


Designing policy for the long term: agency, policy feedback and policy change

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Designing policy for the long term: agency, policy feedback and policy change

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Abstract:

Policy feedback research faces a potential pivot point owing to recent theoretical and substantive advances. Concerted attention now spans new scientific communities, such as climate focused socio-technical transitions literature, as well as reinvigorated attention to environmental politics or policy. Rather than being interested in abstractly explaining policy stability and change, this latest turn turns feedback theory in order to help find practical answers to long-term policy challenges. This introduction to our special issue of *Policy Sciences* aims to take stock of recent developments in policy feedback research and highlight some areas that could be addressed to move the field forward. We argue for taking seriously the original dictum of policy feedback as a loop in which policy is treated as both the start and end point of analysis. This requires integrating advances in policy design scholarship through shared conceptualizations of 'policy,' 'actors' and 'agency'. Doing so, we posit, will champion more comprehensive understandings of the effectiveness of policy design choices in general, and long-term oriented policy change in particular.

Keywords: Policy feedback, Policy change, Policy design, Actors, Agency, Long-term policymaking, Policy termination, Policy continuation

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The [Energy Politics Group \(EPG\)](#) within the [Department of Humanities, Social, and Political Sciences](#) of [ETH Zurich](#) investigates questions related to the governance of technological change in the energy sector.

Designing policy for the long term: agency, policy feedback and policy change

Introduction

Policy feedback theory offers a unique perspective on policy stability and change. The origins can be traced back to Schattschneider's (1935) arguments that, following their adoption, policies restructure political processes, which, in turn, influences how the original policy influences the original problem definition but also, whether the policy itself even survives. Feedback research has risen to prominence in the last quarter century by historical institutionalists (Béland and Schlager 2019) who sought to uncover theories for understanding when and how institutions change. Paul Pierson's influential work (1993, 1994, 2000, 2004) emphasized a clear conceptualization of the causal mechanisms underlying policy feedback, paving the way for establishing a toolbox for detailed empirical analyses of policy stability and change. Since the mid-1990s, researchers have continued to shed light on the (small and large) sources, or triggers, of feedback processes and the way in which these processes explain divergence across policy subsystems (Béland 2010; Patashnik 2008; Weaver 2010). Recent years have seen the theorization of policy feedback further advance through the reevaluation of the importance of self-undermining feedback, triggered by the work of Jacobs and Weaver (2015). Perhaps even more importantly, recent years have also seen new scientific communities taking up policy feedback theorization, such as researchers interested in climate focused socio-technical transitions, as well as policy feedback perspectives being reinforced in extant scholarship of environmental politics (e.g., Jordan and Moore 2020; Kern and Rogge 2017; Rosenbloom et al. 2019; Schmidt and Sewerin 2017; Stokes 2020). While this uptake of policy feedback by new communities proves the appeal of the concept beyond its original fields of social and welfare policy, it also challenges traditional policy feedback research orientations because these new communities turn to policy feedback with a different motivation and, ultimately, a distinct sense of urgency. Rather than being interested in abstractly explaining policy stability and change, these new communities turn to feedback theory to help finding practical answers to long-term environmental policy challenges. At this potential pivot point, this introduction to our special issue takes stock of recent developments in policy feedback research and highlight some areas of research that could be addressed to move the field forward.

This special issue emerged from a workshop on policy feedback held at the University of Pittsburgh in 2018 as part of the 1st International Workshops on Public Policy. Contributors to this special issue met there to present and discuss first drafts of their papers. The remainder of this introduction proceeds as follows. First, we highlight key contributions to policy feedback literature (for more exhaustive reviews of the literature see Béland and Schlager 2019; Jordan and Moore 2020). Second, and as a result, we sketch an agenda for future research. Third, we turn to the papers in the special issue to reinforce, and illustrate, this call for greater attention to the complete feedback loop cycle if we are to not only engage in more systematic theorizing with which to make sense of substantive cases, but also to identify clues about where the most promising types of policy designs might lie to allow practitioners to focus on long-term oriented processes of policy change.

Recent trends in policy feedback research

Over the last years, theoretical debates of policy feedback revolved around whether the causal mechanisms behind self-undermining processes deserved greater attention. This debate was initially triggered by scholars in the tradition of historical institutionalism like Hacker (2004) and Thelen (2004) who critiqued the emphasis on policy stability induced through self-reinforcing feedback found in Pierson's (1993, 1994, 2000, 2004) work because they posited that change was as likely to result. Jacobs and Weaver (2015) advanced these conversations by identifying three types of self-undermining feedback mechanisms—the emergence of unanticipated losses for mobilized social interests, interactions between strategic elites and loss-averse voters and expansions of the menu of policy alternatives. Substantive application of these theoretical

insights found that most policies elicit a combination of self-reinforcing (or positive) and self-undermining (or negative) feedback processes (Béland and Schlager 2019) in which the durability (or continuation or stability) of a policy depends on whether self-reinforcing is more dominant than self-undermining (Béland et al. 2019; Skogstad 2017). Taken together, this new literature clearly suggests that policy durability through self-reinforcing feedback is not, as suggested by much of the earlier literature, a given and that, therefore, studying self-undermining feedback is important. Only focusing on self-reinforcing feedback is fundamental to a selection bias that is damaging to the further evolution of feedback research, both theoretically and in terms its practical application. Crucially, these insights into the importance of both self-reinforcing and self-undermining feedback bring another issue back to the forefront, namely that what triggers feedback in the first place is the policy itself and its effects. This 'rediscovery' may seem peculiar, but the reality is that much of the previous research tended to put policy and its effects in a black box (Schmidt and Sewerin 2017), focusing instead on subsequent politics. Indeed, much of the extant US feedback research (e.g., Campbell 2003, 2012; Mettler 2005) focused on the impact of policies on public attitudes and political behavior. While a handful of scholars did highlight that the impact on mass politics varies across policies (e.g., Soss and Schram 2007), there was no common conceptualization of 'policy' or relevant policy characteristics. Some theoretical contributions even imply a conceptualization of broader policy 'regimes' that subsume several individual policies and their effects without explicitly distinguishing between them (Weaver 2010). More recently, some scholars have started to engage the question about which elements of a policy are relevant for inducing feedback (e.g., Béland et al. 2019; Stokes 2016). These studies suggest that there is room for further differentiating which specific elements of a policy lead to what kind of feedback. Yet, more systematic research into this issue is hampered by what Howlett and Cashore 2009, drawing on Hall (1993), label the 'dependent variable problem in the study of policy change', namely the conflation of distinct types of elements within a policy that causally interact, sometimes inversely. This is owing, in part, to limited attention to disentangling policy into its component parts (Cashore and Howlett 2007; Schaffrin et al. 2015). The risk is that individual analyses may not identify all of the empirical feedback mechanisms in their specific cases, leaving empirical findings not only context-specific but also incomplete, or, in some cases, incorrect. And, even when these micro level processes are uncovered, and the role of actors and agency identified (e.g., Béland 2010, Jacobs and Weaver 2015; Mahoney and Thelen 2009; Pierson 2000; Thelen 2003), there is still no common understanding of just how to disentangle, measure, and systematically compare policy elements in policy feedback-related research. Overall, these challenges to feedback research suggest that feedback theorization could profit from systematically engaging with theoretical and conceptual discussions in other literatures, specifically those related to policy design as well as agency and actors but also other theories of policy change discussed below.

A positive recent trend has been the uptake of feedback thinking in new scientific communities, such as innovation and transition studies (e.g., Kern and Rogge 2017; Schmidt and Sewerin 2017) as well as environmental policy, particularly climate and energy policy (e.g., Jordan and Moore 2020; Stokes 2020). While some of this interest goes back to older discussions about the politics of socio-technical transitions (Meadowcroft 2009, 2011) or the politics of policy change in the field of environmental policy (Jordan and Huiteima 2014), more recent studies have begun to engage more systematically with feedback theory. In their review of feedback research, Rosenbloom et al. (2019) discuss how feedback theorization can help understand the instability that has marred climate policy for so long. Moreover, they seek to develop strategies for overcoming this instability and argue that a focus on the (in-)stability of individual policies is not sufficient but that researchers should attend to a broader aim, namely how to stabilize the overall orientation of climate policy, i.e., to change the direction of policy change (see e.g., Cashore and Howlett 2007) in the entire policy field. Ultimately, theirs is a call for refocusing feedback research from individual policies to complex policy mixes and overall policy regimes (see also Kern et al. 2019; Schmidt and Sewerin 2019). In addition to studies explicitly building on feedback thinking, other studies speak to similar issues while building on broader notions of path-dependency (e.g., Meckling et al. 2015; Meckling et al. 2017; Pahle et al. 2018). What these different approaches share is an understanding of the high complexity of environmental

problems, particularly the problem of climate change. These problems have been conceptualized as being 'super wicked' (Levin et al. 2012), which emphasize the distinct nature of underlying politics of these problems. Overall, this new policy feedback research community shares an interest in evaluating whether policy feedback theorization can help understand the stagnation of policy effort related to many environmental problems and whether there are lessons to be learned from analyzing past policy efforts through a policy feedback lense. More importantly though, this research community is interested in whether policy feedback can be intentionally designed to achieve durable policy trajectories, including changing the overall direction of policy subsystems, that would be able to effectively address a specified 'on the ground' problem. These are questions that go beyond the often rather narrow focus of traditional policy feedback literature. Indeed, path path dependency theorists have, until recently, shied away from interrogating the specific ways in which problem features - which are the focus in the environmental sciences - might be relevant for this inquiry (Yona et al. 2019).

Future directions

These trends in recent policy feedback research suggest that there is a discussion to have about the future directions of the field. With increasing interest in policy feedback on the one hand and increasing expectations for policy feedback to contribute to or inform concrete policy strategies for changing the direction of policy fields on the other, there are many opportunities for advancing policy feedback theorization and application. In the following discussion, we will briefly discuss three potentially interesting and relevant issues before presenting the papers incorporated in our special issue.

First, there is considerable overlap between recent policy design literature and policy feedback research in terms of the conceptualization of 'policy' as well as 'actors' and 'agency.' Integrating insights from policy design literature would allow policy feedback researchers to move closer toward a common conceptualization of policy and relevant policy design features that are the initial drivers of policy feedback processes. In parallel to approaches focusing on policy instruments or policy tools that aims to describe broader types of policy (Capano and Howlett 2020; Hood 2007; Salamon 2002), a distinct stream of literature has developed that aims at identifying basic design elements or characteristics any policy comprises. Building on the seminal analysis of policy change by Hall (1993) and Cashore and Howlett (2007) these efforts have developed a nested hierarchy of policy design characteristics that suggests breaking down policies into three levels of abstraction and two 'policy foci,' i.e., policy aims and policy means. Policy aims represent what the policy intends to achieve. Conversely, policy means define how to achieve these aims. This approach leads to an encompassing and generalizable conceptualization of policy design characteristics, comprising 'goals,' 'instrumental logic,' 'objectives,' 'mechanisms,' 'settings,' and 'calibrations.' While Cashore and Howlett (2007) do not provide a concrete measurement approach for this conceptualization, other scholars have taken up this task. For example, Knill et al. (2012) have suggested a measurement approach for 'policy intensity' that aims to provide a systematic measurement for changes in regulatory policies. Proposing a more generalizable measurement approach, Schaffrin et al. (2014, 2015) identify six policy design characteristics that any policy comprises, regardless of policy field or instrument type. These and similar approaches—for example those that aim at combining a generalizable measurement approach with policy field specific design characteristics (Schmidt and Sewerin 2019)—can help policy feedback researchers to more systematically dissect relevant design characteristics that kick-off feedback processes. The broader policy design literature can also provide valuable input for the conceptualization of 'actors' and 'agency' in policy feedback research, particularly regarding agency behind policy design choices that initiate feedback processes. Actors are generally understood to act on the basis of different interests and resources, making decisions in contingent and opportunistic ways (see Howlett and Lejano 2012). Further conceptualizations of actors such as policy entrepreneurs, epistemic communities, discursive agents and instrument constituencies (Béland and Howlett 2016; Kingdon 1995; Leipold and Winkel 2017; Mukherjee and Howlett 2015; Voß and Simons 2014; Zito 2018) are discussed in related literatures. Even though most of these conceptualizations focus on actors in specific phases of the policymaking process (see Capano and Galanti 2018),

engaging more systematically with agency would allow policy feedback research to better understand the role actors play in policy design (Peters et al. 2018). As design matters for a policy's impact (e.g., Schmidt and Sewerin 2019), understanding how design comes about is highly relevant for understanding feedback dynamics.

Second, policy feedback research should re-engage with its original focus on policy as starting point and end point of analysis (Skocpol 1992). As Jordan and Moore (2020) point out, this would, as a first step, mean to integrate the literature on policy termination and continuation that has developed independently from policy feedback research (see also Schmidt, Sewerin and Bateson 2018). Existing policy feedback research too often takes only a partial focus, engaging, for example, in-depth with post-adoption politics but disregarding subsequent policy (stability or) change (Béland and Schlager 2019). As argued by Jordan and Matt (2014), in order to understand policy stability and change, the entire feedback loop must be considered, starting with policy enactment at t and its effects on the socioeconomic system, then investigating feedback effects and the role of policy design therein until policy termination or change at $t + 1$. While this sounds fairly obvious, it describes an encompassing and ambitious research agenda that comprises (1) the systematic assessment of policy design choices and how they come about (i.e., through actors and agency), (2) the systematic assessment of the effects or impacts of a policy intervention, (3) the systematic investigation of why and how subsequent politics change (or not) and (4) the systematic assessment of whether policy design has changed (or not). Framing policy feedback research in this way, as a research program rather than a heuristic for understanding other phenomena such as mass politics, would position policy feedback at the center of the policy sciences and open up opportunities to integrate various approaches and framework. One example of at least a partial realization of such a broader framing of policy feedback loops is a study by Schmid et al. (2019) of policy-induced technological change (see Schmidt and Sewerin 2017) in the German energy system. The authors combine policy feedback theory with the Advocacy Coalition Framework (ACF) to conceptualize a complete feedback loop between policy, policy outcomes and subsequent politics. Policy feedback mechanisms are used to explain the change in advocacy coalitions over time, allowing the authors to refine the understanding of exogenous factors of policy change in the ACF. A further example of how policy feedback thinking can facilitate the better understanding of policy change is another paper by Schmid et al. (2020) that conceptualizes technological change as important feedback mechanism between different policies (specifically, private and public regulation) (see also Meckling et al. 2015). Crucially, their analysis shows the potential for studying the connections between individual policy's feedback loops, pointing toward increasing links with policy mix research (e.g., Kern et al. 2019). These examples highlight the potential that a more encompassing policy feedback perspective offers for both integrating as well as refining theorizations and approaches that are related to policy, policy outcomes and subsequent politics.

Third, policy feedback theory can become a cornerstone of what has been described as 'anticipatory' policy design (Bali et al. 2019) and discussed under various labels of 'harnessing' policy feedback to tackle long-standing policy challenges (Hacker and Pierson 2019; Jordan and Matt 2014; Rosenbloom et al. 2019). The common understanding is that insights from past policy feedback loops can be distilled to formulate policy strategies that increase the durability of policies as well as their effectiveness over time, leading ultimately to a shift in the trajectories of whole policy subsystems. While this is an intriguing agenda, researchers will have to overcome several challenges to reach this goal. First, the record of policy feedback research in terms of systematically considering policy effectiveness has been mixed, at best. Greater attention to policy design and the effect of individual policy design characteristics is needed. As discussed above, researchers should turn to policy design literature to clearly establish a link between policy design characteristics and their impact (e.g., Schmidt and Sewerin 2019). Second, such strategies would need to include parallel processes of self-undermining as well as self-reinforcing feedback (e.g., Skogstad 2017), depending on whether individual policies are considered to stand in the way of an overall change to the trajectory of a policy field. While considering self-undermining as well as self-reinforcing feedback as important is firmly established in the theoretical literature, most applications of policy feedback still focus on one or the other (Béland and Schlager 2019). Third, such models for harnessing feedback will have

to be complex, given that not only self-undermining and self-reinforcing feedback need to be considered but also many parallel (and/or delayed) feedback loops from all relevant policies within a policy subfield. So far, only stylized models of sequences of policy feedback exist (e.g., Meckling et al. 2015; Schmid et al. 2020). Fourth, more theory has to be developed about expectations regarding the underlying policy problems themselves (Levin et al. 2012). Conceptual work about policy feedback processes can profit from being located in a theory about problem solving, especially when so many problems the extant literature addresses are about improving material human conditions, from economic growth to empowerments to greater sharing of resources and wealth—all of which have been found to be culpable in explaining ongoing biodiversity loss and the catastrophic impacts of global climate change. Hence, theorizing and applying forward-looking lessons about feedback processes will be quite different depending on whether the problem at hand can be traced back to material interests as the concern, versus the source of the problem. Finally, the research design and methods needed to conduct this research are fundamentally different from the large-n ‘data driven’ approaches that dominate most ‘evidence based’ social science approaches today (see, e.g. Bernstein et al. 2000; Hall 2003).

Contributions to this special issue

The articles included in this special issue speak to most of these aspects in one way or the other. In concluding, we will briefly introduce these six contributions to policy feedback research.

Daugbjerg and Kay (2019) contribute to the discussion about the relative importance of positive and negative policy feedback. Arguing that positive and negative feedbacks can occur simultaneously within the same policy, they distinguish between policy feedback processes operating at the ideational and the instrument levels of policy. This distinction allows them to outline a pathway to policy stability in which negative feedback at one level can be a necessary condition for positive feedback at the other.

Béland et al. (2020) investigate the implementation of the Patient Protection and Affordable Care Act (ACA) in the USA. Conceptualizing the ACA as a complex policy mix rather than a simple individual policy, they examine the relationship between the design of policy mixes, the feedback effects caused by distinct elements of ACA and the durability of the whole policy mix.

Moore and Jordan (2020) contribute to a better conceptualization and measurement of ‘policy’ in policy feedback research. They suggest disaggregating policy into three distinct elements (instruments, objectives and settings) and apply this approach to the development of the European Union’s emissions trading system. Their findings highlight that disaggregating policy elements provides a more nuanced understanding of policy feedback processes.

Haelg et al. (2019) aim to understand the role of agency in the policy design process. Distinguishing between six policy design elements, they analyze how actors, during a policy design process, position themselves in relation to individual design elements as part of design coalitions. Their study suggests that the actor dynamics behind the decisions for specific policy design choices deserve greater attention as these choices directly affect the impact of policies and thus, ultimately, long-term feedback loops.

Skogstad (2020) investigates policy feedback dynamics around a disruptive technology, namely renewable fuels. Distinguishing between distinct design elements in the US Renewable Fuels Standard (RFS), her analysis highlights that policy feedback dynamics can play out very differently between different technologies, depending on the influence of associated interest group coalitions. Her analysis also points to the importance of the regulatory capacity of administrative agents in long-term feedback processes.

Pischke and Wellstead (2020) investigate why payments for ecosystem services (PES) programs are adopted despite them being proven largely ineffective. Focusing on the

introduction of a PES program in Mexico, they investigate instrument constituencies behind its adoption. Their findings point to the relevance of ideational as well as resource feedback effects for the persistence of such instrument constituencies and thereby the 'lock-out' of more effective policy solutions.

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