Policy Dynamics:
Insights about Policy Change

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1. Introduction

Given the diversity of research perspectives on "institutions," one point of commonality lies in the ongoing tendency of change and stasis. Institutions, for example, might exhibit plasticity to fit their cultural or biophysical settings or inflexibility by ignoring signals of change, undercutting their adaptive capacities. This chapter offers a perspective on institutional evolution from the standpoint of "policy dynamics."

Policy dynamics refers to the study of change and stability of public policies. Public policies denote the actions and inactions of government (Dye 1972). As instances of government action, public policies include, but are not limited to, supranational agreements, legislative laws, regulations, local ordinances, judicial decisions, executive orders, public referendums, and so on. In this regard, policy dynamics deal with formal, written public policies (also called "rules-in-form") (Ostrom 2005).

Several important yet related topics lie outside the scope of this chapter. One involves public policies as deliberate inactions of government where the choice to do nothing becomes the de facto public policy. Another relates to public policies as ongoing and regularized behaviors of implementing officials, street-level bureaucrats, or people directly engaged in solving collective action dilemmas (also called "rules-in-use") (Lipsky 2010; Ostrom 1990). Lastly, this chapter does not cover policy change outcomes, such as the actual impacts on society. Important as they are, the study of outcomes is another chapter. However, this chapter addresses the effects of public policies on future policies and politics as part of ongoing and evolving policy processes.

As ongoing expressions of the actions of governments, public policies and policy change represent the voices of the powerful and, indirectly, those with less power (see Richerson, this volume). By looking at the content or design of public policies and their evolution, we can understand the distribution of the benefits and burdens in any society, from protections against discrimination to higher taxes. This chapter summarizes some of what we know about policy change, starting with types of change, patterns of change temporally and spatially, and explanations of change. The chapter concludes by identifying a few critical questions for inquiry.

This chapter is drawn from the following book:

Richerson, Peter J., Jenna Bednar, Thomas E. Currie, Sergey Gavrilets, and John Joseph Wallis, eds, *Institutional Dynamics and Organizational Complexity* : *How Social Rules Have Shaped the Evolution of Human Societies Throughout Human History*. Open Access Book, Cultural Evolution Society, 2023. institutionaldynamicsbook.culturalevolutionsociety.org

2. Types of Policy Change

Policy change refers to the observed adoption of a public policy. A considerable literature exists that describes policy change through different definitions, categorizations, or typologies.

At the most fundamental level, a basic categorization of policy change concerns the type of public policy. For example, changes in legislation might differ from changes in regulation. This type of policy change focuses on the "decision-making venue" in which the change originates. Decisions emerging from a legislature might be classified differently from changes emerging from a rulemaking agency. This categorization of policy change might be important in understanding how a government responds to signals for change but ignores the content of the change. A public policy adopted in a regulatory government agency in one US state might be the same as a public policy adopted by a legislature in a different US state.

Another way to distinguish policy change deals with the magnitude of change. On one extreme, paradigmatic change refers to broad, systematic changes in fundamental ideas of governing and allocation of power. The shift in the United Kingdom in the late 20th century from Keynesian ideas of economics to monetarist ideas of economics is one example (Hall 1993). Less paradigmatic, yet still important in the study of policy change, is the distinction between major changes (e.g., changes in goals) versus incremental or minor changes (e.g., changes in the means) (Sabatier 1988). In the United States the decision by New York State to ban oil and gas development using hydraulic fracturing is an example of major policy change compared to the ongoing minor policy changes in the State of Colorado on the regulation of oil and gas development using hydraulic fracturing (Heikkila et al. 2014; Weible and Heikkila 2016). Alternatively, major change might refer to punctuated departures from the status quo compared to minor or incremental departures. For example, budget decisions from year to year tend to change incrementally with the occasional large, punctuated change, as explored in the next section (Baumgartner and Jones 2010).

One final way to portray policy change concerns how it relates to existing public policies. For instance, Mahoney and Thelen (2010) describe how newly adopted public policies might supplement existing public policies by adding layers of details or stipulations. Alternatively, newly adopted public policies might displace or remove existing public policies with something new. Returning to the case of oil and gas development in Colorado, this state adopted 55 public policies between 2007 and 2019 that sometimes added layers of directives and other times removed or modified existing directives related to regulating this industry (Weible et al. 2020).

3. Patterns of Policy Dynamics

Two patterns emerge when analyzing policy change across space and time. The first relates to patterns of stability and change. For example, figure 1 shows the frequency distribution of budget outlays from 1800 through 2004 in the United States. The frequency of change centers predominately around zero, thereby displaying small, incremental changes most of the time. However, the distribution of budget changes stretches far to the right, indicating large, punctuated changes. Noticeably absent are moderate changes. The type of distribution shown in figure 1 deviates from the normal (or bell-shaped) distribution by having a sharp peak of zero or minimal change from the status quo, relatively infrequent moderate changes in the shoulders of the distribution, and long tails of substantial or punctuated change. This type of distribution is what is termed leptokurtic (Jones et al. 2009).

Whereas figure 1 illustrates a typical pattern of change in US budgets, it has also been confirmed in about two dozen other countries, including many outside of western democracies, such as China and Brazil. This pattern also generalizes beyond budget decisions. In the United States, leptokurtic distributions can be observed in lawmaking across substantive categories, court decisions, and executive orders. For example,

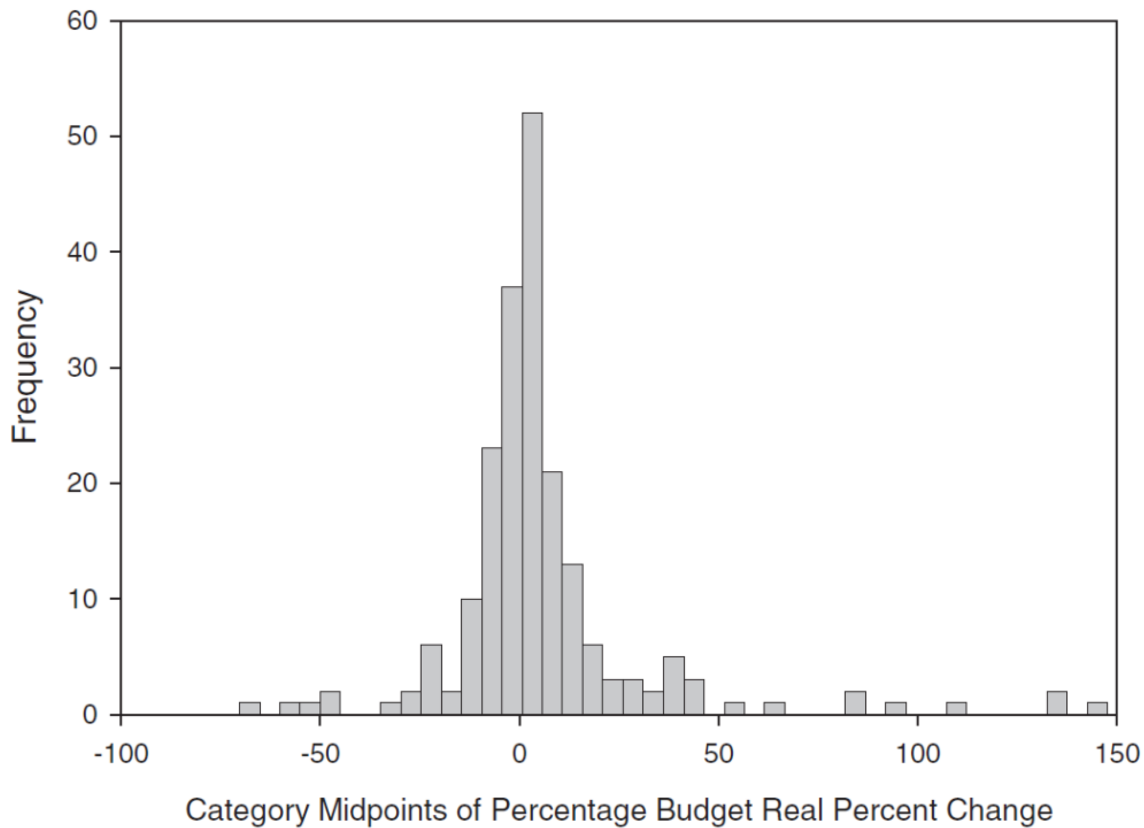

Figure 1. US Total Outlays, Frequency Distribution (Source: Jones et al. 2009)

Robinson (2013) found similar incremental and punctuated changes in US Supreme Court decisions. The mechanisms underlying these leptokurtic distributions involve the emergence of friction that constrains proportional response to the signals of change. The general explanation is that friction comes from the limited attention paid by individuals and their organizations and decision-making rules that slow processes of change. For example, governments dominated by particular expertise or specialized personnel will pay attention to some information sources over others, thereby overlooking signals from the environment. As these missed signals accumulate, they eventually attract the attention of governments, leading to punctuated changes to correct past neglect (see a similar argument in Aoki 2001).

As discussed below, explanations for any specific instance of policy change, incremental or punctuated, involve a recognized set of factors with presumed causal properties (e.g., the emergence of one political coalition overcoming another). However, specifying particular factors that deterministically lead to policy change given specific contextual parameters remains out of reach of today's science and possibly the future's. Yet, we can look for tendencies, associations, and correlations. Despite not knowing the exact causation of the situation depicted in figure 1, scholars studying phenomena involving similar situations outside of public policy find similar patterns, such as the pattern of making tweaks and radical leaps in online computer programming competitions (Miu et al. 2018).

The idea that policies change incrementally with the occasional punctuation need not correspond with actual impacts. For example, a major policy change might not equate with major changes in the world. Likewise, the long-term accumulation of incremental changes might lead to drifts in policy goals and nontrivial changes in the world (Hacker, Pierson, and Thelen 2015).

Whereas the incremental-punctuated pattern incorporates a temporal dimension in its description of policy change, the second pattern combines spatial and temporal dimensions. In this pattern, ideas underlying the policy change diffuse or transfer across governments, such as across national government legislatures across nations, across legislatures within federally structured governments, or between city governments at the local level. Ideas might also diffuse vertically from national to local levels of government.

These patterns vary by speed of adoption, which usually starts slow as the idea begins to spread, speeds up as more governments adopt the policy, and then slows down again as the idea wanes. For example, Boushey (2012) shows how some policies (e.g., mandatory motorcycle helmet laws) spread quickly across US states, whereas others (e.g., restaurant smoking bans) spread slowly.

4. Explanations of Policy Change

If we were to examine 100 instances of policy change, we would probably find 100 different explanations. Each one would be conditioned by historical circumstances and contextual factors that make developing a deterministic formula for predicting an instance of policy change impossible. However, we know that a common set of factors or conditions precede policy change, and we have organized them into several categories. This section summarizes a few of them.

4.1 Public Opinion

In democracies, governments are ideally responsive to the people's will in providing a host of public services, from security to protecting private property. While considerable research has focused on the relationship between public opinion and public policy, there tends to be more congruence between them on salient issues or when the public cares or voices its opinion (Burstein 2014; Clausen and Oxley 2020; Wlezian and Soroka 2016). For example, an analysis of 556 US state-level policies adopted between 1960 and 2014 showed the importance of citizen ideology (Mallinson 2021). Wlezien and Soroka (2016) summarized this research by describing the relationship as dependent on the policy issue and saliency. Research also linked change in public opinion to policy change in dozens of instances of policy change in China and South Korea (Jang, Weible, and Park 2016; Li and Weible 2021). However, research also shows that the average citizen's policy preferences matter little in policy change. For example, analyzing 1,779 instances of policy change in the US Congress between 1981 and 2002 in which national surveys were available on similar topics found no influence of the general public; instead, influence came from interest groups and the economically wealthy (Gilens and Page 2014). In all of these studies, the challenge rests in part on untangling the ongoing interactions between public opinion, the activities of political leaders, and the messaging of social and news media.

4.2 Environmental Contexts

Underlying all explanations of policy change are some aspects of the environmental context, which broadly includes basic environmental and biophysical conditions and the cultural and socioeconomic attributes of a community. These conditions and attributes are often associated with increasing or decreasing the likelihood that a type of policy change might occur. Studies show, for example, that local governments in the United States are more likely to support climate protection measures based on weather-related fatalities, coastal proximity, and projected temperature change than local governments without these contextual conditions (Zahran et al. 2008). Likewise, the wealthier and more populated the governments' jurisdictions, the more likely they are to formulate and adopt ideas for policy change than poorer and less populated jurisdictions (Mallinson 2021). Depending on the type of policy change in relation to the environmental context, the odds of change increase or decrease for a window of time. Thus, environmental conditions can speed up or slow down the pace of policy changes.

4.3 Institutional Contexts

The institutional context refers to the basic rules, both formal and informal, that shape behavior and are shaped by behavior (Ostrom 2005). The institutional context establishes the rules for political behavior, such as voting rules (from consensual to majoritarian), rules specifying incentives and disincentives (from campaign finance laws to pork-barrel spending), and information rules (various forms of disclosure). It also refers to the basic overall structure (e.g., constitutional) of a government. As mentioned, institutional contexts not only shape political behavior, they are also the targets of political behavior and, hence, forms of policy decisions. For example, Jones et al. (2019) describes an association between authoritarian versus democratic political systems and the propensity of incremental versus punctuated policy changes. Similarly, studies of the relationship between contextual conditions and policy change show that across government decision-making venues, contextual factors (e.g., socioeconomic conditions) often trump political considerations (e.g., party composition) (Blomquist 1999) or, comparatively, that the structure of the democracies shapes outcomes (Lijphart 2012). Relatedly, the institutional context also establishes certain roles in a political system, such as "veto players" who have the organizational capacity to delay, stop, or alter policy change (Tsebelis 2011).

4.4 Shocks or Events

Many explanations of policy change assume a sufficient shock or event must occur to overcome inherent resistance or friction inhibiting change . Such shocks or events can be organized into several categories: (1) elections and changes in a governing coalition; (2) wars, disasters, or crises; (3) rapid changes in socioeconomic conditions; and (4) changes in technology, science, and information. These shocks or events do not always lead to policy change. However, when they do, they require those involved in policymaking to capitalize on them (see discussion of champions and political associations below).

As policy change tends to be incremental rather than punctuated, these shocks or events must either be rare or, if not, our governments are not responding to them. Supporting the argument that governments are not responding to events and shocks, Nohrstedt et al. (2021) found no relationship between natural hazard events and policy change for over 10,000 disasters over 11 years in 85 countries. However, this finding does not mean that change does not happen. Instead, when a signal from a disaster occurs, more often than not, our governments do not react proportionately (Jones et al. 2009).

If we focus instead on instances of policy change, we can trace backward and identify major events or shocks associated with them. For example, in a review of 72 cases of policy change in China, Li and Weible (2019) found over 90 percent were attributable to events or shocks, such as a crisis, changes in socioeconomic conditions, or changes in public opinion. But, of course, what Li and Weible (2019) do not analyze is the population of events or shocks that happen that might or might not lead to policy change, as done by Nohrstedt et al. (2020).

Although this summary focuses on disasters and crises, similar arguments can be made for the impacts on policy from the other categories mentioned above, including elections (Baumgartner and Jones 2016; Burnham 1970).

4.5 Learning

Learning around policy issues refers to enduring changes in understandings that lead to changes in behaviors (Sabatier 1988). Learning can involve a variety of changes, all of them not necessarily "good." Indeed, people can just as easily learn the wrong lesson as the right lesson. For example, a study of people actively engaged in policy decisions around oil and gas development using hydraulic fracturing (Heikkila, Wieble, and Gerlak 2020) organized potential responses into four categories (figure 2). The categories reflect the type of information signals received and how they relate to prior positions on public policies. The four categories of responses

include (1) reinforced positions with the acceptance of information supporting existing policy positions, (2) reinforced or no change with the rejection of information countering existing policy positions, (3) no change with the rejection of information supporting existing policy positions, and (4) change with the acceptance of the information countering existing policy positions. In this study, a substantial majority reinforced or kept the same position. This fundamental pattern echoes many other studies using varied data sources and methodological approaches that show how little persuasion changes belief (Moyson 2017; Pattison 2018).

	Accept the Information	**Reject the Information**
Information supports existing policy positions	'I'm doubling down' (reinforced position)	'I'm satisfied' (same position)
Information counters existing policy positions	'I'm persuaded' (changed position)	'I don't believe it' (same position or reinforced)

Figure 2. Typology of Potential Responses to Information (Source: Heikkila, Weible, and Gerlak 2020)

The overall pattern is one of stickiness in beliefs and understandings of the world. The implications reinforce the narrative that people—and hence governments—overlook or respond disproportionately to information signals, leading to incremental or no changes in public policy. This then connects the information and justifications people use to legitimize policy decisions, contributing to the ongoing political discourse of undercutting the foundations for government action and inaction associated with contemporary post-factual politics (Durnová 2019). In other words, the information that we do use to help inform and justify our beliefs will be rejected by opponents.

Facilitating the incorporation of signals from the environment are decision-making settings that lower threats and conflict through trust-building processes marked by fair rules of negotiations and communications. Such collaborative environments are more likely to lead to learning and exchange among people with policy positions (e.g., Koebele 2019; Leach et al. 2014).

4.6 Champions and Political Associations

Policy change requires enough political force to overcome friction in the system, for example by capitalizing on an event or shock or acting on moments of learning. Many terms describe the champions of public policy or the political associations that might make this happen.

For example, policy champions (also called policy entrepreneurs) are those leaders who support an idea and usher it toward policy change (Kingdon 1984; Mintrom and Norman 2009). These individuals are the ones who bear the costs in terms of time and other resources of supporting an idea. They often build the necessary coalition of allies for overcoming opposition, or they might build bridges between opposing factions.

Groups of organizations and individuals also mobilize in various political associations linked with policy change. Examples include political parties, social movements, and advocacy coalitions. The term "advocacy coalition" describes the formation of allies around a policy topic geared toward long-term adoption of public policies. For example, Fischer (2014) analyzed 11 of Switzerland's most important political processes between

2001 and 2006. He found that policy change more likely occurred in low-conflict situations and in cases of strong collaboration between opposing coalitions or weak collaboration between a dominant coalition and an opposing coalition. In a review of social movements, Amenta et al. (2010) found large social movements were influential in influencing public policy, but many small social movements were not. Indeed, the effects of social movements might be less on public policy and more on culture (Amenta and Polletta 2019). Polarization and conflict among coalitions and parties are hard to untangle. Depending on the circumstances, polarization, such as between political parties, might not be associated with delays (e.g., Krehbiel 1998).

5. Conclusion

As described in this chapter, policy dynamics involve patterns of mostly incremental or minor changes in formal public policies over time marked by abrupt changes or punctuations. The adoption of ideas into public policies also diffuses horizontally and vertically among governments at various speeds. These patterns emerge because of people's limited attention and cognitive capacity to process information through selection and filtering. They also arise because of rules in our decision-making venues that slow down processes of policy change.

Each instance of policy change can be understood retrospectively as a combination of factors and forces that interact in overcoming friction and resistance favoring the status quo. Thus, despite many distinctive processes at work in adopting any public policy, common categories of explanations for policy change emerge. Yet, none of these explanations are deterministic, meaning their presence in isolation or combination never guarantees policy change at all times or in all contexts. Instead, explanations might increase or decrease the odds of policy change in some circumstances, and correlations and tendencies can help us understand the world and make decisions. Common explanations for policy change include public opinion, contexts, events and shocks, learning, and policy champions and political associations. These ongoing patterns of change and stasis parallel similar insights about dynamic human systems found in other social sciences (Richerson 2017).

This chapter summarizes insights from political science and, in particular, policy studies focusing on policy dynamics and policy change. The research supporting these efforts operates from methodological pluralism, including quantitative and qualitative approaches. Examples of the methods include manual textual analysis of decades of government agendas and policy decisions (Jones et al. 2009), cross-sectional and repeated longitudinal surveys of people engaged in policy processes (Weible, Pattison, and Sabatier 2010), and comparative fieldwork (Ostrom 1990). More importantly, the knowledge usually develops through the accumulation of scholars worldwide using a similar theoretical orientation and sometimes similar or dissimilar methods to build understanding about a phenomenon (see, for example, Jones et al. 2009; Li and Weible 2021). Thus, this knowledge arises from mixed methods and a diversity of scholars who balance contextual particularity with comparative generalizability.

For policy advocates, three general strategies can better the odds of influencing policy change (Weible et al. 2012):

1. Stay engaged in the policy process for extended periods (i.e., 10 years or more). As shown in figure 1, major policy change happens infrequently, so a good strategy is to position oneself to capitalize on the opportunity (Baumgartner and Jones 2010). Additionally, the accumulation of incremental change can cause a drift in the purpose and outcomes of public policies (Hacker, Pierson, and Thelen 2015).

2. Establish and maintain networks among those engaged. Policy change requires agency, and these agents might be policy champions or various kinds of political associations. This builds from the evidence that

agency, especially in the form of leadership and entrepreneurship, can make a difference, and these individuals tend to be well-networked (Kingdon 1984)

3. Develop deep and broad knowledge in the issue area with the reasoning that learning happens and information flows matter (Baumgartner and Jones 2016; Heikkila and Gerlak 2013).

The idea underlying these three strategies is to earn a position of influence to capitalize when a window opens for major change.

We continue to learn about policy change. Some of the top questions needing answers include:

1. How do explanations for policy change vary by different contexts? Patterns of incremental and punctuated change and diffusion of public policies have been confirmed across political systems. We know, for example, that China's political system shows more incremental changes and more punctuated changes than western democracies as there is more friction in information flows in that political system (Jones, Epp, and Baumgartner 2019). We also expect that explanations will more likely occur in some settings than others. The example of South Korea's unitary form of government and five-year cycle for presidential elections often leads to major policy changes compared to the United States' federal system (Jang, Weible, and Park 2016). Yet, systematic comparisons between countries on policy change continue to evade the scholarship. Additionally, most scholarship on policy change lies in western democratic countries and not enough in other parts of the world. Thus, we need more comparative approaches among more diverse contexts that more comprehensively represent the world. One pathway for responding to this question is to develop and collaborate on historic and ethnographic databases.

2. Whose voices are heard and whose are tuned out in policy change? All policy changes disproportionately reflect the wants of those in powerful positions. We know in our political processes that some people speak with a megaphone and others with a whisper (Gilens and Page 2014; Schlozman, Brady, and Verba 2018). One of the challenges is to explore who is engaged in policy decisions, who has influence, and who is not involved but should be. Similarly, too often overlooked is how masses of people speaking traditionally with a whisper collectively channel their voices into a sustained roar.

3. What is the relationship between changes in rules-in-form and changes in rules-in-use? The relationship between policy change (as written and adopted public policies) and changes in behaviors (as what happens in practice) remains an important question mostly unanswered (Ostrom 2005). The relationship is essential for achieving outcomes, but also for achieving sustainable societies. Ideally, the rules-in-use and the rules-in-form would become congruent through ongoing mutual adjustments and adaptations in delivering public services. This would then trigger better information flows in government and more deliberate learning processes to ensure that lessons on the ground are listened to by those designing public policies and policy decisions reflective of an electorate are heard by those working on the front line.

4. What is the relationship between changes in public policies and changes in outcomes? We know far more about the patterns of policy change and far less about the outcomes of such change on society. The challenges in answering this question are several: isolating the effects of one policy among many at any one point in time, isolating the effects of one policy in evolving configurations of public policies over time, developing criteria for what is policy success and policy failure (McConnell 2010), and more.

5. How do we think about and approach the inaction of government? Part of the definition of public policy involves deliberate choices not to act on an issue. A good example is the inaction by the US government to address gun violence, where the decision not to act becomes the de facto national policy. Part of the challenge is that, in most instances, the choice to do nothing can be difficult to observe and difficult to study. Understanding the absence of policy decisions might be one of the best ways to understand what is contributing to the presence of policy decisions.

Overall, this chapter approaches institutional evolution from the perspective of policy dynamics. In comparison to the other chapters in this volume, it focuses on government action. It offers a perspective on the meaning of institutional evolution that directly or indirectly shapes societies and, in turn, is shaped by societies. It focuses more on decision-making venues in government and less on individuals and groups overcoming local dilemmas through institutional configurations by designing and implementing varied rules-in-use. Its focus is more contemporary in how our governments behave and more specific in dealing with individual public policies rather than broad institutional configurations within or between countries. Like the other perspectives on institutional evolution, this chapter emphasizes collective action in modern societies and their governments.

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