven to be a good predictor of political behavior on Congressional roll call votes (Poole and Daniels, 1985), operates at this level. At the next level are *policy core beliefs*, which represent a coalition's basic normative commitments and causal perceptions across an entire policy domain or subsystem. They include funda-

mental value priorities, such as the relative importance of economic development versus environmental protection, basic perceptions concerning the general seriousness of the problem (e.g., air pollution) and its principal causes, and strategies for realizing core values within the subsystem, such as the appropriate division of authority between governments and markets, the level of government best suited to deal with the problem, and the basic policy instruments to be used. The ACF assumes that policy core—not deep core—beliefs are the fundamental glue of coalitions because they represent basic normative and empirical commitments within the domain of specialization of policy elites.² Finally, the *secondary aspects* of a coalition's belief system comprise a large set of narrower (i.e., typically less than subsystemwide) beliefs concerning the seriousness of the problem or the relative importance of various causal factors in specific locales, policy preferences regarding desirable regulations or budgetary allocations, the design of specific institutions, and the evaluations of various actors' performance.

In general, deep core beliefs are very resistant to change—essentially akin to a religious conversion. A coalition's policy core beliefs are somewhat less rigidly held. Although several are almost exclusively normative and thus very difficult to modify, most involve empirical elements that may change over a period of time with the gradual accumulation of evidence (Weiss's "enlightenment function"). For example, whereas all environmental groups in the United States supported command-and-control regulation in the early 1970s, a few have gradually come to prefer economic incentives as a policy instrument in situations where the marginal costs of further environmental improvements are very high (Liroff, 1986). Beliefs in the secondary aspects are assumed to be more readily adjusted in light of new data, new experience, or changing strategic considerations.³

At any particular time, each coalition adopts one or more strategies involving the use of guidance instruments (changes in rules, budgets, personnel, or information) as a means of altering the behavior of various governmental authorities in an effort to realize its policy objectives. Conflicting strategies from various coalitions may be mediated by a third group of actors, here termed *policy brokers*, whose principal concern is to find some reasonable compromise that will reduce intense conflict.⁴ The end result is one or more governmental programs, which in turn produce policy outputs at the operational level (e.g., agency permit decisions). These outputs—mediated by a number of other factors—result in a variety of impacts on targeted problem parameters (e.g., ambient air quality), as well as side effects. On the basis of perceptions of the adequacy of governmental decisions and/or the resultant impacts, as well as new information arising from search processes and external dynamics, each advocacy coalition may revise its beliefs (primarily in the secondary aspects) and/or alter its strategies. Altering strategies may involve seeking major institutional revisions at the collective choice level, more minor revisions at the operational level (Kiser and Ostrom, 1982), or even going outside the subsystem by seeking changes in the dominant coalition at the systemic level.

Policy-Oriented Learning and Policy Change

Within the general process of policy change, the ACF has a particular interest in understanding policy-oriented learning. Following Heclo (1974, p. 306), the term *policy-oriented learning* refers to relatively enduring alterations of thought or behavioral intentions that result from experience and/or new information and that are concerned with the attainment or revision of policy objectives. Policy-oriented learning involves increased knowledge of problem parameters, and the factors affecting them, the internal feedback loops depicted in Figure 6.1 concerning policy effectiveness, and changing perceptions of the probable impacts of alternative policies.⁵ The framework assumes that such learning is instrumental, that is, that members of various coalitions seek to better understand the world in order to further their policy objectives. Given the perceptual filtering discussed below, coalition members will resist information suggesting that their deep core or policy core beliefs may be invalid and/or unattainable, and they will use formal policy analyses to buttress and elaborate those beliefs (or attack their opponents).

Such learning, however, is only one of the forces affecting policy change. In addition to this cognitive activity, there are two other sources. The first involves changes in the real world, particularly the realm of system dynamics depicted in Figure 6.1. Changes in relevant socioeconomic conditions and systemwide governing coalitions—such as the 1973 Arab oil boycott or the 1974 election of the Thatcher wing of the British Conservative Party—can dramatically alter the composition and the resources of various coalitions and, in turn, public policy within the subsystem (Hoppe and Peterse, 1993; Hall, 1993; Richardson, 1994). Turnover in personnel—sometimes resulting from external conditions, sometimes merely from death or retirement—constitutes a second noncognitive source of change that can substantially alter the political resources of various coalitions and thus policy decisions. The basic argument of the ACF is that, although policy-oriented learning often alters secondary aspects of a coalition's belief system, changes in the policy core aspects of a governmental program require a perturbation in noncognitive factors external to the subsystem.

Hypotheses

Figure 6.2 lists the original set of hypotheses drawn from the ACF regarding advocacy coalitions, policy change, and policy learning (Sabatier, 1988).

The three hypotheses concerning coalitions are based on the premise that the principal glue holding a coalition together is agreement over policy core beliefs. Since these are very resistant to change, the lineup of allies and opponents within a subsystem will remain stable over periods of a decade or more (Coalition Hypothesis 1). Hypotheses 2 and 3 are essentially a restatement of the underlying premise.⁶

Given the arguments concerning the stability of a coalition's policy core beliefs and its desire to translate those beliefs into governmental programs, Policy

Hypotheses Concerning Advocacy Coalitions

Hypothesis 1/Coalition Hypothesis 1: On major controversies within a policy subsystem when policy core beliefs are in dispute, the lineup of allies and opponents tends to be rather stable over periods of a decade or so.

Hypothesis 2/Coalition Hypothesis 2: Actors within an advocacy coalition will show substantial consensus on issues pertaining to the policy core, although less so on secondary aspects.

Hypothesis 3/Coalition Hypothesis 3: An actor (or coalition) will give up secondary aspects of his or her (its) belief system before acknowledging weaknesses in the policy core.

Hypotheses Concerning Policy Change

Hypothesis 4/Policy Change Hypothesis 1: The policy core attributes of a governmental program in a specific jurisdiction will not be significantly revised as long as the subsystem advocacy coalition that instituted the program remains in power within that jurisdiction—except when the change is imposed by a hierarchically superior jurisdiction.

Hypothesis 5/Policy Change Hypothesis 2: The policy core attributes of a governmental action program are unlikely to be changed in the absence of significant perturbations external to the subsystem, i.e., changes in socio-economic conditions, public opinion, system-wide governing coalitions, or policy outputs from other subsystems.

Hypotheses Concerning Learning Across Coalitions

Hypothesis 6/Learning Hypothesis 1: Policy-oriented learning across belief systems is most likely when there is an intermediate level of informed conflict between the two coalitions.

This requires that

- a) Each have the technical resources to engage in such a debate.
- b) The conflict be between secondary aspects of one belief system and core elements of the other or, alternatively, between important secondary aspects of the two belief systems.

Hypothesis 7/Learning Hypothesis 2: Problems for which accepted quantitative data and theory exist are more conducive to policy-oriented learning across belief systems than those in which data and theory are generally qualitative, quite subjective, or altogether lacking.

Hypothesis 8/Learning Hypothesis 3: Problems involving natural systems are more conducive to policy-oriented learning across belief systems than those involving purely social or political systems because, in the former, many of the critical variables are not themselves active strategists and because controlled experimentation is more feasible.

Hypothesis 9/Learning Hypothesis 4: Policy-oriented learning across belief systems is most likely when there exists a forum that is

- a) Prestigious enough to force professionals from different coalitions to participate and
- b) Dominated by professional norms.

FIGURE 6.2 Hypotheses in the Original Version of the ACF

NOTE: This figure contains both the original numbering (1–9) and the new numbering, which divides the hypotheses into three broad topics.

Change Hypothesis 1 contends that the policy core attributes of such programs in a jurisdiction will not change as long as the dominant coalition that instituted that policy remains in power—although the secondary aspects of those programs may well change. Given the logic thus far, it follows that the only way to change the policy core attributes of governmental policy in that jurisdiction is through some shock originating *outside* the subsystem that substantially alters the distribution of political resources or the views of coalitions within the subsystem. Such a shock can come either from external system events (Policy Change Hypothesis 2) or from attempts by hierarchically superior jurisdiction to change policy within a subordinate jurisdiction (Policy Change Hypothesis 1).⁷

The last four hypotheses deal with the conditions conducive to policy-oriented learning across belief systems (i.e., between coalitions). These are based upon the premise that coalitions resist changing their policy core beliefs or important secondary aspects of their belief systems, and thus that only very solid empirical evidence is likely to lead them to do so. It is hypothesized that such evidence is most likely to be developed and accepted in fields where accepted quantitative data and consensual theories are available (Learning Hypothesis 2), in the natural sciences more than the social sciences (Learning Hypothesis 3), when there exists a prestigious professional forum requiring the participation of experts from various coalitions (Learning Hypothesis 4), and in situations involving an intermediate level of conflict, that is, high enough to be worth expending analytical resources but not involving direct normative conflict (Learning Hypothesis 1).

ASSESSING THE EVIDENCE: 1987–1998

Since its initial publication in 1987–1988, the ACF has been applied in a critical fashion to at least the thirty-four cases listed in Table 6.1: six by the authors, eight by other scholars on their own databases but requested by the authors, and twenty by other scholars on their own initiative.⁸ Twenty-three of the cases—including six by the authors—involve environmental or energy policy, suggesting the ACF may be particularly applicable to cases involving substantial political conflict and high technical complexity. The remaining eleven involve a variety of policy domains, including education, national defense, telecommunications regulation, drugs, infrastructure (roads), and gender discrimination in wages. Thirteen of the cases—all unsolicited—involve work by non-U.S. scholars on non-U.S. policy domains. Although the initial set of ACF cases dealt largely with energy and environmental policy in the United States, the ACF has increasingly been applied to western Europe, Canada, and Australia, and several of the most recent cases deal with eastern Europe (Andersson), developing countries (Elliot), and social policy (Mintrom and Vergari, Kuebler). The ACF thus appears to be applicable to a variety of policy domains and political systems, particularly—but not limited to—countries in the Organization for Economic Cooperation and Development (OECD).

TABLE 6.1 Published Cases Applying the ACF in a Critical Fashion, 1987-1998

Author(s) and Institutional Affiliation	Topic
A. Research by the Authors	
1. Jenkins-Smith (1988, 1990), Univ. New Mexico	U.S. energy policy
2. Jenkins-Smith, St. Clair, and Woods (1991, 1993)	Outer Continental Shelf (OSC) leasing policy
3. Jenkins-Smith (1991); Herron et al. (1999)	Nuclear waste and weapons (U.S.)
4. Sabatier et al. (1987, 1989, 1990, 1993)	Environmental policy at Lake Tahoe
5. Sabatier and Zafonte (1995, 1997, 1998, 1999)	San Francisco Bay/Delta water policy
6. Sabatier, Zafonte, and Gjerde (1999)	U.S. auto pollution control
B. Applications by Other Scholars but Solicited by the Authors	
7. Ted Heintz (1988), U.S. Dept. of Interior	OSC leasing (U.S.)
8. John Weyant (1988), Stanford Univ.	U.S. natural gas policy
9. Tony Brown, Oklahoma State, and Joe Stewart, Univ. New Mexico (1993)	U.S. airline regulation
10. John Munro (1993), UCLA/BDM	California water supply policy
11. Richard Barke (1993), Georgia Tech.	U.S. telecommunications regulation
12. Joe Stewart (1991), Univ. New Mexico	U.S. school desegregation, 1950-1985
13. Bill Freudenburg, Wisconsin, and Robert Gramling, SW Louisiana (1997)	OSC leasing (U.S.)
14. Miles Burnett and Charles Davis (1999), Colorado State	U.S. forest policy
C. Applications by Other Scholars on Their Own Initiative	
15. Charles and Sandra Davis (1988), Colorado State Univ.	U.S. public lands policy
16. James Lester and Michael Hamilton (1988), Colorado State Univ.	Ocean waste disposal (U.S.)
17. Marie-Louise van Muijen (1993), Erasmus University	National security policy in Europe
18. Hanna Mawhinney (1993), Univ. Ottawa	Canadian education policy
19. Wyn Grant (1995), Univ. of Warwick, UK	Auto pollution control in California
20. G. Dudley and J. Richardson (1996), Univ. of Essex	British roads policy, 1945-1995
21. Ken Lertzman et al. (1996), Simon Fraser Univ.	Forestry policy in British Columbia
22. M. Mintrom and S. Vergari (1996), Michigan State Univ.	Educational reform in Michigan
23. Anne Loeber and John Grin (1999), Univ. Amsterdam	Dutch water quality, 1977-1989
24. Jan Eberg (1997), Univ. Amsterdam	Hazardous waste in Netherlands and Bavaria
25. Tom Leschine et al. (1999), Univ. Washington	Water pollution in Puget Sound (U.S.)
26. Granville Sewell (1999), MIT	Climate change in U.S. and Netherlands
27. Adam Wellstead (1996), Univ. Toronto	Forestry policy in Ontario and Alberta
28. Elizabeth Shannon (1997), Univ. Tasmania	Gender discrimination in wage policy in Australia and Ireland
29. C. Radaelli and a. Martini (1997), Univ. of Bradford, UK	Professional forums in Italy
30. Robert Duffy (1997), Rider University	Nuclear power (U.S.)
31. Magnus Andersson (1998), Free Univ. of Amsterdam	Environmental policy in Poland
32. Chris Elliot (1998), Swiss Technical University	Forestry policy in Indonesia, Canada, and Sweden
33. Daniel Kuebler (1998), University of Lausanne	Drug policy in Switzerland
34. Gerald Thomas (1998), Colorado State Univ.	Communication satellite policy (U.S.)

The remainder of this section represents our reflections on the ACF since 1987 arising from three sources: (1) empirical applications in the thirty-four cases listed in Table 6.1; (2) criticisms by other authors, particularly Schlager (1995), Schlager and Blomquist (1996), Mintrom and Vergari (1996), and Grin and Hoppe (1997); and (3) the authors' own ruminations on the framework, particularly as stimulated by graduate students and other colleagues.⁹ These reflections are organized around seven basic themes:

1. Advocacy coalitions: Composition, stability, and methods of analysis
2. Model of the individual and belief system structure
3. Subsystems: Delimitation, development, and interaction
4. Coalition behavior: Solving the collective action problem
5. Multiple intergovernmental venues and coalition strategies for influencing policy
6. Across-coalition learning and professional forums
7. Major policy change

Advocacy Coalitions: Composition, Stability, and Methods of Analysis

One of the ACF's most innovative features is that it challenges the implicit assumption of most political scientists that an actor's organizational affiliation is primordial—that there is something fundamentally different between legislators, administrative agency officials, interest group leaders, researchers, and journalists. In the traditional view, interest group leaders and legislators are politically active in seeking to influence public policy, whereas agency officials, researchers, and journalists tend to be perceived as more passive and/or policy-indifferent.¹⁰ The ACF, in contrast, encourages us to think of agency officials, researchers, and journalists as potential members of advocacy coalitions—as having policy beliefs very similar to those of interest group leaders and their legislative allies, and as engaging in some nontrivial degree of coordinated activity in pursuit of their common policy objectives.

Virtually all the case studies have identified coalitions composed of interest groups, agencies, and usually a few legislators and researchers. For example, the Brown and Stewart (1993) analysis of airline regulation in the United States revealed three coalitions, two of which remained remarkably stable over several decades: (1) a preregulation coalition composed of the major airlines, most airline unions, many smaller airports, and their congressional allies; (2) an antiregulation coalition composed of the smaller airlines, the larger airports, most consumer groups, some economists, and their congressional allies; and (3) a deregulation coalition, which probably didn't emerge until the late 1960s and was composed largely of academic economists, Alfred Kahn (an economist who became Civil Aeronautics Board chair in the mid-1970s), some consumer groups, and a few critical members of Senator Edward Kennedy's staff in the mid-1970s.

The Civil Aeronautics Board (CAB) was usually in the proregulation coalition, although it could be moved around for a few years depending upon presidential appointments. In fact, Kahn moved the CAB officially into the deregulation coalition in the late 1970s.

Most of the case studies have not, however, systematically gathered data on actors' beliefs and behavior. Thus, the skeptical reader is unsure if the alleged members of a coalition really do share a set of policy core beliefs and engage in some degree of coordinated behavior or if coalition composition really does remain stable over time. Fortunately, surveys have been used to systematically gather data on beliefs and some aspects of coordinating behaviors, and Sabatier and Jenkins-Smith (1993, Appendix) have developed techniques for systematically coding testimony at legislative and administrative hearings. Studies employing more systematic methods of data acquisition and analysis have (1) confirmed the existence of advocacy coalitions and (2) suggested several amendments to the framework.

First, survey data have repeatedly demonstrated that scientists are not necessarily "neutral" or "policy-indifferent"; instead, they are often members of coalitions. The evidence is probably clearest on San Francisco Bay water policy, where a 1992 survey demonstrated that university scientists as a whole were clearly members of the environmental coalition, in terms of both their policy core beliefs and their networks of sources and perceived allies (Sabatier and Zafonte, 1995, 1999; Zafonte and Sabatier, 1998). Surveys by Jenkins-Smith and his colleagues have revealed that (1) on nuclear waste disposal, biologists have views much closer to those of environmental groups than do physicists and engineers, and (2) on nuclear weapons policy, scientists working for the national laboratories have views quite different from those of members of the Union of Concerned Scientists (Barke and Jenkins-Smith, 1993; Herron, Jenkins-Smith, and Silva, 1999).¹¹ Finally, recall the major role that academic economists, most notably Alfred Kahn, played in airline and trucking deregulation (Derthick and Quirk, 1985; Robyn, 1987; Brown and Stewart, 1993).

Second, the higher resolution provided by systematic quantitative analysis reveals that there may well be more coalitions than first appear. Virtually all the qualitative applications of the ACF have found one to three coalitions, with most perceiving two. And our original quantitative work on San Francisco Bay water policy revealed two: an environmental/fishery coalition and a utilitarian-view-of-nature coalition (Sabatier and Zafonte, 1995). But that analysis dealt only with similar beliefs. When we reanalyzed the data to include the second criterion of a coalition—namely, coordinated behavior—four coalitions emerged, as the utilitarians split into several functional areas: water exporters, waste dischargers, and those concerned with fill and shoreline development (Zafonte and Sabatier, 1998).¹²

Third, more systematic analysis can provide a more accurate portrait of coalition composition and stability over time. Much of the work on both U.S. auto-

motive pollution control and Lake Tahoe has suggested very stable environmental versus development coalitions (Mazmanian and Sabatier, 1989, ch. 4; Sabatier, Hunter, and McLaughlin, 1987). But systematic coding of hearing testimonies involving auto pollution control (Sabatier, Zafonte, and Gjerde, 1999) and Lake Tahoe (Sabatier and Brasher, 1993) have revealed two quite distinct periods. First came an initial period of very fluid and amorphous coalitions during the latter 1960s, in which virtually everyone was in favor of "clean air" or "environmental planning." This alignment changed dramatically in the early 1970s, probably because a watershed event clarified the benefits and costs of stringent environmental regulation. Afterward, the coalitions became very distinct and very stable for fifteen to twenty years. This higher resolution suggests the need to distinguish "nascent" from "mature" subsystems and to make a clarifying amendment to Coalition Hypothesis 1:

Coalition Hypothesis 1 (revised): On major controversies within a *mature* policy subsystem, when policy core beliefs are in dispute, the lineup of allies and opponents tends to be rather stable over periods of a decade or so.

The distinction between "nascent" and "mature" subsystems will be further discussed below.

Fourth, the systematic analysis of testimonies at 1969–1987 Outer Continental Shelf (OCS) leasing hearings by Jenkins-Smith, St. Clair, and Woods (1991; Jenkins-Smith and St. Clair, 1993) suggests a potentially important amendment to our understanding of different types of actors within a coalition. The companies and industry trade groups most directly involved in OCS development were always in the proleasing coalition, and environmental groups were always in the environmental (antileasing) coalition. The involved federal agencies—Energy, Interior, the Environmental Protection Agency (EPA), and the National Oceanographic and Atmospheric Administration (NOAA)—were sandwiched between the competing interest groups. Over the course of the policy debate, the federal agencies—at least in their official pronouncements before congressional committees—shifted toward one coalition or the other in response to exogenous political and economic events. Energy and Interior were consistently closer to the proleasing side, however, whereas NOAA and EPA tended to be closer to the environmental side. The OCS case suggests the following hypothesis:¹³

Coalition Hypothesis 4: Within a coalition, administrative agencies will usually advocate more moderate positions than their interest group allies.

The reasoning here is fairly straightforward: On the one hand, the ACF assumes that most administrative agencies have missions that make them part of a specific coalition. That mission is generally grounded in a statutory mandate and reinforced by the professional affiliation of agency personnel and the agency's

need to provide benefits to the dominant coalition in its subsystem (Meier, 1985; Knott and Miller, 1987). On the other hand, most agencies have multiple sovereigns/principals (sources of money and legal authority) with somewhat different policy views. Thus, agencies need to find some way to adhere to their traditional mission without antagonizing important sovereigns. Interest groups—particularly those funded primarily by member contributions—are not normally confronted with such cross-cutting constraints and thus are free to adopt more extreme positions (Jenkins-Smith et al., 1991).

The evidence to date is quite mixed. The OCS hearing testimony inspired the new hypothesis and thus obviously supports it. Survey data from Lake Tahoe also tend to support it (Sabatier et al., 1987, Figure 1), but the Tahoe *hearing testimony* data are quite mixed (Sabatier and Brasher, 1993). The survey data on the San Francisco Bay water policy are also quite mixed. Personnel from most federal and state agencies expressed somewhat more moderate views than their interest group allies, but personnel from the federal fishery agencies tended to be at least as extreme as their allies from environmental and sportsmen's groups (Sabatier and Zafonte, 1999). Clearly, this is one aspect of the framework in need of additional empirical and theoretical work.¹⁴

On the whole, however, we are convinced that the existence of advocacy coalitions—defined as actors from a wide variety of institutions who share policy core beliefs and coordinate their behavior in a variety of ways—has been demonstrated for numerous policy subsystems in several OECD countries. This would seem to contradict many political scientists' assumption that institutional differences are primordial. The evidence to date suggests that the policy beliefs shared by members of different institutions may be at least as important in explaining their behavior as the institutional rules that apply to members of a given institution.

Model of the Individual and Belief System Structure

The model of the individual—and, by extension, the coalition as a corporate actor—in the ACF has been greatly clarified by the work of Schlager (1995; Schlager and Blomquist, 1996) and by discussions with colleagues, particularly Matt Zafonte. Although the ACF clearly assumes that actors are instrumentally rational—that is, that they seek to use information and other resources to achieve their goals—it draws much more heavily on research in cognitive and social psychology than on work in economics. In particular, the ACF assumes that goals are usually complex and that an individual's ability to perceive the world and to process that information is affected by cognitive biases and constraints.

With respect to goals, all versions of the ACF have assumed that actors are driven by a set of policy-oriented goals comprising value priorities and conceptions of whose welfare should be of greatest concern. The most important beliefs are those in the policy core—that is, those that relate to the subsystem as a whole—

because these are more salient to the individual than deep core beliefs and serve as more efficient guides to behavior than specific policy preferences in the secondary aspects. The ACF does *not* assume that actors are driven primarily by simple goals of economic/political self-interest, nor does it assume that self-interested preferences are easy to ascertain (for confirming evidence, see Marcus and Goodman, 1986; Green and Shapiro, 1994; Martin, 1995; for a dissent, see Scharpf, 1997). Instead, it assumes that actors' goals (their "objective functions") are normally complex and should be ascertained empirically.

The attention to policy-oriented learning clearly implies that specific policy preferences, particularly in the secondary aspects, are endogenous to the sets of behavior to be explained. Policy core beliefs are also subject to change over periods of a decade or more and are thus partially endogenous. On the other hand, deep core values are basically given; that is, they are exogenous to the behavior being explained.

In processing information, the ACF assumes that actors suffer from a variety of cognitive biases and constraints. First, following Simon (1985) and many other scholars, we assume that actors' ability to process and analyze information is limited by time and computational constraints. This limitation produces substantial incentives to utilize a variety of heuristics as guides to complex situations. One of the implications is that policy core beliefs—because they are fairly general in scope yet very salient—provide more efficient guides to behavior over a wide variety of situations than do secondary aspects. This, in turn, contributes to the ACF's assumption that the policy core provides the principal glue of coalitions (Zafonte and Sabatier, 1998).

Second, the ACF assumes, consistent with prospect theory, that actors weigh losses more heavily than gains (Quattrone and Tversky, 1988). A logical corollary is that they remember defeats more than victories. This tendency to overemphasize defeats contributes to the tendency of policy actors, particularly in situations involving frequent conflict, to view opponents as more powerful than they probably are (Sabatier et al., 1987).

Third, the ACF assumes—consistent with attribution and cognitive dissonance theories—that on salient topics, actors' perceptions are strongly filtered by their preexisting normative and perceptual beliefs (Schiff, 1962; Smith, 1968; Tesser, 1978; Lord, Ross, and Lepper, 1979; Fiske and Taylor, 1984; Scholz and Pinney, 1995). Preexisting beliefs constitute a lens through which actors perceive the world.

This model of the individual, in turn, has important implications for coalition dynamics. In particular, the latter two assumptions concerning cognitive bias provide much of the underpinning for Coalition Hypothesis 1, concerning coalition stability over time (see Table 6.1). Since coalition actors (by definition) share a set of policy core beliefs, actors in different coalitions will perceive the world through different lenses and thus will often interpret a given piece of evidence in different ways. This contributes to in-group cohesion. It also produces distrust of

people in other coalitions who, since they come to conclusions so different from ours on "factual" issues, must have questionable motives. When this is combined with the tendency to remember losses more than victories, it becomes easy in high-conflict situations for a mutual "devil shift" to take place, as each coalition views the others as more evil and more powerful than they probably are (Sabatier et al., 1987). As a result, conflict resolution among coalitions is more difficult than classic rational actor models would predict. Also, coalitions tend to be more main more differentiated and more stable in composition over time (contrast the ACE, for example, with Riker, 1962).

In addition to a general clarification of the ACF's model of the individual and its implications for coalition stability, events since 1993 have led to several clarifications of the policy core of belief systems.

First, the 1987-1988 (and even the 1993) versions of the ACF were ambiguous about the defining characteristics of policy core beliefs. In particular, they were not very clear about whether the critical difference between deep core, policy core, and secondary aspects was based upon *scope* of belief or whether it was determined by *degree of abstraction*. The ambiguity arose largely because of the assumption borrowed from Converse (1964) and Peffley and Hurwitz (1985) that abstract beliefs constrain more specific ones. Subsequent work by Jenkins-Smith on OCS drilling and by Sabatier on Lake Tahoe environmental quality suggests, however, that the most fundamental (and probably least changing) beliefs of material groups are not very abstract. Instead, they tend to be quite concrete: material self-interest, operationalized as profit or market share (Jenkins-Smith and St. Clair, 1993; Jenkins-Smith and Sabatier, 1994, pp. 195-196). This finding, in turn, suggests that scope and topic should be the defining characteristics of policy core beliefs. *Scope* means that the belief should apply to virtually all aspects of subsystem policy, rather than to only rather narrow ranges (which are covered by secondary aspects). *Topic* means that it should pertain to one of the subjects listed under "policy core" in Table 6.2. Of those topics, the fundamental normative precepts are the most critical: (1) orientation on basic value priorities and (2) identification of groups/entities whose welfare is of concern. The ACF assumes that agreement on these two normative precepts applied on a subsystemwide basis is the most important defining characteristic of an advocacy coalition.

Second, the set of topics covered by the policy core keeps undergoing revision. The list in Table 6.2 is intended to cover all the really critical aspects of policy on which salient, persistent cleavages might develop across coalitions, but our understanding of what is "really critical" keeps changing slightly. The latest version contains several revisions over previous lists (Sabatier, 1988, p. 145; Sabatier and Jenkins-Smith, 1993, p. 221):

- A. Basic causes of the problem: This is critical because the perceived causes obviously affect the set of plausible solutions and, in turn, who is likely to bear the costs of those solutions.

TABLE 6.2 Revised Structure of Belief Systems of Policy Elites,^a 1998

Defining characteristics	Deep Core	Policy Core	Secondary Aspects
Fundamental normative and ontological axioms	Fundamental policy positions concerning values within the subsystem the basic strategies for achieving core values within the subsystem	Instrumental decisions and information searches necessary to implement policy core Usually only part of subsystem Moderately easy; this is the topic of most administrative and even legislative policymaking	Instrumental decisions and information searches necessary to implement policy core Usually only part of subsystem Moderately easy; this is the topic of most administrative and even legislative policymaking
Scope	Across all policy subsystems.	Subsystemwide	Usually only part of subsystem Moderately easy; this is the topic of most administrative and even legislative policymaking
Susceptibility to change	Very difficult; akin to a religious conversion.	Difficult, but can occur if experience reveals serious anomalies	Moderately easy; this is the topic of most administrative and even legislative policymaking
Illustrative components	1. Human nature: a. Inherently evil vs. socially redeemable b. Part of nature vs. dominion over nature c. Narrow egoists vs. contractarians 2. Relative priority of various ultimate values: Freedom, security, power/knowledge, health, love, beauty, etc. 3. Basic criteria of distributive justice: Whose welfare counts? Relative weights of self, primary groups, all people, future generations, nonhuman beings, etc. 4. Sociocultural identity (e.g., ethnicity, religion, gender, profession)	Fundamental normative precepts: 1. Orientation on basic value priorities 2. Identification of groups or other entities whose welfare is of greatest concern 3. Overall seriousness of the problem 4. Basic causes of the problem 5. Proper distribution of authority between government and market 6. Proper distribution of authority among levels of government 7. Priority accorded various policy instruments (e.g., regulation, insurance, education, direct payments, tax credits) 9. Ability to society to solve the problem (e.g., zero-sum competition vs. potential for mutual accommodation; technological optimism vs. pessimism) 10. Participation of public vs. experts vs. elected officials 11. Policy core policy preferences	3. Overall seriousness of the problem 4. Basic causes of the problem 5. Proper distribution of authority between government and market 6. Proper distribution of authority among levels of government 7. Priority accorded various policy instruments (e.g., regulation, insurance, education, direct payments, tax credits) 9. Ability to society to solve the problem (e.g., zero-sum competition vs. potential for mutual accommodation; technological optimism vs. pessimism) 10. Participation of public vs. experts vs. elected officials 11. Policy core policy preferences

^aThe "Policy Core" and "Secondary Aspects" columns also apply to governmental programs. SOURCE: Sabatier (1998a, p. 113).

concerning market share, its strategies for attaining these goals, and so on. We agree. But corporations that *regularly* get involved in public policy disputes almost certainly have a policy belief system that presumably is congruent with their more fundamental professional belief system. The same could be said of labor unions, many environmental groups, and religious organizations. In short, professional beliefs become important only insofar as they are *not* consistent with policy core beliefs—which, we suspect, happens very infrequently.

Finally, the ACF's model of the individual needs to be modified to include individual (and/or organizational) welfare in addition to the policy belief system (Schlager and Blomquist, 1996, pp. 661–664). The leader of an environmental group, for example, must be concerned about her or his group's organizational needs as well as with transforming the organization's policy belief system into governmental policy. Failure to recognize the role of individual/organizational self-interest is one of the critical reasons why previous versions of the ACF have underestimated the difficulty of forging effective coalitions among like-minded actors (Schlager, 1995; Schlager and Blomquist, 1996)—a topic to which we shall return shortly.

Subsystems: Delimitation, Development, and Interaction

The 1988 and 1993 versions of the ACF defined *policy subsystem* very loosely, as the group of actors interacting with some regularity in a functional policy domain (such as air pollution control).¹⁶ In recent years, however, a number of cases have arisen in which scholars have sought to apply the ACF to something narrower than a classic policy domain and have wondered whether this narrower domain constituted a "subsystem" for ACF purposes.¹⁷

In addition to these rather practical concerns, the clarification of the policy core as being *subsystemwide* in scope obviously requires that subsystem boundaries be delineated with greater precision than has heretofore been the case. This clarification is critical to the internal logic of the ACF, since Coalition Hypotheses 1–3 and Policy Change Hypotheses 1 and 2 all depend upon distinguishing policy core from secondary aspects. In turn, greater precision in delineating subsystem boundaries has resulted in greater attention to changes in subsystem composition over time and to the interaction of related subsystems. These are among the areas where different aspects of the ACF have become more internally related, and hopefully consistent, over time.

For ACF purposes, the concept of a subsystem needs to focus on the group of people and/or organizations interacting regularly over periods of a decade or more to influence policy formulation and implementation within a given policy area/domain. Thus, one needs to distinguish a *nascent* subsystem (i.e., one in the process of forming) from a *mature* one (i.e., one that has existed for a decade or more). Following is the set of necessary and sufficient criteria for the existence of a mature policy subsystem:

- B. Method of financing programs: This is obviously critical because it determines who will pay for problem solutions.
- C. Desirability of participation by public versus experts versus elected officials: This choice is clearly critical in some policy domains, for example, nuclear power (Barke and Jenkins-Smith, 1994) and forestry (Wellstead, 1996). It also helps link the ACF to cultural theory (Thompson, Ellis, and Wildavsky, 1990).
- D. Policy core policy preferences: Although policy preferences generally fall within the secondary aspects of belief systems, they can fall within the policy core if they (i) are subsystemwide in scope, (ii) are highly salient, and (iii) have been a major source of cleavage for some time.

The first three revisions represent relatively minor extensions of the basic logic of the policy core.¹⁵ The fourth is a result of the work of Zafonte and Sabatier (1998), which first clarified the attributes of policy core items that make them the glue of coalitions and then sought to empirically determine the types of beliefs that were, in fact, most highly correlated with indicators of coordinated behavior in San Francisco Bay/Delta water policy. The logical analysis identified subsystemwide scope, salience, and source of long-term conflict as the critical attributes of policy core beliefs, and the empirical analysis demonstrated that several classic policy core items plus several "policy core policy preferences" were the beliefs most strongly related to indicators of coordinated behavior.

Third, the work of Jenkins-Smith and St. Clair (1993, p. 152) on OCS drilling has led to a new hypothesis concerning the degree of constraint/cohesion in the belief systems of different types of interest groups (and probably, by extension, the other members of their advocacy coalition):

Coalition Hypothesis 5: Elites of purposive groups are more constrained in their expression of beliefs and policy positions than elites from material groups.

The reasoning here is that purposive groups are espousing a tightly integrated set of beliefs, and thus, group leaders will be selected on the basis of their adherence to those beliefs and will be encouraged to espouse all aspects of the belief system, lest they risk losing members. In contrast, material groups focus on promoting their members' material self-interest, and members seem willing to give their leaders a fair amount of latitude in determining exactly how to promote that objective (Moe, 1980).

Fourth, John Grin and his colleagues (Loeber and Grin, 1999; Grin and Hoppe, 1997) have criticized the ACF for focusing solely on actors' beliefs relating to *public policy*. They argue that the ACF forgets that most actors have a more fundamental belief system relating to the basic goals of their organization or profession (which they refer to as "professional beliefs"). Understanding corporate behavior, for example, presumably requires knowledge of the company's goals

Brasher, 1993; Sabatier et al., 1999).¹⁸ In both the Tahoe and the air pollution cases, the subsystem began forming in the early 1960s but did not become "mature"—in the sense defined previously—until the late 1960s, largely with the organization of an environmental interest group focused on this subsystem. The watershed event occurred a few years thereafter, and after that event, coalitions were very stable for the next ten to fifteen years.

We now consider the interaction among related subsystems, which occurs along both functional and territorial lines (Zafonte and Sabatier, 1998). A subsystem may be nested within another (i.e., the former is a subset of the latter). In the United States, for example, a fully developed (by this definition) automotive pollution control subsystem has been nested within a larger air pollution subsystem since the early 1970s. Or two subsystems may overlap with each other (i.e., they interact with each other frequently enough so that a subset of actors is part of both). In the United States, for example, the transportation subsystem partially overlaps with the automotive pollution control subsystem on issues such as transportation control plans (e.g., efforts to reduce vehicle miles traveled). But the transportation control actors are involved in only a *subset* of the entire range of automotive pollution control issues. Thus, some actors in a subsystem are "regulars" (i.e., they are involved in virtually all issues), whereas those from overlapping subsystems are "periodic" members (i.e., they are involved only in a distinct subset of topics) (see also Lindquist, 1992).

Policy domains that are intergovernmental in scope—whether between national and local units within a nation-state or between international organizations and specific nation-states—raise important issues about subsystem delineation: Does one put all of the actors—irrespective of governmental level—into a single (undifferentiated) subsystem, or does one assume that each territorial level is a separate subsystem? In Sabatier's work at Lake Tahoe and San Francisco Bay, he opted for the former, whereas Mawhinney (1993) and Sewell (1999) have chosen the latter approach. The choice should be based primarily upon empirical considerations regarding the degree of (1) legal autonomy of each level and (2) actor integration across levels. At Tahoe and the Bay/Delta, Sabatier put all the actors into the same subsystem because that placement mirrored their interaction patterns: No one level of government operates independently of the others, and the hierarchical distinctions between officials at different levels of government are blurred in practice. In the implementation of international treaties, however, autonomy by nation-states is jealously guarded, and the actors who negotiated the treaty usually comprise only a small percentage of those involved in its implementation (Sewell, 1999). The same could be said of the implementation of most federal legislation in the United States, Canada, and Germany, as well as in the European Union (EU). In these cases, one would probably envisage multiple nested subsystems representing different territorial units (e.g., a Bordeaux transportation subsystem nested within a French one, which is, in turn, nested within an EU one).

1. The participants regard themselves as a semiautonomous community who share a domain of expertise.
2. They have sought to influence public policy within the domain over a fairly long period of time (i.e., seven to ten years). This criterion stems from the ACF's assumption that such an interval is necessary for doing meaningful policy analysis that can deal with learning and real-world impacts.
3. There exist specialized subunits within agencies at all relevant levels of government to deal with the topic. This criterion follows from our assumption that without such units at all levels, implementation will be exceedingly problematic and coalitions will come to realize this. A persisting subsystem needs to have some "organizational residue."
4. There exist interest groups, or specialized subunits within interest groups, that regard this as a major policy topic.

These criteria stem directly from the ACF's focus on long-term policy change, which, we assume, requires some organizational residue for at least administrative agencies and interest groups. The ACF is not interested in debating societies (which don't seek to influence policy over the long term) or in policy pronouncements that lack any serious effort at effective implementation and at changing problem conditions in the world.

The above characteristics of a mature subsystem should encourage studies of the conditions under which new subsystems emerge (see, for example, Thomas, 1998). Early versions of the ACF tended to assume that most new subsystems were spin-offs of existing ones and arose when a group of actors became dissatisfied with the neglect of a particular problem by an existing subsystem and sought to develop new venues (Baumgartner and Jones, 1993). In such cases—for example, the emergence of the food-and-drug safety subsystem out of the agricultural policy subsystem at the turn of the nineteenth century (Nadel, 1971)—one would expect clearly differentiated coalitions (mirroring preexisting groupings) from the birth of the new subsystem.

Subsystems may also emerge out of a new issue or a new conceptualization of a situation (Stone, 1988). In such cases, one might expect an initial situation characterized by great fluidity. For example, the coding of hearing testimony at Lake Tahoe (1960–1984) and U.S. automotive pollution control (1960–1990) suggests that subsystems arising because of concern about a relatively new issue—in this case, environmental quality—may initially be characterized by rather amorphous situations in which almost everyone espouses some "motherhood" ideal, such as "environmental planning" or "clean air." But as information develops concerning the seriousness of the problem, its causes, and the costs of remedying the situation, actors tend to coalesce into distinct coalitions, often around some watershed event(s) that clarifies the underlying conflicts (Downs, 1972; Sabatier and

Coalition Behavior: Solving the Collective Action Problem

Advocacy coalitions have been consistently defined as "people from a variety of positions (elected and agency officials, interest group leaders, researchers) who (1) share a particular belief system—i.e., a set of basic values, causal assumptions, and problem perceptions—and who (2) show a non-trivial degree of coordinated activity over time" (Sabatier, 1988, p. 139; Sabatier and Jenkins-Smith, 1993, p. 25).

In two very interesting papers, Schlager (1995) and Schlager and Blomquist (1996) have argued, quite correctly, that most applications to date of the ACF by both Sabatier and Jenkins-Smith have implicitly assumed that actors who hold similar policy core beliefs will *act* in concert, that is, that the first condition of coalition formation is sufficient for the second.¹⁹ Anyone familiar with the literature on collective action will realize the dubiousness of this assumption (see, for example, Olson, 1965; Ostrom, 1990; and, most embarrassingly, Sabatier, 1992). In particular, the ACF has been assuming that shared goals and beliefs plus a recognition that pooling resources increases the probability of success will be sufficient to overcome (1) the transaction costs involved in coming to a common understanding of the policy problem and the proper means of addressing it, (2) the difficulty of finding policies that fairly address distributional conflicts among coalition members, and (3) the temptation of each individual and organization to free-ride (Schlager, 1995, pp. 261–262; Schlager and Blomquist, 1996, pp. 663–666; Robyn, 1987).

We suspect that distributional conflicts and free riding are more serious problems for material groups—whose members are self-consciously seeking to maximize their own material self-interest—than for purposive groups, whose members are more committed to an ideology stressing the collective welfare and who often perceive themselves as David fighting Goliath (Berry, 1977; Sabatier, 1992). Nevertheless, the problems of developing a set of policy proposals that resolve distributional and other conflicts and of avoiding temptations to free-ride in actually pursuing a lobbying strategy affect all coalitions and can no longer be assumed away. In addition, by focusing on shared policy beliefs within a coalition, the ACF has neglected the interest that all individuals and organizations have in maintaining and increasing their viability/welfare. Environmental groups may agree on a general policy agenda, but each must also maintain (and even enhance) its budget and membership. Because, to some extent, such groups compete with each other for members and grant funds, they must also compete for credit concerning policy successes. How interest groups within potential coalitions overcome these difficulties is, to the best of our knowledge, a neglected topic.²⁰ In addition, although different members of a coalition may bring different resources to the table, institutional heterogeneity may create coordination problems. As Schlager (1995, p. 263) noted, "The institutional differences among a legislator, a journalist, a director of a material interest group, and an academic

may very well limit their ability, and their willingness, to cooperate with one another, even if they share similar beliefs."

There have been three somewhat different responses to the challenge of revising the ACF to deal with these collective action problems.

The first has been to follow Schlager (1995) by incorporating principles from the Ostroms' IAD (institutional analysis and development) framework to deal with coordination problems within coalitions (see Chapter 3 on the IAD). Elinor Ostrom distinguishes short-term coordination (developing a common lobbying strategy in a specific controversy) from long-term coordination. From Schlager (1995, p. 262), we borrow the following hypothesis regarding short-term coordination:²¹

Schlager Coordination Hypothesis #1: Actors who share [policy core] beliefs are more likely to engage in short-term coordination if they (1) interact repeatedly, (2) experience relatively low information costs, and (3) believe that there are policies that, while not affecting each actor in similar ways, at least treat each fairly.

Repeated interaction and low information costs are important for developing a shared perspective on the policy problem, for developing a coordinated lobbying strategy, and for enforcing that strategy. "Fair" policies are necessary to resolve distributional conflicts among members. Long-term coordination—which can range from repeated informal interaction to the creation of a peak association—requires a rather similar set of conditions (Schlager, 1995, p. 264):

Schlager Coordination Hypothesis #2: Coalitions are more likely to persist if (1) the major beneficiaries of the benefits that a coalition produces are clearly identified and are members of the coalition, (2) the benefits received by coalition members are related to the maintenance costs of each member, and (3) coalition members monitor each others' actions to ensure compliance.

Although this is an extremely sensible approach, incorporating it intact into the ACF has one very serious problem:²² It is based on the IAD's general model of the individual—rational and self-interested, although with limited information capabilities—rather than the ACF's model of the individual. In contrast to the former, the latter assumes (1) that individuals are not necessarily preoccupied with maximizing their material self-interest and (2) that perceptual filters are at least as important as information constraints.

Schlager's approach focuses on the costs of coordinating behavior and on the strategies for meeting those transaction costs—with the underlying assumption that the costs are difficult to overcome. Sabatier and his students have recently pursued an alternative approach that seeks, first, to reduce the costs and, second, to use the ACF's model of the individual to magnify the perceived *benefits* of coordination.

In a recent paper, Zafonte and Sabatier (1998) distinguished "strong" from "weak" coordination. The former requires the development of a common plan of action, the communication of that plan to potential coalition members, the monitoring of member compliance, and the imposition of sanctions for noncompliance. These requirements are what Schlager has in mind, and the transaction costs are usually quite substantial. In contrast, "weak" coordination simply requires that "organizational actors monitor each other's political behavior, and then alter their actions to make their political strategies complementary with respect to a common goal" (p. 480). Weak coordination does not require any elaborate decisionmaking or monitoring process. It simply requires the potential members of a coalition to monitor each others' behavior and alter their own to make it complementary. Assuming that the actors share policy core beliefs and generally trust each other, such alterations of behavior should not be very difficult (except when distributional conflicts among members are significant). The most likely cases of weak coordination are when actors defer to coalition members on issues of greater salience to the other or when other members have superior information or legal mandates. Weak (informal) coordination is likely to be particularly important among members coming from different organizations with legal impediments to more formalized (strong) coordination.

In addition to pointing to relatively low-cost methods of coordination, Sabatier has sought to use the ACF's model of the individual to augment the perceived benefits, and to lower the costs, of coordination. The basic argument flows directly from the "devil shift," that is, the tendency of actors in high-conflict situations to perceive their opponents as more evil and more powerful than they probably are. If the opponent is evil, then its victory is likely to result in very substantial costs to the members of a coalition. And if the opponent is very powerful, the only way to preclude its victory is to achieve very effective coordination among coalition members. This is not a novel insight. Interest group leaders commonly portray their opponents as "devils" in order to rally members. The ACF simply applies the same logic to coalitions consisting of members from different sorts of organizations. Thus, one can easily develop an analogue to Schlager's first coordination hypothesis:

Coalition Hypothesis 6: Actors who share policy core beliefs are more likely to engage in short-term coordination if they view their opponents as (a) very powerful and (b) very likely to impose substantial costs upon them if victorious.

The ACF's model of the individual would also imply that the costs of coordination within an advocacy coalition are less than Schlager assumed: First, the belief system shared by the members of a coalition reduces the transaction costs involved in coming to a common understanding of the problem and identifying the means to resolve it because the members will be interpreting the evidence through a similar set of preexisting beliefs. Second, the temptation to free-ride

should be reduced among coalition members. Actors who share policy core beliefs are more likely to trust each other, that is, to take each other's interests into account when deciding what to do, in large part because, by definition, many of those interests will be shared. Third, a shared belief system should also increase the willingness to distribute fairly the costs of pursuing the common goals—and thus to decrease the temptation to free-ride. This is particularly true in coalitions involving purposive groups whose ideology values collective goods, rather than material self-interest. In sum, although coordination of coalition members remains a problem, the ACF's model of the individual implies less of a problem than the IAD's general model of the individual.

In a recent paper, Fenger and Klok (1998) helped clarify the coordination/collective action problem by examining the relationship between beliefs and organizational interdependencies. Beliefs are categorized as congruent, divergent, and unrelated. Competitive interdependency occurs when the functional tasks (and resources) of Actor A interfere with Actor B's ability to take action consistent with B's goals (and often vice versa). For example, fishery agencies and dam-building agencies are usually competitively interdependent. In contrast, symbiotic interdependency occurs when the functional tasks and resources of Actor A contribute to Actor B's ability to pursue B's goal (and often vice versa). In such a situation, actors have an incentive to exchange their respective resources in order for each to attain its goals. When two actors have congruent beliefs and symbiotic interdependencies, they will be members of the same coalition, and coordination should be relatively easy. In contrast, divergent beliefs plus competitive interdependencies will lead actors to be in different coalitions. The interesting cases occur in the cross-diagonals. When two actors have congruent beliefs but are competitively interdependent—for example, two agricultural water districts that compete with each other for Bureau of Reclamation water and with fishery agencies/groups for all water—Fenger and Klok interpreted the ACF as arguing that they would be members of the same agricultural water coalition but would face significant distributional conflicts within that coalition. The reason for putting them into the same coalition is that the ACF assumes that policy core beliefs are the principal glue of coalitions, and members of different agricultural water districts tend to have similar views on water development and environmental protection (Sabatier and Zafonte, 1999). By the same logic, when two actors have divergent beliefs but are symbiotically interdependent—for example, a fishery agency heavily reliant upon the fish ladders provided by a dam—Fenger and Klok interpreted the ACF as arguing that they would be in different coalitions but would be relatively moderate members of their respective coalitions and would seek to depoliticize their interdependencies. We find this analysis very helpful in predicting (1) the strong members of coalitions (congruent beliefs and symbiotic interdependencies), (2) the members with distributional conflicts (congruent beliefs, but competitive interdependencies), and (3) the moderate members (congruent beliefs, but symbiotic interdependencies with members of an opposing coalition).