The advocacy coalition framework

Coalitions, learning and policy change

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Introduction

Policy process research is the study of public policy over time and the surrounding actors, contexts, and events. The formal academic study of policy processes began in the 1950s and 1960s, led by the likes of Lerner and Lasswell (1951), Freeman (1955), Simon (1957), Lindblom (1959), Dawson and Robinson (1963), Easton (1965), Ranney (1968), and Walker (1969). Policy process research sprung, in part, from dissatisfaction with political scientists' focus on governing institutions (courts, legislatures, and executives), a theoretical desire to understand broader political systems, optimism following successes of the social sciences during World War II, and a practical desire to benefit society.

Since the 1960s, a number of complementary research programs have emerged for describing and explaining various aspects of policy processes (e.g. Sabatier 1999, 2007). Among these research programs is the advocacy coalition framework (ACF) created by Paul Sabatier and Hank Jenkins-Smith in the 1980s (Sabatier 1987, 1988; Jenkins-Smith 1990; Sabatier and Jenkins-Smith 1993, 1999). Sabatier and Jenkins-Smith established the ACF in response to several perceived shortcomings in policy process research: a dissatisfaction with the policy cycle or stages heuristic as a causal theory; a need to take more seriously the role of scientific and technical information in policy processes; dissatisfaction with the top-down and bottom-up perspectives of the implementation literature; a need to take a long-term time perspective to understand policy processes; and a need to develop theories that assume more realistic human agents other than the rational actor models found in microeconomics.

The ACF resulted as an amalgam inspired partly from previous studies of issue networks (Heclo 1978), implementation (Pressman and Wildavsky 1973; Mazmanian and Sabatier 1981; Hjern and Porter 1981), learning (Heclo 1974; Weiss 1977), policy subsystems (Griffith 1939; Freeman 1955), belief systems (Ajzen and Fishbein 1980; Putnam 1976; Peffley and Hurwitz 1985; Hurwitz and Peffley 1987), scientific and technical information in policy debates (Mazur 1981; Jenkins-Smith 1990), and a model of the individual based on bounded rationality and cognitive filters (Simon 1957). The ACF serves as an analytical guide for answering questions principally about advocacy coalitions, policy-oriented learning, and policy change.

The framework

Following Laudan (1977: 70–120) and Ostrom (2005: 27–9), frameworks serve as a platform for groups of scholars to work together toward common understandings and explanations of phenomena. Frameworks provide assumptions, specify the scope of inquiry, and establish conceptual categories with basic definitions and general relations. Frameworks support the development and testing of theory that, in turn, narrow the scope of inquiry, offer testable hypotheses, and postulate causal relationships among concepts. This section introduces the ACF as an actual "framework" by describing its assumptions, scope, and the basic concepts and the general relations among them. The next sections describe the major theoretical emphases supported by the ACF.

Assumptions

Sabatier and Jenkins-Smith based the ACF on several foundational assumptions (1993: 17-20):

The policy subsystem is the primary unit of analysis for understanding policy processes. Policy subsystems are defined by a substantive topic and territorial domain along with a set of people actively involved in shaping subsystem affairs. Subsystems are simultaneously semi-autonomous while also nested and interdependent (Sabatier 1998; Nohrstedt and Weible 2010). For example, a water policy subsystem at local level will likely be nested in a regional policy subsystem which is nested within a national policy subsystem. This same water policy subsystem at a local level overlaps to various extents with other subsystems (e.g. a local-level transportation policy subsystem). To attract the attention and involvement of actors, policy subsystems usually entail some degree of authority or potential for authority to alter behavior and shape subsystem outcomes.

The set of relevant subsystem actors include any person attempting to influence subsystem affairs. As policy process research developed in the 1950s and 1960s, the emphasis was on symbiotic relations between legislative committees, interest groups, and the government agencies (what has been referred to as the "iron triangle"). The ACF broadens the set of subsystem actors essentially to include any person attempting to influence subsystem affairs, including government officials, members of the private sector and nonprofits, scientists and consultants, and members of the media.

Individuals are boundedly rational with limited ability to process stimuli, motivated by belief systems, and prone to experience the "devil shift." The actors involved in policy subsystems are boundedly rational, meaning they are goal-oriented but hampered by their cognitive abilities to process stimuli (Simon 1985). To overcome these limitations, actors simplify the world through hierarchical belief systems consisting of normative deep core beliefs, subsystem specific policy core beliefs, and narrow secondary beliefs (Putnam 1976; Peffley and Hurwitz 1985; see Sabatier and Jenkins-Smith 1999: 133). These belief systems are used as heuristics to filter and interpret stimuli (Lord et al. 1979; Munro et al. 1997; Munro et al. 2002). Furthermore, the ACF borrows from prospect theory to assume that actors remember losses more than gains (Quattrone and Tversky 1988). The result is what the ACF calls the "devil shift," which is the tendency for individuals to exaggerate both the power and maliciousness of their opponents (Sabatier et al. 1987).

Subsystems are simplified by aggregating actors into one or more coalitions. Given the large number and diversity of actors involved in subsystem affairs, there is a need to simplify while not overly distorting reality. The ACF directs researchers toward aggregating actors into one or more coalitions. These coalitions are defined by their shared policy core beliefs and coordination patterns.

Policies and programs incorporate implicit theories and assumptions reflecting the translated beliefs of one or more coalitions. Subsystems consist of boundedly rational actors working together in coalitions toward shaping policy outputs and outcomes. Given the importance of beliefs systems, the ACF

assumes that policy outputs are merely the translations of beliefs of the winning coalition or coalitions (Pressman and Wildavsky 1973).

Scientific and technical information is important for understanding subsystem affairs. Most subsystems involve issues that are usually difficult to describe and explain in terms of problem seriousness, causes, and potential impacts of proposals. Scientific and technical information, thus, becomes an important resource for coalition members for a variety of uses from argumentation with opponents to the mobilization of supporters.

Researchers should adopt a longterm time perspective (e.g, of 10 years or more) to understand policy processes and change. Policy process research is largely the study of public policy over time. The ACF recommends that researchers examine their phenomenon as a point in the ongoing development of the policy subsystem. Part of the rationale for taking a long-term perspective is to allow for ample time to evaluate the outcomes of any policy decision, to assess political reactions, and to study learning within and between coalitions.

Scope

A framework should provide a scope of inquiry for guiding scholars toward a shared research agenda. The traditional foci of the ACF are descriptions and explanations of advocacy coalitions, learning within and among coalition allies and opponents, and policy change. These emphases should be viewed as general categories for both research inquiry and theory development. Certainly other areas of research are permitted and have been conducted (e.g. Montpetit 2011; Shanahan *et al.* 2011).

General conceptual categories and relations

A framework provides a common vocabulary including the major conceptual categories and general relations among them. Figure 10.1 shows the ACF flow diagram (adapted from Sabatier and Weible 2007) featuring a policy subsystem with coalitions, their resources and beliefs, and the policy outputs and outcomes. Policy subsystems are embedded in a broader political system with relatively stable parameters and external events, where the latter is more prone to change than the former.

For researchers wanting to apply the ACF, it is important to consider the following basic concepts: (1) public policy topic that defines the subsystem; (2) actors who are involved in subsystem affairs; (3) institutions (e.g. rules) that structure overall subsystem interactions and the behaviors within particular venues; (4) relative stable parameters and external events; (5) interdependencies with other subsystems; and, finally, (6) time to permit observations of coalition behavior, learning, and policy change.

The next step is to articulate the theoretical emphases within the ACF. Theories serve different functions than frameworks in a research program. Theories narrow the scope of inquiry, link concepts usually in the form of expectations, propositions, or observable implications, and establish rationales (causal mechanisms) that explain how concepts interrelate. There are three major theoretical emphases of the ACF.

First theoretical emphasis: advocacy coalitions

The first area of theoretical emphasis focuses on advocacy coalitions. Advocacy coalitions are defined as groups of actors sharing policy core beliefs and coordinating their behavior in a non-trivial manner. Advocacy coalitions emerge and persist because actors vary in their belief systems

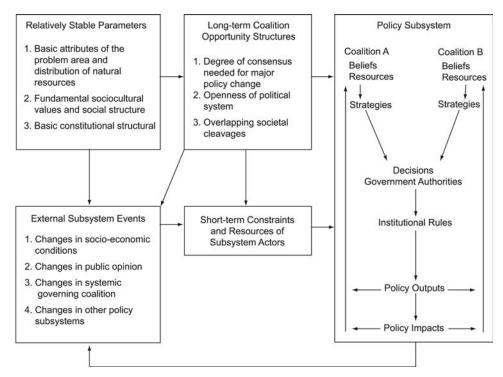


Figure 10.1 Flow diagram of the advocacy coalition framework Source: Adapted from Sabatier and Weible (2007)

(e.g. normative values regarding a particular policy topic) and seek to form alliances to translate their beliefs into actual policies before actors with different belief systems can do the same.

The ACF offers three reasons that permit subsystem actors to overcome threats to collective action in mobilizing coalition activity (Zafonte and Sabatier 1998; Sabatier and Weible 2007: 197). First, similar beliefs among coalition allies reduce transaction costs of coordination. Second, the level of coordination varies with some actors engaging in weak coordination (modifying their behavior to achieve shared goals or information exchange) and others in strong coordination (jointly developing and executing action plans) (Fenger and Klok 2001). Third, in high conflict situations, the "devil shift" occurs when actors exacerbate the power and maliciousness of opponents. When under the devil shift, coalition members will overestimate the threats from shared opponents and the imposed costs of inaction.

Empirical research across subsystems and political systems have confirmed that policy subsystems are regularly composed of one to five advocacy coalitions fighting over resources, access to venues, and influence on the formation of public policy (Weible *et al.* 2009). Occasionally, these coalitions interact competitively showing intervals, sometimes spanning decades, of one-upmanship. In other situations a single, "dominant" coalition will largely control a subsystem for extended periods of time over a largely nonexistent, inactive, or disorganized opposition. Key descriptive questions regarding coalition formation and development include:

- What is the structure of the networks and belief systems of advocacy coalition members?
- How stable is coalition membership over time?
- What is the role of different organizations within coalitions?

- How much consensus is there among coalition members?
- What are the patterns of coordination among subsystem actors?
- What strategies and resources do coalitions use to achieve their policy goals?

Within the scope of the emphasis on coalitions are also a set of explanatory questions addressing the formation of coalitions and the interaction and behavior of coalition members:

- Why do coalitions form?
- How do coalition members overcome threats to collective action?
- Why do coalition allies negotiate with opponents?

These questions are usually pursued in the form of testing and developing hypotheses. The most important hypotheses aiming at the composition and development of advocacy coalition include:

Hyphothesis 1	On major controversies within a policy subsystem when policy core beliefs
	are in dispute, the lineup of allies and opponents tends to be rather stable
	over periods of a decade or so.
Hypothesis 2	Actors within an advocacy coalition will show substantial consensus on issues
	pertaining to the policy core beliefs, although less so on secondary aspects.

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

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

Hypothesis 5 Elites of purposive groups are more constrained in their expression of beliefs

and policy positions than elites from material groups.

(Sabatier and Weible 2007: 220)

Hypotheses 1–5 specify some of the fundamental components of the ACF, including the hierarchy and stability of belief systems and the distinction between different types of organizations. Important contributions in the study of coordination networks and belief stability and change within coalitions can be found in Jenkins-Smith *et al.* (1991), Zafonte and Sabatier (1998), Weible and Sabatier (2005), Weible (2005), Ingold (2011), Henry *et al.* (2010), Henry (2011), Matti and Sandström (2011), and Pierce (2011). Previous empirical research provides mixed results regarding these hypotheses by showing patterns of both stability and defection of coalition members over time (Jenkins-Smith and St. Clair 1993; Jenkins-Smith *et al.* 1991; Sabatier and Brasher 1993; Zafonte and Sabatier 2004; Andersson 1999; Munro 1993).

While coalition resources have been a regular feature within the ACF since its inception (Sabatier and Jenkins-Smith, 1993: 29), Sabatier and Weible (2007: 201-4) and Weible (2007) placed more emphasis on the area by offering a typology of coalition resources: (1) formal legal authority to make policy decisions; (2) public opinion; (3) information; (4) mobilizable troops; (5) financial resources; and (6) skillful leadership. The access and use of these resources is theoretically argued to be important for forming and maintaining coalitions and for policy change. However, the empirical investigation of coalition resources has only recently been examined by scholars (Nohrstedt 2011; Ingold 2011; Albright, 2011).

The formation and stability of advocacy coalitions over time and their political behavior is conditioned by subsystem institutions and events outside the control of subsystem actors. The most important institutional factors that constrain subsystem actors are first, the openness of the political system and second, norms of consensus, which affect the level of inclusiveness of

coalitions, exchange of information across coalition boundaries, and access to policy venues (Sabatier and Weible 2007). Institutions shape the level of coordination within a coalition, primarily by setting legal impediments that constrain formation of formal alliances paving the way for weaker forms of coordination as a viable political strategy (Zafonte and Sabatier 1998; Fenger and Klok 2001; Nohrstedt 2010). Events are likely to affect coalition behavior, particularly by providing opportunities for exploitation of new resources (including mobilization of new coalition members) and strategy in terms of venue exploitation.

Second theoretical emphasis: policy-oriented learning

Learning has been a central focus of the ACF since its inception (Sabatier 1988). Policy-oriented learning is defined as "enduring alterations of thought or behavioral intentions that result from experience and which are concerned with the attainment or revision of the precepts of the belief system of individuals or of collectives" (Sabatier and Jenkins-Smith 1993: 42–56). To study policy-oriented learning is to study changes in belief system components of coalition members over time. Policy-oriented learning may entail better understanding of political goals, the causal relationship among key factors in the subsystem, and effective strategic behaviors, especially as used in analytic debates.

Important descriptive questions that guide inquiry into learning are the following:

- What belief system components are changing through learning?
- To what extent is one coalition learning more than another coalition?

Explanatory questions deal with issues of when, why, and how actors learn within and between coalitions and include:

- What contexts and events foster learning by coalition members?
- How does learning diffuse among allies within a coalition?
- What contexts and events foster learning by brokers?
- To what extent, if at all, does a broker facilitate learning between coalitions?
- Why does learning occur, if at all, between some members of opposing coalitions and not others?

On the whole, the intent of the ACF's focus on policy-oriented learning is to understand and explain what constitutes learning and why learning occurs within coalitions and between coalitions. Four general factors are important for explaining policy-oriented learning. The first involves the attributes of professional forums (see Jenkins-Smith 1990). Professional forums are venues of discussion involving subsystem actors. Forums are structured by different sets of institutional arrangements. Some forums are structured by open participation rules (open forum) and others by closed participation rules (closed forum). Professional forums are based on common analytical training and norms and are postulated to increase the likelihood for learning between coalitions (ibid.).

The second variable conditioning learning is the level of conflict between coalitions (Jenkins-Smith 1990; Weible 2008). The expectation is that there is an inverted quadratic relationship between conflict and cross-coalition learning. On one extreme at low levels of conflict, there is little cross-coalition learning as the opposing coalitions place their attention on other, more pressing issues. On the other extreme at high levels of conflict, there is also little cross-coalition learning as opposing coalitions are motivated to defend their positions and refute claims by their

opponents. The conditions most conducive for cross-coalition learning would then be intermediate levels of conflict where there is enough of a threat to attract the attention of rivals but not too much of a threat to entrench opponents in rigid policy positions.

The third variable is attributes of the stimuli or data prompting learning. The stimuli can come from many different sources including scientific and technical information, actors, and events. One important attribute of stimuli relates to the level of analytical tractability of the phenomenon (Jenkins-Smith 1990: 97–9). Subsystems with highly intractable issues are marked by uncertainty and high levels of disagreement about the scientific and technical aspects of the issue (e.g. about the quality of the data or theories used). In general, highly intractable issues are expected to be associated with lower levels of cross-coalition learning.

The fourth variable that conditions learning involves attributes of individuals, including belief systems, resources, and network contacts. Are actors with extreme beliefs less likely to learn from their opponents than actors with moderate beliefs? Are some actors more or less supported by their analytical training in learning than others? Are actors with network contacts—either within their coalitions or with opposing coalitions—more likely to learn?

Central to the arguments about cross-coalition learning is a certain type of individual: the policy brokers. Sabatier and Jenkins-Smith (1993: 27) define brokers as "a category of actors ... whose dominant concerns are keeping with the level of political conflict within acceptable limits and reaching some 'reasonable' solution to the problem." Sabatier and Jenkins-Smith argue that identifying brokers is an empirical question and is not dependent upon organizational affiliation. These broker may learn, possibly prior to the coalitions, and then facilitate cross-coalition learning later in the process (Sabatier and Jenkins-Smith 1993: 218–19).

Given the research questions and categories above, the theoretical emphasis on policy-oriented learning within the ACF is built into five hypotheses:

- Hypothesis 1 Policy-oriented learning across belief systems is most likely when there is an intermediate level of informed conflict between the two coalitions. This requires that: (a) each have the technical resources to engage in such a debate; 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 2 Policy-oriented learning across belief systems is most likely when there exists a forum which is: (a) prestigious enough to force professionals from different coalitions to participate; and (b) dominated by professional norms.
- Hypothesis 3 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 4 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 5 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.

A review of ACF applications in Weible *et al.* (2009) indicates that, of the five learning hypotheses, the first two have been tested the most and the last two the least. From this review, they found evidence suggesting that learning within coalitions reinforces beliefs and mixed

results about the likelihood of cross-coalition learning. For example, Larsen *et al.* (2006) find that cross-coalition learning occurs at the secondary level of belief systems (as expected) but also at the policy-core level (not expected). Similar mixed results can be found with the measurement and findings involving professional forums. If there is any area within the ACF needing more attention at both the theoretical and operational levels, it is policy-oriented learning.

Third theoretical emphasis: policy change

The third theoretical emphasis in the ACF involves policy change. The ACF assumes that policies are translations of beliefs and can be conceptualized and measured hierarchically like belief systems. Policy components that span, and are salient to, a policy subsystem represent the policy core aspects of the subsystem. Policy components that deal with only a part of a subsystem or technical components of a policy represent secondary aspects of the subsystem. A change in policy core aspects indicates a major change in the direction of the subsystem and is defined as "major policy change." A change in secondary aspects indicates a minor change in the subsystem and is defined as "minor policy change" (Sabatier and Jenkins-Smith 1999: 147–8).

The descriptive questions in the study of policy change include:

- To what extent does major and minor policy change occur within the subsystem over time?
- What is the content of minor and/or major policy change?

Explanatory questions on the topic of policy change are several:

- Why do some events and contexts lead to minor and major policy change?
- What are the mechanisms linking internal and external events to minor and major policy change?
- How do negotiated agreements lead to policy change?
- When does policy-oriented learning lead to policy change?

As reflected in these questions, the ACF specifies four pathways to policy change (Sabatier and Weible 2007). The first two paths involve events either external or internal to the policy subsystem. External events occur outside the territorial boundaries of the subsystem and/or the topical policy boundaries of the subsystem and are, hence, largely outside the control of subsystem actors. Internal events occur inside the territorial and/or the topical area of the policy subsystem and are more likely affected by subsystem actors. The two types of events differ in their effect on coalition behavior and policy change. Most importantly, attribution of blame or success is higher after internal subsystem events are compared to after external subsystem events (see Nohrstedt and Weible 2010).

Policy-oriented learning is the third path and is said to lead to policy change through altering the beliefs of coalition members. Policies may change after a dominant coalition learns or after learning occurs between adversarial coalitions.

The fourth path is said to occur through negotiated agreements. Sabatier and Weible (2007: 205–6) describe nine prescriptions fostering negotiation between coalitions and then policy change. These nine prescriptions include: a hurting stalemate, broad representation, leadership, consensus, funding, commitment by actors, importance of empirical issues, trust, and lack of alternative venues. From this list, the most important for instigating negotiations between coalitions is a hurting stalemate. A hurting stalemate occurs when both coalitions view the status quo as unacceptable and do not have access to alternative venues for achieving their objectives.

The original version of the ACF offered two hypotheses involving major policy change:

Hypothesis 1 Significant perturbations external to the subsystem are a *necessary*, *but not sufficient*, cause of change in the *policy core* attributes of a governmental program.

Hypothesis 2 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.

These two hypotheses for policy change have existed since the original version (Sabatier 1987, 1988). After the introduction of the other paths to policy change in 2007, new hypotheses were not added to encompass this expansion in logic. To better reflect the theoretical arguments c. 2007, a revised Hypothesis 1 would read as follows:

Hypothesis 1 Significant perturbations external to the subsystem, a significant perturbation internal to the subsystem, policy-oriented learning, negotiated agreement, or some combination thereof are *necessary*, but not sufficient, cause of change in the policy core attributes of a governmental program.

The underlying logic of the ACF suggests that none of the four paths are necessary and sufficient to produce policy change. Thus, one underdeveloped area within the ACF is the explanation that traces any path or combination of paths from its occurrence to policy change or stasis. This research should center on one or more exploitive coalitions that seek to capitalize on the opportunity afforded by one of the paths. But how a coalition will exploit an opportunity is largely unknown from a theoretical perspective, with notable explorations into the topic taken by Smith (2000), Ameringer (2002), Albright (2011), Ingold (2011), and Nohrstedt (2005, 2008, 2010, 2011). Developing knowledge in understanding the links from one or more of the four paths to policy change will most likely involve the analysis of how resources are redistributed between coalitions within the subsystem. It is likely, for example, that external events or internal events or even learning might alter the distribution of resources or how those resources are used leading to a more empowered coalition. Another theoretical area open for inquiry is the interdependencies of the four paths or multiple occurrences within the same path. For example, when do multiple external or internal events lead to learning and possibly negotiated agreements among adversarial coalitions? Similarly, when do a number of events occurring over time accumulate into sufficient momentum for a coalition to capitalize to produce major policy change (Smith 2000)? Finally, the role and behavior of dominant coalition actors in processes leading to policy change must be clarified (Nohrstedt 2010: 23). Under what conditions do dominant coalition members promote stability and defend the status quo and when do they seek change? What approaches to policy change (reformist or conservative) do dominant coalitions take following external and internal events and why? By definition, dominant coalition members control key political resources—primarily formal legal authority—and thereby policy programs (Nohrstedt 2011). Therefore, understanding the motivations of dominant coalition actors is an important avenue for future research.

Conclusions

The ACF has continued for a quarter of a century and has made progress in understanding and explaining policy processes across the globe. The theoretical emphasis in the ACF reflects the

specialization among people applying the framework as well as natural partitions of the hypotheses. Clearly, the hypotheses are overlapping. Whereas a theoretical emphasis on the structure and stability of networks and beliefs might be the dependent variable for one study about coalitions, changes in coalition structure and stability might be the independent variable for another study about policy change (Weible *et al.* 2011). Researchers should not view the theoretical emphases as sharply distinct but rather as signifying helpful partitions that permit specialized inquiry into questions about coalitions, learning, and policy change.

Among the next steps in applying the ACF is to continue to develop the theoretical descriptions and explanations within each of these areas of emphases as well as to develop other unexplored areas within the framework. It is quite possible, for example, that there is another theoretical emphasis centered on the role of scientific and technical information and scientists in policy subsystems (Jenkins-Smith 1990; Weible 2008; Montpetit 2011). Policy narratives are another area that offers opportunities for theoretical growth based in part on the ACF (Shanahan *et al.* 2011). Scholars can also develop better theoretical understanding about how specific concepts or categories of concepts interrelate within the framework; for example, the role of political opportunity structures (Sabatier 1998; Kübler 2001). Most importantly, the ACF is increasingly serving as a framework for guiding researchers from around the world in conducting comparative public policy analysis. As such, what is needed is a clearer articulation of how subsystems operate in different political systems and political cultures. One likely approach for international comparisons is, first, to focus on political system differences (e.g. the continuum from corporatism to pluralism) and, second, to compare and contrast subsystem institutions (e.g. subsystem specific rules and norms) and their effects on coalition formation, policy learning and change.

Given the continued and growing momentum of the ACF research program, this effort must ask the question: to what end? The immediate objective of the ACF is a better understanding and explanation of policy processes. Such knowledge serves academia in research and teaching. Another tradition in public policy is the service to society outside the networks of academics. In this context, extant approaches for this aspiration can be found in various forms of engaged scholarship (Van de Ven 2008), advocacy, and direct service. For scholars applying the ACF and seeking practical benefits, one question should be how the framework can be used for theoretically-guided research toward academic ends and as a tool in providing advice to subsystem actors toward better societal outcomes.

Note

1 See Sabatier and Jenkins-Smith (1993) for a thorough description of the framework's underpinnings. Additionally, readers interested in gaining a deeper understanding of the ACF are encouraged to read Sabatier (1987, 1988, 1998), Jenkins-Smith (1990), Sabatier and Jenkins-Smith (1999), Sabatier and Weible (2007), Weible et al. (2009), and Weible et al. (2011).

Bibliography

Ajzen, Icek and Martin Fishbein. 1980. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall.

Albright, Elizabeth A. 2011. 'Policy change and learning in response to extreme flood events in Hungary: An advocacy coalition approach', *Policy Studies Journal* 39(3): 484–511.

Ameringer, Carl F. 2002. Federal antitrust policy and physician discontent: Defining moments in the struggle for congressional relief, *Journal of Health Politics, Policy and Law* 27(4): 543–74.

Andersson, Magnus. 1999. Change and Continuity in Poland's Environmental Policy. Dordrecht: Kluwer.

Dawson, Richard and James Robinson. 1963. 'Interplay competition, economic variables, and welfare policies in the American states', *Journal of Politics* 25 (May): 265–89.

- Easton, David. 1965. A Framework for Political Analysis. Chicago: University of Chicago Press.
- Fenger, Menno and Pieter-Jan Klok. 2001. 'Interdependency, beliefs, and coalition behavior: A contribution to the advocacy coalition framework', *Policy Sciences* 34: 157–70.
- Freeman, J. Leiper. 1955. The Political Process. New York: Random House.
- Griffith, Ernest. 1939. The Impasse of Democracy. New York: Harrison Hilton Books.
- Heclo, Hugh. 1974. Social Policy in Britain and Sweden. New Haven, CT: Yale University Press.
- —— 1978. 'Issue networks and the executive establishment', in Anthony King (ed.) *The New American Political System*. Washington, DC: AEI.
- Henry, Adam. 2011. 'Power, ideology, and policy network cohesion in regional planning', *Policy Studies Journal* 39(3): 361–83.
- ——, Mark Lubell and Michael McCoy. 2010. 'Belief systems and social capital as drivers of policy network structure: The case of California regional planning', *Journal of Public Administration Research and Theory* 21(3); 419–44.
- Herron, Kerry G. and Hank C. Jenkins-Smith. 2006. Critical Masses and Critical Choices: Evolving Public Opinion on Nuclear Weapons, Terrorism, and Security. Pittsburgh, PA: University of Pittsburgh Press.
- Hirschi, Christian and Thomas Widmer. 2010. 'Policy change and policy stasis: Comparing Swiss foreign policy toward South Africa (1968–94) and Iraq (1990–91)', *Policy Studies Journal* 38(3): 537–63.
- Hjern, Benny and David Porter. 1981. 'Implementation structures: A new unit of administrative analysis', Organizational Studies 2: 211–27.
- Hurwitz, Jon and Mark Peffley. 1987. 'How are foreign policy attitudes structured? A hierarchical model', *American Political Science Review* 81: 1099–120.
- Ingold, Karin. 2011. 'Network structures within policy processes: Coalitions, power and brokerage in Swiss climate policy', *Policy Studies Journal* 39(3): 434–59.
- Jenkins-Smith, Hank. 1990. Democratic Politics and Policy Analysis. Pacific Grove, CA: Brooks/Cole.
- and Gilbert St. Clair. 1993. 'The politics of offshore energy: Empirically testing the advocacy coalition framework', in Paul Sabatier and Hank Jenkins-Smith (eds) *Policy Change and Learning*. Boulder, CO: Westview Press, 149–75.
- ——, Gilbert St. Clair and Brian Woods. 1991. 'Explaining change in policy subsystems: Analysis of coalition stability and defection over time', *American Journal of Political Science* 35 (November): 851–72.
- Kübler, Daniel. 2001. 'Understanding policy change with the advocacy coalition framework: An application to Swiss drug policy', *Journal of European Public Policy* 8(4): 623–41.
- Larsen, Jakob Bjerg, Karsten Vrangbaek and Janine M. Traulsen. 2006. 'Advocacy coalitions and pharmacy policy in Denmark', Social Science and Medicine 63(1): 212–24.
- Laudan, Larry. 1977. Progress and Its Problems: Towards a Theory of Scientific Growth. Berkeley, CA: University of California Press.
- Lerner, Daniel and Harold D. Lasswell (eds). 1951. *The Policy Sciences*. Stanford, CA: Stanford University Press.
- Lindblom, Charles E. 1959. 'The science of muddling through', Public Administrative Review 59: 78-88.
- Lord, Charles, Lee Ross and Mark Lepper. 1979. 'Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence', *Journal of Personality and Social Psychology* 37: 2098–109.
- Matti, Simon and Annica Sandström. 2011. 'The rationale determining advocacy coalitions: Examining coordination networks and corresponding beliefs', *Policy Studies Journal* 39(3): 385–410.
- Mazmanian, Daniel and Paul Sabatier. 1981. Implementation and Public Policy. Lanham, MD: University Press of America.
- Mazur, Allan. 1981. The Dynamics of Technical Controversy. Washington DC: Communications Press.
- Montpetit, Eric. 2011. 'Scientific credibility, disagreement, and error costs in 17 biotechnology policy subsystems', *Policy Studies Journal* 39(3): 513–33.
- Munro, John. 1993. 'California water politics: Explaining change in a cognitively polarized subsystem', in Paul Sabatier and Hank Jenkins-Smith (eds) *Policy Change and Learning*. Boulder, CO: Westview Press, 105–28.
- Munro, Geoffrey D. and Peter H. Ditto. 1997. 'Biased assimilation, attitude polarization, and affect in reactions to stereotype-relevant scientific information', *Personality and Social Psychology Bulletin* 23(6): 636–53.
- —, Peter H. Ditto, Lisa K. Lockhart, Angela Fagerlin, Mitchell Gready and Elizabeth Peterson. 2002. 'Biased assimilation of sociopolitical arguments: Evaluating the 1996 US Presidential debate', *Basic and Applied Social Psychology* 24(1): 15–26.

- Nohrstedt, Daniel. 2005. 'External shocks and policy change: Three Mile Island and Swedish nuclear energy policy', *Journal of European Public Policy* 12(6): 1041–59.
- —— 2008. 'The politics of crisis policymaking: Chernobyl and Swedish nuclear energy policy', *Policy Studies Journal* 36(2): 257–78.
- —— 2010. 'Do advocacy coalitions matter? Crisis and change in Swedish nuclear energy policy', *Journal of Public Administration Research and Theory* 20: 309–33.
- —— 2011. 'Shifting resources and venues producing policy change in contested subsystems: A case study of Swedish signals intelligence policy', *Policy Studies Journal* 39(3): 461–84.
- ——and Christopher M. Weible. 2010. 'The logic of policy change after crisis: Proximity and subsystem interaction', *Risks, Hazards, and Crisis in Public Policy* 1(2): 1–32.
- Ostrom, Elinor. 2005. Understanding Institutional Diversity. Princeton, NJ: Princeton University Press.
- Peffley, Mark and Jon Hurwitz. 1985. 'A hierarchical model of attitude constraint', *American Journal of Political Science* 29: 871–90.
- Pierce, Jonathan J. 2011. 'Coalition stability and belief change: Advocacy coalitions in US foreign policy and the creation of Israel, 1922–44', *Policy Studies Journal* 411–34.
- Pressman, Jeffrey and Aaron Wildavsky. 1973. *Implementation*. Berkeley, CA: University of California Press.
- Putnam, Robert. 1976. The Comparative Study of Political Elites. Englewood Cliffs, NJ: Prentice Hall.
- Quattrone, George A. and Amos Tversky. 1988. 'Contrasting rational and psychological analysis of political choice', *American Political Science Review* 82: 719–36.
- Ranney, Austin. 1968. Political Science and Public Policy. New York: Markham.
- Sabatier, Paul, A. 1987. 'Knowledge, policy-oriented learning, and policy change: An advocacy coalition framework', *Knowledge: Creation, Diffusion, Utilization* 8(4): 649–92.
- —— 1988. 'An advocacy coalition model of policy change and the role of policy-oriented learning therein', *Policy Sciences* 21 (autumn): 129–68.
- —— 1991. 'Toward better theories of the policy process', PS: Political Science and Politics 24(2): 147–56.
- —— 1998. 'The advocacy coalition framework: revisions and relevance for Europe', *Journal of European Public Policy* 5 (March): 98–130.
- —— 1999. 'The need for better theories', in *Theories of the Policy Process*. Boulder, CO: Westview Press, 3–17.
- —— 2007. Theories of the Policy Process. Boulder, CO: Westview Press.
- ——and Anne M. Brasher. 1993. 'From vague consensus to clearly differentiated coalitions: environmental policy at Lake Tahoe, 1964–1985', in Paul Sabatier and Hank Jenkins-Smith (eds) *Policy Change and Learning*. Boulder, CO: Westview Press, 177–208.
- ——and Hank C. Jenkins-Smith. 1993. *Policy Change and Learning: An Advocacy Coalition Approach*. Boulder, CO: Westview Press.
- ——and Hank Jenkins-Smith. 1999. 'The advocacy coalition framework: An assessment', in Paul Sabatier (ed.) *Theories of the Policy Process*. Boulder, CO: Westview Press, 117–68.
- and Christopher M. Weible. 2007. 'The advocacy coalition framework: Innovations and clarifications', in Paul Sabatier (ed.) *Theories of the Policy Process*, 2nd edn. Boulder, CO: Westview Press, 189–222.
- ——and Matthew Zafonte. 2001. 'Policy knowledge, advocacy organizations', in Neil J. Smelser and Paul B. Baltes (eds) *International Encyclopedia of the Social and Behavioral Sciences* 17. Oxford: Pergamon Press, 11563–68.
- —, Susan Hunter and Susan McLaughlin. 1987. 'The devil shift: Perceptions and misperceptions of opponents', Western Political Quarterly 40: 51–73.
- Schlager, Edella. 1995. 'Policy making and collective action: Defining coalitions within the advocacy coalition framework', *Policy Sciences* 28: 243–70.
- Shanahan, Elizabeth, Michael D. Jones and Mark K. McBeth. 2011. 'Policy narratives and policy processes', *Policy Studies Journal* 39(3): 535–61.
- Simon, Herbert A. 1957. Models of Man: Social and Rational. New York: John Wiley.
- —— 1985. 'Human nature in politics: The dialogue of psychology with political science', *American Political Science Review* 79 (June): 293–304.
- Smith, Adrian. 2000. 'Policy networks and advocacy coalitions: Explaining policy change and stability in UK industrial pollution policy?' *Environment and Planning C: Government and Policy* 18: 95–114.
- Van de Ven, Andrew H. 2008. Engaged Scholarship: A Guide for Organizational and Social Research. Oxford: Oxford University Press.
- Walker, Jack, L. 1969. 'The diffusion and innovation among the American states', *The American Political Science Review* 63(3): 880–99.

- Weible, C.M. 2005. 'Beliefs and perceived influence in a natural resource conflict: an advocacy coalition approach to policy networks', *Political Research Quarterly* 58(3): 461–75.
- 2007. 'An advocacy coalition framework approach to stakeholder analysis: understanding the political context of California marine protected area policy', *Journal of Public Administration Research and Theory* 17: 95–117.
- —— 2008. 'Expert-based information and policy subsystems: A Review and synthesis', *Policy Studies Journal* 36(4): 615–35.
- ——and Paul A. Sabatier. 2005. 'Comparing policy networks: Marine protected areas in California', Policy Studies Journal 33(2): 181–204.
- ——, Paul A. Sabatier and Kelly McQueen. 2009. 'Themes and variations: Taking stock of the advocacy coalition framework', *Policy Studies Journal* 37(1): 121–40.
- ——, Paul A. Sabatier, Hank C. Jenkins-Smith, Daniel Nohrstedt and Adam Douglas Henry. 2011. 'A quarter century of the advocacy coalition framework: An introduction to the special issue', *Policy Studies Journal* 39(3): 349–60.
- Weiss, Carol. 1977. 'Research for policy's sake: The enlightenment function of social research', *Policy Analysis* 3 (autumn): 531–45.
- Zafonte, Matthew and Paul A. Sabatier. 1998. 'Shared beliefs and imposed interdependencies as determinants of ally networks in overlapping subsystems', *Journal of Theoretical Politics* 10 (4): 473–505.
- ——and Paul A. Sabatier. 2004. 'Short-term versus long-term coalitions in the policy process: Automotive pollution control, 1963–89', *The Policy Studies Journal* 32(1): 75–107.