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## Understanding and influencing the policy process

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**Abstract** This essay translates some of the underlying logic of existing research of policy processes into a set of strategies for shaping policy agendas and influencing policy development and change. The argument builds from a synthesized model of the individual and a simplified depiction of the political system. Three overarching strategies are introduced that operate at the policy subsystem level: developing deep knowledge; building networks; and participating for extended periods of time. The essay then considers how a democratic ethic can inform these strategies. Ultimately, the success or failure of influencing the policy process is a matter of odds, but these odds could be changed favorably if individuals employ the three strategies consistently over time. The conclusion contextualizes the arguments and interprets the strategies offered as a meta-theoretical argument of political influence.

**Keywords** Advocacy · Public policy · Policy analysis · Policy change · Institutional change · Learning

### Introduction

One of the most common questions from students, researchers, and practitioners in public policy is how to influence the policy process. Influencing the policy process may entail a variety of goals from the adoption of a new policy to minor adjustments to institutional arrangements in current policies. Perhaps, the goal is to ensure successful policy implementation or raise public awareness of a social issue. In other instances, the goal might be

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to facilitate cooperation among political adversaries in hopes of mitigating conflict and reaching a negotiated agreement.

For decades, public policy scholars and policy scientists have developed frameworks, theories, and models to better understand policy processes. What we have now are several distinct research programs as found within the policy sciences framework (e.g., Clark 2002) or in the frameworks and theories constituting the chapters in Sabatier (1999, 2007).<sup>1</sup> Each research program provides descriptive and explanatory insights backed by empirical investigation on topics such as agenda setting, minor and major policy change, problem solving, policy entrepreneurs, collective action, formal and informal institutions, and policy designs. This essay translates some of the underlying logic from these research programs both in a way of thinking about the policy process and in a set of strategies for influencing the policy process.

Smith and Larimer (2009, p. 18) describe the policy process field as failing to produce a single unifying theory. We will agree, but from our perspective, this is far from a fatal flaw. Instead, the strength of the field lies in the multiple research programs with different analytic traditions and cultures, which speak to the complexity and diversity of the policy process phenomena. Moreover, multiple research programs offer a market of ideas and approaches, thereby encouraging policy process scholars to view the world from multiple perspectives and helping them guard against confirmation bias and theory tenacity (Loehle 1987). Finally, policy process research—defined here as the study of the development of public policy over time and the context, events, and individuals surrounding this development—is so complex and multifaceted that the assumption that a single framework or theory can explain all its facets and effects is absurd.

What is needed, nonetheless, is greater appreciation of the underlying logic and traditions of the different research programs and lesson drawing from across them for those wanting to influence policy processes. To date, the leading policy process books (e.g., McCool 1995; Kraft and Furlong 2007; Smith and Larimer 2009; Birkland 2010; Sabatier 1999, 2007) do a splendid job of describing public policy or policy process research but focus less on drawing lessons for influencing the policy process. Books that provide advice for the policy participant emphasize the ways in which individuals can influence the policy process, but attend to specific skills for the audience, speak less to the scholar, and ground the arguments indirectly on theory (Gerston 2008). Some books provide advice on problem solving directed through a particular framework (Clark 2002). Others speak to a particular type of policy participant, like the policy analyst (Majone 1989). Political scientists, when focused on translating their knowledge into practical lessons about politics, tend to deal with voter preferences, will of the people, party affiliation, and interest groups (Noel 2010), but they do not cover the gamut of political behavior.

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<sup>1</sup> The field of policy process literature offers valid and useful knowledge generated from rigorous scientific approaches to data collection and analysis about the development of public policy over time. Depictions in a recent public policy handbook by Moran et al. (2006, p. 5) and repeated by Smith and Larimer (2009, p. 1) that policy process literature within public policy is more “mood than a science” is inaccurate. Indeed, to find the “scientific” approach in policy process research, people need look no further than to Dr. Elinor Ostrom’s Nobel Prize for her work within the institutional analysis and development framework (Ostrom 1990, 2005) or to Drs. Bryan Jones and Frank Baumgartner’s arguments on institutional friction affecting incremental and punctuated policy change (Baumgartner et al. 2009; Jones et al. 2003). Of course, many unanswered questions remain. We recognize the challenges facing policy process researchers (Greenberg et al. 1977) and the numerous theories characterizing the field, some of which are stronger than others (Sabatier 1991, 2007). The persistence of some theories over others is possibly one indication of growth and progress in the field.

There are a couple audiences for this essay. The first is public policy scholars for whom we aim to contribute an understanding of the field of policy process research and to expand the discussion about deriving practical lessons from this field. Another audience is students in typical public policy, policy science, and public administration classes, particularly those without much experience in politics and who have asked the question: what advice can you give about how to influence the policy process? These future policy participants may someday assume roles as activists, practitioners, managers, scientists, and consultants, but they may be unsure about how to begin. For all readers, some knowledge of the policy process literature is beneficial but not necessary to understand the arguments in this essay.

We forego discussions of strategies and tactics of influence for the experienced policy participant, such as the effective acquisition, and then use, of financial resources. We also keep our strategies at a generalized level and not on specific situations, like how to lobby a legislator, negotiate with opponents, or frame an issue for media consumption. The point is not that lobbying, negotiating, and framing are unimportant, but rather that these tactical techniques require elaborate depictions of context beyond the scope of this essay.<sup>2</sup> Further, the point is not to provide a new framework or theory for understanding, analyzing, and improving policy processes. This essay is best read as complementary to existing frameworks and theories and not meant to supplant any of them, though this is a point of interpretation that we return to in the conclusion.

We begin by defining what we mean by the “process” in policy process. To help understand how policy participants can influence these processes, we then lay out some key assumptions from the literature about individuals as well as the political context within which they are embedded. Drawing from these assumptions, we offer three strategies (developing deep knowledge, building networks, and long-term participation) that position individuals to increase their opportunity and likelihood of influencing policy. This essay places its argument within a discussion of democratic principles of what policy participants ought to consider while engaging in the policy process. These normative recommendations apply to individuals with various policy goals, be it pro-environment versus pro-development in environmental debates, or, more specifically, those who favor and oppose deep-water oil drilling. The heart of our argument is that success or failure in the policy process is a matter of odds, but these odds can be changed favorably if individuals consistently employ these strategies, which are grounded in diverse and well-established public policy theories and frameworks.

### The “process” of policy processes

The policy process is the study of change and development of policy and the related actors, events, and contexts. Different scholars of the policy process have emphasized various forms of processes.<sup>3</sup> For instance, scholars of the policy cycle describe a process that is ushered through a sequence of stages: agenda setting, policy formulation, policy adoption, implementation, evaluation, and termination (Lasswell 1948, 1956; Brewer 1974; Brewer and deLeon 1983; deLeon 1999). Other policy process theories and frameworks focus on distinct stages of the policy process. For instance, Kingdon’s (1984) multiple streams theory of agenda setting or Mazmanian and Sabatier’s implementation framework (1981)

<sup>2</sup> For those wanting specific tactical recommendations on civic engagement, we refer readers to Gerston (2008) and Dalton (2008).

<sup>3</sup> See the work by Van de Ven (2007) for a similar depiction of process types.

focuses on one stage. Some of the policy literature, rather than focusing on the stages of a single policy, explain how multiple policies are either adopted or rejected over time. For example, the diffusion and innovation framework (Walker 1969; Berry and Berry 1990, 2007) describes an evolutionary process wherein multiple policies are considered across different contexts (e.g., organizations, subgovernments, governments) with some policies selected and others rejected.

Other theories and frameworks draw out processes more from the perspective of the actions of human agents and their goal attainment in devising policies and institutions. The institutional analysis and development (IAD) framework and its common pool resource theory (Ostrom 1990, 2005), for instance, have emphasized how policy actors engage in adaptive decision making and continual adjustment of institutions or rules over time. While the IAD framework literature has largely emphasized processes within a single “action situation,” the Advocacy Coalition Framework (ACF), which also emphasizes the role of human agents, looks at processes that emerge through conflict or competition among two or more coalitions over long periods of time (Sabatier and Jenkins-Smith 1993). The process unfolds around periods of intractable political conflict or efforts to negotiate agreements.

Readers should know that the policy process should not be singly interpreted as the policy cycle, an evolutionary depiction of diffusion and selection of policies, ongoing adaptation and adjustment, or enduring conflict. Indeed, each interpretation has its place. The objective is to learn how to draw lessons from each of these processes at the appropriate point in time and not to focus just one as the single process lens. The arguments in this essay draw from these research traditions and their underlying logic to provide some strategies for influencing the policy process.

### Individuals and context

Cognitive characteristics of individuals in combination with individuals’ contextual environment are key factors shaping policy processes (Hecl 1974). Indeed, a combination of cognitive and contextual factors lie at the foundation of today’s prominent policy frameworks and theories, including the IAD framework (Kiser and Ostrom 1982; Poteete et al. 2010), the ACF (Sabatier 1988), and punctuated equilibrium theory (PET) (Jones 2001). Certainly, these are not the only policy frameworks and theories, but we draw heavily upon them due to their prominence in the field.

What cognitive factors influence individuals’ actions in policy processes?

The vast majority of research on the policy processes assumes that individuals, and not “collectives” (e.g., organizations, groups, or coalitions), are the agents who create or change policies (Kiser and Ostrom 1982; Sabatier 1988; Jones 2001). While this literature explicitly recognizes that individuals act within collective settings, it directs the reader toward first understanding how the minds of individuals work as a basis for understanding how individuals act collectively. This essay adopts this assumption, which is appropriate given the goal to identify a simple set of strategies for individuals attempting to achieve their objectives.

The policy process literature recognizes that individuals are complex beings but offers a simplified “model” (or set of assumptions) of cognition that can help explain choices in policy settings. Policy scholars generally assume that *individuals are goal-oriented but*

*imperfect in their cognitive abilities to understand the contextual environment that they must navigate for goal achievement.*<sup>4</sup> A general articulation of goal-oriented individuals with limited cognitive abilities is bounded rationality, a depiction of individuals that is now nearly ubiquitous across the field of policy process research (Simon 1985; Jones 2001; Poteete et al. 2010; Sabatier 1988). Under the constraints of bounded rationality, individuals' goals can reflect their beliefs, interests, or organizational affiliations.

The cognition limitations of boundedly rational individuals necessitate the use of *heuristics* to aid their reasoning, help allocate attention, and process the complexities of the world more efficiently. Heuristics allow individuals to focus on the implications of some stimuli while ignoring others. Common heuristics include ideology and belief systems, academic disciplines, and any stereotype or bias. Heuristics succeed by allocating our attention efficiently. Heuristics fail when individuals misallocate their attention and incorrectly interpret pertinent information related to their goals. The use of heuristics is aided or hindered by emotions (Jones 2001). Whereas heuristics are about allocating attention, emotions are about “feelings,” such as fear and trust. Fear of opponents, for example, may be an underlying factor in forming coalitions (Henry et al. 2011; Sabatier et al. 1987). Trust may be the driving force for cooperation and overcoming collective action problems (Ostrom 2005).

In summarizing this literature, let us offer the following caricature of policy participants. They are as follows:

- Goal oriented with goals derived from a variety of sources including interests, beliefs and values, or collective affiliations;
- Limited in their cognitive capacity to process the multitude of stimuli supplied from the environment;
- Reliant upon heuristics to simplify, understand, interpret, and respond to incoming stimuli;
- Affected by their emotions, such as fear and trust, in reasoning, allocating attention, and making behavioral decisions.

What contextual factors shape individuals' actions in policy processes?

Influencing the policy process involves not just assumptions about individuals but the placement of individuals in contexts. We provide the following general depiction, which reflects the more specific depictions from the literature (Sabatier 1988; Ostrom 2005; Poteete et al. 2010; Jones and Baumgartner 2005; Baumgartner and Jones 1993).<sup>5</sup>

<sup>4</sup> It is most important to recognize that the rational actor model found in economics and public choice theories, which assumes perfect rationality, utility maximization and often perfect abilities to process information, does not accurately depict the behavior of individuals operating in policy processes. While these assumptions might be useful in market settings, they have been shown empirically and theoretically not to apply to the action situations found in policy processes (see among many the arguments in Jones 2001; Ostrom et al. 1994; Poteete et al. 2010).

<sup>5</sup> We purposively exclude the physical, geographic conditions from this initial discussion. Our rationale is not at all that these factors are unimportant for we address them in the next section. Instead, we argue that the constitutional features of a political system as found in the United States and the resulting emergence of subsystems and action situations is applicable across all problem contexts.

### *Policy subsystems*

Most policy participants, whether they are government officials, agency staff, or interested stakeholders from advocacy groups, the media, or scientists, make decisions and shape public policy from within policy subsystems. Subsystems bring together policy participants who focus on a particular policy issue within a particular territorial area, such as immigration policy in Arizona. The rationale is that policy issues are highly complex and, thus, require long-term commitment and specialization and partitioning of responsibilities. These policy subsystems may operate not only at the national level but also at the state, local, and community level. Thus, policy subsystems are best thought of as both interdependent horizontally (e.g., water policy in Colorado is interdependent with water policy in Arizona) as well as nested vertically (e.g., water policy in Colorado lies within a Colorado River Basin subsystem).<sup>6</sup>

For individuals wanting to achieve their goals, understanding the structure of policy subsystems—e.g., who is involved, what are the boundaries of an issue, how is information shared, how are decisions made—is critical because goal achievement usually requires attention to policy issues within an existing government program or policy or groups of policies and programs. Knowing the policy subsystem helps simplify a macro-political system by bounding individuals and issues and removes those policy issues and decisions that are irrelevant to the issue of concern.<sup>7</sup>

### *The macro-system*

Policy subsystems do not operate within a vacuum. Understanding policy processes requires an understanding of the macro-setting, that is, the basic constitutional rules, physical conditions, and culture of a society (Birkland 2010). These macro-conditions are called “relatively stable parameters” in the ACF (Sabatier 1988), but the term “macro-system” is more appropriate because it reinforces the idea that subsystems are embedded in broader systems.

To illustrate the importance of the macro-system, consider the constitutional level rules that govern “allowable” political behavior (Ostrom 2005). In the United States, for instance, the constitutionally defined federalist system of governance and separation of powers has important implications for subsystem actions.<sup>8</sup> Across executive, legislative, and judicial branches of government, as well as between national and state governments, separation of powers provides a degree of institutional friction where sweeping changes across the entire system is unlikely, but changes in parts of the system or subsystems are quite likely. This is because the federalist political system creates many decision-making

<sup>6</sup> Policy subsystems themselves can be integrated into or around the more generic concept of “action situations.” Action situations can be defined as any human choice situation with two or more actors where collective outcomes emerge (Ostrom 2005). Thus, subsystems can be thought of as a very large “action situation,” but they are better conceptualized as having many other action situations nested within them. Both subsystems and action situations outside the subsystem than can affect affairs within the subsystem (for similar logic see Poteete et al. 2010, p. 235).

<sup>7</sup> The astute observer of the policy process literature will note the different of interpretations of policy subsystems. Some anchor the concept toward the traditional iron triangle or subgovernment concept with strong connections to a legislative subcommittee (Jochim and May 2010). Others de-emphasize the subcommittee concept and instead focus on subsystem nestedness and interdependence (Nohrstedt and Weible 2010). We emphasize the latter.

<sup>8</sup> While we claim similar arguments could be made in parliamentary and corporatist systems, we leave the nuances of these arguments to others.

venues (with authority to advise, adopt, and, sometimes, implement policies) and possible veto points (e.g., opportunity for individuals to slow, stop, or alter policy developments) (Pralle 2003). Venues and veto points can be viewed as points of frustration and opportunities, that is, two sides of the same coin. For those, wanting to affect the policy process, there are multiple access points in venues where individuals can take their ideas and problems. However, the multiple veto points allow opponents to prevent goal achievement or simply raise the transaction costs that any policy issue will actually succeed.

### *Factors that grease the wheels of policy change*

Understanding the venues for influencing policy (subsystems) and how the larger system sets the rules of the game is just a starting point. It is also critical to understand those factors that can affect whether and how policies change. Changes in policies could represent a range of outputs from the alternation of established institutional rules that would affect operational activities of existing policy programs to the creation of entirely new programs. If we assume, for the sake of argument, that the former is one example of minor change and the latter is one example of major change, then one of the novel discoveries over the past two decades in the policy process literature is that both major and minor policy change are regular features in policy subsystems with the former occurring at a much rarer rate in what has been called leptokurtic policy change (Baumgartner and Jones 1993; Jones and Baumgartner 2005, p. 145). The leptokurtic policy change happens *not because of the inputs into the decision making system but because of the reaction of the policy participants and the amount of institutional “friction” from cognitive, institutional, and political sources* from the receiving individual, organization, or system (Jones and Baumgartner 2005, p. 145). “Friction,” in this case, is equivalent to the transaction and decision costs that dampen change.

Related to the work of Baumgartner and Jones but more to the IAD Framework and the ACF are the factors associated with policy change. Across these bodies of literature, we see three common paths to change, which are not mutually exclusive.<sup>9</sup> In describing these three paths, we recognize that a breadth of policy literature, beyond the three that we primarily draw upon, further inform our understanding of these paths.

1. *Events* external or internal to the policy subsystem are probably the most frequently mentioned factor contributing to change (Birkland 1997; Sabatier and Weible 2007; Ostrom 2005, pp. 272–3; Kingdon 1984). The ACF categorizes these events as sudden changes in the external subsystem environment. Such changes can stem from crises, public opinion, socioeconomic conditions, the macro-level governing coalition, and other subsystems. While events may be territorially and topically external to the subsystem, it is also likely that the event could be internal and closely related to subsystem affairs (Nohrstedt and Weible 2010). The events are non-cognitive but should not be viewed in isolation of the policy subsystem and individual cognitive and behavioral responses. With events occurring continuously at various intensities, it is the policy participants who respond to the event that provide the opportunity for change and these policy participants interact within a set of formal institutions and institutions-in-use (Ostrom 2005). Since change is contingent on the amount of resistant of the subsystem (Jones and Baumgartner 2005), major external and internal

<sup>9</sup> The ACF lists four paths, but we simplify them to three in this essay (Sabatier and Weible 2007) and because the theoretical distinction between internal and external shocks continues to evolve (Nohrstedt and Weible 2010).



events should be interpreted as shocks that may overcome this “stickiness.” It is conceivable that a shock combined with the right subsystem response will, by itself, be enough to overcome the friction imposed by some subsystem policy participants and the institutions therein. Likewise, it is quite possible, but shown less in the literature, that sequences of minor events would accumulate to have the same effect. In this respect, one should recognize that the exact relationship between events and policy change is unknown. We do not know when and if specific events will provide sufficient energy (e.g., resources, attention, and new knowledge of the problem) into a subsystem to create opportunities for overcoming the stickiness and produce major policy change.<sup>10</sup>

2. *Learning.* In response to stimuli, learning can be thought of as the cognitive adjustments in the form of change or reinforcement in what we value, see, and understand in the world and how we behave (Deutsch 1966; Hecló 1974; Sabatier 1988; Jenkins-Smith 1990; May 1992; Simon 1996). Learning can lead to change by altering the values, knowledge, and strategies (cognitive and behavior effects) of the policy participants in the subsystem or people outside the subsystem, such as individuals in authority or the general public (Hecló 1974; Weiss 1977; Sabatier 1988; May 1992).<sup>11</sup> Learning can also lead to reinforcement of cognitive and behavioral aspects, which can reduce uncertainty and possibly direct attention to other issues. Given the limited abilities to process information and the tendency to select, interpret, and sometimes distort information, learning usually results in more reinforcement than change. Indeed, learning is probably more leptokurtic than normal in distributional response to stimuli. Such leptokurtic learning partly mirrors Weiss’s (1977) interpretation that learning accumulates like sedimentation over long periods of time. Weiss’s sedimentation metaphor is similar to the gradual buildup of evidence that, for the most part, might be ignored. What Weiss did not identify, and what Jones and Baumgartner did identify, was the overcompensation in changes in beliefs or behavior after long periods of discounting incoming stimuli on a particular topic.
3. *Negotiation and Cooperation.* Both the ACF and IAD framework focus heavily on negotiated agreements and cooperation as precursors to changes in policies or institutions. The obstacles for negotiation and consensus can be either the self-interested, uncommunicative individual found in the tragedy of the commons or the individuals seeking to protect their interests against an adversarial coalition. The IAD framework deals with the former by offering principles for the emergence of cooperation: the salience of the good or resource, common understanding of the issue, low discount rates, trust, autonomy, and prior experience and leadership (Schlager 2004, p. 152). The ACF deals with adversarial coalitions by identifying factors enabling adversarial coalitions to negotiate and possibly reach an agreement. The ACF identifies nine factors for negotiated agreements, based largely on the alternate dispute resolution literature: a “hurting” stalemate; representative composition; leadership; consensus decision rule; adequate funding; commitment to negotiate; a focus on empirical issues; trust; and the lack of alternative venues (Sabatier and Weible 2007, p. 206–7). For negotiated agreements to occur in the ACF, probably the most important among these factors is a “hurting stalemate”—when individuals within the

<sup>10</sup> Undoubtedly, however, learning about some of the causal mechanisms between events and subsystem change is partly a function of the event itself but even more related to the actual context of the subsystem (Nohrstedt and Weible 2010).

<sup>11</sup> May (1992), for example, described different types of learning instrumental, social, and political.

competing coalitions perceive a lack of alternate venues other than the adjudication process and a dissatisfaction with the status quo.

In sum, the contextual factors of policy processes that individuals interested in influencing policy need to understand are (1) the multitude of policy subsystems that emerge out of the need for individuals to specialize and focus their attention on specific policy issues; (2) the macro-political system that shapes decisions in policy subsystems, especially the constitutional rules of the game; and (3) paths toward major and minor change that can be grouped into three categories of major events, learning, and negotiation and cooperation.

### **Articulation of strategies**

Cognitive limitations and the context of policy processes provide an uncertain and somewhat probabilistic expectation about what may work and not work in influencing policy processes. Strategies for influencing the policy process come at various levels of specificity and generality. We adopt the assumptions of Simon (1996) among others that our readers—students and professionals alike—have limited capacity to store and remember information. We, therefore, assume that a comprehensive long list of strategies is not as productive as a commanding short list. We lay out three strategies for understanding and influencing the policy process: (1) develop deep knowledge in a policy subsystem; (2) invest in networks; and (3) participate for extended periods of time. As will be discussed, each of these strategies spring in part from the assumptions found in the boundedly rational individual and the contextual environment found in policy subsystems and action situations.

#### **Developing belief system awareness and deep knowledge about policy subsystem affairs**

We recommend that if individuals want to achieve their goals in a policy process, they develop deep knowledge of the policy subsystem. There is not, however, a set of well-accepted conditions that define deep knowledge of a policy subsystem. Instead, deep knowledge is best thought of as a family of conditions that continues to evolve. We identify four key dimensions of deep knowledge toward which individuals should strive as they attempt to influence the policy process: (1) awareness of one's belief system; (2) analytic knowledge; (3) local space and time knowledge; and (4) conditions from other subsystems. For each strategy, we underscore strengths and warnings. Deep knowledge is not necessary and sufficient to have influence, but the odds of influence are greater if policy participants develop knowledge across the four dimensions than just one category.

#### *Belief system awareness*

Probably, the first step for aspiring policy participants involves understanding their belief systems. Belief systems involve interdependent mental configurations ranging from normative values to more instrumental beliefs (Converse 1964). Sabatier and Jenkins-Smith (1999, p. 132) identify common elements in a belief system. The normative end might include views about human nature (e.g., relationship between humans and nature), role of governments versus markets, priority to freedom or security, distributive justice, and

sociocultural identity (e.g., ethnicity and religion).<sup>12</sup> Related to the subsystem, beliefs might include problem seriousness and causes as well as support for general policy proposals and alternatives. More instrumental beliefs include the design specifics of alternatives.

Two important characteristics of belief systems are the degree that they are *moderately stable and internally coherent* (Herron and Jenkins-Smith 2006). By moderately stable, we mean, for example, that belief systems should be stable enough to help make consistent decisions across situations but not immune to adjustments and learning from important stimuli. A coherent belief system is one where there is consistency between fundamental values and the interpretation of stimuli in a given situation and decisions in a given context. For example, a person who places a high priority on freedom should more likely oppose further security screening measures taken at airports.

For policy participants, an awareness of their belief system is important for several reasons. It helps (1) interpret new information from different contexts; (2) make consistent arguments and engage effectively in debate; (3) filter and interpret external stimuli; (4) provide a basis for both dissecting and even understanding different points of view; and (5) provide a basis for clear articulation of views to others. In all, belief system awareness helps make us cognizant of one of the most important heuristics for interpreting the world.

Additionally, we know that beliefs (especially those pertaining to normative values) pervade much of politics. Mazur (1981) argues that many technical and scientific disputes are actually disputes about values. Similarly, we know that belief systems provide much of the glue that binds coalitions together and the polarizing force between opposing coalitions (Sabatier and Jenkins-Smith 1993). Policy designs also represent belief systems with implicit causal arguments and problem definitions (Mazmanian and Sabatier 1981; Pressman and Wildavsky 1972). Thus, belief system awareness might alert policy participants to the different effects and manifestations of salient values and beliefs on the policy and politics of the policy subsystem.

The problem with self-awareness of a stable and coherent belief system is that the belief system itself becomes an “inappropriate heuristic” where relevant information is discarded or interpreted incorrectly, resulting in possible intransigent conflicts or delays and failures in goal achievement (Jones 2001, p. 106). One solution that we recommend is adapted from Tetlock (2005). Tetlock describes two types of personalities, each of which is important in different contexts. The first is “foxes,” who are prone to seeing different points of view with flexibility and with the ability to adapt. The second is “hedgehogs,” who are rigid in their world views (i.e., belief system). Consistent with Tetlock, we argue that both personality types are needed for influencing the policy process. At times to be effective, policy participants must act like the hedgehogs to overcome threats to their ideas and the many obstacles confronted in any political system. At other times, policy participants should act more like foxes in adapting and seeing the world from different points of view. Following Tetlock’s (2005, p. 215) advice: “We need to cultivate the art of self-overhearing, to learn how to eaves drop on the mental conversations we have with ourselves as we struggle to strike the right balance between preserving our existing worldview and rethinking core assumptions.”

<sup>12</sup> Other interpretations of the normative part of a belief system deal with cultural types be them hierarchists (strong identity to groups and strong allegiance to externally imposed prescriptions, such as rules and traditions), individualists (weak identity to groups and external prescriptions), egalitarians (strong identity to groups with weak constraints from prescriptions), and fatalists (weak group identity and high constraints from imposed prescriptions) (Herron and Jenkins-Smith 2006, p. 135–6). See also Stone’s (2001) characterization of goals as involving equity, efficiency, security, and liberty.

### *Analytic knowledge*

Analytics are akin to professional paradigms in that *they represent one's approach to analysis as might be learned through formal education and past experiences* (Weible and Moore 2010; Cohen 2006). Analytics include reasoning, causal logic, approaches to relating interventions with outcomes, and disciplinary methods for understanding and explaining world phenomena. Analytics often reflect current scientific theories, academic paradigms, or scientific programs. In this sense, they serve as another heuristic. Individuals with similar analytics likely emphasize similar elements in a system, adopt similar methods of measurement and analysis, and make similar cause-and-effect arguments (Kuhn 1970; Lakatos 1970). In studying policy participants in the policy process, analytics can be measured by academic disciplines, subdisciplines, and other fields of study.<sup>13</sup>

Analytic knowledge is essential because individuals are cognitively limited and rely on heuristics to understand the complexity of policy subsystems. Analytic knowledge is also indispensable because a vast majority of public policy issues involve unobservable causal processes, problem indicators best measured through scientific methods, and alternatives that affect the system in uncertain ways as assessed through ex post evaluations or ex ante forecasts or predictions. Probably, the best way to understand these complexities is through analytics, such as by knowing the physical laws that operate in the natural resource system or the causal theories that explain what produces the undesirable symptoms plaguing a social system. Through knowing the key subsystem elements and their interactions, the policy participant will be in a better position to devise effective tactics for influencing the system.

The danger of using analytics in policy processes, especially when equated with any academic fields of study, is that they represent a mobilization of bias in comprehending and simplifying complex phenomena (Schattschneider 1969; Kuhn 1970; Jasanoff 1990; Norton 2005; Cohen 2006). This is best described by Cohen's (2006, p. 12) description of "deep analytic bias" in academic disciplines. Analytics establish a peer-defined set of rules that establish an informal scope around a set of questions to ask, system elements to study, and a means for linking elements together. For example, an economist can professionally measure the benefits and costs and calculate the net present value of a particular proposal, but the approach itself may appear inappropriate or biased from a different analytic tradition. Moreover, scientific knowledge is not always relevant to the time and place of a particular context (Ostrom et al. 1993, p. 50). Therefore, empirical or scientifically based analytics should not trump analytics developed on local knowledge, experience, and tradition, nor should it trump norms and values in decision processes. Akin to policy analysis and evaluation, knowledge can inform a decision, but decisions themselves are based on our views about the way the world ought to be.

The best way to guard against the inappropriate use of analytics is to become competent in multiple analytic approaches (Lasswell 1971; Cohen 2006). That is, policy participants should acquire multi-analytic or interdisciplinary competencies. Multi-analytic competencies can come in many forms including strong competency across many analytics or strong competency in one and weak competency in a few. For instance, given the limits of human knowledge, new graduates might take an analytically narrow view of the world

<sup>13</sup> We prefer analytics instead of scientific and technical training because the term is more open to knowledge in fields outside of the sciences (e.g., the humanities or law). We also use the term analytics instead of discipline because some people have multiple disciplines or their disciplines poorly depict their actual disciplinary competencies.

based on their professional academic training, but over time their analytic knowledge should continue to specialize as well as to diversify. Finally, of course, all analytics are subject to attack from interests making unreasoned and/or ideologically based arguments (Majone 1989).

### *Local knowledge*

A foundation to the policy process literature is that contextual information is required for understanding the development of public policy over time (Ranney 1968; Sharkansky 1970; Lasswell 1971; Hecl 1974; Simeon 1976; Greenberg et al. 1977; Ostrom 1990). From this literature, one of the principle lessons from the 1960s and 1970s was that the physical and socioeconomic conditions can explain a significant amount (often about 20–30%) of the variance in policy outputs across cities, states, or nations (Blomquist 2007; Mazmanian and Sabatier 1980; Hofferbert 1974). We have already provided a macro-perspective of the context and described the four process types. Our second form of knowledge involves the local context. As individuals enter a subsystem, they should accept immediately that every subsystem constitutes unique processes and configurations of historical sociocultural, economic, institutional, and physical conditions. Their job then is to understand the characteristics of the subsystem they are attempting to influence. These characteristics include learning about the important venues and veto points for influencing subsystem affairs and knowing how to use of symbols and framing contexts to influence opinions about subsystem affairs.

Ostrom et al. (1993, p. 49) situates “time and place information,” what we call local knowledge of context, equally with scientific knowledge. She argues, and we agree, that both help to develop long-term, enduring institutional arrangements. We would simply extend her arguments to say that both analytic and local knowledge increase the likelihood of influencing the policy subsystem.

A problem with local knowledge is that it may not be as good as individuals think. Clearly, we know that some communities possess hundreds and sometimes thousands of years of learning and adaptation to develop stable institutional arrangements to empower the self-governance of a common pool resource (Ostrom 1990). In other communities, the local knowledge of problems does not inherit a rich history of adaptation and learning. In some communities, the problems are so new that local knowledge within a community is struggling for an understanding or even a recognition that a problem exists. Additionally, local knowledge is somewhat akin to common sense—possibly immune to error seeking and just as susceptible to confirmation bias as science. In this way, local knowledge is just as likely to be an inappropriate heuristic as analytic knowledge.

### *Knowledge of other subsystems*

The fourth type of knowledge involves developing knowledge about other subsystems and the macro-system within which a subsystem is a set. The rationale is simple: we know subsystems are interdependent and nested in other subsystems and the macro-system; therefore, events from outside of the subsystem matter to internal subsystem affairs. As a result, understanding only the imminent subsystem is an isolationist strategy likely to be ineffective in influencing the policy process.

Of the four areas to develop knowledge, we consider external subsystem knowledge as the most challenging and the least important because understanding other subsystem affairs involves knowing an unthinkable amount of information across an unthinkable number of

subsystems. It is best, therefore, to focus attention on knowing the imminent subsystem and then deliberately sift through the incoming stimuli from other subsystems and selectively choose the stimuli that matters most for the relevant subsystem. This task is not doomed to ultimate failure and ineffectiveness for we expect some efficiency in understanding similar subsystems. For example, a person involved in Colorado water policy is much more likely to understand Arizona's water policy compared with Colorado health care policy. Obviously, we recognize that an individual cannot do it all (Lindblom and Cohen 1979). A focus on all four is the best strategy with perhaps weighting analytic and local knowledge more than knowledge about other subsystems. Developing knowledge may be an insurmountable challenge but this is also why, as we will discuss shortly, that the likelihood of influencing a policy subsystem increases for those who participate for the longest period of time—for individuals require years to learn about scientific and technical details of a subsystem, its context, and other related subsystems.

### Building networks

Influencing the policy process requires the collective interaction with others, often referred to as collective action dilemmas (Ostrom 1999). Thus, our second strategy for influencing the policy process is to develop networks of relationships to overcome these collective action dilemmas that arise in policy subsystems.

The recognition of the importance of networks within policy subsystems has long been a staple of policy process research (Freeman 1965; Hecl 1978). The names of these networks have taken on many names and forms including iron triangles, epistemic communities, advocacy coalitions, policy communities, and policy networks (Haas 1992; Rhoades 2006). Indeed, networks and policy subsystems are so related that policy subsystems have been equated as a network type. The forms of subsystem networks are diverse (Feiock and Scholz 2010). Some networks are formal in their legal requirement as when an owner of private firm must submit a self-report to, or obtain a permit from, a government official. Others are informal as occurs when individuals coordinate their political behavior to influence an agenda of a government agency or when two advocacy groups share information.

Probably, the most important type of relation in a network setting involves exchange and acquisition of resources (Pfeffer and Salancik 1978). Resource exchange and acquisition could be information and money and equates with access to authority. Somewhat separate from resource exchange is the role of networks in overcoming collective action dilemmas, i.e., reducing transaction cost and decision costs through better coordination of activities. Given that the macro-system and subsystems create multiple opportunities for stopping, delaying, and altering policies, and given the heterogeneity of most subsystems, the essential strategy is to build a network of supporters who have skills, interest, and capacities to help policy participants achieve their goals. By the same token, this network of supporters might be called allies, a coalition, friends, or partners. Whatever the name, we see no other way to overcome the obstacles in the political systems and overcome collective action dilemmas without cooperation with others in the system.

One of possible downsides of investing energy and resources in a network is what Irving Janis (1972) referred to as “groupthink”—when homogeneous groups fail to think critically in their decision making in their search for group consensus. Groupthink is partly attributed to our model of the individual that is susceptible to selection and interpretation bias based on the same heuristics by which the group is formed. While the literature on political networks continues to evolve, the most important way to overcome groupthink mentalities is to develop diverse network ties. We know that individuals with diverse

(“weak”) network ties are more effective in achieving objectives than individuals with redundant (or “strong”) ties (Granovetter 1973; Burt 1992). Strong ties are contacts to individuals within the same social group, often represented by a set of similar beliefs or interests or perhaps similar form of knowledge. Strong ties are essential but often results in redundant information and resources. Weak ties are links to individuals of a completely different social group. These weak ties might be infrequent contacts, often acquaintances, but they are more likely to provide original information and access to resources in ways not available among the stronger ties. Similar to analytics, the exact balance of weak or strong ties is still not understood; a mix of both is essential. The influence of the Internet on network formation and openness had not yet been studied in depth, but is likely to be substantial. Insular groupthink may be less likely due to the perspective provided in blog comments, for example, and the motivation of bloggers to see what is being said about their work.

### Participating for long periods of time

Given the need to develop knowledge and networks, our final recommendation is to stay involved in the subsystem for long periods of time. Our arguments for this point are fourfold:

First, time is needed to develop knowledge about a subsystem. Time is needed, of course, because of our cognitive limitations in learning any complex task, which include both constraints on our short-term memory and challenges to store the information in long-term memory. Simon (1996, p. 91) estimates that it would take about a decade of professional training to attain expert knowledge and performance. Working with Simon, Ericsson (1996) and later Gladwell (2008) in *Outliers* recast the 10-year estimate into 10,000 h to achieve expert performance (or 20 h/week for 10 years). Our message to individuals wanting to influence policy process is that it takes time to learn about a subsystem to develop that deep knowledge that will increase policy participants’ performance and the probability of successful goal achievement.

Second, processes take time. Intransigent processes of high conflict, for example, can endure for long periods of time before negotiation and cooperation. A casual observer of political history suggests that political conflict can last decades or more. In the ACF literature, empirical studies have found that coalitions can persist for decades with many short-term losses and victories (Jenkins-Smith et al. 1991; Zafonte and Sabatier 2004). Most importantly, we know the political battle does not end at policy adoption but continue in implementation and agenda setting activities. In this respect, policy participants should nurture a particular idea or protect their preferred policy throughout the stages of the policy cycle for opponents certainly do not restrict themselves to one stage at a time. Indeed, an allied victory in adopting a policy may prompt a counter mobilization by opponents to launch a new campaign to shape government agendas and, at the same time, to file a lawsuit to delay the implementation of the policy. In agenda setting, adoption, and implementation stages, opponents may conduct evaluation studies of the given policy or similar policies to influence perceptions of the definition and solutions to the phenomenon. Given the high number of veto points and a heterogeneous composition of some policy subsystems, our advice to policy participants is to nurture the policies and programs that relate to policy participants’ goals closely over extended periods of time. Similar logic applies to processes of low conflict where policy participants seek to develop institutional arrangements to solve any sort of collective action problem—i.e., it simply takes long periods of time to modify the institutions to deal with dissatisfaction.

Third, one theoretical insight from the policy process literature has been the “window of opportunity” (Kingdon 1984). The main point is that agenda setting and policy change require the catalyst of a policy entrepreneur to take advantage at right time to achieve his or her goals when the politics are right and the right ideas are matched to the problems—in what Kingdon describes as the merging on the politics, policies, and problem streams. While the symbolic imagery of the three streams can be debated, a harder critique is the importance of timing and the role of policy entrepreneurs in the policy subsystem. Policy entrepreneurs have developed an acute sense of timing and are willing to invest the energy, reputation, and money for goal achievement. For nascent policy participants, we argue that one of the best ways to develop strong sense of timing is to actually participate for extended periods of time.

Fourth, one of the major findings from the learning literature is that it often takes about a decade or more for scientific and technical information to diffuse among decision makers and lead to change (Weiss 1977; Sabatier 1988). For individuals wanting to get involved in a subsystem as a scientist or technician, this is of critical importance. Know that a single scientific or technical finding is typically not as likely to create change compared with a series of findings over time that builds a coherent argument.

In sum, we recommend individuals looking to influence the policy process be persistent and determined for long periods of time. Ten years may be the magic number for it has been identified by Simon and Ericsson as the time it takes to develop knowledge and skills. Clearly, designing institutional arrangements that are effective in achieving policy goals require adjustment and realignment simply take time (Ostrom 1990). Perhaps more conjectural, Sabatier claims too that it takes about a decade for scientific and technical information to diffuse in the process and to complete the policy cycle from agenda setting through evaluation (Sabatier 1988).

### **A guiding democratic ethic**

While individuals working to influence policy may often be driven by personal values and goals, we should remember that policy processes are collective endeavors that ultimately produce collective goods. Individuals are most likely to be successful in achieving both their own interests and the collective interests if their strategies are guided by a shared ethic. The United States political system, from its inception, has ascribed to the philosophy and practice of democracy as its overriding normative ethic. From a policy perspective, the major democratic theorist has been Harold D. Lasswell, who avowed that “the policy sciences of democracy” were “directed towards knowledge to improve the practice of democracy” (1951, p. 15). Even though the operational definition of democracy has taken different hues (e.g., representative vs. direct democracy), none has challenged the centrality of the democratic touchstone.

Underlying Lasswell’s view that knowledge should be directed toward improving democracy is the possibility of self-governance. Similarly, the fundamental underpinning of Elinor Ostrom’s 2009 Nobel Award in economics was the idea that individuals can cooperate and then design institutional arrangements enabling self-governance. The challenge is that in democracies, as found in the United States, it is usually infeasible for everyone to participate directly in policy decisions and, therefore, individuals often must rely upon formally and informally endorsed representatives, be they members of a favored advocacy group, part of a political party, or an elected official (Dahl 1990). Representation probably becomes more pressing in policy subsystems operating at the national level



compared with local-level policy subsystems because in the latter individuals affected by the decisions are more likely to be closer to decision-making venues. The result is greater use, and possibly abuse, of mass communication techniques for national level decision making, which returns us to the limited cognitive capacity of individuals to select and interpret stimuli differently and the need for effective venues for reconciling different interpretations and value differences among citizens not participating in the process. The implication for nascent policy participants is to recognize that they will likely influence the decisions that will have impacts on individuals not participating. The challenge is how to adhere to a moral responsibility of making decisions for others that maintains, at some level, their dignity and rights.

Therefore, the contemporary policy participant needs to take into account the Constitution's guarantees and the democratic ideals laid out by Madison and his *Federalist* #10, such as guarding the rights of minority populations (that is, protection from the tyranny of the majority) without letting such guarantees distort the political system (i.e., protection from the tyranny of the minority). Similarly, the same lessons can be drawn from Schneider and Ingram's work (and deLeon) concerning how policy designs (i.e., institutional configurations) bestow benefits and burdens onto socially constructed groups of minority and majority populations (Ingram et al. 2007). There are times when a national "sentiment" might favor one general approach over another—typically a preference for a decentralized form of governance compared with a more centralized approach, sometimes over the same policy issue—that warrants consideration.

Interspersed with these political currents is the other great presence in the United States society, capitalism, which brings its own ethics. While not necessarily standing in contradiction to the democratic norms, there can be some dilemmas, such as disputes between efficiency and equity (see Lane 2000). These disputes can be exacerbated by both the issue-area being examined and the level (and timing) of government involvement.

Embedded throughout this discussion of ethics and democracy is the role of citizens in political systems. As examined by Dalton (2008), some individuals are duty-oriented in their participation by directing their activities toward voting, paying taxes, obeying the law, and serving in the military. Others are more engaged-oriented in their participation by active involvement in groups and helping disadvantaged populations. Obviously, both forms of participation are an essential component of a working democracy, and both should be encouraged (as argued by Dalton). Our recommendations align closer toward engaged-oriented activities by suggesting if individuals, as citizens, want to serve democracy by influencing the affairs of a particular policy subsystem, then they should get to know the affairs and other individuals in that system and participate for extended periods of time.

We agree with Redford (1969) who described a democratic ethic as one that intertwines the right of individual development equally matched to the right of every other individual in the society. Recognition of the interdependence among individuals can help incentivize individuals to devise institutions that help them overcome collective dilemmas (Ostrom 1990). As for policy participants, we recommend that their normative orientations should be grounded in the dual recognition of individuals as single entities and as collectives and, therefore, direct their actions in building "the capacity of such processes to control tensions among people and to bring about peaceful adjustments of their differences" (Redford 1969, p. 6). While issues of democratic ethics raised in this section are important to consider in goal achievement in the policy process, such ethics are irrelevant without effective strategies, as outlined in the rest of this essay, to attain them.

## Final points

There are no guarantees for influencing the policy process. The best individuals can do is to place themselves in a position to have a chance to make a difference, which includes developing the following strategies: (1) developing deep knowledge, (2) investing in networks, and (3) participating for long periods of time.

For some, the emphasis on deep knowledge may come across as a bias toward technocracy, rationality, or objectivity. Such an interpretation would be an inaccurate depiction of the main arguments in this essay. We emphasize belief system awareness because self-awareness is an important step toward self-expression and goal attainment. We emphasize deep analytic and local knowledge because public policy problems are rich their histories, real in their interdependencies with individuals and contexts, and complex in their attributes of the problem and solutions. We emphasize learning about other policy systems because we know public policy issues take place and intersect with broader contexts. Obviously, individuals cannot know everything. Our recommendation, equivalent to a cognitive balancing act, involves developing belief system awareness and deep knowledge within and across analytic approaches, developing local knowledge, and striving for some breadth of knowledge across other subsystems. Additionally, our arguments should not be interpreted to imply that policy participants are necessarily elites detached from the ordinary citizen. Policy subsystems can include large, powerful interest groups and regular citizens who become involved in an effort to influence change. For individuals without expendable resources (e.g., time and money), the challenge is maintaining persistent involvement over time. The barriers against greater involvement are clearly not only problematic in modern democracies but also a realistic interpretation of the challenges individuals will likely face if they want to influence policy processes.

Some may also interpret the arguments in this essay as placing too much confidence in the policy process literature. This is not our intent. Clearly, we must remain diligent and critical of the arguments and the assumptions in the policy process literature. The long-term goal should be to maintain rigor in testing and developing current theories of the policy process while at the same time drawing the best lessons to date to help those currently participating in the policy process. If we were required to wait until we discovered universal truths, then we would never provide advice or lessons to anyone. The question must be asked: to what end do we place the knowledge gained from frameworks, theories, and models in policy process research? Ultimately, the knowledge gained must contribute to society through some combination of teaching, advocacy, and the various forms of engaged scholarship (deLeon and Weible 2010). The question is how to contribute and to even ask such a question with the humility toward the complexity of policy processes and what it means to contribute.

A person might ask: are these three general strategies the only and best advice after decades of policy process research? We developed these three general strategies to apply across most contexts and view them as good advice. We also recognize and encourage alternate interpretations and, in particular, the development of context-specific strategies or tactics. For example, there might be another set of strategies involving how to acquire and use political resources in the policy subsystem (see Dahl and Stinebrickner 2003). One tactic from Schattschneider (1969) involves the mobilization of the general public, a strategy that we certainly agree with but one that requires deep understanding of the issues, network relations, and time—hence, contingent first upon our strategies. A knowledgeable referee for this article recommends that people entering a policy subsystem should partner with a “seasoned policy practitioner,” something we interpret as a potentially useful advice

in developing networks. Other tactics might include the effective approaches in framing contexts and use of symbols, methods of argumentation, or even the exact choice of whom to form network ties or how to use information (Edelman 1985; Majone 1989; Stone 2001). Indeed, it is quite possible that the variance between influential and inconsequential policy participants is better explained by a completely different set of factors found in other parts of the literature that we overlooked. What is needed is an empirical effort toward the actual testing and refinement of our strategies and others in empirical settings. Until this happens, we consider the three strategies herein as a useful simplification.

We know readers will look at our recommended set of strategies and think of the exceptions: the individuals who influenced the policy process and achieved their goals without deep knowledge, minimal network ties, and only having participating for short-periods of time. We argue that these individuals represent more of the exception than the norm or that these individuals possess rare and valuable attributes, like charisma, or endowed resources, like money. We expect this discussion to be most useful for those lacking extraordinary assets, i.e., the “typical” citizen.

This essay offers a synthetic set of meta-theoretical implications that span across much of the policy process literature. Our argument is that this essay is an exercise in lesson learning and serves to complement and not supplant existing policy process frameworks and theories. One critical referee of this manuscript disagreed and claimed that the three strategies are based on a partially developed new theory or framework of the policy process that has not been examined for “consistency, comprehensiveness, or sufficiency.” We respectfully disagree. A deep understanding of the policy process literature (particular the ACF, IAD framework, and PET) shows that the assumptions and strategies herein are hardly new but simply reflect a compilation drawn from extant theoretical argumentation and empirical evidence. For example, the ACF provides the exact definition of subsystems and portrays nearly the same path for policy change as described in this essay (Sabatier and Weible 2007; Nohrstedt and Weible 2010). Yet, perhaps this referee is correct—might we be simultaneously discounting the importance of the meta-theoretical arguments and failing to provide the necessary justification regarding the internal consistency, scope, assumptions, and logic of a new theory? If we were fortunate enough to have readers seriously consider our arguments to such extents, then we would humbly welcome different interpretations and discussions of this essay’s contributions and failings.

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