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Comparison of Theories of the Policy Process

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Scholars compare theories, frameworks, and models (or generally "theoretical approaches") to consider how to combine their insights or accept some and reject others (Sabatier 2007a, 330). They often do this implicitly or in an ad hoc way. Our aim is to add some rigor to this process by examining three of the criteria used most frequently by Weible (2017, see Introduction in this volume):

1. To what extent does the approach cover the basic elements of a theoretical approach, such as a shared vocabulary and defined concepts?
2. Are the scholars who are applying the theoretical approach developing an active research program?
3. Does the theoretical approach explain a large part of the policy process?

Using these criteria, our aim is to make the theoretical approaches presented in this volume comparable by identifying their key concepts, their strengths and weaknesses for understanding the policy process and advancing knowledge, and the similarities and differences in what these different theories explain and what shared knowledge can be gleaned across them.[1]

This takes place in the context of a policy theory field that is not conducive to systematic comparison. The literature contains a complicated mix of frameworks, theories, and models (Schlager 1999, 2007). The major theories and frameworks have generally been produced independently of each other and were not designed with these comparisons in mind. They contain different frames of reference, foci, and concepts. Some are used to produce a parsimonious understanding of a large number of cases; others tend to emphasize in-depth

understanding of single cases. Their assumptions and findings may complement or contradict each other. They may attach different meanings to the same concepts (Cairney 2013a, 7). They may require extensive training to understand fully. So, a systematic comparison is an important aim in itself—to foster broad agreement on how we, as a group of scholars, can understand and judge different approaches. This is as much a practical requirement as a scientific statement: we need to know what information to pay attention to and what to ignore and to ensure that the information we receive can be meaningfully compared with our own. Although we recognize that some of the approaches identified in this book may operate more at the level of broader frameworks, or more narrowly as models (see Schlager 1999, 2007 for further discussion), for the remainder of this chapter we use the term *theory* in a generic sense for ease of description.

HOW SHOULD WE COMPARE THEORETICAL APPROACHES? THREE CRITERIA

The first criterion is the extent to which the basic elements of a theory are covered. Following Weible (2017, see Introduction, this volume), we consider the extent to which each has (1) a defined scope and levels of analysis, (2) a shared vocabulary and defined concepts, (3) explicit assumptions, (4) identified relationships among key concepts or variables, and (5) a model of the individual grounding the theory. People making choices are at the heart of policy studies, but not all theories conceptualize this process extensively.

The second criterion is the development of an active research program. We consider four indicators of this criterion: (1) the degree to which the approach has been employed actively by researchers and published as journal articles and books; (2) whether it has been tested in multiple contexts, inclusive of diverse policy issues and different political systems, and with multiple methods; (3) whether scholars involved in employing the theory have made an attempt to actively develop shared research protocols, methods, or approaches; and (4) how the theory has been adapted or modified over time.

Developing indicators of the third criterion—whether the theory explains a large part of the policy process—is the most challenging because we know that the policy process is complex and there is no "general theory" (Smith and Larimer 2009, 15–19). This prompts us to consider a fundamental question: Given that we must simplify a complex world to understand it, which elements do policy scholars treat as crucial to explanation? These crucial elements are identified in similar ways (see, e.g., Weible 2014; John 2003; Cairney 2012b; Schlager 2007).

We are interested in how each theory describes the following elements and explains the interactions between them to provide an overall explanation of policymaking systems:

1. *Actors making choices:* The policymaking world may include thousands of people. To simplify, policy theories often categorize and describe key actors. Actors can be individuals or collectives, and collectives can range from private companies to interest groups to governments bodies (Weible 2017, see Introduction, this volume).

2. *Institutions:* These are the rules, norms, practices, and relationships that influence individual and collective behavior. The choices of actors are explained partly by their understanding of and adherence to rules. Rules can be formal and widely understood, such as when enshrined in law or a constitution, or informal and only understood in particular organizations. Institutions at one level (e.g., constitutional) can also shape activity at another (e.g., legislative or regulatory), establish the types of venues where policy decisions are made, and make the rules that allow particular types of actors or ideas to enter the policy process.

3. *Networks or subsystems:* These are the relationships between actors responsible for policy decisions and the "pressure participants" (Jordan, Halpin, and Maloney 2004), such as interest groups with which they consult and negotiate. Senior policymakers delegate responsibility for policymaking to bureaucrats, who seek information and advice from groups. Groups exchange information for access to and potential influence within government. Bureaucracies and other public bodies (or forums for collective choice) may have operating procedures that favor particular sources of evidence and some participants over others.

4. *Ideas or beliefs:* This broad category captures how theories deal with ways of thinking or the knowledge that plays a role in the policy process. This category may include beliefs, knowledge, worldviews, and shared definitions of policy problems, images, and solutions within groups, organizations, networks, and political systems. Some ideas or beliefs may be taken for granted or rarely questioned—such as core beliefs, values, or paradigms. Others may be more malleable, such as proposed solutions to policy problems.

5. *Policy context:* This category describes the wide array of features of the policymaking environment that can influence policy decisions. It can refer to the often-changing policy conditions that policymakers take into account when identifying problems and deciding how to address them, such as a political system's geography, biophysical and demographic profile, economy, and mass attitudes and behavior (Hofferbert 1974). It can also refer to a sense of policymaker "inheritance"—of laws, rules, institutions, and programs—on entry into office (Rose 1990).

6. *Events:* Events can be routine and anticipated, such as elections that produce limited change or introduce new actors with different ideas. Or they can be unanticipated incidents, including social or natural crises or major scientific breakthroughs and technological changes (Weible 2017, see Introduction, this volume). Their unpredictability makes them difficult to theorize, and they can often be treated as "errors" or external factors providing an additional source of explanation. Or they can be incorporated within theories that focus on how actors interpret and respond to events.

The main complication is that policy theories do not treat these concepts in the same way. First, these terms are ambiguous, producing debate about their meaning and most useful applications. For example, there are at least four major approaches to studies of institutionalism (rational choice, historical, sociological, and constructivist), and it is still difficult to place many texts within those categories (Lowndes 2010, 65; Hall and Taylor 1996, 939–940; Peters 2005, 108; Cairney 2012b, 77). These problems are compounded when we try to connect terms and use a range of other ambiguous concepts—such as power, evolution, punctuated equilibrium, and policy entrepreneurs—to provide a complete explanation (Cairney 2012b, 271–273). Additionally, each of the elements we identified above includes multiple subelements, and scholars may debate whether the subelements can be combined or form part of the same overarching concept.

Second, the boundaries between terms are fluid. As one example, institutions are defined primarily as rules and norms, which make them difficult to disentangle from ideas or networks. In particular, "constructivist institutionalism" challenges the suggestion that institutions represent fixed structures (Hay 2006, 65; Béland and Cox 2010, 4; Cairney 2012b, 83–84). Other studies identify shared rules and norms as the main explanation for network or subsystem stability (Jordan and Maloney 1997). Similarly, one person's event or context is another person's idea, particularly if events only become important when important people pay attention to them.

Third, theories explore these processes at the level of the individual, network, or system. The metaphor of the telescope is useful: (1) zooming in to see individuals, then zooming out to see groups and organizations, networks, and political systems (Cairney 2012b, 346); and (2) shifting one's focus from the "top" to the "bottom" or from one organization to another. Further, not all theories focus on all aspects of the policy process. Some focus on a small number of these terms—partly because trade-offs exist between explaining either one element in depth or the whole process. So, we should not assume that each theory refers to each term in the same way or shares the same focus. Rather, we consider how each theory uses these elements of the policy process and describes their interaction to produce an explanation of a significant part of the policy process.

COMPARATIVE CRITERION 1: ELEMENTS OF A THEORY

To help organize our comparison, Table 8.1 presents a brief summary of the indicators we use to explore our first criterion: key elements of a theory. These indicators include: (1) a defined scope and levels of analysis; (2) shared vocabulary and defined concepts; (3) defined assumptions; (4) the model of the individual; and (5) identified relationships among key concepts.

Scope and levels of analysis. Each of the approaches in this volume has a relatively well-defined scope and provides a different lens on the policy process. They all, to some degree, address questions related to policy formulation and change within their scope. The Multiple Streams Framework (MSF), Punctuated Equilibrium Theory (PET), and innovation and diffusion models (IDM) tend to emphasize particular stages of the policy process more than the other theories, although each poses distinct questions. MSF explores how agenda setting and policymaking occur under conditions of ambiguity (see Chapter 1). PET explains why and how political systems, generally characterized by stability and incrementalism, occasionally produce large-scale departures from the past (see Chapter 2). The IDM consider what explains the adoption of new policies and how they diffuse across states and other jurisdictions (see Chapter 7). The Narrative Policy Framework (NPF) and Advocacy Coalition Framework (ACF) place a premium on studying questions related to policy formulation and change but also the importance of the cognitive biases that make storytelling and coalition formation so important. The ACF digs into questions around coalition formation and policy learning, for example (see Chapter 4). The NPF looks at how narratives influence public opinion, how these narratives are structured, and how they reflect policy beliefs (see Chapter 5). Although Policy Feedback Theory (PFT; see Chapter 3) addresses policy formulation and change, it focuses more on questions of policy design and dynamics, such as the feedback of policies into society. The Institutional Analysis and Development (IAD) framework and its related Social-Ecological Systems (SES) framework differ from the other theories in that they are explicitly more generic frameworks. The IAD framework is aimed at guiding inquiry of how institutions, which include public policies, shape human interactions as well as how they are designed and perform. As noted by Schlager and Cox (2017, see Chapter 6 in this volume), the starting point for the IAD framework is typically a collective action problem, and scholars have applied a diverse set of theories and models in studying different collective action problems.

For many of the approaches covered in this volume, the level of analysis, or where conclusions from the research are drawn or inferred, is a policy system or subsystem. However, it is important to differentiate between the level of analysis and the unit of observation. Often researchers applying the theories rely on units of observation that differ from the primary level of analysis. For

TABLE 8.1 What Elements of a Theoretical Approach Are Included?

	MSF	PET	PFT	ACF	NPF	IAD Framework	IDM
Scope and levels of analysis	Scope: Policy choice under ambiguity. Level: System, but implicit, and focus is on actors coupling streams	Scope: Political system toward stability and periodic major change. Level: System	Scope: How policies shape politics and subsequent policymaking. Level: System, but implicit	Scope: Advocacy coalition interaction, learning, and policy change. Levels: Coalitions and subsystems	Scope: Influence of narratives on public opinion, policy dialogue, agenda setting, policy change. Levels: Individual, coalition, societal	Scope: How people devise institutions and the outcomes of those processes. Level: The action situation may be broadly interpreted	Scope: Policy diffusion and innovation. Levels: Policymaking venues/governments
Shared vocabulary and defined concepts	Primarily the five structural elements of the framework	Numerous key concepts such as institutional friction	Primarily policy feedback and the types of effects	Numerous key concepts	Numerous key concepts, some borrowed	Numerous key concepts, expanded further by Social-Ecological Systems (SES) framework	Primarily policy adoption and diffusion and key concepts explaining diffusion or adoption
Assumptions	Explicitly defined	Included, for example, logic of decision making, but not explicitly labeled as assumptions	Implicitly defined assumptions underlying the rationale for effects	Explicitly defined	Explicitly defined	Defined, but very generally at the framework level	Some assumptions explicitly defined for the models
Model of the individual	Challenges assumptions of comprehensive rationality; focus on ambiguity	Bounded rationality, particularly relating to attention	Not explicitly discussed in this volume; suggests individual choice is shaped by policies and institutions	Boundedly rational, emphasis that individuals are motivated by beliefs and prone to devil shift	Homo narrans, builds on bounded rationality recognizing the role of heuristics, primacy of affect, hot cognition, selective exposure, primacy of groups, identity protective cognition, narrative cognition	Multiple are compatible, but the researcher must be explicit with the model	Not explicit, but recognizes that both bounded rationality and rational choice models may be compatible
Relationships among key concepts	Generally identifies three streams that come together during windows of opportunity to cause major policy change; specific hypotheses recently added	Describes factors that lead to major policy change and those that constrain change or produce incrementalism; offers specific hypotheses for empirical testing	General emphasis on effects of public policy on the meaning of citizenship, form of governance, power of groups, political agendas—all of which affect future policy; hypotheses in empirical applications	General relationships shaping subsystem at framework level; specific factors that influence coalition formation, policy learning, and policy change via hypotheses	Hypotheses at microlevel and mesolevel on influence of narrative elements on individual persuasion, how narratives are used in coalitional strategies, policy learning	General relationships at the framework level, and more specific at theory and model levels, for example, conditions that lead to collective action and principles of robust common pool resource governance	General model of innovation identified; specific determinants of policy diffusion and adoption identified in alternative models in empirical applications

example, ACF studies typically use individuals or organizations as the unit of observation to draw conclusions about coalitions or subsystems, whereas PET is explicitly a system-level analysis.

Some theories are more explicit than others about what levels of analysis are of interest. The NPF directs researchers to three possible levels of analysis (macro/societal, meso/subsystem, micro/individual), whereas the ACF identifies and defines two levels of analysis (policy subsystems and coalitions). PET discusses the nature of decision making in policy systems but does not define policy systems as directly as the ACF. The MSF and PFT also explore questions related to policy systems but do not pay close attention to the boundaries of those systems. IDM studies look at policymaking venues or governments for the level of analysis. Still, the IDM draw inferences about how policies diffuse across a system or collection of states (i.e., a political system made up of states, such as the United States or European Union). The primary level of analysis in the IAD framework also diverges from the others in that it looks at action situations. However, the breadth of the concept of the action situation means that it could be viewed as a coalition, network, or other type of collective action venue, depending on the research question addressed. Decision making within the action situation can also operate at constitutional, collective, and operational levels.

Shared vocabulary and defined concepts. All of the theories or frameworks presented have developed shared vocabulary and a set of concepts that inform the research scope. Most are explicit about their definitions and have incorporated the primary key concepts into principal diagrams and figures that represent the scope of the theory. The IAD and the SES frameworks may have the most extensive set of shared vocabulary, likely the result of their broad scope. By contrast, the MSF, although it presents a set of shared key concepts and general definitions, would benefit from more consistent and clear operationalization of its core concepts, as recognized by Herweg, Zahariadis, and Zohlnhöfer in this volume (2017, see Chapter 1), Jones et al. (2016), and Cairney and Jones (2016). Although clear conceptualization can aid analysts by providing opportunities for more precise measurement, especially across research contexts, an overly complex, or precisely defined, set of concepts may inhibit widespread appeal of the applicability of the theory. Additionally, the set of key concepts identified within these theories can evolve, or the theory may incorporate new concepts or shift their emphasis. We discuss some of these changes below in our examination of research program coherence.

Defined assumptions. All of the theories in this volume offer at least implicit assumptions that underlie their theoretical logic. The IAD framework's assumptions are the most general and least specified at the framework level. For example, in laying out the components of an action situation, or identifying a typology of rules and the levels where collective action occurs (operational,

collective choice, constitutional), the IAD framework includes assumptions about the factors that are critical to understanding collective decision making. ACF provides more explicit assumptions, such as its emphasis on a long time period to study policy change. MSF is also explicit with its assumptions, focusing on the ambiguity of decision making, the time constraints facing policymakers, problematic preferences of actors in policy processes, unclear technology within political systems, fluid participation in decision-making bodies, and stream independence. PET draws on similar assumptions about bounded rationality and agenda setting but adds the expectation that policy systems exhibit exogenous and endogenous drivers of positive and negative feedback. The ACF assumes that the focus of policymaking activity is the subsystem. The NPF also recognizes the subsystem as a key level of activity at the mesolevel but also explicitly assumes that policy narratives operate across micro-, meso-, and macrolevels. The NPF further assumes that the world is (to a great extent) socially constructed, but those constructions are susceptible to manipulation by actors telling stories. The MSF similarly suggests that the problem stream is socially constructed but does not include this in its set of explicit assumptions.

Model of the individual. The model of the individual in many theories is part of the stated assumptions. Most theories in this book adopt a broad focus on bounded rationality. People do not have the time, resources, and cognitive ability to consider all issues and act optimally, so they use informational shortcuts and other heuristics or emotional cues to produce what they perceive to be good-enough decisions. However, bounded rationality on its own is little more than a truism, and each approach has to make sense of its implications in relation to other key concepts. So, despite its widespread recognition among the theories, we find different emphases in the models of the individual.

For instance, the NPF emphasizes the role of emotions and narration on human decision making in establishing its model of *homo narrans:* actors tell stories to manipulate the bounded rationality of others. PET focuses on the need for individual actors to consider issues serially (one issue at a time), whereas organizations can parallel process, producing limited attention to most issues, but continuous potential for major shifts in attention. The theories also differ in their recommendations about how to work with the model of the individual. The IAD framework accepts that it can accommodate differing models of the individual; some models make the assumption of comprehensive rationality, whereas others explore bounded rationality. What is critical in the IAD framework is that analysts are explicit about their assumptions about individual values, their information-processing abilities, and their internal decision-making mechanism. IDM also recognize that both bounded rationality and rational choice models may be compatible with the theory. The NPF seeks to synthesize approximately ten ideas about rationality and decision making to produce a model that is more nuanced, but it is difficult to connect the specific elements

of the model to the rationale underlying the theory's hypotheses. On the opposite end of the spectrum, PFT is the least explicit about its model of the individual. Like the other theories, however, PFT suggests that individuals are not perfectly rational because their choices and understanding of the political world are influenced by policy designs.

We argue there is likely a trade-off in the level of specificity underlying the model of the individual. On the one hand, more detailed models of the individual are likely to offer more accurate representations of the underlying drivers of human decision making. Moreover, adding nuances to the simplified "boundedly rational" models of the individual can open up new questions about how actors engage and interact in policy processes as well as whether and under what conditions policy learning occurs. For example, different emphases on the model of the individual have opened up questions about how problem framing occurs (MSF), how attention to policy problems shift (PET, MSF), why collective action is possible under certain conditions (IAD framework), and the ways in which coalitions demonize their opponents (ACF, NPF). Expanding individual models further or adopting insights from other models may add areas for future theoretical development. On the other hand, adding too many layers of complexity to models of the individual may lead to problems of internal inconsistencies with parent theories and can make it difficult to establish clear linkages or rationale for the hypotheses or models that they should inform. It is also difficult, if not impossible, to present system-wide analysis without a simple model of individual behavior.

Relationships among key concepts. Each body of literature presents relationships among key variables that build on the logic of the theory's assumptions and models of the individual—often in the form of explicit hypotheses or propositions. Most often these relationships explore how different factors (e.g., contextual variables, narratives, coalitional structures, institutional venues, or framing of target populations) affect an outcome within the policy process (e.g., major or minor policy change, public opinion of policies, policy efficacy). In some cases, these relationships are broadly implied. For example, the main argument of the MSF is that three "streams" (problems, policies, politics) come together, often through the efforts of policy entrepreneurs, during "windows of opportunity" to set policy agendas and effect policy change. Yet, new exponents of the MSF also offer a new set of more specific hypotheses in this volume of the book (see Chapter 1, Tables 1.1 and 1.2). These lay out the conditions under which the key elements of the framework are more likely to lead to agenda setting and policy decision making. PET also lays out general expectations and more precise hypotheses. It identifies institutional, subsystem, and decision-making factors that lead to major policy change as well as those that constrain change or produce incrementalism. Within its models, PET further develops more precise hypotheses, such as explanations of the distribution

of budget changes over time, and focuses on levels of institutional friction to explain the size or frequency of punctuations. Similarly, IDM refer to highly specified variables of both internal and external "determinants" in its models that aim to explain why a policymaking venue is likely to adopt a new policy. NPF also develops a number of hypotheses that detail how persuasive policy narratives will be on individuals, how narratives are used in coalitional strategies, and how narrative strategies can affect public opinion and policy outcomes. PFT does not present specific hypotheses in the overview chapter in this volume, but individual studies that examine policy feedback have explored how different types of policy designs influence outcomes, such as the power of groups and political agendas. PFT research also seeks to examine the mechanisms that drive these relationships.

Both the ACF and the IAD and SES frameworks are open to tackling diverse sets of relationships among key concepts or variables. They present these relationships both at the general framework level, identifying the broad categories of factors that can influence policy processes (or action situations in the case of the IAD framework), and at the theory level in explaining more precise phenomena within the policy process. The ACF's theory-level explanations address the nature of coalitions, policy learning, and policy change. The IAD framework is less explicit about its hypotheses at the theory level than the ACF, but it does lay out the conditions that lead to collective action around common pool resource governance as well as the principles or factors associated with robust common pool resource institutions. Game theory models employed by IAD scholars have been used to identify more specific relationships about collective action.

Not all of the theories offer causal or explanatory hypotheses; rather, some present descriptive hypotheses. These include the ACF's propositions on coalitions and PET's propositions about the frequency and characterization of budget distributions. At the same time, some propositions stem directly from their assumptions, such as the ACF's ordering of beliefs. PET's assumptions also appear as propositions or hypotheses. For instance, PET argues that bounded rationality produces disproportionate attention and that ambiguity leads to reframing or institutional friction that may produce punctuations. These propositions or hypotheses explicitly help explain system-wide effects rather than try to predict which issues will receive most attention and which policy areas are subject to most punctuations.

COMPARATIVE CRITERION 2: ACTIVENESS OF RESEARCH PROGRAMS AND THEIR COHERENCE

Table 8.2 presents a summary of our assessment of the theories' levels of research activity and coherence. Most have produced publications in the hundreds, with the exception of the relatively new NPF and PFT, whose applications appear to

TABLE 8.2 How Active and Coherent Are the Research Programs?

	MSF	PET	PFT	ACF	NPF	IAD Framework	IDM
Extent of publications	Kingdon's two editions plus numerous applications	Extensive and growing rapidly; almost 400 publications in web annex	Numerous applications, including books and journal articles	Numerous applications; 224 listed between 1987–2013	Fewer than others, but growing	Numerous, especially common pool resource applications	Numerous with rapid growth; over 100 per year since 2010
Tested in multiple contexts and/ or with multiple methods	Applications: Diverse policy domains, including subnational, national, and international levels Methods: Mostly case studies	Applications: Budgets and agendas in diverse policy domains, both national and international Method: Mostly quantitative	Applications: Social welfare policies and case studies, but more attention to other policy area Methods: Mostly case studies and some quantitative	Applications: Multiple countries and settings, but with initial bias toward US and environmental policy Methods: Mixed, for example, surveys, case studies, document analyses, interviews	Applications: Mostly United States in a few policy contexts, but still new Methods: Mixed, for example, case study, document coding, experiments, surveys	Applications: Mostly common pool resources around the world, but other policy domains, too Methods: Mixed, for example, meta-analyses, field research, experiments	Applications: Multiple policy topics, often US state level, but also national Methods: Mostly quantitative
Shared research protocols, methods, approaches	Unclear, but studies appear to be inspired by broad, intuitive concepts	Shared models of budget changes, agenda change Shared datasets, website, etc.	Unclear, but publications highlight common research agendas among the diverse community of scholars	Coding forms and surveys often available as appendices Many ACF survey questions replicated, but application of protocols not always consistent	Shared codebooks and methods for identifying narratives, with several modifications and adaptations	Framework is the shared approach with a large and active network; a number of shared datasets and models; less guidance on Social-Ecological Systems (SES) framework	Key methods and variables and unified model of policy innovation identified; common use of event history analysis
Change or adaptation to the theory over time	Scholars such as Durant and Diehl and Zahariadis have modified the theory to apply to foreign policy or European cases, but not as part of a core program.	Hypotheses added, concepts modified, methods advanced Major shift from case study focus on the United States, to a general punctuation hypothesis applied in new contexts (e.g., the Comparative Agendas Project).	Some evolution of the underlying theory of feedback and mechanisms. The most recent innovations have been methodological.	Hard core of the theory maintained, with multiple revisions, including 1993 (major edited book), 1998 (European focus), and 2007 (clarifying shocks).	Has updated hypotheses and connections to related policy theories as NPF is tested and critiqued.	Has evolved since the 1980s, clarifying vocabulary and concepts, and links to theory and models; addition of the SES framework is the main adaptation.	Diffusion mechanism has been made more explicit and tested more explicitly and rigorously in the models.

be growing steadily. As the number of applications of each of the theories has grown, so too has the diversity of contexts within which they are applied (for example, only 36 percent of PET studies since 2005 are from the United States). Still, the majority of applications across the theories covered here have been made in the United States or Europe, often across national or state levels, with few at local levels. The IAD framework and its companion SES framework are the exceptions. Some tend to employ quantitative methods with sophisticated modeling techniques (e.g., PET and IDM); others have relied more heavily on qualitative or case study applications (e.g., MSF and PFT). Others, such as the ACF, IAD framework, and NPF, have emphasized both quantitative and qualitative approaches and multiple types of data sources, such as surveys, document coding, and experiments.

Across the theories, we find strengths and weaknesses in how each advances its research program in terms of the extent and diversity of the research applications, the shared research protocols, and adaptations to the theory over time. When the MSF is applied, its strength is also its weakness. Its core concepts have broad intuitive appeal, which may make it feasible to apply without being immersed in the research program over a long period (Cairney and Jones, 2016). It also has been modified to make it more readily applicable outside the United States. Most applications have been case studies that use the concepts of contingency and ambiguity to focus in detail on why key decisions at particular stages were made in particular places at particular times. The explanations are impressive but difficult to generalize. A recent meta-analysis of the MSF, for example, has found that the coherence of the research program remains limited, particularly because of the inconsistencies in the operationalization of MSA's core concepts and the lack of integration of new subcomponents into the MSF's hypotheses (Jones et al. 2016).

Compared to MSF studies, PET research generally has treated its core concepts and their interaction consistently and coherently. Some concepts have been modified, and methods have advanced over time. There is potential for reduced clarity as the Comparative Agendas Project expands and new scholars (with different backgrounds and less training in PET) become involved, although PET's history of shared datasets and methods may help. When applied, PET has two major strengths. The original work produced in-depth case studies combining qualitative and quantitative methods of postwar policy continuity and change. The general punctuation hypothesis extended the analysis to a quantitative account of stability and instability in budgets and legislative outputs. This has helped shift the focus from agenda setting to the broader process (although the original work, covering decades, examined policy continuity and change over several "cycles"). The explanations are increasingly generalizable, across levels of US government and in multiple countries (particularly budget distributions), although this expansion has prompted some debate about

methods and measurement among the core team (Dowding, Hindmoor, and Martin 2016; Jones 2016).

PFT has tended to emphasize in-depth case studies, especially on social welfare policy topics in the United States. The research has begun to expand in recent years to include large-*n* datasets and experiments and applications outside the United States. Mettler and SoRelle (2017, see Chapter 3 in this book) discuss many recent examples of rigorous applications. However, it is not directly apparent that there is a coordinated and coherent research program promoting shared research protocols or approaches.

As with the PET, the ACF's core studies treat key concepts and their interaction consistently and coherently—but with considerable scope for independent scholars to use the ACF very loosely, without testing any of its hypotheses (which may, in part, contribute to its extensive use). The framework's authors describe its strength in explaining "high-conflict situations at the subsystem level of analysis," with theoretical emphases on coalitions, policy learning, and policy change (see Chapter 4, pp. XXX–XXX). It is increasingly applied beyond the United States and environmental policy, prompting its key authors to adapt the framework to make it more generalizable and to coordinate comparative applications (e.g., Weible et al. 2016). ACF also has shared approaches and protocols that are commonly made available to scholars, but the consistency in application of these protocols is less clear. The framework has maintained its basic assumptions, but hypotheses and concepts have been modified on occasion to reflect new empirical and theoretical insights.

The NPF's attempt to advance "postpositivist" accounts by making the role of narratives in the policy process measurable and more conducive to testable hypotheses has led NPF scholars to develop shared codebooks and methods for identifying and quantifying the nature and effect of narratives. Some inconsistencies remain across the applications in terms of how the elements of narratives are operationalized. Yet, continued efforts to refine and adapt the methodologies, modify (or eliminate) some hypotheses, and extend the research outside of the United States suggest growth in the research program (albeit while facing some friction when building on insights from positivist *and* postpositivist accounts; see Jones and Radaelli 2016). Because it is still a relatively young research program, some hypotheses have yet to be tested, and applicability to a wide array of policy contexts remains somewhat limited.

The IAD framework's long-standing research program has been structured around a shared approach for a large and cohesive network of scholars as well as the development of shared datasets, models, and methods (see Poteete, Janssen, and Ostrom 2010). These trends in diverse methods and applications continue, as evidenced by the recent special issues of journals and books that Schlager and Cox identify in Chapter 6, including many applications using formal modeling and experimental work as well as comparative studies from around the

world. Its most prominent strength is in the study of common pool resources, with Ostrom winning the Nobel Prize in Economics in 2009 for demonstrating how people can create and enforce rules to ward off common pool resource exhaustion. Recent efforts to apply some of the IAD framework's early work on polycentric governance to common pool resource studies have taken this research in new directions. The IAD's sister framework, the SES, continues to evolve, although the number of empirical SES applications remains somewhat limited and application is inconsistent. As we noted in our 2014 chapter in this volume, however, it would be beneficial to see more development of IAD framework–related research on public policy issues and collective action dilemmas outside of the environmental domain.

IDM have exhibited substantial growth in recent years, in terms of the number of applications and advancements in the methods and models. The research approaches and methods have also been relatively cohesive over time. Walker (1969) set the agenda, and core authors such as F. Berry and W. Berry have continued to extend the research. Early models focused primarily on communication and learning (the voluntary adoption of policies), and later models have devised a mix of five explanations for diffusion. Berry and Berry (2017, see Chapter 7, this volume) identify a major shift in the last ten years, from asking whether a policy diffuses to investigating how and why policy innovation occurs. By integrating lessons from the diverse empirical applications of diffusion and innovation, they have further established a generic unified model of government innovation that includes diffusion and internal determinants variables. Traditionally, the focus has been on the US states, but recent work has also applied IDM to European contexts.

COMPARATIVE CRITERION 3:
HOW DOES EACH THEORETICAL APPROACH
EXPLAIN "THE POLICY PROCESS"?

Table 8.3 identifies how each theory describes the six key elements of the policy process and explains how they interact to produce policies.

Multiple streams analysis. Kingdon's (1984) focus was on the interaction between two kinds of ideas: the type of policy solution that could draw attention and catch on quickly and the established set of beliefs in a policy community that would slow a policy solution's progress. Government attention may lurch quickly to a problem, but a feasible solution (i.e., one acceptable to the community) takes much longer to produce. This highlights the role of relatively open networks—the interaction among wide groups of actors in a policy community to refine a solution—and actors, who include the policy entrepreneurs trying to find the right time to propose solutions (when attention is high) and the policymakers needing the motive and opportunity to adopt them. The role of

TABLE 8.3 What Elements of the Policy Process Are Explained or Emphasized?

	MSF	PET	PFT	ACF	NPF	IAD Framework	IDM
Actors making choices	Policy entrepreneurs and policymakers	Broadly, policymakers, interest groups and other organizations, and individuals within groups and different venues	Implicitly actors who are affected by policy may in turn become policy actors	Policy actors who form coalitions, act strategically, learn, etc.	Actors and groups interested in policies use narratives strategically to influence public opinion and decisions	Actors, primarily individuals, who make choices	Policymakers, experts, entrepreneurs
Institutions as rules or venues of decision making	Informal rules and formal venues, recognized but institutions not emphasized	Institutional venues and their rules, which cause more or less friction	Policies institutionalized in rules and programs	Types of policy venues and rules in the broader context, but less directly	Part of context	Institutions as rules and norms that shape behavior, and typology of rules	Indirectly, institutionalized channels of communication
Networks/subsystems	A broad policy community of actors, with relatively little focus on insulated subsystems	Subsystems as sources of stability and power	Groups mobilizing to protect or challenge programs	Subsystems and coalitions	Modifies the ACF's flow diagram on subsystems and explores the idea of focusing on regimes	Networks within action situation, but no explicit attention to subsystems	Loosely, information networks
Ideas or beliefs	Policy solutions proposed and amended over time to become acceptable to a policy community	Monopoly of understandings in established subsystem; and new solutions or ideas that break through	Ideas about policy benefits and political attitudes via interpretive effects of policy	Belief systems that drive policy actor behavior	Narrative strategies, grounded in belief systems and ways of thinking that are embedded in cultures	Shared preferences or norms of actors, but not explicit	Policy solutions emulated, or the perceived norms of policy adoption that influence policy borrowers
Context	National mood, policy conditions, pressure groups, admin turnover, etc.	Endogenous subsystem context; and wider policy environment	Past policy decisions and broader context	Stable parameters—social, cultural, economic, physical, and institutions structuring the subsystem	Not a core part of NPF, but recognizes legal, constitutional parameters, geography, etc. as important	Physical and material conditions, community characteristics, preexisting institutions	Socioeconomic, conditions, education, ideology, religion, etc.
Events	Focusing events draw attention to problems	Events shift the macropolitical agenda	Not directly addressed	External events and internal events (e.g., shocks, change to governing coalition)	Not directly addressed, but may combine with narratives to focus attention	Not directly addressed	Indirectly addressed, for example, crises, but part of context

institutions in the MSF comes from the framework's recognition of policy venues and can be inferred from the recognition of informal rules in each political system, such as when to introduce a bill in Congress (see Chapter 1 in this book and Zahariadis 2014), and the MSF chapter in this volume (Chapter 1) offers further suggestions for advancing insights on the role of institutions in agenda setting and decision making. Focusing events can be important to shift levels of attention to a problem, but the MSF is about the need for other processes to occur before the event has more than a fleeting importance. Key sources of context include the "national mood," interpreted by policymakers, and the policy conditions in each case, such as levels of congestion, fuel availability, and pollution when policymakers consider transport policy. We can tease out the interactions among all elements, but a lack of clarity in some aspects may produce studies describing this interaction in different ways.

Punctuated Equilibrium Theory. The PET emphasizes the interaction between two types of ideas: (1) the "monopoly of understandings" underpinning established subsystem relationships, and (2) the new solutions that could "catch fire" following successful venue shopping or prompt endogenous change (when attention shifts and issues are reframed). Subsystems are a source of stability, power, and policy continuity for long periods (decades in some cases). Instability and major change can come from the interactions among institutions, such as venues with different rules and understandings, or the interactions between the policy subsystem and the macropolitical system (a conceptualization also found in some evolutionary and complexity theories; Cairney 2013b). The latter is unpredictable: lurches of macropolitical attention can destabilize subsystems, but most subsystems can remain unaffected for long periods.

The concept of institutional friction describes the amount of effort required to overcome established rules. High friction suggests that a major or cumulative effort is required to secure institutional change, which may produce a pressure-dam effect and a major policy punctuation. Major events, such as wars that change budget patterns, as well as sustained and cumulative attention to minor events may also cause punctuations. Different sequences of events help explain different processes across countries. However, the focus is on serial attention to events. Although *events* can include elections, PET studies increasingly discuss political parties to show that agendas seem more likely to shift in relation to the policymaking environment than parties of government. Context is important, but the focus of the PET is often the endogenous change in subsystems in the absence of similar change in the wider policy environment. Overall, the PET covers all the major elements of the policy process.

Policy Feedback Theory. The PFT has its roots in historical institutionalism, which suggests that policy commitments made in the past produce increasing returns and make it costly to choose a different path (Pierson 2000; Cairney

2012b, 76). When a policy becomes established and resources are devoted to programs, it helps structure current activity and provides advantages for some groups more than for others (Mettler and SoRelle 2017, see Chapter 3 in this book).

Although PFT may not directly conceptualize many elements of the policy process, we can identify a broad focus on actors, networks, and ideas. Actors are present when policies assign different citizen rights to groups, influencing their ability and incentive to mobilize and engage. Networks are implied when government agencies mobilize support for, and groups mobilize to protect, programs. Ideas appear in the PFT because established policies and rules represent institutionalized beliefs or dominant policy frames (public opinion on programs may also shift after they have been introduced). Further, in historical institutionalism, "sensitivity to initial conditions" describes a particular sequence of past decisions that sets the broad context for current policy, and "critical juncture" highlights the major event that may be required to prompt institutional change when policies are "locked in" (Cairney 2012b, 84). Consequently, using our identified elements, we can infer that various elements of the policy process underlie or inform the PFT.

Advocacy Coalition Framework. According to the ACF, people engage in politics to translate their beliefs into action (Chapter 4). There are three main types of beliefs: core, policy core, and secondary. Actors with similar beliefs become part of the same advocacy coalition, and coalitions compete with each other. We can identify a role for institutions as venues when coalitions compete for influence in multiple arenas. However, the main focus of the ACF is the subsystem, which represents a key venue (with particular rules of engagement) for coalition interaction. The ACF's conceptualization of subsystems is distinctive, focusing on actors beyond government and interest groups, to include, for example, academics and analysts. The ACF flow diagram identifies spillover effects from other policy subsystems and events, such as a change in government or a shift in governmental priorities, on subsystems. However, its focus is on how coalitions interpret and respond to events—as external or internal shocks. Major responses to shocks are far less frequent than policy learning and the revision of secondary aspects of coalition beliefs. Overall, the ACF covers all the major elements of the policy process as well as interactions among these elements, although the role of institutions is addressed less directly than the other elements.

Narrative Policy Framework. The NPF seeks to measure how actors both use narratives and are influenced by narratives in policymaking. Narratives are stylized accounts of the origins, aims, and likely impacts of policies. They are used strategically to reinforce or oppose policy measures. Thus, actors making choices, as influenced by particular types of policy ideas (or narratives),

are the core focus of the NPF. Subsystems are also a cornerstone of the NPF's mesolevel of analysis. This framework has adapted the ACF to identify how advocacy coalitions compete through narratives or how subsystem-level actors can dominate narratives. Context is also important in the NPF through the policy setting. Context includes the factors that actors have to account for when constructing narratives (e.g., legal and constitutional parameters, geography, scientific evidence, economic conditions, and agreed-upon norms). However, NPF hypotheses and empirical analyses have not explored the role of context in shaping narratives or their influence on policy in much detail. Institutions are addressed more indirectly in the NPF through the context and by arguing that successful narratives may become embedded in the culture, or institutionalized, in policy systems at the macrolevel.[2] Events are treated primarily as resources, used to construct focusing events and apportion blame, but also are not central to the framework. Overall, the NPF pays attention to all six elements, but actors and ideas dominate the approach.

Institutional Analysis and Development framework. The IAD framework focuses on the ways in which actors make choices within institutional environments that structure (or at least help explain) their behavior, namely, when engaged in collective action dilemmas. The focus is on providing tools to explore how different sets of actors and institutions produce different outcomes, often evaluated in terms of trade-offs among efficiency, equity, accountability, and other criteria such as robustness. The IAD framework contains a typology of rules regarding, for example, who can take part, how extensive their involvement can be, who is in charge, how to share information, and how to punish defectors—but it notes that many rules are implicit and difficult to identify in practice. One set of operational rules is nested in a set of rules on collective action, which in turn is nested in constitutional rules.

The institutional context is underpinned by physical and material conditions that affect how people can act and which rules can be set. This wider context may produce the incentives for people to act selfishly or cooperatively or to produce public goods. This context influences the rules that people generate to regulate individual behavior. The IAD framework does not discuss ideas explicitly, but shared preferences or norms underpin the production of rules. For example, an institutional solution in the United States, with its tradition of market-based solutions, will likely differ significantly from one in China, with its tradition of state-based solutions. Similarly, subsystems are not theorized, but the role of networks (the interaction of actors in venues with specific rules) is important within the concept of the action situation (Ostrom 2009) and is recognized in the SES framework (Schlager and Cox 2017, see Chapter 6, this volume). Overall, the IAD framework focuses explicitly on actors, institutions, and context and more implicitly on ideas and networks or subsystems.

Innovation and diffusion models. Innovation is the adoption of a policy that is new to the individual government, and both determinants that are internal to a government and external—via diffusion—factor into innovation, according to IDM's unified model. Although, substantial effort has been put into modeling both internal determinants and diffusion sources of innovation. Through these efforts the IDM tend to emphasize the role of context, events, and ideas in explaining policy change. With respect to context and events, IDM have recognized that economic crises or unsuccessful wars make government more vulnerable to coercion, larger cities are more likely to learn, and diffusion is dependent on information technology. Some models also use proximity to explain adoption, from physical proximity (regional models) to a wider similarity between states (ideology, biophysical properties, social composition, attitudes, etc.). Leader-laggard and other models partly explain innovation in terms of context (e.g., levels of economic development, education, "slack resources," and research capabilities). With respect to ideas, diffusion models recognize that "the probability of adoption of a policy by one governmental jurisdiction is influenced by the policy choices of other governments in the system" (see Chapter 7, p. XXX, this volume). In other words, diffusion often follows policymakers' perception of the benefits of adopted policies in neighboring jurisdictions or of their need to keep up with norms or competitive pressures. The properties of policy solutions may also influence the extent to which the solutions receive attention. However, diffusion is also something to be explained in terms of how attractive policy solutions are to policymakers. Internal determinants models express these roles of perception and demand most strongly.

Regarding actors, IDM tend to focus on the policy choices of actors at the "collective level" (i.e., by a state or jurisdiction). However, the broader policy transfer literature identifies the "usual suspects" within each state (including elected policymakers, officials, and interest groups), plus actors who operate across states, including supranational or federal organizations, multinational corporations, epistemic communities containing networks of experts (Haas 1992), and entrepreneurs selling policies from one government to another (Cairney 2012b, 263). Institutions are conceptualized minimally, in terms of organizations exchanging information, without a discussion of rule-based action. Networks are defined loosely as information networks, not the more regular and systematic patterns of behavior in subsystems.

COMPARING THEORIES: WHERE DO WE GO FROM HERE?

In the third edition of this book, we focused on the extent to which these theories should be treated as complementary or contradictory (Cairney and Heikkila 2014). The former is tempting as a way to explain the policy process as fully as possible. For example, actors form coalitions to cooperate with each other

and compete with their opponents (ACF); they exploit cultural stereotypes and cognitive biases to tell stories with heroes and a policy moral (NPF); the policy system dampens the effect of most stories and amplifies some (PET); the small number of amplified issues prompt policy change during a window of opportunity (MSF); and subsequent policies create feedback, or the rules that constrain and facilitate future coalition activity (PFT). Yet, theories rarely examine the same cases and, when individual studies try to combine insights and apply them to specific cases, they face major terminological and methodological obstacles (Cairney 2013a). The alternative, to focus on a small number of discrete theories and reject others, is what we do as professional scholars (e.g., through peer review and editorial discretion), often on the basis of widespread adherence to certain scientific principles (Sabatier 1999, 2007b; Eller and Krutz 2009). Or this occurs without fully agreeing on the rules for inclusion (Cairney 2013a), and without being sure that different theories using different concepts to explain different things actually compete with each other (Dowding 2015).

In that context, we highlight where we see the strengths and weaknesses, broadly speaking, when we look across the chapters in this volume using our three overarching criteria: (1) inclusion of basic elements of a theoretical approach (i.e., well-defined scope and levels of analysis, shared vocabulary, clear assumptions, model of the individual, and relationships among key variables); (2) development of an active and coherent research program (inclusive of broad substantive and geographic applications); and (3) explanation of a large part of the policy process (i.e., coverage of actors, institutions, networks/subsystems, ideas/beliefs, context, and events).

With respect to the first criterion, we find that the theoretical approaches discussed in this book all largely include the basic elements we identified. Of course, there is variation within and across the theories. All do well in clearly defining their scope/levels of analysis and establishing clear vocabulary, although some are more expansive (i.e., the IAD framework) or perhaps more consistent than others. Some (PFT, IAD, IDM) leave their assumptions more implicitly stated or leave their model of the individual more implicit (PFT, IDM) and could provide more clarity for theory consumers and potential users on those fronts. All of the theories have defined relationships among key variables, with wide variation in how these are described. Occasionally, theories present more general relationships through a visual framework or flow diagram (ACF, IAD) or through a generalized model (IDM). Others focus on describing these general relationships verbally (MSF, PET, PFT). All, except the IAD framework, also lay out more specific hypotheses that have been identified theoretically or empirically; the IAD framework explores more precise relationships through related modeling, such as game theory and laboratory experiments. A few are more limited, however, in the extent to which some of their theoretical hypotheses have been empirically tested across a diversity of contexts (i.e., MSF, NPF). Overall, we argue that the theories in this book, as

well as other policy theories, can continue to improve on particular elements of theory building and can learn from those that are more well developed in their explication of these elements.

In comparing the theories on the second criterion, we find an impressive level of activity with respect to the extent of publications and adaptation of the theories over time. Whereas most have well-developed research protocols and methods, some have room to develop on this front (MSF, PFT). Others may struggle with consistency in the application of their theories and concepts (ACF, NPF, IAD/SES framework) or with the application of sophisticated data collection or modeling (PET, IDM), especially when scholars from outside of the core research community look to apply these theories. This is a critical challenge for all of the theories if we expect to see continued growth and expansion. Yet it points to the need for ongoing training opportunities (e.g., conference workshops) and more transparent and easily accessible research protocols (i.e., appendices to journal articles, online manuals). These points are also critical for expanding the empirical applications of these theories to new policy settings (e.g., even more diversity outside of the environmental arena for the ACF, NPF, and IAD framework) or to more non-Western contexts. The IAD framework is largely the exception in terms of its applicability outside of Western democracies. Efforts to develop a global network of scholars have been part of the IAD framework through the Ostrom Workshop in political theory and policy analysis for more than three decades. Such efforts may provide a useful example of how to broaden the contexts where a research program is applied, although this requires resources and dedicated leadership that may not be available to each of these theories.

Finally, in examining how the theories meet our third criterion, we find that most at least pay attention to the six major elements of the policy process we included as part of their explanations of policy processes. However, the emphasis on specific factors varies on the basis of the scope of each theory in terms of which primary phenomenon the theory seeks to explain or which key factor it considers important in shaping policy outcomes. This is typical of theories. No single theory can adequately explain all of the elements of policy processes—such an attempt would likely render it either overly complex or overly superficial. Consumers and users of theories should pay attention to the foci of theories and ensure that applications are appropriate for the question at hand. At the same time, to advance the theories, it may be useful to consider whether more attention to the elements of policy processes that are not addressed (e.g., the PFT or IDM incorporating more attention to events or the NPF delving more into institutions) could offer new theoretical insights, at least within the scope and assumptions of the theory.

We offer the above assessments with a note of caution. That is, we need to keep examining why we use such criteria, and not others, and the implications these criteria have for promoting certain theories and rejecting others.

Other legitimate criteria are available. Alongside narrow scientific criteria (e.g., whether a theoretical approach has core elements of a theory or an active scientific research program) are explanatory criteria (e.g., the extent a theory adequately explains the complexity of policy processes) and practical or normative criteria (e.g., how a theory helps us solve real-world policy problems). We may want all three but face major trade-offs, which force us to prioritize one over the others.

The theories described in this book prioritize scientific criteria (see the Introduction for the rationale for theory selection in this volume). To prioritize the explanation of complex policymaking, without as much clarity of exposition but with more focus on the practical political implications, might prompt us to include studies of multilevel governance and complexity theory (Cairney 2012a). To prioritize normative issues would prompt us to include the social construction and policy design (SCPD) framework, which has more than a hundred applications since 1993 (Pierce et al. 2014). Most of the SCPD studies identify degenerative politics in which the distribution of government benefits to target populations is highly unequal, reflecting and reinforcing inequalities in society and producing policy designs that contribute to low levels of civic and political participation (Schneider, Ingram, and deLeon 2014). Many of these concerns overlap with the PFT, but perhaps with SCPD focusing primarily on the fate of deviant populations and the PFT on the wider effects of policy feedback on policymakers, policy agendas, interest groups, *and* citizens. The latter may replace the former because of scientific criteria—for example, its scope is wider, and its propositions are more general—rather than the normative importance of the questions it raises.

Since they focus primarily on scientific criteria, other policy theories may offer only the *untapped potential* to help explain and evaluate such normative issues. Or, if the normative criteria become more important, such concerns may represent a small, but growing, feature of key theories. For example, PET now focuses more on the potential links between policymaking pathologies and punctuated equilibrium. Major change may be associated with long periods of resistance to change and limited information gathering, overcome eventually with the help of major events or pressure. Although these developments were previously linked to a healthy US democratic process, studies of China, for example, highlight comparable processes in authoritarian regimes and prompt us to consider how centralist are key organizations in less authoritarian regimes. These concerns, aided partly by more comparative studies of democratic and authoritarian regimes, are also raised by the ACF, whereas the NPF raises the prospect of stories used to reinforce inequalities in political power. However, the value of SCPD has been to identify pressing normative issues in the United States even when, for comparative purposes, US policymaking would be treated relatively positively.

CONCLUSIONS AND REFLECTIONS ON OUR CRITERIA

The theories, frameworks, and models presented in this volume are indicative of the depth and vibrancy of the field. The literature is growing, and there are many significant overlaps between theories that aid the study of the policy process, but also important differences. How we evaluated the theoretical approaches allows us to see some of the differences, similarities, strengths, and weaknesses across the different theories, which we hope can help guide researchers and students who want to apply, test, or perhaps even attempt to integrate some of them. Our criteria allowed for comparison across some key scientific principles (e.g., elements of a theory); they also helped us evaluate the development of research programs and understand the breadth or coverage of the theories, frameworks, and models in terms of how they incorporate or address some critical elements of the policy process.

In applying the criteria we selected, our goal was not to identify the best theory or framework. Moreover, these criteria would be limited in their ability to do so if that were one's goal. One reason is the difficultly of simultaneously meeting all of the criteria or the indicators we selected; meeting one criterion may impose trade-offs on another. For example, in our criteria for research program development we explored (1) whether the theories use multiple methods, and (2) whether they have developed shared research protocols and methods. Establishing standardized approaches to data collection and analysis within a research program, using well-developed and replicable instruments, takes time and energy. Such investments could therefore make it challenging to engage in a diversity of methods, at least initially.

Additionally, the criteria we selected by no means encompass the full range of possible evaluative or comparative criteria for theories. We did not explore the quality of the explanatory or causal arguments made by the theories and models, such as their generalizability, coherence, parsimony, relevance, or precision (e.g., Gerring 2012). Also, Schlager (1999, 2007) organized her evaluation of the theories in the first and second editions of this book to highlight comparisons across theories, frameworks, and models more directly, which was valuable for identifying differences in research programs and scientific advancements. In terms of the policy process elements, we did not compare how the theories address key outcomes of the policy process, such as policy change or collective action, as examined by Schlager. Nor did we examine the extent to which the theories are applicable to various stages of policymaking, including implementation and evaluation, or to different policy venues (e.g., regulatory/administrative, legislative, judicial, or even informal collaborative processes).

In sum, we encourage scholars to be open to multiple and alternative criteria in their comparisons and evaluations of theories, frameworks, and models of the policy process and to make their criteria transparent. We see this as

fitting with the call to explain methods, define concepts clearly, and clearly set out the causal processes, which is the conventional wisdom used to warn scholars against obfuscation, confirmation bias, and a generally defensive approach to their results. In this context we introduced a range of criteria—not to adjudicate between theories and solve unequivocally the problem of which are worthiest of our resources but to generate some level of agreement within the discipline about which frameworks and theories are clear enough to be proven wrong and which show a sufficient amount of payoff from the investment of scholars.

NOTES

1. For brevity, we use the following acronyms: MSF for Multiple Streams Framework, PET for Punctuated Equilibrium Theory, PFT for Policy Feedback Theory, ACF for Advocacy Coalition Framework, NPF for Narrative Policy Framework, IAD for Institutional Analysis and Development framework, and IDM for innovation and diffusion models.

2. Although there is some scope for confusion, because they describe subsystems as systems—effectively moving the ACF flow diagram's external processes into one subsystem box—or they describe regimes as collections of interlocked subsystems without fully explaining their reasoning.

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