

Looping to Success (and Failure): Second-order Mechanisms and Policy Outcomes

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Abstract

The premise of a dynamic policy model—e.g., that sequence matters or decision making is constrained by what has already happened—applies to many, if not most, social-political phenomena. Yet, when contextualized with defined scope conditions, the same mechanism might explain not just stability and change, but the success or otherwise of public policies. In this paper, we first discuss the value of a dynamic and mechanistic perspective to the study of policy success, we elaborate a three-dimensional concept of policy success (programmatic, process, and political performance), and we examine how both first- and second-order mechanisms can reinforce or work against these dynamics. Developing a typology of policy loops (driven by configurations of first- and second-order mechanisms) we explore how such a perspective can not only inform analytical explanations of policy success and failure, but also purposeful attempts by policy actors to work towards their preferred outcomes.

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Significant accomplishments of public policy successes are not always -- or even rarely -- noticed and appreciated for what they are. Much of the Dutch population lives happily and safely well below sea level, Brazil leads the world in tackling poverty and inequality, and Botswana has avoided the resource curse against all odds. In each case, smartly designed, well-executed, broadly supported and continuously evolving public policy programs make this happen. In this paper, we examine how second-order mechanisms can remake political and social institutions to reinforce performance and contribute to the success of public policies. In doing so, we assume that public policy analysis and design necessitates a dynamic perspective, that policy processes unfold over time, and that temporality is an essential aspect of explanatory public policy theory.

The study of success in public policy has yet been a modest affair compared to ongoing efforts to expose public policy failures and scandals and the inherent pathologies of government (Bovens and 't Hart 1996; Bovens and Hart 2016; Hall 1982; Peirce 1981; King and Crewe, 2014; Schuck 2014). The stubborn few who insist on studying public policy achievements have mainly focused on conceptualizing what 'success' looks like in the complex contentious endeavor that is a public policy, program, or project. Scholars have advanced frameworks for assessing typologies and scales of success in real cases. This work enabled analysts to progress beyond the elegant but oversimplified emphasis on goal achievement that dominated classic program evaluation methodologies and the analytical vagaries of subsequent constructivist and goal-free approaches to evaluation (Bovens, 't Hart, and Peters 2001; McConnell 2010b). What this line of research has yet to deliver, however, is a robust framework explaining differential performance of otherwise similar policy endeavors, though it has certainly generated initial hypotheses (see also Glazer and Rothenberg 2001; Patashnik 2008). To our knowledge, there has been no systematic attempt to identify the role of social mechanisms in the achievement, consolidation, and reproduction of policy successes.

This is a remarkable omission. Public policy outcomes successful or otherwise materialize through *dynamic* processes, building and unfolding over time. It seems obvious, then, that in explaining policy outcomes at any given time t an appropriately dynamic perspective should be taken. Focus should be put on specifying mechanisms driving those outcomes realized since time $t-1$. That said, in a parallel universe, historical-institutionalist research on feedback in policy regimes has identified a host of mechanisms affecting not just policy outcomes but – over time and through dynamic loops – the degree of stability and change of these policy

regimes themselves (see, for example, Jacobs and Weaver 2015; Jordan and Matt 2014; Pierson 1993; Weaver 2010). In this article, we seek to contribute to the study of policy success by borrowing from this subfield, which has not concerned itself with evaluative questions about success or failure but rather with explaining stability and change in public policy over time. Both the *policy success* and a *policy dynamics* perspective can be used to illuminate questions about public policy design and management which hitherto dominant ‘textbook’ models of public policy (e.g. the policy cycle, multiple streams, advocacy coalitions, and punctuated equilibrium frameworks; Peters 2015; Sabatier and Weible 2014) overlook or obscure. By combining the two, we gain insight into the interconnections between (dynamic) mechanisms and policy outcomes.

(Second-order) Mechanisms in Public Policy¹

In their critique of historical institutionalism, Peters, Pierre, and King (2005, 1284) argue that identifying systematic patterns between social phenomena is not sufficient, and ‘to be effective a theory should be capable of linking outcomes with actors and with the process that produced the outcomes.’ In other words, acceptable explanation must link cause and effect through a social process and avoid ‘black box’ associations (Hedstrom and Swedberg 1996). Studies of policy change are also critiqued for struggling to specify mechanisms capable of explaining magnitude of observed change (for example, consider Givel 2010; Howlett and Rayner 2006).

In spite of a growing literature on feedback dynamics, accounts of causation in social and political life remain a niche enterprise (Ayres 2014; Cavana and Mares 2004; Collander and Kupers 2014; Jervis 1997; De Roo and Hillier 2012). Even within literature on the unintended consequences of public policy, a linear causal relation is the default option for understanding outcomes is (Ayres 2014; van der Steen et al. 2013). There are good reasons for this. In stable and bounded systems, the linear causal model is a suitable way to establish a relation between cause and effect, and accordingly assign success and failure to clearly demarcated moments in time and specific actions taken by actors in those moments (Collander and Kupers 2014). Outside of this context, however, in unstable or complex systems (which would

¹ Parts of this section were adapted from van der Steen et al. (2015), pp. 325-326, with kind permission of Paul ’t Hart’s co-authors.

characterize any contemporary policy program), the linear perspective presents two shortcomings.

Firstly, a linear causal model does not take into account interactive dynamics. Interventions have multiple effects which are not limited to the designated target or time-period. The linear perspective assumes the causal effect of *A* to be *bounded* to *B*. However, in complex systems it is difficult to project beforehand where effects will 'go', how many mechanisms will be activated, how long effects will resonate, and who will respond to activators. What is called an 'unexpected outcome' from the linear view on causality (Sieber, 1981:10) can be understood or even expected from the perspective of interactive complexity. Policies activate more than one social mechanism, with multiple and interactive effects materializing on different time scales. Policy *A* may affect outcome *B*, but it may also affect outcome *C* and *B*, and the magnitude or direction of those effects may be conditional on values of other variables in the system.

Secondly, and relatedly, the linear perspective on causation hardly takes into account reflexivity, or the learning capacity of agents. When policy is added to a system, agents learn from what happens (this is an example of effect multiplicity). Over time they will change their response to stimuli. What seemed to work the first time likely plays out differently the next because the previous intervention changed the system; it instigated learning and agents may adapt their behavior(s) as a result. Causation is a dynamic interactive process that evolves over time, rather than a fixed, stable and almost a-temporal relation between cause and effect. Paying attention to social mechanisms is key to overcoming the limitations of the linear view. Specifying mechanisms better equips theory to explain and anticipate interactive or multi-level effects, or effect multiplicity, including evolution of capacities and interests as policies take their course over time.

To explain the occurrence of policy outcomes we must look beyond linear and fixed mechanisms of cause and effect and adopt a lens of causality that accounts for dynamics in the system (Leeuw 2008). Therefore, we apply the lens of circular causality to the study of policy success and look at causal loops. Circular causality originated in the literatures on system dynamics and cybernetics, and has since been applied to the context of policy and system analysis (Cavana and Mares 2004; Chapman 2004; Deutsch 1963; Forrester 1961; Haraldsson 2000b; Laitin and Wildavsky 1988; Maani and Cavana 2000; Perrow 1984; Steinbruner 1974). Central to this approach is the interconnectedness of elements and the feedback mechanisms that shape the interactions between them. With this view, outcomes are seen as the

effects of interrelated interactions between different actors and factors of the system (Richardson 1991; Richmond 1993).

Actions generate feedback in social systems, which becomes input for others, and these feedback-loops create patterns, which can be conceptualized in the form of loops (Merali and Allen 2011). Scholars have discerned a few fundamental types of causal loops. Some loops are self-balancing, others display a self-reinforcing pattern: a change in one factor enforces a loop that leads to a magnification of the original effect (Haraldsson 2000b; Lane 2008; Maruyama 1963; Richardson 1986; Senge 1990; Toole 2005). Some loops draw the system towards an outcome intended by the policy maker -- a virtuous cycle -- while others -- vicious cycles -- pull it further away from the original aims (Masuch 1985; Morçöl 2010).

Systems dominated by self-balancing loops involve in-build mechanisms that regress to the status quo; disturbances are corrected through the self-balancing patterns (Haraldsson 2000b; Morçöl 2010; Teisman, Van Buuren, and Gerrits 2009). The opposite goes for systems with strong or dominant self-reinforcing loops, in which case originally minor interventions can escalate into large developments. Such inflationary interventions can flip the balance of the system, precipitating outcomes which may be positive or negative with respect to original intent. Sometimes a system develops into a virtuous circle of excellent performance; sometimes a system becomes locked into a vicious cycle and its eventual downfall. Rival explanations for such loops can rest on different social mechanisms, making it crucial that mechanisms be identified in order to reverse or replicate a policy pattern (Mahoney 2000; Thelen 1999). The perspective of social mechanisms and causal loops therefore offers a potentially more compelling account of the process of policies 'becoming' successes (or failures).

Scholars attentive to the importance of social mechanisms have sorted causal mechanisms in various ways (e.g., Falleti and Lynch 2009; van der Heijden and Kuhlmann 2017; Mahoney 2000). They deem it important when classifying mechanisms to be attentive to '(1) the level of reality they refer to, (2) their degree of conceptual abstraction, and (3) their assumed scope of application' (Mayntz 2004, 246). Acknowledging the pioneering work by Coleman (1990) and Hedstrom and Swedberg (1996), in this article we adopt the macro-micro relations approach to social science mechanisms as introduced in chapter [X] of this volume [appropriate cite]. Within this framework, *second-order* mechanisms are sets of entities and activities which produce a regular series of state changes in response to the first-order (individual, behavioral) reactions to an activator. Second-order mechanisms

are ‘activated’ by individuals’ responses to a policy or decision, and generate effects at a level of aggregation above the individual—the institutional, collective, context, or macro-level.

We argue that this macro-micro perspective on policy dynamics can be reconciled with the circular causal view of policy systems discussed above by recognizing a loop connecting the outcome of second-order mechanisms to the input into first-order (individual) mechanisms— in other words, a feedback loop. Where second-order mechanisms generate change at the macro-level that reinforces the value, performance, or legitimacy of a policy instrument or program, this loop is *reinforcing*. On the other hand, where the effect of the mechanism chain is to undercut the value of the effect a policy instrument or program has on society, this loop would instead represent *self-undermining* policy cycle, or even a vicious policy cycle. By now, these dynamics are becoming well-understood (see e.g. Kay 2006; Patashnik 2008; van der Steen et al, 2016). What is less obvious is how dynamic mechanisms affect the degree to which policies are – or come to be seen as – successful. This is what we now turn to.

Success? Failure? Assessing Policy Outcomes

Having recognized the critical role of dynamic mechanisms and complex/circular causality in explanation, the question of interest then arises: when, how, and why do second-order mechanisms produce patterns (either self-reinforcing or self-balancing) that sustain *policy success*? First, it must be decided what can be called a policy success. Assessment of public policy is necessarily multi-dimensional (Bovens and ‘t Hart 1996; Fischer 1995). At a most fundamental level, both effective *performance* and public *legitimacy* are necessary for success. Assessing the performance of a policy refers to evaluating its substantive societal impact of a policy. Assessing its legitimacy requires ascertaining the way it is perceived, experienced and appreciated by stakeholders in public, political, and legal arenas. It may be reasonable to expect both types of assessment to yield symmetrical results: high-performing policies will be popular and respected (and will thus have a good chance of becoming self-sustaining). In reality, this is not always the case. Asymmetries can and do emerge. Well-performing policies (e.g. EU membership of Central European countries that has demonstrable contributed to their economic growth) may not for that reason always enjoy broad public and political support (as public opinion data and recent election results in e.g. Poland and Hungary suggest). Likewise, ineffective

or counterproductive policies may nevertheless enjoy strong legitimacy because of their strong fit with dominant value systems and political power structures (US gun ‘control’ policies come to mind). It is an open question what this means for the survival of these policies over time. US gun laws may be an instance of ‘permanently failing public policy’: not delivering core desirables such as harm reduction which are widely supported, but nevertheless politically unassailable. But more often than not, asymmetries between performance and legitimacy may create a context conducive to policy change: policy learning to improve the substantive performance of a program while it still enjoys a viable level of political support; political learning to improve an unpopular but fungible policy’s reputation and solidify the constellation of stakeholders supporting it; or policy termination to rid the system of programmatic and/or political ‘train wrecks’.

McConnell (2010) reformulated this assessment matrix into a three-dimensional frame, with performance evaluated in programmatic, process, and political terms. We can further refine this three-dimensional view of success. First, *programmatic assessment* is a ‘classic’ evaluation, focused on explicit policy goals, the theory of change underpinning policy design, and the selection of instruments– all culminating in judgments about the degree to which a policy achieves valuable impacts. This aspect of success is achieved when purposeful and valued action manifests as a direct consequence of the policy instruments. This may entail (a) a well-developed and empirically feasible public value proposition and theory of change underpins the policy, (b) achievement of (or considerable momentum towards) the policy’s intended and/or of other beneficial social outcomes, and (c) costs/benefits associated with the policy are distributed equitably in society.

Second, *process assessment* is an evaluation of the extent to which processes of policy design, decision-making and delivery are organized and managed in a way to contribute to both its problem-solving capacity and stakeholder’s support for what it tries to achieve and how it tries to do so. This is achieved by thoughtful and effective policymaking practices. This requires (a) a design process that ensures carefully considered choice of policy instruments appropriate to context and in a manner that is perceived to be correct and fair, (b) a decision-making process resulting in firm political commitment and adequate levels of funding, realistic time lines, and administrative capacity, and (c) a delivery process that effectively and adaptively deploys (mix of) policy instrument(s) to achieve intended outcomes with acceptable costs, and with limited unintended negative consequences.

Lastly, *political assessment* evaluates the degree to which policymakers and agencies involved in driving and delivering the policy can build and maintain fungible political coalitions supporting it, and the degree to which their being associated with it enhances their reputations. In other words, this lens examines both the political requirements for policy success and the distribution of political costs/benefits among the actors involved in it. This is the achievement of stakeholder and public legitimacy for the policy. The components of this dimension of success include (a) a relatively broad and deep political coalition supports the policy's value proposition, (b) that association with the policy enhances the political capital of the responsible policy-makers, and (c) that association with the policy enhances the organizational reputation of the relevant public agencies.

Embedded in each dimension of these policy assessments (programmatic, process, and political) is temporality—both performance and public and political perceptions of that performance unfold over time (see Bovens and 't Hart 1996). Therefore, for a policy to be classified as completely successful, this level of performance must be sustained even in the case of exogenous contextual changes. Such changes may include economic and fiscal ebbs and flows, changes in government composition, demographic and socio-cultural change in target populations, or technological changes in the service delivery environment. In other words, policies that not only endure but also continue to deliver public value in the face of contextual change probably have an adaptive capacity in their modus operandi to sustain the virtuous cycles that made it successful in the first place.

In sum, we define a policy (program, project) as completely successful when (a) it demonstrably produces valued social outcomes, (b) through deliberate design, decision-making, and delivery processes that enhance both its problem-solving capacity and its political legitimacy, and (c) sustains this performance for a considerable period of time, even in the face of changing circumstances (Compton and 't Hart n.d.) Table 1 summarizes this dynamic conception of policy evaluation.

[Table 1 about here]

How Success (and Failure) Happens: A Mechanistic Perspective

With an explicit success (or failure) frame, systematic identification of outcomes of interest in a population of cases becomes possible. Once identified, it is the role of explanatory public policy theory, and the mechanisms specified therein, to account for how policy success outcomes emerge and whether or how it is sustained over time. Minimally, 'dynamic' explanation entails time as an independent variable in a model of some phenomenon. Of course, the role of time in public policy is not as simple as this, and dynamic theories are often subject to conceptual ambiguity or under-specification (Kay, 2006; Grzymala-Busse 2011; Howlett and Goetz 2014). Importantly, any number of theories may underpin an observed dynamic policy development, hinging on a variety of causal mechanisms.

Falleti and Lynch (2009) compile a (non-exhaustive) list of dynamic mechanisms linking micro processes to macro outcomes. These include: belief formation, rational choice, brokerage, coordination, framing, power reproduction, learning (social learning; political learning), positive feedback (organizational inertia; policy ratchet effect), replacement, layering, conversion, policy drift, increasing returns, and functional consequence. Any of these arguments imply a policy that over time becomes costly to reverse and which has effects at the macro-level. Scholars of public policy often identify these mechanisms as reinforcing effects, which create self-sustaining policy regimes to the exclusion of alternative policy institutions (Jervis 1997; Pierson 1993, 2000). Feedback mechanisms should account for stability and change in institutions, however, as well as the maintenance of the status quo (Thelen 1999).

As Weaver (2010, 137) rightly points out, it is 'equally important to focus on negative policy feedbacks: consequences of policy that tend to undermine rather than reinforce the political, fiscal, or social sustainability of a particular set of priorities.' Whether a particular feedback (or dynamic) mechanism will generate reinforcing effects on a policy regime will depend on the balance of competing political, social, and fiscal (positive and negative) influences (Jacobs and Weaver 2015; Weaver 2010). In other words, policy mechanisms can also work towards self-subversion of a policy. It is analytically useful, then, to differentiate between mechanisms that produce loops leading to the eventual (programmatic, process and/or political) *success* of a policy from those leading to its *failure* (again, in one or more of these three dimensions) and potentially its termination (Kirkpatrick et al, 1999). At the same time, there is one other important distinction to be made. In both theory and practice, we can observe differences between the unforeseen and

unplanned activation of such mechanisms-driven loops on the one hand, and on the other hand the deliberate leveraging of such mechanisms in a policy's design or on the part of stakeholders purposefully responding to its enactment.

Table 2 provides an analytical map of the possibilities that emerge when we combine these two distinctions: four types of loops connecting the initiation of a policy to its eventual success or failure, driven by different combinations of first- and second-order mechanisms. The four ideal-typical loops and their driving mechanisms are illustrated by case vignettes drawing from existing studies of major instances of policy success and policy failure.

[Table 2 about here]

Policy bolstering mechanisms

When societal problems spill over geographic, policy-domain, or task-related jurisdictional boundaries, collaboration between political entities can be beneficial, if not necessary. Solving some social problems requires cooperation. International money laundering is one such problem. The proliferation of anti-money laundering standards in the past 30 years reflects a diverse set of policy goals related to corruption, drug trafficking, and more recently, terrorism (Tsingou 2010). Initiated by the EU and the US in 1989, the Financial Action Task Force published a list of forty best practices for financial supervision and regulation, law enforcement guidelines, and protocols for international cooperation which are now adopted by more than 170 countries worldwide (Drezner 2005; Sharman 2008). The EU and the US implemented these recommendations quickly out of clear self-interest as the largest beneficiaries of cooperation, and other developed (OECD) members soon followed (Drezner 2005).

As the problem of offshore financial centers evolved, the benefits of collaboration in the coordination of national and transnational measures to prevent future banking scandals grew, and the US and EU put effort towards persuasion and inducements (along with the threat of penalizing 'countermeasures' for non-participants) to ensure widespread international policy harmonization (Drezner 2005). Although the process of harmonization by less-developed countries did require coercive power on the part of the EU and the US (Sharman 2008), potential

gains from collaboratively co-produced coordinated money laundering regulation reinforce the survival of an existing set of standards. Changing a policy regime that has so been forged would require the coordination of all current participants (more than 170), thereby incurring large transaction costs. In this case, collaborative processes combined with compliance and reputational incentives (1st order mechanisms) to yield coordination benefits and isomorphism. Policy lock-in eventually emerged through a positive feedback loop fueled by these mechanisms. Once an initial advantage was gained (a set of standards adopted by some), benefits increased with each additional adoption, and the cost of policy change thereby increased (Pierson 1993, 2000).

Policies designed to address problems that cross borders—like money laundering—will be most effective where regimes across jurisdictions are harmonized. Once trust-building processes started to generate on the ground harmonization of anti-money laundering measures and practices, this enhanced *programmatic* success because defection from the shared regime could severely limit achievement of beneficial social outcomes. Furthermore, the now extensive research on collaborative governance suggests that a careful institutional design, facilitative leadership and the emergence of interpersonal trust and shared understandings of commonly faced challenges in collaborative settings where actors that previously failed to coordinate their actions or even competed against one another, can generate an ever stronger commitment to the collaborative *process* itself, which in turn increases the chances of the collaboration producing valuable outcomes and sustaining itself over time (Ansell and Gash 2008; Emerson et al 2012). In this instance, smart institutional design and effective facilitative leadership (Ansell and Gash 2012) combined to overcome initial commitment problems. As in many other instances of effective collaborative governance, much depended on continued and painstaking micro-level interactions for the macro-level benefits of policy coordination to be achieved.

Policy luck loops

Australia was one of few OECD economies not to experience a major breakdown in its financial institutions during the Global Financial Crisis of 2008-9. *Programmatic* success lay in the non-occurrence of events and consequences that the policymakers keenly sought to avoid. The four major Australian banks all avoided the worst of the global financial crisis. Aggregate pre-tax profit at these four banks fell only

marginally from A\$6.3bn in 2007 to A\$5.1bn in 2008 and A\$5.4bn in 2009. None one of the four banks had its credit rating downgraded; indeed, by late 2009 four of the nine global banks with an AA credit rating from Standard and Poor's were Australian (RBA 2009, 25). No major bank went under. No panic occurred in local financial markets, although bank share prices suffered for a period. Banks kept lending, money kept flowing through the economy. There were no mass foreclosures of homes whose mortgages could no longer be paid. Consumer and business confidence only suffered short-lived and minor dents.

In *political* terms, the main thrust of the regulatory, monetary, and fiscal policy measures taken prior and in response to the crisis was supported by a broad coalition consisting of the federal cabinet, 3 3 the Treasury department and the Council of Financial Regulators (which included, besides Treasury, the Reserve Bank of Australia (RBA); the Australian Prudential Regulation Authority (APRA); and the Australian Securities and Investments Commission (ASIC), the Business Council of Australia, and, importantly, a large proportion of the Australian public). The strong performance of the financial system in these turbulent conditions certainly enhanced the standing, including the international reputation, of all the regulatory institutions involved.

In *process* terms, a key factor was that Australia's major banks had remained, on the whole, focused on traditional banking practices. In particular, the big Australian banks did not become heavily involved in highly-leveraged financial trading in 'toxic' mortgage-backed assets emanating from the US. The two largest banks, Westpac and the Commonwealth, eschewed trading in US-originated mortgage-backed securities altogether, and the others had comparatively limited exposure.

The Australian banks behave so differently from their counterparts around the globe as of the interplay between local market dynamics (local banks were making strong profits in traditional mortgage markets), competition policy (which essentially outlawed the takeover market for the big banks and thus reduced competitive pressure on the banks from hostile takeovers, a key driver of the bank behaviour and risk taking in the crisis-hit banks overseas markets), and 'near-miss' experiences of in retrospect fortuitously timed earlier macro- (the 1997 Asian recession) and micro-economic (the 2001 collapse of Australian financial giant HIH) disturbances. These had prompted compliance and accountability (1st order mechanisms): not only were regulatory policies and the institutional structure of prudential regulation firmed up, the social ties between the key players in the

regulatory community were strengthened. In parallel, and equally fortuitously, the coincidental combination of personalities and role conceptions of the key regulators players — all ‘common boys’ with a no-nonsense, grounded attitude fostered mutual trust so pivotal at the point of crisis. This in turn produced institutional learning (2nd order mechanism) resulting in higher alertness, stronger and swifter policy consensus, and hence more effective prudential crisis prevention practices when the 2008 global crash came along. None of this was designed or even envisaged, but it worked when it needed to (Bell and ‘t Hart n.d.)

Policy erosion loops

It seemed like a smart move, one that would help a dramatic higher order macro-economic policy become programmatically effective and that at the same time would symbolize the governing Labor party’s political commitment to progressive environmental policies: the home insulation subsidies scheme launched by the Australian federal government in 2009. The scheme was part of a massive A\$42 billion stimulus package seeking to give the hitherto buoyant Australian economy a soft landing rather than a hard recession as the GFC crippled trade, investment and growth around the OECD world. Up to 2.7 million homes were envisaged to receive free ceiling insulation. Because speed was considered paramount – money needed to flow into the real economy as soon as possible to prevent recession – the *process* of making this policy work occurred under immense time pressure and was described by participants as ‘hectic’, ‘chaotic’. *Programmatically*, what this sudden announcement did was not just to put pink bats under many Australian roofs, but to change the prevailing market equilibrium in this sector overnight as citizen uptake of the scheme was instant and massive. As a result, the capacity of existing suppliers was outstripped, and a flood of new operators entered the now lucrative business (opportunistic response to competitive incentives-- 1st order mechanism). Many of the new operators were however uncertified and unqualified and a spate of fires in recently insulated homes resulted. Furthermore, when within the space of weeks four fatalities among electrician apprentices occurred during installations, there was media carnage and the *political* failure of the scheme was ensured (negative image building and framing-- 2nd order). Damning investigation reports ensued, the responsible minister was moved on, and a costly effort to review all recently insulated roofs across the country had to be undertaken. The scheme, needless to say, was rapidly terminated (Lewis 2010).

Policy sabotage loops

Before 1985, the concept of a poll tax to finance local government seemed far-fetched in the UK (John 1999). The policy instrument was so uncommon, in fact, that it had only been tried three times before: in Papua New Guinea, Guinea-Bissau, and in England in the middle ages (John 1999). And yet, in 1990, the individual poll tax was chosen over a list of other debated alternatives. Supporters successfully pushed the proposal through Parliament by capitalizing on a political environment which rewarded risk-taking in policy-making, and clever framing to reflect in-vogue ideas of fiscal roll-backs and efficiency (Cullis, Jones, and Morrissey 1993; John 1999). Within three years, however, the policy proved 'disasterous' (politically, procedurally, and programmatically) and was dismantled (Smith 1991). The poll tax faced a host of implementation problems, high local taxes and massive unpopularity, and by 1991 the tax's main defender, Prime Minister Margaret Thatcher, fell from office (John 1999). Poorly conceived and implemented, yes, but the final blow to the policy was the public uproar and strategic avoidance behavior that reinforced negative feedback ensuring the policy's quick end. The case of the short-lived UK Poll Tax demonstrates how initially spontaneous and (micro-level) resistance to a policy can be purposefully harnessed as a source of ever stronger negative feedback loops, and transformed into not only an effective policy termination campaign but indeed inflict fatal political damage on the policy chief political architect (macro level) (Bulter, Adonis, and Travers 1995).

That the policy failed is clear—it existed for only three years before being replaced with the now known Council Tax in 1993. *Programmatically*, the policy failed to deliver on the promises of efficiency and improved accountability. Complexities in the UK's system of local government through a combination of individual taxes and block grants from the central government obscured the potential gains in local accountability for spending (John 1999). The policy also failed *procedurally*. Difficulties in creating an accurate register of adults and adequately addressing civil liberties issues greatly hampered implementation (John 1999). Most crucially, however, the policy was a *political* failure. As a consequence of central government cutbacks and local spending rises, most adults experienced a steep tax hike in the first year, which only increased perceptions that the policy was unfair and fueled public and elite protest to the policy (John 1999).

Public resistance to the bill manifested in more than negative public opinion, however. Noncompliance spread, as individuals craftily avoided the new tax

obligation (Bulter, Adonis, and Travers 1995). Deliberate individual responses (first-order mechanisms) to the policy prevented efficient or effective collection of the tax, which only further fed the political coalition opposed to the policy. The counter-mobilization (a second-order mechanism) in favor of termination increased the cost of policy persistence to the incumbent government—in terms of political capital and administrative cost. The coalition incentivized by the policy was not of the self-reinforcing type with positive (political) feedback (i.e., Pierson 1993, 2000), this was a self-undermining process (Jacobs and Weaver 2015). The design and implementation of the Poll Tax reshaped interests in a way that made the policy unsustainable and contributed to the Conservatives' reshuffle and John Major's replacement of Thatcher.

Explaining and Achieving Policy Success Through Social Mechanisms: Moving Forward

In this paper, we have argued that understanding of policy successes and failures can benefit from an analytical approach that is both dynamic and a mechanistic. To move forward the study of public policy success beyond description and in the direction of policy design, researchers should endeavor to incorporate insights from the study of policy mechanisms into explanations of the origins of very high-performing (in programmatic, process, and political terms) as well as low-performing policies and programs. Viewing policy processes as circular loops driven or mediated by social mechanisms can help us to account for not just instances of success but also for variations in degrees of success (and failure) in populations of cases, for example within particular sectors but across local, state or national jurisdictions. A four-step approach to researching such populations once identified (i.e. road-safety, anti-smoking, anti-obesity, or climate adaptation water management programs) would be required:

- Step 1. Program assessment – using the 3-dimensional schema of programmatic, process, and political evaluation outlined in this paper
- Step 2. Selecting two samples of 'extreme' (most-different) cases: high-performing and low-performing programs
- Step 3. Within-case intensive process description (i.e. using critical incident analysis)

Step 4. Reconstructing critical pathways (both linear and loop-like) to the observed outcomes and explaining these pathways in terms of the (first- and second-order) social mechanisms at work.

Moreover, through Table 2 and the brief examples above, we hope to illustrate the value of mechanistic-thinking to the study of policy success. Second-order mechanisms explain how micro-level changes (in perceptions, attitudes, and behavior in response to policy interventions) link to meso- and macro-level changes (in incentive structures, norms, and expectations), which have consequences that may reinforce and/or undermine public policy performance (in programmatic, process, and political terms). In Table 2 we further make the case for distinguishing between the spontaneous, inadvertent emergence of such success- or failure-enhancing mechanisms and loops, and their deliberate incorporation in the designs and political strategies of policymakers and other influential stakeholders.

A combination of population-level and intensive single or small-*n* analyses of policy failures and policy successes can help us identify the extent to which these outcomes are triggered by distinct (combinations of) mechanisms and loops – as implied in Table 2 – and to which one and the same mechanism may trigger both success-enhancing and failure-enhancing loops. One particularly compelling question that emerges from this is whether and how mechanistic-thinking can inform policy-design. Can first- and second-order mechanisms be purposefully predicted, designed, harnessed, and exploited by policy makers and stakeholders to produce policy success (or failure)? Though we imply this to be the case in Table 2 and two of the examples presented earlier, it is by no means definitively demonstrated. What can mechanistic thinking contribute to inform policymakers' 'theories of change' as they go about seeking not only to create policies that 'work' but that endure and institutionalize over time, and conversely to inform stakeholders' 'theories of obstruction' as they endeavor to create the conditions for policy failure and termination?

Cited Sources

- Ansell, Chris, and Alison Gash. 2008. "Collaborative Governance in Theory and Practice." *Journal of Public Administration Research and Theory* 18(4): 543–71.
- — —. 2012. "Stewards, Mediators, and Catalysts: Toward a Model of Collaborative Leadership." *Innovation Journal* 17(1): 1–21.
- Ayres, S, ed. 2014. *Rethinking Policy and Politics: Reflections on Contemporary Debates in Policy Studies*. Bristol: Policy Press.
- Bell, Stephen, and Paul 't Hart. "Weathering the Great Financial Crisis: 'Nothing' Happened - a Policy Success?" In *Successful Public Policy: Lessons from Australia and New Zealand*, eds. Joannah Luetjens, Michael Mintrom, and Paul 't Hart.
- Bovens, Mark, and Paul 't Hart. 1996. *Understanding Policy Fiascoes*. New Brunswick, NJ: Transaction.
- Bovens, Mark, Paul 't Hart, and B. Guy Peters, eds. 2001. *Success and Failure in Public Governance: A Comparative Analysis*. Cheltenham, UK: Edward Elgar Publishing Limited.
- Bovens, Mark, and Paul 't Hart. 2016. "Revisiting the Study of Policy Failures." *Journal of European Public Policy* 1763(August): 0–14.
- Bulter, David, Andrew Adonis, and Tony Travers. 1995. *Failure in British Government: The Politics of the Poll Tax*. Oxford: Oxford University Press.
- Cavana, Robert Y., and Edwin D. Mares. 2004. "Integrating Critical Thinking and Systems Thinking: From Premises to Causal Loops." *System Dynamics Review* 20(3): 223–35.
- Chapman, Jake. 2004. *System Failure: Why Governments Must Learn to Think Differently*. 2nd ed. London: Demos.
- Coleman, James. 1990. *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- Collander, D, and R Kupers. 2014. *Complexity and the Art of Public Policy: Solving Society's Problems from the Bottom Up*. Princeton: Princeton University Press.
- Compton, Mallory, and Paul 't Hart, eds. *Great Policy Successes: How Governments Get It Right in a Big Way at Least Some of the Time*. Oxford: Oxford University Press.
- Cullis, J.G, P.R Jones, and O Morrissey. 1993. "The Charge of the Tax Brigade: A Case Study of Government Failure and Tax Reforms." *European Journal of Political Economy* 9(3): 407–25.

- Deutsch, Karl W. 1963. *The Nerves of Government: Models of Political Communication and Control*. New York: The Free Press.
- Drezner, Daniel W. 2005. "Globalization, Harmonization, and Competition: The Different Pathways to Policy Convergence." *Journal of European Public Policy* 12(5): 841–59.
- Falletti, Tulia G., and Julia F. Lynch. 2009. "Context and Causal Mechanisms in Political Analysis." *Comparative Political Studies* 42(9): 1143–66.
- Fischer, F. 1995. *Evaluating Public Policy*. Chicago: Nelson Hall.
- Forrester, J.W. 1961. *Industrial Dynamics*. Cambridge, MA: MIT Press.
- Givel, Michael. 2010. "The Evolution of the Theoretical Foundations of Punctuated Equilibrium Theory in Public Policy." *Review of Policy Research* 27(2): 187–98.
- Glazer, Amihai, and Lawrence S. Rothenberg. 2001. *Why Government Succeeds and Why It Fails*. Cambridge, MA: Harvard University Press.
- Grzymala-Busse, Anna. 2011. "Time Will Tell? Temporality and the Analysis of Causal Mechanisms and Processes." *Comparative Political Studies* 44(9): 1267–97.
- Hall, Peter. 1982. *Great Planning Disasters*. University of California Press.
- Haraldsson, H.V. 2000a. "Introduction to Systems and Causal Loop Diagrams." (January): 1–33.
- — —. 2000b. *Introduction to Systems and Causal Loop Diagrams, System Analysis Course*. Lund: Lund University.
- Hedstrom, Peter, and Richard Swedberg. 1996. "Social Mechanisms." *Acta Sociologica* 39(3): 281–308.
- van der Heijden, Jeroen, and Johanna Kuhlmann. 2017. "Studying Incremental Institutional Change: A Systematic and Critical Meta-Review of the Literature from 2005 to 2015." *Policy Studies Journal* 45(3): 535–54.
- Howlett, Michael, and Klaus H. Goetz. 2014. "Introduction: Time, Temporality and Timescapes in Administration and Policy." *International Review of Administrative Sciences* 80(3): 477–92.
- Howlett, Michael, and Jeremy Rayner. 2006. "Understanding the Historical Turn in the Policy Sciences: A Critique of Stochastic, Narrative, Path Dependency and Process-Sequencing Models of Policy-Making over Time." *Policy Sciences* 39(1): 1–18.
- Jacobs, Alan M., and R. Kent Weaver. 2015. "When Policies Undo Themselves: Self-

- Undermining Feedback as a Source of Policy Change." *Governance* 28(4): 441–57.
- Jervis, Robert. 1997. *System Effects: Complexity in Political and Social Life*. Princeton: Princeton University Press.
- John, Peter. 1999. "Ideas and Interests; Agendas and Implementation: An Evolutionary Explanation of Policy Change in British Local Government Finance." *British Journal of Politics and International Relations* 1(1): 39–62.
- Jordan, Andrew, and Elah Matt. 2014. "Designing Policies That Intentionally Stick: Policy Feedback in a Changing Climate." *Policy Sciences* 47(3): 227–47.
- Kay, Adrian. 2006. *The Dynamics of Public Policy: Theory and Evidence*. Cheltenham, UK: Edward Elgar Publishing Limited.
- Laitin, David D., and Aaron Wildavsky. 1988. "Political Culture and Political Preferences." *American Political Science Review* 82(2): 589–97.
- Lane, David C. 2008. "The Emergence and Use of Diagramming in System Dynamics: A Critical Account." *Systems Research and Behavioral Science* 25: 3–23.
- Leeuw, F.L. 2008. "Gedragmechanismen Achter Overheidsinterventies En Rechtsregels. Intreerede Universiteit Maastricht."
- Maani, K.E., and Robert Y. Cavana. 2000. *Systems Thinking and Modeling: Understanding Change and Complexity*. Auckland: Pearson Education (NZ).
- Mahoney, James. 2000. "Path Dependence in Historical Sociology." *Theory and Society* 29(4): 507–48.
- Maruyama, Magoroh. 1963. "The Second Cybernetics: Deviation-Amplifying Mutual Causal Processes." *American Scientist* 51(2): 164–79.
- Masuch, Michael. 1985. "Vicious Circles in Organizations." *Administrative Science Quarterly* 30(1): 14–33.
- Mayntz, Renate. 2004. "Mechanisms in the Analysis of Social Macro-Phenomena." *Philosophy of the Social Sciences* 34(2): 237–59.
- McConnell, Allan. 2010a. "Policy Success, Policy Failure and Grey Areas In-Between." *Journal of Public Policy* 30(3): 345–62.
- — —. 2010b. *Understanding Policy Success: Rethinking Public Policy*. London: Palgrave Macmillan.
- Merali, Y, and P. Allen. 2011. "Complexity and Systems Thinking." In *The Sage Handbook of Complexity and Management*, eds. P. Allen, S. Maguire, and B. McKelvey. London: Sage, 31–52.

- Morçöl, G. 2010. "Reconceptualizing Public Policy from the Perspective of Complexity Theory." *Emergence: A Journal of Complexity Issues in Organizations and Management* 12: 52–60.
- Patashnik, Eric M. 2008. *Reforms at Risk: What Happens after Major Policy Changes Are Enacted*. Princeton, N.J.: Princeton University Press.
- Peirce, W. 1981. *Bureaucratic Failure and Public Expenditure*. New York: Academic Press.
- Perrow, C. 1984. *Normal Accidents*. New York: Basic Books.
- Peters, B. Guy. 2015. *An Advanced Introduction to Public Policy*. Cheltenham: Elgar.
- Peters, B. Guy, Jon Pierre, and Desmond S. King. 2005. "The Politics of Path Dependency: Political Conflict in Historical Institutionalism." *The Journal of Politics* 67(4): 1275–1300.
- Pierson, Paul. 1993. "When Effect Becomes Cause: Policy Feedback and Political Change." *World Politics* 45(4): 595–628.
- — —. 2000. "Increasing Returns, Path Dependence, and the Study of Politics." *The American Political Science Review* 94(2): 251–67.
- RBA [Reserve Bank of Australia]. 2009. "Financial Stability Review." March.
- Richardson, George P. 1986. "Problems with Causal-Loop Diagrams." *System Dynamics Review* 2(2): 158–70.
- — —. 1991. *Feedback Thought in Social Science and Systems Theory*. Waltham, MA: Pegasus Communications.
- Richmond, Barry. 1993. "Systems Thinking: Critical Thinking Skills for the 1990s and beyond." *System Dynamics Review* 9(2): 113–33.
- De Roo, G, Van Wezemael J, and J Hillier, eds. 2012. *Complexity and Planning: Systems, Assemblages and Simulations*. Farnham: Ashgate Publishing, Ltd.
- Sabatier, Paul, and Christopher Weible, eds. 2014. *Theories of the Policy Process*. 3rd ed. Boulder, CO: Westview Press.
- Schuck, P. H. 2014. *Why Government Fails so Often, and How It Can Do Better*. Princeton, N.J.: Princeton University Press.
- Senge, P.M. 1990. *The Fifth Discipline: The Art and Practice of the Learning Organization*. Century Business.
- Sharman, J. C. 2008. "Power and Discourse in Policy Diffusion: Anti-Money Laundering in Developing States." *International Studies Quarterly* 52(3): 635–56.

- Sieber, S.D. 1981. *Fatal Remedies: The Ironies of Social Intervention*. New York: Plenum.
- Smith, Peter. 1991. "Lessons From the British Poll Tax Disaster." *National Tax Journal* 44(4): 421–37.
- van der Steen, Martijn, Jorren Scherpenisse, Mark van Twist, and Paul 't Hart. 2015. "How to See Failure: Attempts by the Inspectorate of Education to Detect and Disarm Failure in Dutch Education Policy." *Public Policy and Administration* 30(3–4): 320–41.
- van der Steen, Martijn, Mark van Twist, Menno Fenger, and Sara Le Cointre. 2013. "Complex Causality in Improving Underperforming Schools: A Complex Adaptive Systems Approach." *Policy and politics* 41(4): 551–67.
- Steinbruner, John D. 1974. *The Cybernetic Theory of Decision: New Dimensions of Political Analysis*. Princeton: Princeton University Press.
- Teisman, G., A Van Buuren, and L Gerrits. 2009. *Managing Complex Governance Systems*. New York: Taylor & Francis.
- Thelen, Kathleen. 1999. "Historical Institutionalism in Comparative Politics." *Annual Review of Political Science* 2(1): 369–404.
- Toole, T Michael. 2005. "A Project Management Causal Loop Diagram." In *ARCOM Conference*, London.
- Tsingou, Eleni. 2010. "Global Financial Governance and the Developing Anti-Money Laundering Regime: What Lessons for International Political Economy?" *International Politics* 47(6): 617–37.
- Weaver, Kent. 2010. "Paths and Forks or Chutes and Ladders?: Negative Feedbacks and Policy Regime Change." *Journal of Public Policy* 30(2): 137–62.

Programmatic assessment: Purposeful and valued action	Process assessment: Thoughtful and fair policymaking practices	Political assessment: Stakeholder and public legitimacy for the policy
<ul style="list-style-type: none"> • A well-developed and empirically feasible <i>public value proposition</i> and <i>theory of change</i> underpins the policy • <i>Achievement</i> of (or considerable momentum towards) the policy's intended and/or of other <i>beneficial social outcomes</i> • Costs/benefits associated with the policy are <i>distributed equitably in society</i> 	<ul style="list-style-type: none"> • The policy process allows for <i>robust deliberation</i> about <i>thoughtful consideration</i> of: the relevant values and interests; the hierarchy of goals and objectives; contextual constraints; the (mix of) policy instruments; and the institutional arrangements and capacities necessary for effective policy implementation • Stakeholders overwhelmingly experience the making and/or the delivery of policy as <i>just and fair</i>. 	<ul style="list-style-type: none"> • A relatively <i>broad and deep political coalition</i> supports the policy's value proposition, instruments and current results. • Association with the policy <i>enhances the political capital</i> of the responsible policy-makers • <i>Association with the policy enhances the organizational reputation</i> of the relevant public agencies
Time <ul style="list-style-type: none"> • Degree to which programmatic, process, and political <i>performance is maintained</i> over time • Degree of <i>convergence in citizens' support</i> for the policy's value proposition over time • Degree to which the policy confers <i>legitimacy on the broader political system</i> 		

Table 1: Assessing Success in Public Policies, from (Compton and 't Hart n.d.)

		<i>Nature</i>	
		Spontaneous-emergent	Designed-intentional
<i>Impact</i>	Loops towards policy success	<i>Policy luck mechanisms</i> <u>Example:</u> Australian financial crisis management 1 st order: compliance and accountability 2 nd order: learning	<i>Policy bolstering mechanisms</i> <u>Example:</u> International anti-money laundering scheme 1 st order: compliance and reputational incentives 2 nd order: coordination benefits and isomorphism
	Loops towards policy failure	<i>Policy erosion mechanisms</i> <u>Example:</u> Australian housing installation incentives 1 st order: opportunistic competition 2 nd order: negative image building and framing	<i>Policy sabotage mechanisms</i> <u>Example:</u> UK Poll Tax and self-undermining feedback 1 st order: strategic (non-)compliance 2 nd order: emergent losses and counter-mobilization

Table 2: Linking social mechanisms to policy success and failure