



Journal of European Public Policy

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rjpp20>

The advocacy coalition framework: revisions and relevance for Europe

Paul A. Sabatier

Published online: 04 Feb 2011.

To cite this article: Paul A. Sabatier (1998): The advocacy coalition framework: revisions and relevance for Europe, *Journal of European Public Policy*, 5:1, 98-130

To link to this article: <http://dx.doi.org/10.1080/13501768880000051>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

The advocacy coalition framework: revisions and relevance for Europe

Paul A. Sabatier

ABSTRACT The advocacy coalition framework (ACF) has generated considerable interest among European policy scholars. This article summarizes some of the more important findings concerning, and changes to, the ACF since the last major revision in 1993. These include: (1) a much clearer model of the individual; (2) a clearer, more integrated concept of 'policy subsystem'; (3) much greater attention to the problematic nature of collective behavior among people who share policy beliefs; and (4) some suggestions concerning methods of ascertaining the existence and membership of advocacy coalitions. The article also briefly addresses the ACF's applicability to parliamentary systems, to the countries of Eastern Europe, and to the dynamic politics of the European Union.

KEY WORDS Advocacy coalition framework; European policy; policy theory; public policy.

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 (1981–2) at the University of Bielefeld and culminating in two similar papers (Sabatier 1987, 1988). It emerged out of: (a) a search for an alternative to the stages heuristic (Jones 1977) that was then dominating policy studies, (b) a desire to synthesize the best features of the 'top-down' and 'bottom-up' approaches to policy implementation (Sabatier 1986), and (c) a commitment to incorporate technical information into a more prominent role in theories of the policy process. Its goal was to provide a coherent understanding of the major factors and processes affecting the overall policy process—including problem definition, policy formulation, implementation, and revision in a specific policy domain—over periods of a decade or more.

In the mid-1980s, Sabatier developed a collaboration with Jenkins-Smith, who had, quite independently, developed similar conceptions of the role of scientific information in public policy (Jenkins-Smith 1988, 1990). They encouraged other scholars to critically evaluate relevant portions of the ACF on policy domains and data sets at their disposal. This resulted in several revisions to the framework (Sabatier and Jenkins-Smith 1988, 1993; Jenkins-Smith and Sabatier 1994). Since

1993, Sabatier and other scholars – many of them European – have continued to refine the ACF based upon their reflections and its application to a variety of policy domains in Organization for Economic Co-operation and Development (OECD) countries. See Table 1 for a list of the thirty-one studies to date.

This article first lays out the foundations of the 1993 version of the ACF found in *Policy Change and Learning* (Sabatier and Jenkins-Smith 1993). The heart of the article discusses the implications for the framework of research since 1993, and then addresses the ACF's applicability to Europe (and other areas outside the US). I conclude with an assessment of the critical features of the ACF and its future.

THE 1993 VERSION OF THE ACF¹

Premises

The ACF has been based on five basic premises, arising largely out of the literatures on policy implementation and the role of technical information in public policy. For an explication of each, see Sabatier and Jenkins-Smith (1993: 16–17).

- 1 Theories of the policy process need to address the role that technical information concerning the magnitude and facets of the problem, its causes, and the probable impacts (including distributional impacts) of various solutions play in that process. This is what the vast majority of discussion among policy élites is about and, assuming a modicum of rationality on their part, it must be important.
- 2 Understanding the process of policy change – and the role of technical information therein – requires a time perspective of a decade or more. Such a time-span is also necessary to get a reasonable assessment of policy impacts.
- 3 The most useful unit of analysis for understanding the overall policy process in modern industrial societies is not any specific governmental organization or program but rather a policy subsystem or domain. A subsystem consists of actors from a variety of public and private organizations who are actively concerned with a policy problem or issue, such as agriculture, and who regularly seek to influence public policy in that domain. In most policy subsystems there will be numerous laws and policy initiatives at any given point in time.
- 4 In virtually all domains, policy subsystems will involve actors from several levels of government within a country and, increasingly, from international organizations and other countries.
- 5 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, including the role of technical information.

Given these premises, the challenge confronting the ACF has been to explain an

Table 1 Cases applying the ACF in a critical fashion, 1987–97

Author(s) and institutional affiliation		Topic
A. Research by the authors		
1 Jenkins-Smith (1988, 1990),		US energy policy
2 Jenkins-Smith and St Clair (1993)		OCS leasing policy
3 Jenkins-Smith (1991), Herron <i>et al.</i> (1997)		US nuclear waste and weapons
4 Sabatier <i>et al.</i> (1987); Sabatier and Brasher (1993)		Environmental policy at Lake Tahoe
5 Sabatier and Zafonte (1994, 1995, 1997a)		San Francisco Bay/Delta water policy
6 Sabatier, Zafonte and Gjerde (1997)		US auto pollution control
B. Applications by other scholars but solicited by the authors		
7 Ted Heintz (1988), US Dept of Interior		OCS leasing (US)
8 John Weyent (1988), Stanford Univ.		US natural gas policy
9 Tony Brown (Oklahoma State) and Joe Stewart (New Mexico) (1993)		US airline regulation
10 John Munro (1993), UCLA/BDM		California water supply policy
11 Richard Barke (1993), Georgia Tech.		US telecommunications regulation
12 Joe Stewart (1991), New Mexico		US school desegregation, 1950–85
13 Bill Freudenburg (Wisconsin) and Robert Gramling (SW Louisiana) (1997)		OCS leasing (US)
14 C. Davis and M. Burnett (1997), Colorado State		US forest policy
C. Applications by other scholars at their own initiative		
15 C. Davis and S. Davis (1988), Colorado State		US public lands policy
16 James Lester and Michael Hamilton (1988), Colorado State Univ.		Ocean waste disposal (US)
17 Marie-Louise van Muijen (1993), Erasmus Univ., Rotterdam		National security policy in Europe
18 Hanna Mawhinney (1993), Univ. of Ottawa		Canadian education policy
19 Wyn Grant (1995), Univ. of Warwick		Auto pollution control in California
20 G. Dudley and J.J. Richardson (1996), Univ. of Essex		British roads policy, 1945–95
21 Ken Lertzman <i>et al.</i> (1996), Simon Fraser Univ.		Forestry policy in British Columbia
22 M. Mintrom and S. Vergari (1996), Michigan State Univ.		Educational reform in Michigan

- | | | |
|----|--|---|
| 23 | Gerald Thomas (1996), Colorado State | US landsat policy, 1974–92 |
| 24 | Adam Wellstead (1996), Univ. of Toronto | Forest policy in Ontario and Alberta |
| 25 | Anne Loeber and John Grin (1997), Univ. of Amsterdam | Dutch water quality, 1977–89 |
| 26 | Jan Eberg (1997), Univ. of Amsterdam | Hazardous waste in the Netherlands and Bavaria |
| 27 | T. Leschine and K. Lind (1997), Univ. of Washington | Water pollution in Puget Sound (US) |
| 28 | Granville Sewell (1997), MIT | Climate change treaty in the US and the Netherlands |
| 29 | Elizabeth Shannon (1997), Univ. of Tasmania | Wage policy in Australia and Ireland |
| 30 | C. Radaelli and A. Martini (1997), Univ. of Bradford | Professional fora in Italy |
| 31 | Magnus Andersson (1997), Free Univ. of Amsterdam | Environmental policy in Poland |
-

exceedingly complex situation involving hundreds of actors from dozens of organizations seeking to influence the overall policy process over periods of a decade or more in situations where relatively technical information concerning problem severity and causes cannot be neglected.

Structural overview of the ACF

Figure 1 presents a general overview of the framework. On the left side are two sets of exogenous variables – the one quite stable, the other more dynamic – that affect the constraints and opportunities of subsystem actors.

The former include the basic constitutional structure, socio-cultural 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) has recently argued that changing the law is typically the focus of coalition strategies in separation-of-

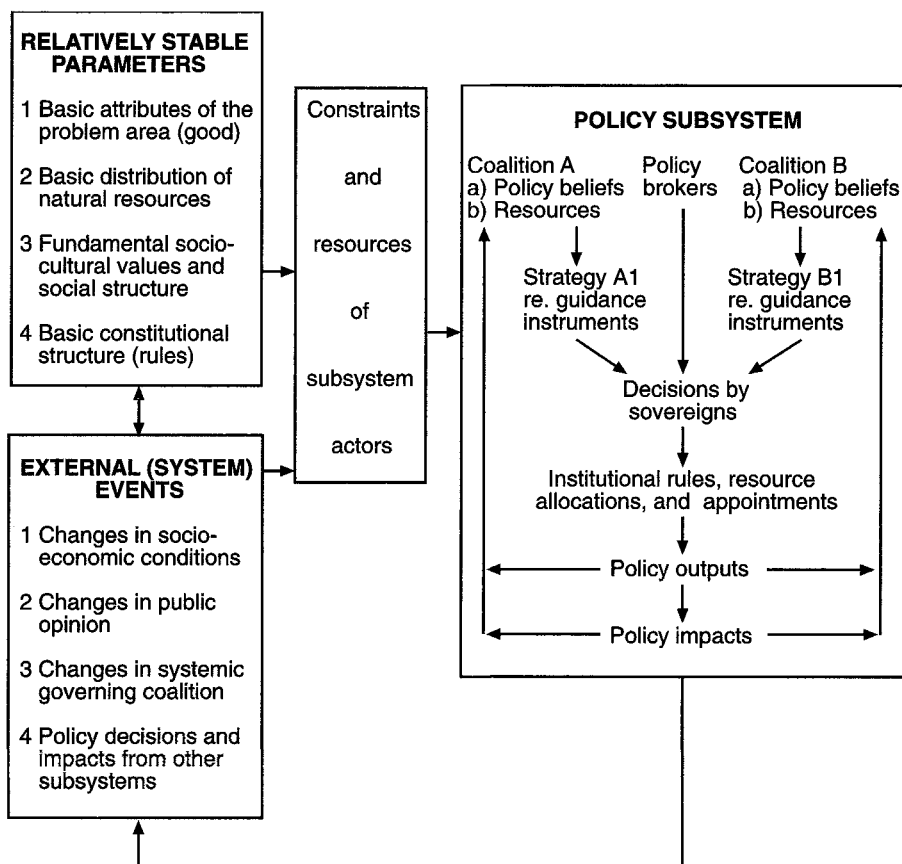


Figure 1 Revised diagram of the ACF

powers systems 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 any time it wishes, coalitions are more likely to rely upon a variety of more informal, and longer-lasting, arrangements. Likewise, Ashford (1981) has argued that policy-oriented learning is probably more difficult in Britain than in many other countries because of the norms of secrecy so ingrained in the civil service.

The second set of factors exogenous to the subsystem is more likely to change over the course of a decade or so. The ACF argues that they are a critical prerequisite to major policy change. They include: (1) major socio-economic changes, such as economic dislocations or the rise of social movements; (2) changes in public opinion, particularly regarding governmental spending priorities and the relative seriousness of various problems; (3) changes in the systemic governing coalition, including 'critical' and/or 'realigning elections' (Burnham 1970; Brady 1988); and (4) policy decisions and impacts from other subsystems (Muller 1995). For example, changes in tax law normally have major (largely unintended) impacts on numerous other 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 actors from various governmental and private organizations who both (a) share a set of normative and causal beliefs and (b) engage in a non-trivial degree of co-ordinated 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, the subsystem will usually contain a number of individuals and organizations unassociated with any coalition, but the ACF assumes that most will be unimportant over the long term because they will either leave or be incorporated into one of the coalitions.

The belief systems of each coalition are organized into a hierarchical, tripartite structure, with higher/broader levels 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 legislative 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 fundamental value priorities, such as the relative importance of economic development versus environmental protection; basic perceptions concerning the general seriousness of the problem 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* beliefs are the fundamental 'glue' of coalitions because they represent basic normative and empirical commitments within the domain of specialization of policy élites. The

secondary aspects of a coalition's belief system comprise a large set of narrower (i.e. less than subsystem-wide) 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 resistant to change – akin to a religious conversion. A coalition's *policy core* beliefs are somewhat less rigidly held. While several are almost exclusively normative and thus difficult to modify, most involve empirical elements which may change over a period of time with the gradual accumulation of evidence (Weiss' (1977) 'enlightenment function'). Beliefs in the *secondary aspects* are assumed to be more readily adjusted in light of new data, experience, or changing strategic considerations.

At any particular point in 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 institutions in an effort to realize its policy objectives. Conflicting strategies from various coalitions are normally 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. 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 produce 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 its strategies. The latter may involve the seeking of major institutional revisions at the collective choice level, more minor revisions at the operational level, or even going outside the subsystem by seeking changes in the dominant coalition at the systemic level (Kiser and Ostrom 1982).

Policy-oriented learning and policy change

Within the general process of policy change, the ACF has a particular interest in policy-oriented learning. Following Hecla (1974: 306), policy-oriented learning refers to relatively enduring alterations of thought or behavioral intentions which result from experience and/or new information and which 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 1 concerning policy effectiveness, perceptions concerning external dynamics, and changing perceptions of the probable impacts of alternative policies. The framework assumes that such learning is instrumental, i.e. that members of various coalitions seek to better understand the world in order to further their policy objectives. Given that perceptual filtering is a fundamental component of the ACF's model of the individual (see below, p. 108), coalition members will resist information suggesting their deep core or policy core beliefs may be invalid and/or unattainable, and usually will use formal policy

analyses to buttress and elaborate those beliefs (or attack their opponents' views).

Such learning, however, comprises only one of the forces affecting policy change. In addition to this cognitive activity, there are two other sources of policy change. The first involves changes in the real world, particularly the realm of system dynamics depicted in Figure 1. Changes in relevant socio-economic conditions and system-wide 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; Richardson 1994). Turnover in personnel – sometimes resulting from external conditions, sometimes merely from death or retirement – constitutes a second non-cognitive 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, while policy-oriented learning is an important aspect of policy change and can often alter 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.

Hypotheses

Table 2 lists a set of hypotheses drawn from the 1993 version of the ACF (Sabatier and Jenkins-Smith 1993: chs 2, 3, 10).

The first three hypotheses concerning coalitions are all 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 (Hypothesis 1). Hypotheses 2 and 3 are essentially a restatement of the underlying premise.² Hypotheses 10 and 11 are based primarily upon principal-agent relationships and were suggested by the work of Jenkins-Smith and St Clair (1993) on US energy policy.

Given the arguments concerning the stability of a coalition's policy core beliefs and its desire to translate those beliefs into governmental programs, the policy core attributes of such programs will not change as long as the dominant coalition which instituted that policy remains in power (although the secondary aspects of those programs may well change). It follows that the only way to change the policy core attributes of governmental policy is through some shock originating *outside* the subsystem which substantially alters the distribution of political resources or the views of coalitions within the subsystem (Hypothesis 5) or the imposition of a change by a hierarchically superior jurisdiction (Hypothesis 4).

The next three 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, and thus only 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 (Hypothesis 7), in the natural sciences more than the social sciences (Hypothesis 8),

Table 2 Hypotheses in the 1993 version of the ACF

Hypotheses concerning advocacy coalitions

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 stable over periods of a decade or so.

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

Hypothesis 10 (new in 1993): Élites of purposive groups are more constrained in their expression of beliefs and policy positions than elites from material groups.

Hypothesis 11 (new in 1993): Within a coalition, administrative agencies will usually advocate more moderate positions than their interest-group allies.

Hypotheses concerning policy change

Hypothesis 4 (revised in 1993): 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 (1997): Significant perturbations external to the subsystem (e.g. changes in socio-economic conditions, public opinion, system-wide governing coalitions, or policy outputs from other subsystems) are a *necessary, but not sufficient*, cause of change in the *policy core* attributes of a governmental program.

Hypotheses concerning policy learning, particularly across coalitions

Hypothesis 6: 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 has the technical resources to engage in such a debate; and that
- (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: 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: 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: Policy-oriented learning across belief systems is most likely when there is a forum which is:

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

Hypothesis 12 (new in 1993): Even when the accumulation of technical information does not change the views of the opposing coalition, it can have important impacts on policy – at least in the short run – by altering the views of policy brokers.

when a prestigious professional forum requiring the participation of experts from various coalitions exists (Hypothesis 9), and in situations involving an intermediate level of conflict, i.e. high enough to be worth expending analytical resources but not involving direct normative conflict (Hypothesis 6). Finally, Hypothesis 12 argues that, even when new information is resisted by a specific coalition, it may alter the views of policy brokers and thus affect policy – at least in the short term.

ASSESSING THE EVIDENCE SINCE 1993³

Since 1993, there have been at least eighteen documented studies critically applying the ACF: three involving Sabatier or Jenkins-Smith, the remaining fifteen by other scholars – including thirteen unmotivated by the ACF authors (see Table 1). In addition, there have been a number of review essays, of which the most important have been Schlager (1995), Schlager and Blomquist (1996), and Grin and Hoppe (1997).⁴ These studies, combined with the authors' own ruminations on the framework, have led to a number of conclusions regarding the ACF's strengths, weaknesses, and needed revisions. These reflections are organized around six basic themes:

- 1 Advocacy coalitions: composition and methods of analysis
- 2 The model of the individual and belief system structure
- 3 Subsystems: delimitation, development, and interaction
- 4 Coalition behavior: collective action, 'glue,' and strategies
- 5 Policy-oriented learning and professional fora
- 6 Major policy change.

Advocacy coalitions: composition 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, while agency officials, researchers, and journalists tend to be perceived as more passive and/or policy indifferent.⁵ The ACF, in contrast, encourages us to think of agency officials, researchers, and journalists as potential members of advocacy coalitions – as having policy beliefs similar to interest group leaders and their legislative allies, and as engaging in some non-trivial degree of co-ordinated activity in pursuit of their common policy objectives.

Consistent with previous work (Jenkins-Smith and Sabatier 1994), virtually all the case studies since 1993 have identified coalitions composed of interest groups, agencies, and usually a few legislators and researchers. Many of them have not, however, *systematically* gathered data on the beliefs and behavior of actors within the subsystem, and thus the skeptical reader is unsure if alleged members of a coalition really do share a set of policy core beliefs and engage in some degree of co-

ordinated behavior – the necessary and sufficient conditions for being members of an advocacy coalition (Sabatier 1988: 139). Fortunately, other authors have used surveys to systematically gather data on beliefs and some aspects of co-ordinating behavior. Sabatier and Jenkins-Smith (1993: appendix) have also developed techniques for systematically coding testimony at legislative and administrative hearings. These studies, employing more systematic methods of data acquisition and analysis, have (a) confirmed the existence of advocacy coalitions and (b) suggested a number of amendments to the framework.

First, survey data have repeatedly demonstrated that scientists are not necessarily 'neutral' or 'policy indifferent,' but, instead, are often members of coalitions. The evidence is probably clearest on San Francisco Bay water policy, where university scientists as a whole were clearly members of the Environmental Coalition, both in terms of policy core beliefs and their networks of sources and perceived allies (Sabatier and Zafonte 1994, 1995; Zafonte and Sabatier 1997). One can also point to the major role that academic economists, most notably Alfred Kahn, played in airline and trucking deregulation in the US (Derthick and Quirk 1985; Robyn 1987; Brown and Stewart 1993).

Second, the precision (higher resolution) provided by systematic quantitative analysis reveals that there may well be more coalitions than first appears. Virtually all qualitative applications of the ACF have found one to three coalitions, with most perceiving two.⁶ 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, co-ordinated 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 1997).

In sum, the existence of advocacy coalitions – composed of interest group leaders, agency officials, researchers, and, at least in the US, legislators – is now largely beyond dispute. In the future, however, scholars need to be more careful to systematically gather data on actors' beliefs and co-ordinated behavior in order to more accurately ascertain the number of coalitions and the membership of each.

The 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, most notably Matt Zafonte. While the ACF clearly assumes that actors are instrumentally rational – i.e. they seek to use information and other resources to achieve their goals – it draws much more heavily on work in cognitive and social psychology than 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, the early versions of the ACF 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 are those in the policy core – i.e. 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 (Gerber and Jackson 1993). Policy core beliefs are also subject to change over periods of a decade or more, and thus partially endogenous. On the other hand, deep core values are basically given, i.e. 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 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 1997).

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 contributes to the tendency of policy actors, particularly in high-conflict situations, 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 other beliefs (Schiff 1962; Smith 1968; Tesser 1978; Lord *et al.* 1979; Fiske and Taylor 1984; Scholz and Pinney 1995). In short, actors always perceive the world through a lens consisting of their preexisting beliefs.

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 Hypothesis 1 concerning coalition stability over time (see Table 2). 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 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, must be motivated by hidden, nefarious interests. When 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, and coalitions tend to remain differentiated and stable in composition over time.

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 1987–8 (and even the 1993) versions of the ACF were ambiguous about the defining characteristics of policy core beliefs. In particular, they were unclear about whether the critical difference between deep core, policy core, and secondary aspects was *scope* of belief or whether it was *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 outer continental shelf (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: 195–6). This, 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 3. Of those topics, the fundamental normative precepts are the most critical: (a) orientation on basic value priorities; and (b) identification of groups/entities whose welfare is of concern. The ACF assumes that agreement on these two normative precepts applied on a subsystem-wide basis is the most important defining characteristic of an advocacy coalition.

Second, the set of topics covered by the policy core keeps undergoing revision. This is because it 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 (Table 3) contains three additions to the list in Sabatier and Jenkins-Smith (1993: 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 will likely bear the costs of those solutions.
- (b) *Method of financing programs*. This is obviously critical because it determines who will pay for problem solutions.
- (c) *Desirability of participation by public v. experts v. elected officials*. This is clearly critical in some policy domains, e.g. nuclear power (Barke and Jenkins-Smith 1993) and forestry (Wellstead 1996), and it is an obvious means of relating the ACF to cultural theory (Thompson *et al.* 1990).

Third, John Grin and his colleagues (Loeber and Grin 1997; Grin and Hoppe 1997) have criticized the ACF for focusing solely on actors' beliefs relating to *public policy*, forgetting that most actors have a much more important belief system (which they refer to as 'professional beliefs'). Understanding corporate behavior, for example, presumably requires knowledge of the company's goals concerning market share, their strategies for attaining it, etc. I agree. But corporations that *regularly* become 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 for labor unions, many environmental groups, and religious organizations.

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: 661–4). The leader of an environmental group, for example, must be concerned with 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 interaction⁷

The 1988 and 1993 versions of the ACF defined a 'policy subsystem' very loosely, as the group of actors interacting with some regularity in a functional policy area, such as air pollution control. The boundaries of a subsystem must be delineated with greater clarity, however, since the ACF uses *subsystem-wide scope* as being the major criterion for distinguishing policy core from secondary aspects and that distinction is, in turn, critical to Hypotheses 1–5 (see Table 2).

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. that has existed for a decade or more). There follows the set of necessary and sufficient criteria for the existence of a mature policy subsystem:

- 1 The participants regard themselves as a semi-autonomous community who share a domain of expertise.
- 2 They seek to influence public policy within the domain over a fairly long period of time, i.e. seven to ten years. This 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 are specialized subunits within agencies at all relevant levels of government to deal with the topic. This follows from our assumption that, absent such units, implementation will be exceedingly problematic and coalitions will come to realize this; a persisting subsystem needs to have some 'organizational residue.'

Table 3 Revised structure of belief systems of policy elites* (1966)

Deep core		Policy core	Secondary aspects
Defining characteristics	Fundamental normative and ontological axioms.	Fundamental policy positions concerning the basic strategies for achieving core values within the subsystem.	Instrumental decisions and information searches necessary to implement policy core.
Scope	Across all policy subsystems.	Subsystem-wide.	Usually only part of subsystem.
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 policy-making.
Illustrative components	<div>1 The nature of man:<div>(i) Inherently evil v. socially redeemable.</div><div>(ii) Part of nature v. dominion over nature.</div><div>(iii) Narrow egoists v. contractarians.</div></div> <div>2 Relative priority of various ultimate values: freedom, security, power, knowledge, health, love, beauty, etc.</div> <div>3 Basic criteria of distributive justice: whose welfare counts? Relative weights of self, primary groups, all people, future</div>	<div>Fundamental normative precepts:<div>1 Orientation on basic value priorities.</div><div>2 Identification of groups or other entities whose welfare is of greatest concern.</div></div> <div>Precepts with a substantial empirical component:<div>3 Overall seriousness of the problem.</div><div>4 Basic causes of the problem.</div><div>5 Proper distribution of authority between government and market.</div><div>6 Proper distribution of authority among levels of government.</div></div>	<div>1 Seriousness of specific aspects of the problem in specific locales.</div> <div>2 Importance of various causal linkages in different locales and over time.</div> <div>3 Most decisions concerning administrative rules, budgetary allocations, disposition of cases, statutory interpretation, and even statutory revision.</div> <div>4 Information regarding performance of specific programs or institutions.</div>

generations, non-human beings,
etc.

- | | |
|----|---|
| 7 | Priority accorded various policy instruments (e.g. regulation, insurance, education, direct payments, tax credits). |
| 8 | Method of financing. |
| 9 | Ability of society to solve the problem (e.g. zero-sum competition v. potential for mutual accommodation; technological optimism v. pessimism). |
| 10 | Participation of public v. experts v. elected officials. |

* The policy core and secondary aspects also apply to governmental programs.

- 4 There are interest groups, or specialized subunits within interest groups, which 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 do not seek to influence policy over the long term or in policy pronouncements which 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 (1996)). Early versions of the ACF tended to assume that most new subsystems were 'spin-offs' from existing ones and arose when a group of actors became dissatisfied with the neglect of a particular problem by an existing subsystem. But subsystems may also emerge out of a new conceptualization of a situation (Stone 1988).

Subsystems that emerge out of a relatively new issue may see coalition conflict develop only over time. For example, the coding of hearing testimony at Lake Tahoe (1960–84) and US automotive pollution control (1960–90) suggests that subsystems arising because of concern with a relatively new issue – in this case, environmental quality – may initially be characterized by fluid 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, the causes, and the costs of remedying the situation, actors tend to coalesce into distinct coalitions, often around some watershed event that clarifies the underlying conflicts (Downs 1972; Sabatier and Brasher 1993; Sabatier *et al.* 1997).⁸ At the very least, this suggests a minor refinement to Hypothesis 1:

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 stable over periods of a decade or so.

In both the Tahoe and 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 stable for the next ten to fifteen years.

One more point: mature subsystems clearly interact with each other along both functional and territorial lines (Zafonte and Sabatier 1997). A subsystem may be nested within another, i.e. the former is a subset of the latter. In the US, for example, a fully developed (by this definition) automotive pollution control subsystem has been nested within a larger air pollution subsystem for over two decades. Or two subsystems may overlap with each other, i.e. they interact with each other frequently enough that a subset of actors is part of both. In the US, 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 only involved in a

subset of the entire range of automotive pollution control issues. Thus some actors in a subsystem will be 'regulars,' i.e. be involved on virtually all issues, while those from overlapping subsystems will be 'subsetters,' i.e. only involved in a distinct subset of topics.

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 my work at Lake Tahoe and San Francisco Bay, I have opted for the former, while Mawhinney (1993) and Sewell (1997) have chosen the latter approach. The choice should be based primarily upon empirical considerations regarding the degree of (a) legal autonomy of each level and (b) actor integration among levels. At Tahoe and the Bay/Delta, Sabatier *et al.* put all the actors into the same subsystem because that mirrors their interaction patterns, no one level of government operates independent of the others, and the hierarchical distinctions between levels of government are blurred in practice. When dealing with the implementation of international treaties, however, autonomy by nation states is jealously guarded and usually the actors who negotiated the treaty will comprise only a small percentage of those involved in its implementation. The same could be said for the implementation of most federal legislation in the US, Canada, and (the Federal Republic of) Germany, as well as the European Union. In these cases, one would probably envisage multiple nested subsystems representing different territorial units.

Coalition behavior: collective action, 'glue,' and strategies

Advocacy coalitions have consistently been 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 co-ordinated activity over time' (Sabatier 1988: 139; Sabatier and Jenkins-Smith 1993: 25; numbers in parentheses added).

In two very interesting papers, Schlager (1995) and Schlager and Blomquist (1996) have argued, quite correctly, that 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.⁹ 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: 261–2; Schlager and Blomquist 1996: 663–6; see also 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 own 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 against 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.¹⁰ In addition, while different members of a coalition may bring different resources to the table, the role norms for different institutions may create co-ordination problems. As Schlager (1995: 263) notes: ‘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.’

In a specific policy controversy, co-ordination requires agreeing on (a) the policy to be pursued, (b) the basic lobbying strategy (i.e. who should do what), and (c) some ability to monitor and enforce conformance with the agreed-upon strategy. From Schlager (1995: 262), we develop the following hypothesis regarding short-term co-ordination:

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 co-ordinated lobbying strategy, and for enforcing that strategy. ‘Fair’ policies are necessary to resolve distributional conflicts among members.

Shared beliefs do, however, reduce the transaction costs among potential members of an advocacy coalition. In addition, the perceptual filters in the ACF’s ‘model of the individual’ tend to facilitate co-ordination by making opponents appear more powerful and more wicked than they probably are (Sabatier *et al.* 1987).

What sorts of belief, however, constitute the principal ‘glue’ of coalitions? The ACF has long argued that it is policy core beliefs, particularly normative beliefs concerning the priority of different values and conceptions of whose welfare is pivotal. In several recent papers involving measures of co-ordinated behavior

among San Francisco Bay/Delta policy élites, Zafonte and Sabatier (1997; also Sabatier and Zafonte 1997a) have found that policy core beliefs are often, but not always, the category of beliefs most closely associated with co-ordinated behavior. In several cases, it is policy preferences involving a long-standing, intense conflict affecting most members of the subsystem. While such beliefs would normally be considered among the secondary aspects of a belief system, they share the crucial characteristics of the policy core: they are broad in scope (affecting virtually all members of the subsystem), involve very salient beliefs, and have been the source of long-term conflict. Thus they could be added to the policy core. At any rate, the types of belief – whether classic policy core or a ‘policy core policy preference’ – that constitute the principal glue of coalitions have now been clarified.¹¹

A final note about coalition strategies: the ACF assumes that coalitions seek to alter the behavior of governmental institutions in order to achieve the policy objectives in their respective policy cores. In an intergovernmental system, they have a multitude of possible venues, including agencies, courts, and legislatures at all levels of government. The 1993 version of the ACF contained a rather extensive discussion of the use of ‘guidance instruments,’ including persuasive testimony to alter agency rules or budgets, seeking to change the role occupants of various positions, or seeking to change public opinion (Sabatier and Jenkins-Smith 1993: 227–30). In work since then, Wellstead (1996) and Loeber and Grin (1997) have identified a fourth major guidance instrument: attempting to alter target group behavior through demonstrations or boycotts, i.e. working through the market rather than government. Sabatier and Zafonte (1995, 1997a) have documented the wide variety of strategies at different venues that coalitions use in practice. And Dudley and Richardson (1996) have come up with some interesting examples of ‘venue-shopping’ (Baumgartner and Jones 1993).

Policy-oriented learning and professional fora

One of the most influential aspects of the 1987–8 version of the ACF was its contention that policy change is not simply the result of competition among various interests in which financial resources and institutional rules are critical, but rather that ‘policy-oriented learning’ within and between coalitions is an important aspect of policy change (Sabatier 1987, 1988; Jenkins-Smith 1988, 1990). This important argument of the ACF stems directly from its model of the individual: given the assumption that new experience is filtered through existing beliefs, actors tend to accept information confirming existing beliefs and to screen out dissonant information. This is even more true for policy core beliefs than for secondary aspects (Hypothesis 3).

Recent studies have tended to confirm this argument. On the one hand, Eberg’s (1997: 208–9) summary of learning processes regarding waste management in Bavaria and the Netherlands found that (a) learning was far more frequent in secondary aspects than in the policy core (thus supporting Hypothesis 3) and (b) actors occasionally altered policy core learning on the basis of information coming from others within the same coalition. In addition, Freudenburg and Gramling (1997) provide a great example of how strong perceptual filters can be.¹²

Since learning among members of the same coalition is assumed to be relatively non-problematic, attention has focused on identifying the conditions for learning *across* coalitions. The original versions of the framework identified 'professional fora' as critical institutions for promoting such learning (Hypothesis 9). Sabatier and Zafonte (1997b) have developed a set of hypotheses specifying the characteristics of successful fora in greater detail, but space constraints preclude their presentation here.

Major policy change

One of the major strengths of the ACF is that it provides a relatively clear-cut criterion for distinguishing 'major' from 'minor' policy change: major change is change in the policy core aspects of a governmental program, whereas minor change is change in the secondary aspects.¹³ Thus it is the *topic* and the *scope* of policy change that determine whether it is major or minor. Linking change to scope also makes it clear that the same change may be 'minor' for one subsystem but 'major' for a subsystem nested within it. For example, changing automotive emission standards may be 'major' for the automotive pollution control subsystem but relatively minor (i.e. dealing with secondary aspects) for the larger air pollution control subsystem. Thus the ACF provides a clear reference point for determining the magnitude of change.

On the other hand, Mintrom and Vergari (1996: 425) are quite correct when they fault the ACF for neglecting the conditions under which major policy change occurs:

[The ACF] directs our attention to thinking about the ways that belief structures arise and adjust over time to bring stability to a policy subsystem . . . [But] it does not direct our attention to exploring the processes that determine when [major, i.e. policy core] policy change will actually take place. Clearly, not all exogenous shocks and not all instances of policy learning translate into policy change. We need to better understand why particular policy changes materialize.

How does the ACF respond?

First, one needs to remember that changes in the policy core of governmental programs are infrequent events. The vast majority of changes occur in the secondary aspects. Like any large-scale, infrequent events, they are difficult to predict.¹⁴

Second, the cases by Brown and Stewart (1993) on airline deregulation and by Mawhinney (1993) on Canadian education have led to a revision of Hypothesis 5:¹⁵

Hypothesis 5 (revised): Significant perturbations external to the subsystem (e.g. changes in socio-economic conditions, public opinion, system-wide governing coalition, or policy outputs from other subsystems) are a *necessary, but not sufficient*, cause of change in the *policy core* attributes of a governmental program.

The basic argument is that such perturbations provide an opportunity for major policy change, but such change will not occur unless that opportunity is skillfully

exploited by proponents of change, i.e. the heretofore minority coalition(s).

Third, we must remember that a hierarchically superior unit of government may attempt to change the policy core of a 'subordinate' level (Mawhinney 1993; Sewell 1997). Anyone familiar with the implementation literature is likely to view this as an exceedingly problematic enterprise that may succeed but usually winds up in a *de facto* compromise among coalitions (Van Horn 1979; Mazmanian and Sabatier 1989; Stewart 1991).

Fourth, we suspect there may be two very different processes of major policy change within a given policy subsystem at a specific level of government (i.e. one that is *not* hierarchically imposed). On the one hand is the replacement of one dominant coalition by another. This is the model assumed by most political scientists. Sometimes a tremendous surge of public concern with a problem leads to a process of competitive policy escalation by elected officials (or political parties), and thus the replacement of one coalition by another virtually overnight. The 1970 Clean Air Amendments in the US would be an example (Jones 1975). Far more frequent, we suspect, is a scenario in which the minority coalition increases in importance and attempts to take advantage of a window of opportunity opened by an external perturbation, but does not have the votes in the legislature to push through a substantial change in the policy core of governmental policy on its merits. Thus the minority coalition is likely to resort to *any* tactic that will garner additional votes, including 'pork barrel' benefits, trying to manipulate the dimensions of the issue to appeal to different constituencies (Mintrom and Vergari 1996), bribes, attaching the bill as a waiver to other legislation, etc. In short, obtaining major policy change usually requires that an advocacy coalition augment its resources by developing 'coalitions of convenience' (Sabatier and Jenkins-Smith 1993: 27) with a variety of other groups.

But there is at least one alternative that has been neglected by most American policy scholars. In situations in which *all major coalitions view a continuation of the current situation as unacceptable*, they may be willing to enter negotiations in the hope of finding a compromise that is viewed by everyone as superior to the status quo. (This assumes that each coalition has the ability to impose unacceptable costs on the others.) This is not a zero-sum game but rather a search for a win-win solution. We suspect that the conditions for such a successful consensus process – i.e. one that results in legally binding agreements viewed by everyone as an improvement – are similar to those for a successful professional forum:

- (a) a stalemate wherein all coalitions view a continuation of the status quo as unacceptable;
- (b) the negotiations are conducted in private and last a relatively long time, e.g. more than six months;
- (c) there is a facilitator (policy broker) respected by all parties and viewed as relatively neutral.

The end result of such a process is not a dominant coalition and several minority coalitions but what might be regarded as 'power sharing' among coalitions (analogous to a 'grand coalition' in parliamentary systems or the tradition of

consensus negotiations in such countries as Switzerland or the Netherlands). But the perceptual biases that are part of the ACF's model of the individual suggest that such 'consensus regimes' are likely to be quite unstable unless (a) the arrangement produces a distribution of benefits over time that all coalitions regard as 'fair' and (b) new leaders committed to consensus replace old 'warriors' within the coalitions.

APPLICABILITY TO EUROPE

The ACF was originally developed primarily with the American experience in mind.¹⁶ How well does it apply to other countries, particularly those with different cultures, parliamentary (rather than separation of powers) systems, or non-democratic traditions?

An initial answer can be found in Table 1. Of the seventeen studies critically applying the ACF that have been done by other scholars on their own initiative, eleven have involved studies by non-Americans on either European or Commonwealth (Canada or Australia) countries. In all cases, except perhaps van Muijen (1993), the authors have found the ACF to be at least a useful ordering framework for identifying important variables and relationships.

Several problems and/or revisions have, however, been suggested. First, when dealing with parliamentary systems, a couple of clarifications are called for:

- (a) What constitutes a 'change in the systemic governing coalition?' In a separation of powers system, a change in the systemic coalition requires the replacement of one coalition by another in both houses of the legislature and in the chief executive, perhaps over several elections. In a two-party parliamentary system, the answer is also clear. But what about a multi-party parliamentary system? Requiring a complete change in the parties in government is probably too great a hurdle, but simply requiring a change in the major party is probably too little. A possible criterion would be that a large percentage – e.g. 60–70 percent – of the legislative seats go to parties not previously in the governmental coalition.
- (b) Policy documents in parliamentary systems often take the form of 'white papers' or 'reports' whose legal status is much more ambiguous than the changes in statute that are the usual indicator of policy core change in separation of powers systems (Moe 1990; Wellstead 1996; Loeber and Grin 1997). In addition, the less frequent elections in many parliamentary systems (compared to the US) provide governing coalitions with the time to 'dribble out' major reforms over a period of time: first a white paper, then a 'framework law,' and finally more detailed implementing laws or decrees (Casey *et al.* 1997). This makes it much more difficult to ascertain when a 'major policy change' has occurred. On the other hand, this problem affects anyone seeking to identify major policy change – not just those using the ACF.

Second, anyone doing cross-national policy research in Europe recognizes that different countries have quite different political cultures. Eberg (1997) has suggested taking Richardson's (1982) concept of 'policy style'¹⁷ and adding it as an intervening variable in Figure 1 between 'stable system parameters' and 'constraints

and resources of subsystem actors.' I would propose, instead, that one of the constitutive elements of policy style – namely, 'degree of consensus needed to institute a major policy change' – be added as an intervening variable. The categories might be: (a) 'less than a majority' (as in non-democratic countries and perhaps in strong states, such as France), (b) a strong majority (as in separation of powers systems like the US), and (c) a consensus (as in Switzerland or the Netherlands). This variable affects not only the constraints and strategies of subsystem actors, but also the probability that major policy change will actually occur.¹⁸

Third, the ACF should apply well to the increasingly complex set of relationships evolving within the European Union, as European institutions – most notably the European Commission, the Court of Justice, the Council of Ministers and also the European Parliament – are increasingly displacing national institutions as the principal loci of policy change (Peterson 1995; Richardson 1996). National institutions remain important, however, in the implementation of EU directives and as sources of policy ideas incorporated into EU directives (Héritier 1996). This is particularly the case to the extent that EU directives are 'soft' law allowing considerable discretion to implementing officials.

The ACF offers a number of advantages for studying EU policy processes. First, several scholars have had no difficulty discerning coalitions composed of administrative agency officials, interest group leaders, and researchers from various countries forming, for example, environmental or industry-based coalitions in a variety of subsystems (Peterson 1995; Richardson 1995; Richardson 1996: 17–18; Josselin 1996; Coen 1997). Second, the ACF would expect coalitions to be seeking to maximize their advantage by 'venue-shopping' – as certainly seems to be happening, both among levels of government and among institutions at the European level (Richardson 1996: 18–19; Mazey 1998; Wendon 1998). Third, the ACF's clear distinction between major (policy core) versus relatively minor (secondary aspects) policy change – plus its recognition that subsystems are often nested within each other – should help to clarify the bewildering array of policy initiatives at different levels of government occurring in many policy domains. It makes clear, for example, that a relatively minor change at the European level may nevertheless entail a policy core change in specific countries. Fourth, it is hoped that the recent stress on clear indicators of the beliefs and degree of co-ordinated activity among potential coalition members will encourage researchers to carefully document the number of coalitions and the membership of each. Fifth, the ACF's attention to subsystem development – to the process by which nascent subsystems become mature – would appear to be particularly relevant to a situation as dynamic as the contemporary EU.

In most of these areas, however, the ACF only points to certain relationships or processes as being important. The real task of European researchers is to develop falsifiable hypotheses based upon the ACF or other theories (Bueno de Mesquita and Stokman 1994), and then to test them on a variety of cases.

Finally, a word needs to be said about the applicability of the ACF to historically non-democratic systems in Eastern Europe and elsewhere. The minimal condition for the ACF to be useful is that some degree of co-ordinated dissent from the policies of the dominant coalition needs to be possible (although not necessarily

legal). Magnus Andersson's (1997) ongoing research on environmental policy in Poland over the past thirty years suggests that the ACF was useful in identifying changes in the membership and beliefs of various coalitions. He also found that dissent and criticism of governmental policy was possible during the martial law of the 1980s. On the other hand, the rule of law was so weak during that period that heavy industry simply ignored environmental laws. While environmental policy was primarily symbolic during that period, a good deal of information on implementation deficits was gathered and later used when the rule of law acquired greater legitimacy after 1989. Interestingly, as the rules became legitimate, industry found it necessary to become much more active participants in environmental policy-making. In case then, a strengthening of the rule of law meant that industry could no longer ignore the environmental policy subsystem but instead had to form (with agency officials) a 'pragmatic coalition.'

CONCLUSIONS

Over the past ten years, the ACF has generated considerable interest from a variety of scholars in the US, Europe, and other OECD countries. I would like to think that part of that interest can be attributed to the fact that it does a reasonably good job of meeting the criteria for a scientific theory outlined in Lave and March (1975) and King *et al.* (1994):

- 1 Most of the critical terms are clearly defined and most of its propositions appear to be clearly stated and internally consistent. At any rate, the definition of 'advocacy coalition' was clear enough for Schlager to criticize us for ignoring the portion dealing with co-ordinated behavior. And various elements of the framework are becoming increasingly interrelated.
- 2 It has two causal drivers: (a) the core values of coalition members and (b) external perturbations. In this sense, it is similar to theories of population dynamics in biology, where population levels are a function of (i) competition among individuals and species seeking to maximize inclusive fitness and (ii) external perturbations.
- 3 It certainly has lots of falsifiable hypotheses.
- 4 It is fairly broad in application, i.e. it appears to apply reasonably well to most policy domains in at least OECD countries.

In addition, its ability to deal with complex situations and its model of the individual derived from psychology make it attractive to scholars looking for an alternative to the institutional rational choice models currently dominating much of policy scholarship (Ostrom 1997; Scharpf 1997).

One final point concerning generalizability. Several people have wondered whether the ACF applies to policy domains – such as abortion, gun control, human rights, gay rights, school prayer, gender politics – in which technical issues are dominated by normative and identity concerns.¹⁹ In my view, it should work very well in these areas. Clearly, these subsystems seem to be characterized by well-defined coalitions driven by belief-driven conflict which resort to a wide variety of

guidance instruments at multiple levels of government. In fact, the perceptual distortions within the ACF's model of the individual contributing to 'the devil shift' should be *particularly strong* in such policy arenas. Thus far, there have been two case studies initiated by other scholars – Mawhinney's (1993) analysis of linguistic conflict in Ontario education and Shannon's (1997) study of gender discrimination in wages in Australia and Ireland – where the authors found that the ACF applied quite well. But a more definitive judgment will have to await additional cases.

Address for correspondence: Paul A. Sabatier, Department of Environmental Sciences and Policy, University of California, Davis, One Shields Ave, Davis, CA 95616, USA. Tel: 530 752 3074. Fax: 530 752 3350. email: pasabatier@ucdavis.edu

NOTES

Theory-building is a collective enterprise. I would particularly like to thank Bill Blomquist, Dorothy Daley, Jan Eberg, John Grin, Robert Hoppe, Hank Jenkins-Smith, Bill Leach, Michael Mintrom, Neil Pelkey, John Power, Edella Schlager, Elizabeth Shannon, Gerald Thomas, Rinie van Est, and Matt Zafonte for the interest they have taken in improving the ACF over the last five years.

- 1 Only a brief overview of the 1993 version is presented here. For details, the reader is referred to Chapters 2, 3, and 10 of *Policy Change and Learning: An Advocacy Coalition Approach*.
- 2 In fact, Hypothesis 2 is partially true by definition, as a coalition is defined as people who agree on policy core items. Thus it is highly likely, although not logically required, that they will agree more on the policy core than on secondary aspects.
- 3 For a more extended discussion of many of these points, see Sabatier and Jenkins-Smith (1997).
- 4 There have also been a number of essays discussing the ACF, often comparing it with other approaches. These include Bennett and Howlett (1992), Lindquist (1992), deLeon (1994), Zahariadis (1995), Dowding (1995), Radaelli (1995a), Peterson (1995), Casey *et al.* (1997), and Capano (1996). Finally, there have been several papers, e.g. Radaelli (1995b), that apply the ACF to a case(s) in a more cursory fashion than those listed in Table 2.
- 5 The situation is more complex than suggested here. On the one hand, the entire literature on iron triangles, closed subsystems, and corporatism suggests that many political scientists view administrative agency officials as active policy participants. And there has been some work on journalists as political actors (Rothman and Lichter 1987; Iyengar 1991). On the other hand, there is substantial evidence that many political scientists are reluctant to see agency officials, scientists, and journalists as potential members of advocacy coalitions. (1) Most of the literature on principal agent models – particularly that of Wood and Waterman (1991, 1994) – views agency officials as passive blanks who respond to stimuli from principals. (2) In his influential article on the change in British macroeconomic policy from Keynesianism to monetarism in the 1980s, Hall (1993) recognizes the roles played by journalists and economists in popularizing monetarism, but never admits that they may have been active allies of the Thatcherites (rather than 'neutral' chroniclers of the debate).
- 6 Eberg (1997) is, however, a major exception.
- 7 This section has benefited greatly from Thomas (1996) and Grin and Hoppe (1997).
- 8 At Tahoe, those watershed events were approval of a regional plan and zoning ordinance in the winter of 1971–2 and the subsequent approval of several casinos because of some unusual voting rules (Sabatier and Pelkey 1990). In air pollution control, the

- watershed event was probably approval of the 1970 Clean Air Amendments, which greatly increased the stringency of federal regulation (Ingram 1974; Jones 1975).
- 9 Interestingly, Haas (1992) makes precisely the same mistake with respect to epistemic communities.
 - 10 Hojnacki (1997) analyzes the factors responsible for American interest groups' decisions to act alone or in concert in lobbying Congress. She finds that groups are more likely to work together (a) on broad, rather than narrow, issues, (b) when some organization is perceived as pivotal to success, or (c) when they perceive a strong organized opposition. Niche theory suggests that one way to minimize competition for credit is to specialize, i.e. occupy a narrow niche (Gray and Lowery 1996).
 - 11 This type of 'policy core policy preference' is probably similar to the 'legitimizing idea' of Lertzman *et al.* (1996: 131–3) and the 'justifying idea' of Muller (1995). Its essential characteristics are, however, much clearer.
 - 12 In their study of OCS leasing during the Reagan and Bush Administrations, Freudenburg and Gramling (1997) found that the Department of Interior was so convinced of the evidence concerning the negligible environmental impacts of expanded drilling that they convinced President Bush to turn the issue over to the National Academy of Sciences for a judgment. Imagine their surprise when the Academy ruled that the evidence was *not at all* clear!
 - 13 On the other hand, we are not yet prepared to say whether a change in one of the ten topics in the policy core (see Table 3) would constitute 'major' change, or whether it might require changes in several topics.
 - 14 Baumgartner and Jones' (1993) punctuated equilibrium theory does no better than the ACF on this point. Just as the ACF points to exogenous shocks, they point to changes in 'public image' and 'venue' as precursors of change, but both theories treat these precursors as exogenous (rather than endogenous) to the phenomena being explained.
 - 15 The 1987/8 version was naïve, while the revised 1993 version (Sabatier and Jenkins-Smith 1993: 221–2) was probably non-falsifiable – a far more heinous crime.
 - 16 Sabatier had, however, done research on both (a) coastal planning in Britain and France and (b) higher education reform in a number of European countries (Cerch and Sabatier 1986), and was also familiar with the European literature on policy implementation.
 - 17 Richardson's (1982) original work posited four styles defined by two binary variables: active versus reactive governmental approach and consensual versus conflictual relationship between government and private interests. But several commentators since that time have suggested amendments to the Richardson framework (Coleman and Skogstad 1990; Enevoldsen 1997), and it is not even clear that the recent paper by Mazey and Richardson (1995) on a 'promiscuous' European policy style is based on the original variables. From an ACF standpoint, the key distinction in Richardson's original typology is between consensual versus conflictual traditions of conflict resolution.
 - 18 This revision crystallized during a seminar presented at the European University Institute in October 1997. I would particularly like to thank Pierre Muller for suggesting the possibility that major policy change does not necessarily require the support of a majority of subsystem actors. As an example, he points to the major revision of French agricultural policy that occurred in the early 1960s. See Jobert and Muller (1987: 80–100).
 - 19 I would like to thank Neil Pelkey for raising this issue in a particularly forceful fashion.

REFERENCES

- Andersson, Magnus (1997) 'An advocacy coalition approach to long-term environmental policy change in Poland', unpublished paper, Free University of Amsterdam.
- Ashford, Douglas (1981) *British Dogmatism and French Pragmatism*, London: Allen & Unwin.
- Barke, Richard (1993) 'Managing technological change in federal communications policy:

- the role of industry advisory groups', in P. Sabatier and H. Jenkins-Smith (eds), *Policy Change and Learning*, Boulder, CO: Westview Press, pp. 129–46.
- Barke, Richard and Jenkins-Smith, Hank (1993) 'Politics and scientific expertise: scientists, risk perceptions, and nuclear waste policy', *Risk Analysis* 13 (October): 425–39.
- Baumgartner, Frank and Jones, Bryan (1993) *Agendas and Instability in American Politics*, Chicago: University of Chicago Press.
- Bennett, Colin and Howlett, Michael (1992) 'The lessons of learning: reconciling theories of policy learning and policy change', *Policy Sciences* 25: 275–94.
- Berry, Jeffrey (1977) *Lobbying for the People*, Princeton: Princeton University Press.
- Brady, David (1988) *Critical Elections and Congressional Policy Making*, Stanford: Stanford University Press.
- Brown, Anthony E. and Stewart, Joseph (1993) 'Competing advocacy coalitions, policy evolution, and airline deregulation', in P. Sabatier and H. Jenkins-Smith (eds), *Policy Change and Learning*, Boulder, CO: Westview Press, pp. 83–104.
- Bueno de Mesquita, Bruce and Stokman, Frans (eds) (1994) *European Community Decision-Making*, New Haven: Yale University Press.
- Burnham, Walter Dean (1970) *Critical Elections and the Mainsprings of American Politics*, New York: W.W. Norton.
- Capano, Giliberto (1996) 'Political science and the comparative study of policy change in higher education', *Higher Education* 31: 263–82.
- Casey, Sue *et al.* (1997) 'Placing post-graduate research in an advocacy coalition framework'. Paper presented at the Conference of the Public Policy Network, Melbourne, January.
- Cerch, Lada and Sabatier, Paul (1986) *Great Expectations and Mixed Performance: The Implementation of Higher Education Reforms in Europe*, Stoke on Trent, UK: Trentham Books.
- Coen, David (1997) 'The evolution of the large firm as a political actor in the European Union', *Journal of European Public Policy* 4(1): 91–108.
- Coleman, William D. and Skogstad, Grace (eds) (1990) *Policy Communities and Public Policy in Canada*, Toronto: Copp Clark Pitman.
- Converse, Philip (1964) 'The nature of belief systems in mass publics', in David Apter (ed.), *Ideology and Discontent*, New York: Free Press.
- Davis, Charles and Burnett, Miles (1997) 'Getting out the cut: politics and national forest timber harvesting, 1960–1995', in P. Sabatier (ed.), *An Advocacy Coalition Lens on Environmental Policy*, Cambridge, MA: MIT Press, forthcoming.
- Davis, Charles and Davis, Sandra (1988) 'Analyzing change in public lands policymaking: from subsystems to advocacy coalitions', *Policy Studies Journal* 17 (Fall): 3–24.
- deLeon, Peter (1994) 'The policy sciences redux: new roads to post-positivism', *Policy Studies Journal* 22(1): 176–84.
- Derthick, Martha and Quirk, Paul (1985) *The Politics of Deregulation*, Washington, DC: Brookings Institution.
- Dowding, Keith (1995) 'Model or metaphor: a critical review of the policy network approach', *Political Studies* 43 (March): 136–58.
- Downs, Anthony (1972) 'Up and down with ecology – the issue attention cycle', *Public Interest* 28: 37–50.
- Dudley, Geoffrey and Richardson, Jeremy (1996) 'Why does policy change over time? adversarial policy communities, alternative policy arenas, and British trunk roads policy, 1945–95', *Journal of European Public Policy* 3(1): 63–83.
- Eberg, Jan (1997) 'Waste policy and learning'. PhD thesis, Department of Political Science, University of Amsterdam.
- Enevoldsen, Martin (1997) 'Policy style and political subculture'. Paper presented at the Symposium on Innovation in Environmental Policy, University of Bologna, 21–25 July.
- Fiske, Susan and Taylor, Shelley (1984) *Social Cognition*, Reading, MA: Addison-Wesley.
- Freudenburg, William and Gramling, Robert (1997) 'How crude: advocacy coalitions, offshore oil, and the self-negating belief'. Paper presented at the AAAS Annual Meeting, Seattle, 16 February.

- Gerber, Elisabeth and Jackson, John (1993) 'Endogenous preferences and the study of institutions', *American Political Science Review* 87 (September): 639–56.
- Grant, Wyn (1995) *Autos, Smog, and Pollution Control*, Aldershot: Edward Elgar.
- Gray, Virginia and Lowery, David (1996) 'A niche theory of interest representation', *Journal of Politics* 58 (February): 91–111.
- Green, David and Shapiro, Ian (1994) *Pathologies of Rational Choice Theory*, New Haven: Yale University Press.
- Grin, John and Hoppe, Robert (1997) 'Towards a theory of the policy process: problems, premises, and prospects of the ACF'. Paper presented at the Polybios Workshop, University of Amsterdam, 4 February.
- Haas, Peter (1992) 'Introduction: Epistemic communities and international policy coordination', *International Organization* 46 (Winter): 1–35.
- Hall, Peter (1993) 'Policy paradigms, social learning, and the state: the case of economic policymaking in Britain', *Comparative Politics* 25 (April): 275–96.
- Heclo, Hugh (1974) *Social Policy in Britain and Sweden*, New Haven, Conn: Yale University Press.
- Heintz, Theodore (1988) 'Advocacy coalitions and the OCS leasing debate: a case study in policy evolution', *Policy Sciences* 21: 213–38.
- Héritier, Adrienne (1996) 'Options politiques et politiques publiques: l'exemple des politiques de l'environnement et des transports en Europe'. Présenté à la colloque sur l'analyse des politiques publiques, Université de Berne, 29 février–2 mars.
- Herron, Kerry, Jenkins-Smith, Hank and Silva, Carol (1997) 'Scientists, belief systems, and advocacy coalitions in environmental policy', in P. Sabatier (ed.), *An Advocacy Coalition Lens on Environmental Policy*, Cambridge, MA: MIT Press, forthcoming.
- Hojnacki, Marie (1997) 'Interest groups' decisions to join alliances or work alone', *American Journal of Political Science* 41 (January): 61–87.
- Hoppe, Robert and Peterse, Aat (1993) *Handling Frozen Fire*, Boulder, CO: Westview Press.
- Ingram, Helen (1974) 'The political rationality of innovation: the Clean Air Act amendments of 1970', in A. Friedlaender (ed.), *Approaches to Controlling Air Pollution*, Cambridge, MA: MIT Press, pp. 12–67.
- Iyengar, Shanto (1991) *Is Anyone Responsible? How Television Frames Political Issues*, Chicago: University of Chicago Press.
- Jenkins-Smith, Hank (1988) 'Analytical debates and policy learning: analysis and change in the federal bureaucracy', *Policy Sciences* 21: 169–212.
- Jenkins-Smith, Hank (1990) *Democratic Politics and Policy Analysis*, Pacific Grove, CA: Brooks/Cole.
- Jenkins-Smith, Hank (1991) 'Alternative theories of the policy process: reflections on research strategy for the study of nuclear waste policy', *PS: Political Science and Politics* 24 (June): 157–66.
- Jenkins-Smith, Hank and Sabatier, Paul (1994) 'Evaluating the advocacy coalition framework', *Journal of Public Policy* 14: 175–203.
- Jenkins-Smith, Hank and St Clair, Gilbert (1993) 'The politics of offshore energy: empirically testing the advocacy coalition framework', in P. Sabatier and H. Jenkins-Smith (eds), *Policy Change and Learning*, Boulder, CO: Westview Press, pp. 149–76.
- Jobert, Bruno and Muller, Pierre (1987) *L'état en action*, Paris: Presses Universitaires de France.
- Jones, Charles (1975) *Clean Air: The Policies and Politics of Pollution Control*, Pittsburgh: University of Pittsburgh Press.
- Jones, Charles (1977) *An Introduction to the Study of Public Policy*, 2nd edn, Belmont, CA: Wadsworth.
- Josselin, Daphné (1996) 'Domestic policy networks and European negotiations: evidence from British and French financial services', *Journal of European Public Policy* 3(3): 297–317.
- King, Gary, Keohane, Robert and Verba, Sidney (1994) *Designing Social Inquiry*, Princeton: Princeton University Press.

- Kiser, Larry and Ostrom, Elinor (1982) 'The three worlds of action', in E. Ostrom (ed.), *Strategies of Political Inquiry*, Beverly Hills, CA: Sage, pp. 179–222.
- Lave, Charles and March, James (1975) *An Introduction to Models in the Social Sciences*, New York: Harper & Row.
- Lertzman, Ken, Rayner, Jeremy and Wilson, Jeremy (1996) 'Learning and change in the British Columbia forest policy sector: a consideration of Sabatier's advocacy coalition framework', *Canadian Journal of Political Science* 29 (March): 111–33.
- Leschine, Tom and Lind, Kent (1997) 'Contaminated sediments in Puget Sound', in P. Sabatier (ed.), *An Advocacy Coalition Lens on Environmental Policy*, Cambridge, MA: MIT Press, forthcoming.
- Lester, James and Hamilton, Michael (1988) 'Intergovernmental relations and marine policy change: ocean dumping and at-sea incineration of hazardous waste', in Maynard Silva (ed.), *Ocean Resources and US Intergovernmental Relations in the 1980s*, Boulder, CO: Westview Press, pp. 197–220.
- Lindquist, Evert (1992) 'Public managers and policy communities: learning to meet new challenges', *Canadian Public Administration* 35 (Summer): 127–59.
- Loeber, Anne and Grin, John (1997) 'From phosphate policy to eutrophication control: policy change and learning in the Netherlands, 1977–89', in P. Sabatier (ed.), *An Advocacy Coalition Lens on Environmental Policy*, Cambridge, MA: MIT Press, forthcoming.
- Lord, Charles, Ross, Lee and Lepper, Mark (1979) 'Biased assimilation and attitude polarization: the effects of prior theories on subsequently considered evidence', *Journal of Personality and Social Psychology* 37: 2098–109.
- Majone, Giandomenico (1980) 'Policies as theories', *Omega* 8: 151–62.
- Marcus, Alfred and Goodman, Robert (1986) 'Airline deregulation: factors affecting the choice of firm political strategy', *Policy Studies Journal* 15 (December): 231–46.
- Martin, Cathie Jo (1995) 'Nature or nurture? Sources of firm preference for national health reform', *American Political Science Review* 89 (December): 898–913.
- Mawhinney, Hanna (1993) 'An advocacy coalition approach to change in Canadian education', in P. Sabatier and H. Jenkins-Smith (eds), *Policy Change and Learning*, Boulder, CO: Westview Press, pp. 59–82.
- Mazey, Sonia (1998) 'The European Union and women's rights: from the Europeanization of national agendas to the nationalization of a European agenda?', *Journal of Public Policy* 5(1): 131–52.
- Mazey, Sonia and Richardson, Jeremy (1995) 'Promiscuous policy-making: the European policy style?', in C. Rhodes and S. Mazey (eds), *The State of the European Union: Building a European Polity?*, Harlow: Longman, pp. 337–59.
- Mazmanian, Daniel and Sabatier, Paul (1989) *Implementation and Public Policy*, Lanham, MD: University Press of America.
- Mintrom, Michael and Vergari, Sandra (1996) 'Advocacy coalitions, policy entrepreneurs, and policy change', *Policy Studies Journal* 24 (Fall): 420–434.
- Moe, Terry (1990) 'Political institutions: the neglected side of the story', *Journal of Law, Economics, and Organization* 6: 213–53.
- Muller, Pierre (1995) 'Les politiques publiques comme construction d'un rapport au monde', in A. Faure, G. Pollet and P. Warin (eds), *La construction du sens dans les politiques publiques*, Paris: L'Harmattan, pp. 153–79.
- Munro, John (1993) 'California water politics: explaining policy change in a cognitively polarized subsystem', in P. Sabatier and H. Jenkins-Smith (eds), *Policy Change and Learning*, Boulder, CO: Westview Press, pp. 105–28.
- Olson, Mancur (1965) *The Logic of Collective Action*, Cambridge: Harvard University Press.
- Ostrom, Elinor (1990) *Governing the Commons*, Cambridge: Cambridge University Press.
- Ostrom, Elinor (1997) 'Institutional rational choice: an assessment of the IAD framework', in P. Sabatier (ed.), *Theories of the Policy Process*, Boulder, CO: Westview Press, forthcoming.
- Peffley, Mark and Hurwitz, Jon (1985) 'A hierarchical model of attitude constraint',

- American Journal of Political Science* 29 (November): 871–90.
- Peterson, John (1995) 'Decision-making in the European Union: towards a framework of analysis', *Journal of European Public Policy* 2 (March): 69–93.
- Poole, Keith and Daniels, R. Steven (1985) 'Ideology, party and voting in the US Congress, 1959–1980', *American Political Science Review* 79 (June): 373–99.
- Pressman, Jeffrey and Wildavsky, Aaron (1973) *Implementation*, Berkeley, CA: University of California Press.
- Quattrone, George and Tversky, Amos (1988) 'Contrasting rational and psychological analyses of political choice', *American Political Science Review* 82 (September): 719–36.
- Radaelli, Claudio (1995a) 'The role of knowledge in the policy process', *Journal of European Public Policy* 2 (June): 159–83.
- Radaelli, Claudio (1995b) 'Corporate direct taxation in the European Union', *Journal of Public Policy* 15(2): 153–81.
- Radaelli, Claudio and Martini, Alberto (1997) 'Think tanks, advocacy coalitions, and policy change: a first look at the Italian case', in D. Stone, M. Garnett and A. Denham (eds), *Think Tanks in Comparative Perspective*, Manchester: Manchester University Press.
- Richardson, Jeremy (ed.) (1982) *Policy Styles in Western Europe*, London: Allen & Unwin.
- Richardson, Jeremy (1994) 'Doing less by doing more: British government, 1979–1993', *West European Politics* 17 (July): 178–97.
- Richardson, Jeremy (1995) 'EU water policy: uncertain agendas, shifting networks and complex coalitions', in H. Bressers, L. O'Toole and J. Richardson (eds), *Networks for Water Policy: A Comparative Perspective*, London: Frank Cass.
- Richardson, Jeremy (1996) 'Policy-making in the EU. Interests, ideas and garbage cans of primeval soup', in J. Richardson (ed.), *European Union: Power and Policy-Making*, London: Routledge, pp. 3–23.
- Robyn, Dorothy (1987) *Braking the Special Interests: Trucking Deregulation and the Politics of Policy Reform*, Chicago: University of Chicago Press.
- Rothman, Stanley and Lichter, S. Robert (1987) 'Elite ideology and risk perception in nuclear energy policy', *American Political Science Review* 81 (June): 383–404.
- Sabatier, Paul (1986) 'Top-down and bottom-up models of policy implementation: a critical analysis and suggested synthesis', *Journal of Public Policy* 6 (January): 21–48.
- Sabatier, Paul (1987) 'Knowledge, policy-oriented learning, and policy change', *Knowledge* 8 (June): 649–92.
- Sabatier, Paul (1988) 'An advocacy coalition framework of policy change and the role of policy-oriented learning therein', *Policy Sciences* 21: 129–68.
- Sabatier, Paul (1992) 'Interest group membership and organization: multiple theories', in M. Petracca (ed.), *The Politics of Interests*, Boulder CO: Westview, pp. 99–129.
- Sabatier, Paul and Brasher, Anne (1993) 'From vague consensus to clearly-differentiated coalitions: environmental policy at Lake Tahoe, 1964–85', in P. Sabatier and H. Jenkins-Smith (eds), *Policy Change and Learning*, Boulder, CO: Westview Press, pp. 149–76.
- Sabatier, Paul and Jenkins-Smith, Hank (eds) (1988) 'Symposium on policy change and learning', *Policy Sciences* 21: 123–278.
- Sabatier, Paul and Jenkins-Smith, Hank (eds) (1993) *Policy Change and Learning: An Advocacy Coalition Approach*, Boulder, CO: Westview Press.
- Sabatier, Paul and Jenkins-Smith, Hank (1997) 'The advocacy coalition framework: an assessment', in P. Sabatier (ed.), *Theories of the Policy Process*, Boulder, CO: Westview Press, forthcoming.
- Sabatier, Paul and Pelkey, Neil (1990) *Land Development at Lake Tahoe, 1960–84*, Davis, CA: Institute of Ecology.
- Sabatier, Paul and Zafonte, Matthew (1994) 'Are bureaucrats and scientists members of advocacy coalitions?' Paper submitted (but rejected) for publication to the APSR. Will be revised and resubmitted to *AJPS*.
- Sabatier, Paul and Zafonte, Matthew (1995) 'The views of Bay/Delta water policy activists on endangered species issues', *Hastings West-Northwest Journal of Environmental Law and Policy* 2 (Winter): 131–46.

- Sabatier, Paul and Zafonte, Matthew (1997a) 'Who do policy élites look to for advice and information?' Paper submitted for publication to the *Journal of Politics*.
- Sabatier, Paul and Zafonte, Matthew (1997b) 'Policy oriented learning between coalitions: characteristics of successful professional/scientific fora'. Paper presented at the AAAS Meetings, Seattle, 9 February.
- Sabatier, Paul, Hunter, Susan and McLaughlin, Susan (1987) 'The devil shift: perceptions and misperceptions of opponents', *Western Political Quarterly* 41 (September): 449–76.
- Sabatier, Paul, Zafonte, Matthew and Gjerde, Michael (1997) 'Coalition stability in US automotive pollution control policy', in P. Sabatier (ed.), *An Advocacy Coalition Lens on Environmental Policy*, Albany, NY: SUNY Press, forthcoming.
- Scharpf, Fritz (1997) *Games Real Actors Play: Actor-Centered Institutionalism and Policy Research*, Boulder, CO: Westview Press.
- Schiff, Ashley (1962) *Fire and Water: Scientific Heresy in the Forest Service*, Cambridge, MA: Harvard University Press.
- Schlager, Edella (1995) 'Policy making and collective action: defining coalitions within the advocacy coalition framework', *Policy Sciences* 28: 242–70.
- Schlager, Edella and Blomquist, William (1996) 'A comparison of three emerging theories of the policy process', *Political Research Quarterly* 49 (September): 651–72.
- Scholz, John and Pinney, Neil (1995) 'Duty, fear, and tax compliance: the heuristic basis of citizenship behavior', *American Journal of Political Science* 39 (May): 490–512.
- Sewell, Granville (1997) 'Advocacy coalitions and the implementation of the Framework Convention on Climate Change', in P. Sabatier (ed.), *An Advocacy Coalition Lens on Environmental Policy*, Cambridge, MA: MIT Press, forthcoming.
- Shannon, Elizabeth (1997) 'Inching toward equality: equal pay in Australia and Ireland, 1969–1996', unpublished paper, Center for Public Policy and Management, University of Tasmania.
- Simon, Herbert (1985) 'Human nature in politics: the dialogue of psychology with political science', *American Political Science Review* 79 (June): 293–304.
- Smith, Don (1968) 'Cognitive consistency and the perception of others' opinions', *Public Opinion Quarterly* 32: 1–15.
- Stewart, Joseph (1991) 'Policy models and equal educational opportunity', *PS: Political Science and Politics* 26 (June): 167–73.
- Stone, Deborah (1988) *Policy Paradox and Political Reason*, New York: HarperCollins.
- Tesser, Abraham (1978) 'Self-generated attitude change', *Advances in Experimental Social Psychology* 11: 289–338.
- Thomas, Gerald (1996) 'Policy subsystems, the advocacy coalition framework, and US civilian land remote sensing (landsat) policy'. Paper presented at the Annual Meeting of the Western Political Science Association, San Francisco, 14–16 March.
- Thompson, Michael, Ellis, Richard and Wildavsky, Aaron (1990) *Cultural Theory*, Boulder, CO: Westview Press.
- Van Horn, Carl (1979) *Policy Implementation in the Federal System*, Lexington, MA: D.C. Heath.
- van Muijen, Marie-Louise (1993) *Better Safe than Provocative*, Amsterdam: VU University Press.
- Weiss, Carol (1977) 'Research for policy's sake: the enlightenment function of social research', *Policy Analysis* 3 (Fall): 531–45.
- Wellstead, Adam (1996) 'The role of the advocacy coalition framework in understanding forest policy change: Alberta and Ontario', unpublished Master's thesis, Graduate Department of Forestry, University of Toronto.
- Wendon, Bryan (1998, forthcoming) 'The Commission and images–venue interaction on EU social policy', *Journal of European Public Policy* 5: 2.
- Weyent, John (1988) 'Is there policy-oriented learning in the analysis of natural gas policy issues?', *Policy Sciences* 21 (Fall): 239–62.
- Wood, B. Dan and Waterman, Richard (1991) 'The dynamics of political control of the bureaucracy', *American Political Science Review* 85 (September): 801–22.

Wood, B. Dan and Waterman, Richard (1994) *Bureaucratic Dynamics*, Boulder, CO: Westview Press.

Zafonte, Matthew and Sabatier, Paul (1997) 'Shared beliefs and functional interdependence as determinants of ally networks in overlapping subsystems', paper submitted for publication to the *Journal of Theoretical Politics*.

Zahariadis, Nikolaos (1995) 'Comparing lenses in comparative public policy', *Policy Studies Journal* 23 (2): 378–82.

Final version accepted for publication 15/10/97