EDITED BY
Giliberto Capano, Michael Howlett,
M Ramesh and Altaf Virani

Making Policies Work

First- and Second-Order Mechanisms in Policy Design

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Edited by

Giliberto Capano

Professor of Political Science and Public Policy, Department of Political and Social Sciences, University of Bologna, Italy

Michael Howlett

Burnaby Mountain Professor and Canada Research Chair, Department of Political Science, Simon Fraser University, Canada

M Ramesh

Professor and UNESCO Chair of Social Policy Design in Asia, Lee Kuan Yew School of Public Policy, National University of Singapore

Altaf Virani

Ph.D. Candidate, Lee Kuan Yew School of Public Policy, National University of Singapore

Contents

Figures

Tables

Contributors

Simone Busetti is a lecturer in Public Policy Analysis at the University of Milan-Bicocca. His research deals with policy design, evaluation and qualitative methods. His most recent publications include 'Designing multi-actor implementation: A mechanism-based approach' in *Public Policy and Administration* (2018, with Bruno Dente) and 'Process-tracing change management: The reform of the Italian judiciary' in the *International Journal of Public Sector Management* (2018, with Giancarlo Vecchi).

Giliberto Capano is Professor of Political Science and Public Policy in the University of Bologna. He is the co-editor of the journal *Policy & Society*, and *Journal of Comparative Policy Analysis*. His research focuses on governance dynamics, policy change, policy instruments, and comparative public policy. His latest books are*: Varieties of Governance* (co-edited with M. Howlett and M Ramesh), Palgrave, 2015; *Changing Governance in Universities* (with M. Regini and M. Turri), Palgrave, 2016; and *Designing for Policy Effectiveness: Defining and Understanding a Concept* (with G. Peters, M. Chou, M. Howlett, I. Mukherjee and P. Ravinet), Cambridge, 2018.

Mallory E. Compton is a postdoctoral researcher with the School of Governance at Utrecht University. Her work sits at the intersection of public policy feedback, individual preferences and demand for social policies. Her most recent work includes a book, *Great Policy Successes* (Oxford University Press, 2019), and a forthcoming article in *The Journal of Politics.*. Mallory received her PhD in Political Science from Texas A&M University in 2016, and her MPA in Public and Economic Policy from the London School of Economics in 2010.

Bruno Dente is Honorary Professor of Public Policy Analysis at Politecnico di Milano. His latest book is *Understanding Policy Decisions*, Springer, 2014 (enlarged Spanish version *Decisiones Publicas*, Ariel, 2014, with J. Subirats).

Claire A. Dunlop is Professor of Politics and Public Policy at the University of Exeter, UK. A public policy and administration scholar, Claire's main fields of interest include the politics of expertise and knowledge utilization; epistemic communities and advisory politics; risk governance; policy learning and analysis; impact assessment; and policy narratives. She explores these conceptual

interests at the UK and EU levels principally, and most frequently in relation to agricultural, environmental and LGBT issues. Claire has published more than 40 peer-reviewed journal articles and book chapters – most recently in *Policy & Politics*, *Policy Sciences*, *International Public Management Journal*, *Regulation & Governance* and *Journal of European Public Policy*. She is editor of *Public Policy and Administration*.

Maria Tullia Galanti is Assistant Professor in Public Policy at the Department of Social and Political Sciences, University of Milan. She is interested in leadership and entrepreneurship in public policy, and policy advice. Her empirical studies focus on local public services and urban policies, such as water policies, urban planning, housing and local welfare in Italian municipalities.

Sarah Giest is an Assistant Professor at the Institute of Public Administration (Leiden University) conducting research in comparative public policy, focusing specifically on environmental and innovation policy design. She developed a special interest in the challenges encountered by (local) governments in dealing with the intersection of delivering high-quality public service, spurring economic activity and utilizing new technology for innovation and sustainability.

Mattia Guidi is Assistant Professor in Political Science at Scuola Normale Superiore. His research focuses on delegation and institutions, independent regulatory agencies, EU competition policy and EU public policies in general. He has published articles in several international journals, including *JCMS: Journal of Common Market Studies*, *Regulation & Governance*, *European Union Politics*, *European Political Science Review*, *Acta Politica*, *Comparative European Politics*. His monograph 'Competition policy enforcement in EU member states' (2016) is published by Palgrave Macmillan.

Paul 't Hart is Professor of Public Administration at Utrecht University and Associate Dean of the Netherlands School of Public Administration (NSOB) in The Hague. Paul's research, teaching and consulting covers political and public sector leadership, policy evaluation, public accountability and crisis management. His most recent books include *Great Policy Successes* (Oxford University Press, 2019), *Public Policy Successes in Australia and New Zealand* (ANU Press, 2019), *The Leadership Capital Index: A New Perspective on Political Leadership* (Oxford University Press, 2017) and *The Pivot of Power: Australian Prime Ministers and Political Leadership, 1949–2016* (Miegunyah Press of MUP, 2017).

Michael Howlett is Burnaby Mountain Professor and Canada Research Chair (Tier 1) in the Department of Political Science at Simon Fraser University, Vancouver. He specializes in public policy analysis, political economy, and resource and environmental policy. His latest books are *Designing Public*

Policies (Routledge, 2019); *Policy Consultancy in Comparative Perspective* (Cambridge, 2019); the *Routledge Handbook of Policy Design* (Routledge, 2019); *Policy Styles and Policy Making* (Routledge, 2019); *Designing for Policy Effectiveness: Defining and Understanding a Concept* (Cambridge, 2018); and *The Public Policy Primer* (Routledge, 2018).

Evert Lindquist is Professor of Public Administration at the University of Victoria's School of Public Administration, and Editor of the journal, *Canadian Public Administration*. He has published widely on public sector reform, governance and decision-making, research utilization, policy capability, think tanks, consultation, horizontal management, policy-related visualization, digital governance, and competing values in public administration.

Edoardo Ongaro is Professor of Public Management at The Open University, UK. He is the President of EGPA, the European Group for Public Administration, and an editor of *Public Policy and Administration*. He has published extensively on the topic of administrative reforms and comparative public management. Latest works include *The Palgrave Handbook of Public Administration and Management in Europe* (Palgrave, 2018, co-edited with Sandra van Thiel); *Philosophy and Public Administration: An Introduction* (Edward Elgar Publishing, 2017); and *Strategic Management in Public Services Organizations: Concepts, Schools and Contemporary Issues* (2015, Routledge, co-authored with Ewan Ferlie). Professor Ongaro is Fellow of the Academy of the Social Sciences.

Claudio M. Radaelli is Professor of Public Policy at University College London (UCL). His research interests lie in the field of policy learning, regulatory accountability, and the effects of regulatory reforms. He was awarded two advanced grants by the European Research Council, the most recent one on Procedural Tools for Effective Governance (PROTEGO, with Claire Dunlop as co-PI).

M Ramesh is Professor and UNESCO Chair of Social Policy Design in Asia at the Lee Kuan Yew School of Public Policy at the National University of Singapore. Previously, he was the Founding Head of the Department of Asian and Policy at the Hong Kong Institute of Education; Professor of Social Policy at the University of Hong Kong; and Chair of the Department of Government and International Relations at the University of Sydney. He has also held teaching positions at the University of New England and Victoria University of Wellington. Specializing in public policy and governance in Asia with a particular focus on social policy, he is the Editor of *Policy and Society*, and *Policy Design and Practice*.

Altaf Virani is a PhD Candidate at the Lee Kuan Yew School of Public Policy, National University of Singapore, and Fox International Fellow (2017–18) at the

Whitney and Betty MacMillan Center for International and Area Studies, Yale University. His work applies public policy and management theory to health policy and health systems. His research interests are broadly focused on public sector governance, particularly policy design, market-based governance, public–private partnership, performance management and organizational learning.

R. Kent Weaver is Professor of Public Policy and Government at Georgetown University and a Senior Fellow in Governance Studies at the Brookings Institution in Washington, DC. His research focuses on the retirement and pensions policy, policy feedbacks, and policy implementation.

Adam Wellstead is Associate Professor of Public Policy at Michigan Technological University. He joined the Department of Social Sciences in 2011 after a 15-year career with the Canadian federal government. His research interests focus on environmental policy and include investigating multi-level governance arrangements in the natural resource sector, measuring policy capacity and evidence-based policy-making, policy mechanisms, and theories of the policy process.

PART I

Introduction: why study policy mechanisms?

1. Disentangling the mechanistic chain for better policy design

Giliberto Capano, Michael Howlett and M Ramesh

1   A MECHANISTIC TURN FOR POLICY DESIGN?

Understanding how policy design can incentivize, constrain, and otherwise structure policy targets' behavior to achieve desired results is vital but requires a clear understanding of the mechanisms that link policy tools to actual behavior. More importantly, it requires reasoning in terms of the processes and interactions that can be activated by policy tools to accomplish desired results. It is therefore imperative that policy designers – both those who study it and those who practice it – specify clearly the linkages between the input (policy design) and the output, via the intended and unintended processes triggered by the design. Many existing analytical efforts focus only on shedding light on what is needed for good policy design and ignore how good policy design works in terms of the types of processes that can be activated to achieve (or not) the desired results. As a result, we know little about how different solutions trigger and drive the achievement of intended outcomes. The literature on policy design is often based on anecdotes and correlations, jumping from proposed solutions to anticipated outcomes without exploring the conditions that are the real determinants of policy results.

The objective of this book is to explore the usefulness of adopting a mechanistic approach to policy design, focusing on the actual ways in which policy designs can facilitate or hinder achievement of policy goals. It improves the analysis and practice of policy design by focusing on the mechanistic causation relevant to policy-making and policy behavior. The book thus brings to policy design studies the insights of the mechanistic turn in social sciences over the past few decades. This mechanistic turn is partly motivated by dissatisfaction with both the "law-like" and statistical explanations commonly employed by policy scholars.

Starting with Elster (1989), many studies in both political science and sociology have sought to apply a mechanistic explanatory logic (Hedström and Swedberg, 1998; Tilly, 2001; Maynitz, 2004; Schmid, 2006; Abbott, 2007; Gross, 2009). While the mechanistic line of thinking has found a ready home in sociology, the idea of causal mechanisms remains controversial in political science. As has been observed, there are many definitions of mechanisms (Mahoney, 2001; Gerring, 2007), leading to the questioning of its ontological status (Gerring, 2010 vs Falleti and Lynch, 2009). The debate remains inconclusive, with diverging opinions on the role of mechanisms and mechanistic explanations based on different epistemological views.

Although there is general agreement that mechanisms are "analytical constructs" that explain observed behavior (Hedström and Swedberg, 1998, p. 13), mechanisms have been defined in multiple ways. Kuorikoski (2009) has summarized the debate by proposing two ways to conceptualize mechanisms: as an "abstract form of interaction" (AFI) or "componential causal system" (CCS).

AFI conceptualizes mechanisms as an event or activity that can have different causes and exhibits a specific form of causal interaction. Falleti and Lynch (2009) define mechanisms as "portable concepts that describe how causation occurs" (p. 1148) and thus "tell us how things happen: how actors relate, how individuals come to believe what they do or what they draw from past experience, how policies and institutions endure or change" (p. 1147). All these explanations are based on a specific context. AFI, which is the definition most frequently adopted in social sciences, considers mechanisms in a largely processual and contextual manner. According to this perspective, mechanisms are abstract concepts (which may be unobservable) that can explain a phenomenon given a specific context and characteristic process through which a specific result is achieved. For example, Tilly notes that mechanisms "form a delimited class of events that change relations among specified sets of elements in identical or closely similar ways over a variety of situations" (Tilly, 2001, pp. 25–6). Gerring defines a mechanism as "the pathway or process by which an effect is produced or a purpose is accomplished" (Gerring, 2007, p. 178).

The "componential causal system" approach, on the other hand, assumes that mechanisms are not only processes but also have a structure in the sense that they are composed of entities with properties and activities of their own. A mechanism, accordingly, is a type of "systemic" phenomenon that bridges cause and effect but is also "a structure performing a function in virtue of its component parts, component operations, and their organization. The orchestrated functioning of mechanism is responsible for one or more phenomena" (Bechtel and Abrahamsen, 2005, p. 423). As Glennan (2011, p. 809) notes, mechanisms are "particular systems of interacting parts, where these interactions occur at a particular time and place." Here, the concept of mechanism is more complex than with AFI: it is not only process but can also be a complex

structure of organized parts. More specifically, according to this perspective, a mechanism can be defined as "a constellation of entities and activities that are organized such that they regularly bring about a particular type of outcome" (Hedström, 2008, p. 321). From this perspective, a "consensus" definition describes a mechanism as a "system with multiple components, which interact to produce some overall phenomenon" (Fagan, 2012, p. 453; see also Bechtel and Abrahamsen, 2005). When activated, such systems "actualize" potential powers, engendering both local and general effects.

Hence, the (AFI) perspective on mechanisms is focused on identifying "the intervening causal process – the causal chain and the causal mechanisms – between an independent variable (or variables) and the outcome of the dependent variable" (George and Bennett, 2005, pp. 206–7). From the systemic perspective (CCS), however, a mechanism is a specific configuration of elements that is capable of producing a specific process (or behavior) in a specific context. In other words, mechanisms should be considered as recurrent patterns of the interaction of invariant change-producing elements.

From a policy design perspective, both approaches are useful. The AFI's conception of mechanisms, for example, can be useful for understanding policy dynamics by focusing attention on those "abstracted" factors through which effects are produced in a specific policy context, such as the psychological mechanisms through which various "nudges" operate (Capano, 2013). The CCS's conception of mechanisms as a system of interacting parts, on the other hand, helps better understand policy-making institutions and processes such as the impact of electoral systems or legislative activities.

Regardless of how it is defined, a mechanistic approach is useful for policy analysis and policy design for several reasons. First, it points to the idea that to understand what happens, and thus to design something to happen, policy designers must pay attention to and theorize not only what is observable – such as behavior of actors or networks – but also what may be unobservable, such as the root causes of that behavior.

Second, it highlights that in any design, the designed policy must impact the mechanistic workings of the actual situation if it is to have any effect. Thus: (1) if the AFI definition of mechanism is adopted, policy design should be capable of activating the proper mechanism(s); (2) if the CCS definition of mechanism is adopted, policy design should change some elements of the structure of the actual mechanism so that the recurrent pattern of interactions, which is conducive to the outcome of interest, is either changed or addressed in the intended manner.

Based on these two essential lessons, a mechanism-based policy design perspective will improve the capacity of designers to analyze policy tools and programs when policies are under formulation and to better predict the impact on implementation. From this point of view, the variable-oriented perspective

through which design decisions are often made in which outcomes are modeled using correlations rather than mechanisms, should be replaced with a more finely tuned view of the likely outcome after the designed policy is implemented.

2 A MECHANISTIC FRAMEWORK FOR POLICY DESIGN: ACTIVATORS, FIRST-ORDER AND SECOND-ORDER MECHANISMS

By adopting a mechanistic perspective, policy designs can better deal with the multilevel complexity of policy dynamics. By focusing on underlying mechanisms, policy design can be explanatory and predictive, without relying on overreaching theories based on correlative and other forms of logic. Thus, a mechanistic approach can help policy design to better open the "black box" of policy behavior and to better intervene in it.

From this point of view, a mechanistic approach to policy design can facilitate both generalization and prediction and thus better design of policies. Through policy design, different orders of mechanisms can be activated to produce desired outcomes, and different design actions can activate different sequences of mechanisms. Some of these mechanisms are first-order mechanisms, which leverage the expected behavior tendencies of actors to alter their behavior, leading them to perform specific actions that are consistent with the achievement of desired policy outcomes. Others are second-order mechanisms, which are activated to "transform" the initial situation and context of policy-making.

In other words, policy design seeks to change a situation t0 by adopting policy instruments to activate mechanisms which induce actors to change their behaviors in ways that lead to the emergence of a new transformed situation (t1). This type of reasoning translates into policy design through the macro-micro-macro model proposed by Coleman (1990), Hedström and Swedberg (1998) and Hedström and Ylikoski (2010).

Figure 1.1 presents how a policy design mechanism-based approach works.

There are thus three main components of the mechanistic framework of policy design represented in Figure 1.1: activators, first-order mechanisms and second-order mechanisms (Capano and Howlett, 2019).

- "Activators" are not mechanisms: rather, they are "events" or activities that trigger mechanisms, thus activating the causal forces (first-order and second-order mechanisms) through which the behavior of individuals, groups and subsystems is altered to achieve a specific outcome. From a policy design perspective, activators are those policy instruments through which decision-makers set up their policy design to impact on the reality they want to maintain or to change. This does not exclude that mechanistic activation can also be caused by a specific contextual event (generated by
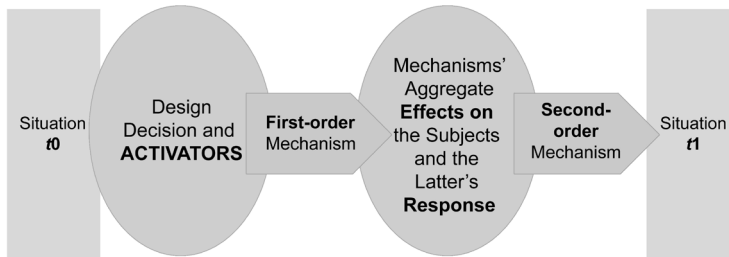
Figure 1.1   The mechanistic process from a policy design perspective

    socio-political economic dynamics, or by specific policy actors, like policy entrepreneurs) as well as by the consequence of previous mechanistic processes in a feedback-like process.
- First-order mechanisms are those that directly alter the behavior of individuals and groups to achieve a specific outcome. These mechanisms can be activated by individuals (through actions like the provision of subsidies to trigger enhanced savings behavior), or groups (by extending tax credits for charitable donations, which can lead to the formation of new groups) or to the arrangements of a specific subsystem (for example, by adding or removing new actors and ideas or reinforcing existing ones in a policy network or community).
- Second-order mechanisms are those through which the effects of the first-order mechanisms are aggregated, thus producing a structural or contextual effect. Frequently appearing second-order mechanisms include learning, diffusion transfer, constituency building, adaptive expectations, civic engagement, institutional complementarity, social trust, isomorphism and other similar phenomena. Second-order mechanisms can also be defined as counter-causal mechanisms (counter-mobilization; negative framing; resistance; opportunism) that can impede expected outcomes (Weaver, 2010; Jacobs and Weaver, 2015; Dunlop, 2017).

Thus, Figure 1.1 represents the process through which activators trigger the causal force (first-order mechanisms) through which the behavior of individuals and groups is addressed to achieve a specific outcome. This can be accompanied by the activation of second-order mechanisms that, by reinforcing or changing situation *t*0, alter the context at point *t*1.

    Regardless of whether or not second-order mechanisms are consciously activated, after a new policy has been implemented, agents interact with their environment and begin to produce effects that may not have been originally

intended but can also activate second-order mechanisms. For instance, when a new policy is successful, it may engender learning and diffusion, whether or not this was planned or intended.

For example, in higher education policy, the introduction of national research standards to measure the quality of university research is a design intervention ("activator") through which policy-makers can pursue the improvement of research quality through the activation of the mechanism of institutional competition ("first-order mechanism"). This mechanism is supposed to be quite strong: a significant amount of public funding is allocated through this type of exercise. Theoretically, positive feedback would imply that through competition, the overall national quality of research should increase in the medium run and that through "second-order mechanisms" such as learning or blame avoidance, institutions should institutionalize the new situation $t1$. It could be the case, however, that because of incoherent design and poor first-order mechanism activation, the new design does not produce the expected behavior and, therefore, the activated competition mechanisms do not trigger the expected second-order ones. This situation has been seen in the UK, for example, where the overall quality of national research has not been improved as much as expected through the introduction of competition for funds. Competition has merely advantaged older, more prestigious institutions (Schafer, 2016), whereas creative, innovative and risky research has been stymied (Talib, 2002; Oancea, 2010). Furthermore, opportunistic behavior in the recruitment (often based on short-term motivations) and distribution of internal power has created significant problems for many schools (Marginson, 2014; McNay, 2015). Thus, in this case, competition (as a first-order mechanism) activated "second-order" counter-causal mechanisms such as opportunism and dissatisfaction, all of which can undermine returns.

This way of reasoning allows us to clearly distinguish between decisional strategies and policy instruments contents (activators) with respect to the causal forces that work behind policy dynamics and to better understand both policy success and failure. Too often, in fact, the content of decisions or the way of deciding has been confused or overlapped with causal mechanisms. For example, very often, the chosen policy instruments (tariffs, exhortation, strong regulations) or the manner of policy design (layering, planning, evidence-based design) are intended to be causal mechanisms in themselves, while rather, they are ways through which causal mechanisms are activated. Furthermore, the distinction between two levels of mechanisms allows a better ordering and comprehension of the process of causation through which policy processes and outcomes develop, and enlightens the complex dynamics that the implementation of any policy design effort has to deal with.

Of course, this is not to say that everything that can be known about policy mechanisms is known, or about which kinds of mechanisms trigger which

kinds of behavior. The goal of the book is to better understand first-order and second-order mechanisms so these can be better activated through better design.

3   THE CONTENT OF THE BOOK

Chapters in the book discuss in more detail the mechanistic logic set out above and use case study and bibliometric methods to explicate the workings of first-order (policy tools, for example) and second-order (policy learning, for example) mechanisms. Various empirical and theoretical aspects offered by the theoretical framework sketched above are explored in detail.

In the first part of the book, additional theoretical insights are offered to better understand why it is important to study mechanisms in/for policy design. This introductory chapter is followed by Evert Lindquist and Adam Wellstead in Chapter 2, who review the most reputed and adopted analytical frameworks of the theories of the policy process: the Multiple Streams Framework, the Advocacy Coalition Framework, Punctuated Equilibrium Theory, Institutional Analysis and Design, Policy Diffusion, Policy Feedback Theory, and Narrative Policy Framework. The authors show that many of these frameworks have considerable overlap in terms of identifying the variables, components, and functions at play in policy-making systems and how they are very loose and often unspecified regarding causal mechanisms. A policy mechanism approach poses a challenge to these frameworks but also points to a way forward. According to Lindquist and Wellstead, deepening our understanding on causal mechanisms may well sharpen our appreciation of what each framework does and cannot do.

In Part II of the book, first-order mechanisms are analyzed in a more fine-grained way through a theoretical contribution and three specific empirical cases. In Chapter 3, Michael Howlett elaborates on a specific category of first-order mechanisms – different from those mechanisms that are targeted to influence individuals' or groups' behaviors – which directly affect policy subsystem or structure and behavior that he defines as "network mechanisms." These types of mechanisms are those affecting the number of types of nodes and links present in a policy community or network rather than individual or group behavior, per se. Network mechanisms are activated mostly by procedural policy tools that directly impact subsystem structural elements – nodes and links – by introducing new actors or reconfiguring relationships to affect policy targets and drive policy change. These mechanisms activate mechanisms such as the redefinition of actors' structural positions and policy preferences; promotion of network self-regulation; reframing of the criteria for assessing policy success and failure; and reframing the patterns of actors' interactions and of policy conflict dynamics.

In Chapter 4, Simone Busetti and Bruno Dente propose an analysis of the mechanisms of the Italian policy for food waste prevention to determine the causes. In particular, two activating measures are analyzed: bureaucratic simplifications for donating food and the possibility to donate food after the best-before date (BBD). These activators are expected to trigger very simple causal mechanisms: bureaucratic simplifications cut the costs of donation and hence make donors increase or start donations. The BBD innovation expands the types of products that can be donated and hence enlarge the set of actions available to donors, who can eventually donate all the surplus that they were previously forced to waste. The analysis highlights how features such as the capacity of donors, the quality of surplus, the recovery skills of charities, and the reputational risks incurred by both actors may affect the effectiveness of these two mechanisms and the implementation of the policy. These elements are not directly under the control of designers, but they are nonetheless fundamental for ensuring that design features trigger successfully a causal mechanism and produce the expected changes of behavior. The conclusion shows how, thanks to a mechanistic analysis, policy designers are not only able to have more realistic understanding of food policy, but also about which kinds of design elements should be further added to overcome possible barriers in successfully activating first-order mechanisms for producing the expected policy outcomes.

In Chapter 5, Altaf Virani and M Ramesh review the experience of public–private partnerships (PPPs) in India's healthcare sector, and examine issues of policy coherence, contract design, policy capacity and regulation to identify common sources of failure. Based on the analysis, they highlight five levels of failure: goal definition, instrument selection, calibration, implementation and learning. Thanks to this fine-grained analysis they demonstrate that the policy failure of PPPs in the Indian health system is the result of bad design due to the inability of policy designers to both discern and leverage the key causal mechanisms needed to facilitate actors to behave in ways that are conducive to the achievement of overarching policy goals. Poor design and related implementation problems are based on larger institutional weaknesses in policy capacity, regulation, and interorganizational trust and cooperation, which again affect both the diagnosis and operation of first-order mechanisms and successful policy design.

Maria Tullia Galanti and Sarah Giest end Part II with Chapter 6, devoted to the analyses of how certain actors can advance themselves as policy entrepreneurs and promote the activation of certain first-order mechanisms to lead policy changes. They start from the observation that in the context and the processes that are involved in policy-making, entrepreneurs often play a fundamental role in activating and making mechanisms work. This activation role can take different forms, and involve individual and collective actors at multi-

ple levels of government – national, regional and local. The chapter focuses on the selection of entrepreneurial strategies in various policy contexts, and how these can affect first-order mechanism activation down the line. The authors use examples at the European level and the Italian national and local contexts to highlight the connection between policy context, entrepreneurial strategies and first-order mechanisms and behavioral changes. Galanti and Giest show how entrepreneurial activities can activate first-order mechanisms like the building of a trustworthy network of actors in support, of commitment in favor of a policy idea, and of the exploitation of windows of opportunities at different institutional levels.

Part III is focused on second-order mechanisms and especially on those related to learning and accountability, notably in the European Union, and on mechanisms for effective public sector reforms. In Chapter 7, Claire A. Dunlop and Claudio M. Radaelli focus their analytical attention on the relationship between policy instruments and mechanisms and how policy-makers and designers learn how this relationship works. They analyze the case of impact assessment (IA) in the European Union as a mechanism expected to trigger second-order learning. IA is an evidence-based instrument adopted by the EU in the context of the evidence-based better regulation strategy. The connection between IA and learning is apparently intuitive: IA should bring evidence to bear on the process of selecting policy options, and therefore assist decision-makers in learning from different types of analysis, dialogue with experts and stakeholders, and open consultation. They identify several types of learning related to the tractability of an issue and the certification of actors associated with it to isolate several specific kinds of learning that can be triggered: epistemic, reflexive, bargaining and hierarchical. These types of learning are activated respectively by teaching through evidence-based rationality, dialogue via participation, exchange through consultation, and monitoring and scrutiny.

Mattia Guidi, in Chapter 8, also uses an EU case to assess the usefulness of a mechanistic approach to policy design, by examining, according to this perspective, EU banking union policy. His research question is quite clear: when a new institutional body is established, how much discretion should the new body enjoy? This choice highlights the trade-off between autonomy (to take advantage of expertise and credibility) and democratic accountability as second-order mechanisms triggered by policy designs. According to his principal–agent framework, EU rules define certain activators that enable political principals to exercise direct or indirect control on some agency. The presence of these first-order mechanisms (and the threat of using them) is expected to trigger accountability (second-order mechanism) on behalf of the agency. Guidi shows how the EU process is not expected to activate strong accountability to the EU decision-makers because of the weakness of the rules

activating the European banking union together with the lack of political will to make European Central Bank really accountable, again highlighting barriers to the affective activation of policy mechanisms.

Edoardo Ongaro focuses in Chapter 9 on the combination between first- and second-order mechanisms for effective policy design by exploring how the analysis of social mechanisms may enlighten our understanding of policy processes of public sector reform. The chapter develops a selective review of published case studies on the subject and extracts from them a number of social mechanisms that may explain how public sector reform process dynamics operate. These include first-order mechanisms like actor certification; attribution of opportunity and threat; threshold-based behavior; brokerage; appropriation of mobilizing structures; and second-order mechanisms like feedback mechanisms and decreasing or increasing marginal returns. Ongaro argues that contextual and administrative legacies should be combined with a mechanistic approach both for better understanding administrative reform dynamics and for making it more effective.

Part IV is devoted to methods for policy design and to mechanistic analysis of policy outcomes. In Chapter 10, R. Kent Weaver suggests the use of reverse engineering as a second-order mechanism for redesigning policy in his chapter on household savings for retirement in advanced industrial countries. Reverse engineering can help extract information from a more rigorous understanding of interactive social, behavioral and policy processes that can lead to improvements in policy activators for achieving the goals set by governments. Weaver argues that the causal mechanisms affecting individuals' retirement savings decisions are extremely complex, because of context, differences in individual life preferences and the presence of structural barriers (especially resource barriers and the individual perception of uncertainty). In these conditions, the type of activators (more or less constraining) depends on the trade-offs chosen by the decision-maker. Thanks to his analysis, Weaver argues that reverse engineering cannot alone lead to "optimal" choices of instruments and settings given the underlying policy trade-offs and political conflicts in policy design. Thus, Weaver problematizes a mechanistic approach to policy design. In fact, he observes that behavioral responses are often not a single behavior but many, distinctive behaviors, carried out over a long period of time and that mechanistic chains interconnect with other different mechanisms and thus are complex processes. Thus, at least for the analyzed policy field, where the variety of individual preferences could be very high, he suggests that different mechanisms could work according to different targets.

Finally, in Chapter 11, Mallory E. Compton and Paul 't Hart discuss the value of a dynamic and mechanistic perspective to the study of policy success. They elaborate a three-dimensional concept of policy success (programmatic, process, and political performance), and 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) they explore, thanks to many empirical illustrations, 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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2. Policy process research and the causal mechanism movement: reinvigorating the field?

Evert Lindquist and Adam Wellstead

INTRODUCTION

Over the last few decades, enormous strides have been made in developing theoretical frameworks that capture the complex, dynamic, inertial and punctuated change features of policy-making. Leading policy process scholars have developed a portfolio of frameworks and theories for addressing key challenges of policy-making, identifying key dynamics and institutional contexts, and explaining why change occurs or does not occur at different phases of the policy process and whether policy succeeds (Weible and Sabatier, 2018). In this chapter, we focus on seven popular approaches: the Multiple Streams Framework (MSF), the Advocacy Coalition Framework (ACF), Punctuated Equilibrium Theory (PET), Institutional Analysis and Design (IAD), Policy Diffusion (PD), Policy Feedback Theory (PFT), and Narrative Policy Framework (NPF). Although interest in other approaches has surged at times – for example, policy network or constructivist perspectives – these frameworks predominate, having been debated, modified and enduring as the leading approaches. They provide the concepts and propositions that many scholars and practitioners use to analyze and appraise various facets of policy-making.[1]

What is surprising, though, is the extent to which these approaches overlap (which their progenitors have long recognized regardless of when each tradition gathered steam), and second, while appearing well articulated from a theoretical perspective, they do not seem well specified considering the granularity of policy-making, the challenges of conducting empirical research on specific policy problems and domains, and the recent interest in policy design and the practical implications of such research (Weible and Cairney, 2018). As the policy design movement has taken shape (e.g., Clarke and Craft, 2018; Howlett, 2018), a complementary wave of interest in better specifying
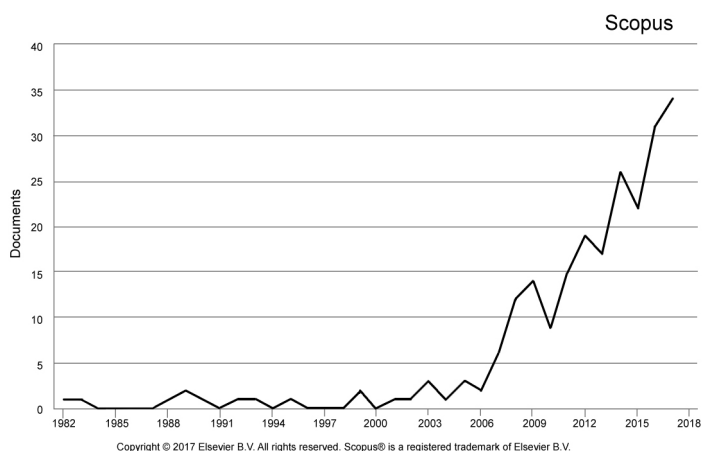
Figure 2.1   *Policy process peer-reviewed papers using the word "mechanism"*

the "mechanisms" movement has been gathering steam. Inspired by the philosophy of science, social science and political science (Tilly, 2001; Falleti and Lynch, 2009), it has important implications for the policy sciences and policy process theoretical frameworks and associated programs of research.

Over the past decade, the language of mechanisms has been seeping into the policy process literature. Figure 2.1 broadly illustrates this trend by tracking the use of the word "mechanism(s)" in titles or abstracts of 226 peer-reviewed papers using the seven policy process frameworks noted above. It shows that notions of mechanisms are proliferating in the policy literature but does not provide a nuanced sense of the extent to which and how mechanisms are applied in the theoretical literature. This chapter is a first attempt to assess the state of theorizing from a "mechanism" perspective associated with policy process frameworks.

We were asked by the book editors to appraise the assessments of contributors to the seminal *Theories of the Policy Process* collection (Weible and Sabatier, 2018), now in its fourth edition, devoted to describing and providing snapshots of the state of theorizing and empirical studies associated with seven well-known policy frameworks.[2] The progenitors of these frameworks explicitly set out theoretical assumptions and propositions for their approach, and encouraged empirical studies that test and improve the evolution of the frameworks. This chapter appraises these descriptions of the main policy process frameworks, provides a sense of which frameworks seem best developed from a policy mechanism perspective, and identifies the implications for research,

design practice, and pedagogy. We see the arrival of policy mechanism approaches – what we refer to in this chapter as the "policy mechanism move- ment"[3] (PMM) – as invigorating a field coalescing around a few theoretically informed high-level frameworks through a call for deeper theorizing and more focused empirical studies. The PMM, we suggest, seeks more detailed specifi- cation of frameworks and theories, not only to inform finer-grained empirical work but also to arrive at more nuanced and perhaps more robust explanations, with the potential to improve governance and policy design. While PMM chal- lenges and provides a strong critique of existing policy theoretical frameworks, it constructively points the way forward and promises important implications for furthering knowledge and design practice, and better linking theoretical frameworks to teaching in policy and public administration schools.

   This chapter has five main sections. The first section provides a brief review of essential concepts and distinctions from the mechanism literature. The second section identifies the main theories of policy-making, largely by introducing a key book in the field, *Theories of the Policy Process* (*TPP*) which over four editions (spanning 1999–2018) has filtered out and described the central theoretical frameworks. The third section describes the approach we took to reviewing *TPP*, especially the fourth edition (Weible and Sabatier, 2018), while the fourth section contains our assessments of each chapter and its policy process framework. In the fifth section we provide observations about the extent of use of mechanisms in the policy literature as well as the state of theorizing. We conclude by suggesting that the PMM could lead to a new round of theoretical and empirical research building on the foundations of different theories of the policy process, but also serving to better work across and link these traditions.

THINKING MECHANISTICALLY: ESSENTIAL CONCEPTS AND DISTINCTIONS

Advancing the policy process literature to improve explanation and design requires deeper understanding of causality. This will involve policy scholars identifying and measuring key "causal mechanisms" responsible for policy outcomes. There have been calls for identifying causal mechanisms in policy theory (Yee, 1996; John, 2003; Steinberg, 2007; Nowlin, 2011; Kay and Baker, 2015). Quite independently, Weible (2018) has recently argued that "causal drivers" lie at the heart of the scientific assumptions underlying these theories. Throughout the literature, causation is often claimed or implied, but often only supported, if at all, by sketchy or shallow explanations (Nowlin, 2011). The renowned philosopher of science, Mario Bunge (1997), coined this incomplete theorizing as "gray box theory," where causality is assumed but the mechanisms are rarely described and hypotheses infrequently tested.

Similarly, Morgan and Winship (2014) refer to such abstract relationships as "mechanism sketches," which stand in contrast to "mechanism schema," where the component parts or entities are known.

A more detailed understanding of policy-making requires what Bunge (1997) calls a "translucent" box, more clearly identifying details about mechanisms or the cause-and-effect relationships between policy-makers' attention to policy problems and their receptivity to policy solutions. Once the nature of pertinent mechanisms are understood, it becomes possible to apply more rigorous empirical methods and to make inferences. Identifying causal mechanisms helps explain how and why some decisions have the desired effect, and why others are resisted. In other words, we seek to identify "what works" when actors engage in the policy process to use evidence and seek policy outcomes consistent with that evidence.

The large social science "mechanisms" literature has been influenced by insights from the natural sciences and philosophy of science. Mechanisms are sets of entities and activities organized to produce a regular series of changes from a beginning state to an ending state (McAdam, Tarrow and Tilly, 2008). Mechanisms usually "invoke some form of 'causal agent' that is assumed to have generated the relationship among the entities observed," serving as "analytical constructs that provide hypothetical links between observable events" (Hedström and Swedberg, 1998, p. 11). At first blush, mechanisms are often seen as unobservable or hidden phenomena, sensitive to variations in context, but in principle can be empirically traceable processes where a cause (or causes) can generate an outcome (Pawson and Tilley, 1997). Assessing the logic of association helps to open the black box of the limited $X \rightarrow Y$ causal inferences so prevalent in the social sciences (Falleti and Lynch, 2009). Mechanistic thinking brings to the surface deeper processes and variables at play.

Causality is not simply a functional description of a certain variable, but requires uncovering how X produces Y under specific conditions. It is a theoretical formulation that "adduces properties of the relationships among phenomena with the potential to recur, which helps explain why x causes y" (Hall, 2013, p. 21). Context can trigger or condition a relationship and the role it plays in determining outcomes. Initial conditions play a key role in determining how mechanisms are triggered and how they respond to certain contextual conditions. Identifying the context and the mechanism is important when formulating hypotheses. It is critical to understand under what conditions mechanisms are most likely to occur or produce a particular outcome (Pawson and Tilley, 1997). Various scholars have adopted a "context mechanism outcome" (CMO) approach: namely, the observed patterns of (un)intended outcomes can be explained by identifying the plausible causal set of mechanisms within the situational context of the process (Pawson and Tilley, 1997; Biesbroek, Dupuis and Wellstead, 2017) (Figure 2.2). The context influences when and
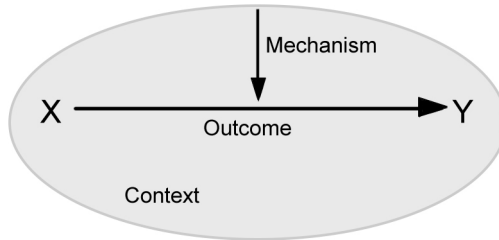
Figure 2.2   Context mechanism outcome (CMO) model

how certain mechanisms are triggered, and how they play out. Context is critical because similar initial conditions may lead to dissimilar outcomes (multifinality); conversely, outcomes can be reached from distinctly different developmental paths (equifinality) (Biesbroek et al., 2017).

This more robust understanding of causality permits the skeptical scientist to open up the black or gray boxes of policy-making to find a diversity of causal mechanisms that could affect policy outcomes. First, different categories of mechanism have been identified: structural (e.g., environment, institutions), cognitive (e.g., individual perceptions and ideas), and relational (e.g., network connections between people). Second, mechanisms can span across micro-level (individual) and macro-level (structural) phenomena (Bunge, 1997; Checkel, 2006). Given the multi-level nature of policy-making, such distinctions are important, as Figure 2.3 shows.[4]
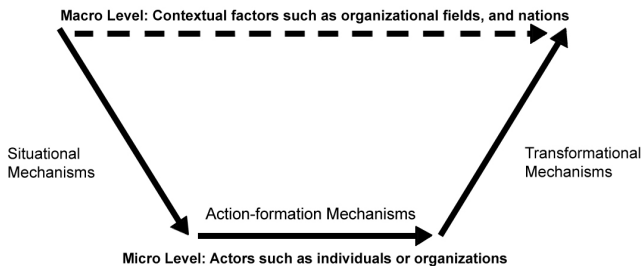
Figure 2.3   "Bath tub" approach for identifying different levels of mechanisms

Situational mechanisms occur when social structures or environmental phenomena constrain individuals' action or shape beliefs. Action-formation mechanisms link individual micro-level activities or behavior to their actions. Transformational mechanisms are those where individuals, through their actions and interactions, generate intended and unintended outcomes.

The temporal nature of mechanisms is material, including the time horizons associated with the workings of a mechanism (which might involve a chain of effects) and the outcome (Pierson, 2003; Beach and Pedersen, 2013). For example, a slow-moving causal process may eventually result in a threshold event precipitating a sudden change. In the policy and social sciences, many mechanisms fit these broad categories. However, identifying high-level – albeit somewhat abstract – mechanisms in policy theory often brackets detailed delineation of the causal factors associated with important components of policy theory in a gray causal box (Sartori, 1970; Falleti and Lynch, 2008). Drawing on Sartori's (1970) "ladder of abstraction," Falleti and Lynch (2008) argue that developing more compelling and measurable causal explanations can only happen if mechanisms are disaggregated from high-level abstractions – which they label as "processes," "mechanisms-as-type," and "mechanisms-as-example" – which are more conceptualizations of mechanisms than a measurement strategy. More importantly, they claim that "mechanisms-as-cause" and "mechanism-as-indicators" are critical to making a measurable causal claim and describing how things happen.

From a vertical perspective, Machamer, Darden and Craver (2000) argue that mechanisms are often nested hierarchies in systems that contain "lower level entities, properties, and activities" that "produce higher level phenomena" (p. 13). That is, "the components that are accepted as relatively fundamental or taken to be unproblematic as far as the observables in the data" (Morgan and Winship, 2014, p. 239). Machamer et al. (2000) borrow from molecular biology and find that mechanisms "bottom out in descriptions of the activities of macromolecules, smaller molecules, and ions" (p. 14).

This brief review of the causal mechanism literature distils the essence of the approach, and its relevance for the multi-level (macro, meso, micro) policy process frameworks that attempt to deal with multiple dependent and independent variables. This literature does not favor quantitative over qualitative empirical methods, but more generally calls for theoretical elaboration and empirical testing in the service of better specifying predictable relationships. This aspiration has long been shared with the policy sciences, which has always sought to improve the basis for advice and the quality or predictability of policy interventions.

THE CAUSAL PREREQUISITES IN *THEORIES OF THE POLICY PROCESS* (1999, 2007, 2014, 2018)

The *Theories of the Policy Process* (*TPP*) collections have become a vital resource for policy scholars, providing snapshots of the state of theorizing and empirical work.[5] The four editions reviewed seven or eight policy theories or frameworks. After the first edition, the editors of the subsequent editions flagged the importance of causality. In *TPP* (1999), Sabatier mentions mechanisms and states that, "to think carefully about the steps in the causal process is one of the principal steps in going from general frameworks to denser, more logical interconnected theories" (Sabatier, 1999, p. 268). Several years later, Sabatier (2007, p. 328) argued that, "[t]he failure to develop clear chains of causal relationships" was the contributing factor for the extinction of earlier policy process frameworks (e.g., Dye–Sharkansky–Hofferbert – DSH framework). Sabatier and Weible reference the mechanisms scholarship in *TPP* (2014). Finally, Tosun and Workman (2018) suggest that approaches "facilitating a more demanding empirical test of the causal mechanisms underlying policy process theories" will "help to increase confidence in their analytical merits" (p. 330).

A challenge to applying mechanisms is raised in Schlager's chapter in *TPP* (2007). Citing Ostrom, Schlager states that "frameworks organize inquiry, but they cannot in or themselves provide explanations for, or predictions of, behavior and outcomes. Explanation and prediction lie in the realm of theories and models. These approaches are often a collection of theories from which mechanisms can be derived" (Schlager, 2007, p. 293). In *TPP* (2014), and updated in *TPP* (2018), Cairney and Heikkila (Cairney and Heikkila, 2014; Heikkila and Cairney, 2018), undertook the first extensive comparison of the approaches. In both editions, the elements, research program, and the emphasis of the approaches are raised in a series of three tables comparing the seven approaches. However, no comparison was ventured with respect to causality. By identifying the role of causality and mechanisms in *TPP* (2018) comparative fashion, we aim to construct a "Table 4."

These collections have never sought to provide detailed reviews of each policy framework, but rather, described the essential features and evolution of each approach, surveyed empirical contributions, and identified trends and avenues for future research. Given its centrality in our field, and that Sabatier and/or Weible stress the importance of causality and mechanism in the policy process literature, a review of *TPP* through the lens of mechanisms should provide a useful, if high-level, sense of the extent to which the approach has been taken up in the field.

METHODS

Since 1999, four editions of *Theories of the Policy Process* (*TPP*) have been published, with chapters from leading scholars in the field. The line-up of frameworks and theories has remained fairly consistent (Table 2.1). The fourth edition reviews the Multiple Streams Framework (MSF), Punctuated Equilibrium Theory (PET), Policy Feedback Theory (PFT), Advocacy Coalition Framework (ACF), Narrative Policy Framework (NPF), Institutional Analysis and Development (IAD), and the Innovation and Diffusion Model (IDM). While each approach focuses on particular aspects of policy-making, they are each comprehensive and overlap in varying degrees.

A two-pronged textual analysis was undertaken (Lindkvist, 1981). First, we sought to get an indication of the extent to which the authors invoked mecha-

Table 2.1   *Policy process frameworks, theories, and models reviewed in four editions of "TPP"*

*TPP*1 (1999)	*TPP*2 (2007)	*TPP*3 (2014)	*TPP*4 (2018)
Multiple Streams Framework (MSF)	MSF	MSF	MSF
Punctuated Equilibrium Theory (PET)	PET	PET	PET
Advocacy Coalition Framework (ACF)	ACF	ACF	ACF
Policy Diffusion (PD)	PD	Innovation and Diffusion Models (IDM)	IDM
Institutional Rational Choice (IRC)	IRC	Institutional Analysis and Development (IAD) and Social-Ecological Systems Framework (SESF)	IAD
		Policy Feedback Theory	PFT
		Narrative Policy Framework (NPF)	NPF
Social Construction and Policy Design (SCPC)	SCPC	Democratic Policy Design (DPD)	
Policy Network Approach (PNA)	PNA		
Large-*n* comparative models (Dawson and Robinson, 1963; Dye–Sharkansky–Hofferbert – DSH framework)	DHS		

nisms or causality terminology in the text. QSR NVivo 11, a qualitative data analysis computer software package, was employed. References relating to the terms "causality" and "mechanism" were coded as nodes. From this qualitative effort, the context of the term's use was accessed. However, frequencies may not necessarily reflect each chapter's treatment of the terms. Second, we reviewed each chapter and assessed whether and the extent to which it applied mechanistic analysis based on our survey of the mechanisms literature, and regardless of whether it used such terminology, whether it undertook or was disposed to such analysis.

RESULTS

Table 2.2 reports the frequency of causality- and mechanism-related terms in *TPP*4. From the quantitative accounting of approaches undertaken in QSR NVivo, the most frequent mention of mechanism was found in IDM and PFT chapters. The NPF chapter invoked causality the most often. MSF had very few references to either term. However, as we discuss below, because the terms "causality" and "mechanism" were mentioned in the chapters does not mean that they were invoked in the way called for by the policy mechanisms movement; conversely, some chapters demonstrate approaches consistent with mechanistic analysis but not invoking mechanistic language, though grappling in varying degrees with the challenge of working across levels of analysis (individual, meso, macro) when describing the genesis and evolution of the frameworks as well as the empirical progress made in the respective domains.

Table 2.2   "TPP4": Frequency of causality and mechanism terms

Policy Process Framework and Theory	Causality	Mechanism
MSF	1	4
PET	3	6
PFT	3	16
ACF	7	4
NPF	11	8
IAD	1	7
IDM	1	35

What follows provides an overview of each policy framework's essential approach, the extent to which the authors of the respective chapters relied on a "mechanism" approach (explicitly or implicitly), and whether the empirical literature and prospective research agendas as described in the chapters (usually

in very high-level ways) seem consistent with the "policy mechanism" approach advocated for in this collection.

Multiple Streams Framework (MSF): Limited Causal Claims, High Potential of Mechanisms Research

First introduced by Kingdon (1984), the MSF is one of the oldest policy process approaches. Inspired by Cohen, March and Olsen's (1972) organizational garbage can model, the MSF assumes that policy-making is beset by ambiguity, time constraints, incomplete policy preferences, and constant fluidity of policy actors. The basic structural make-up consists of three streams (problems, policies, and political), policy windows, and policy entrepreneurs and processes (attention, search, and selection). Whether policy proposals become part of a government's agenda is the function of the three streams coupling at an opportunistic time (which "opens" a policy window), often promoted or taken advantage of by a policy entrepreneur.

Mechanisms and causality receive limited discussion in this chapter by Herweg, Zahariadis and Zohlnhoefer (2018). Only the idea of types of coupling of the three streams is presented as a type of mechanism. The authors state that future MSF applications should specify causal mechanisms dependent on the context (policy stage). Some of the MSF's elements and process reference identifiable high-level mechanisms such as prospect theory and feedbacks, which can be readily disaggregated. On a positive note, several hypotheses are listed, which implies the potential of mechanism-related research.

Punctuated Equilibrium Theory (PET): Policy Mechanism Research in Practice, Not Name?

Inspired by early work on bounded rationality and notions of episodic and rapid speciation from the natural sciences, Punctuated Equilibrium Theory (PET) seeks to describe and explain how public policy regimes break from patterns of "marginal and incremental" policy change towards more dramatic change at certain junctures. Baumgartner, Jones and Mortensen (2018) describe how policy monopolies, buttressed by "policy images" (problem definitions and claims for certain policy approaches), can shape and constrain change in specific policy domains, along with the limited attentiveness of governments and policy-making systems at the macro level (flowing from bounded rationality of individuals, organizations and systems), and can combine to produce negative feedback loops, constraining forces and calls for change. Conversely, significant policy change can occur when events and facts burst through the claims of policy monopolies, and issues move high on the policy agenda, leading governments at the macro level to take an interest in a specific policy domain. This

may not necessarily lead to significant policy change, but the authors argue that it is a necessary condition, and constitutes a positive feedback loop. The authors survey the empirical work that they and colleagues have undertaken with PET, focusing on studies of budgeting and other policy domains in the US and noting the expanding comparative literature in these areas, and relying on stochastic studies of budget outcomes over many years.

The authors use the term "mechanism" a few times, but not in the way advocated by the policy mechanisms movement literature described earlier. Mechanism is variously invoked to describe policy subsystems allowing the large system to "engage in parallel processing" (p. 59), processes associated with human and organizational "cognitive architecture" (p. 65), "discontent" as a means for communicating problems (pp. 66–8), policy images, issue expansion, and policy development (respectively, pp. 69, 85–6), and "continuous dynamic adjustment" as "the primary decision mechanism" (p. 74). These references neither delve into the more detailed processes through which the process or function would achieve its effect, nor the conditions. They can be seen as pointing to "gray box" processes.

However, while not using the mechanism language, Baumgartner and Jones's multi-decade program of research on agenda-setting and punctuated equilibria nevertheless exhibits many of the tenets of "mechanistic thinking." It is shown in how carefully specified and elaborated the assumptions and theoretical underpinnings of their multi-level framework are, and a systematic empirical research agenda of comparative research within the US, particularly with respect to budget outcomes. In recent years, they secured funding for cross-jurisdictional studies using similar research methods, which allowed them to explore the effects of different governance systems and political contexts, and evaluate the effects of top-down system-level dynamics with more bottom-up dynamics associated with specific issues and policy domains (Jones, Baumgartner and True, 1998; Baumgartner et al., 2009).

Policy Feedback Theory (PFT): Unpacking and Disaggregating Mechanism Sketches

Mettler and SoRelle (2018) state that Policy Feedback Theory (PFT) has led to the investigation of the specific mechanisms and pathways through which policies affect political attitudes and behaviors among mass publics. Like the MSF, the PFT employs broad "streams" whereby current public policies affect meaning of citizenship, forms of governance, the power of groups, and political agendas, and the definition of policy, which in turn constrain future public policies.

Despite the causal arrows from public policies to political outcomes, discussion of causality is completely absent. For example, it is unclear what the cause

of that effect from public policy (in Time 1) happens to be. Also absent are causal mechanism(s) relating to "meaning of citizenship" and its effect on a public policy in Time 2. Mettler and SoRelle, to their credit, hone in on the specific factors affecting meaning of citizenship (e.g., resource effects, interpretative effects, civic capacity, and civic predisposition). By doing so, there is a rudimentary form of theory-testing process tracing. Later, they argue that it is important to open up the "black box of how public policies impact political behavior of ordinary citizens" (p. 118). The need to test hypotheses in more rigorous ways and identify mechanisms with greater specificity is highlighted. Without using the term mechanism, for each of the major streams of policy feedback inquiry, several mechanisms (e.g., stratification, learning, power of groups, mobilization, free-rider effects) are discussed as possible approaches to refine PFT.

Advocacy Coalition Framework (ACF): Delineating a Policy Mechanism Research Agenda?

In the mid-to-late 1980s, the progenitors of the Advocacy Coalition Framework (Sabatier and Jenkins-Smith, 1993) developed a framework to explain the effects of changes in external variables and system-level shocks, as well as new flows of scientific and technical information, on the behavior and strategies of contending advocacy coalitions (comprising individuals with similar beliefs and varying degrees of cohesion) on policy subsystems and policy change. Animated by threat and conflict, advocacy coalitions learn in order to develop new strategies and in response to new information and changing conditions, sometimes informed by more or less authoritative policy brokers. Like PET, it is a multi-level theoretical framework – focusing on specific policy domains, taking into account macro-level or system-wide influences, while rooted in assumptions of individual beliefs and policy preferences.

Jenkins-Smith et al. (2018) refer to mechanisms, but in a gray box fashion or as "causal pathways," asserting effects and linkages rather than demonstrating them. The term mechanism is variously used to refer to belief systems "simplifying and interpreting the world" (p. 142), "heightened public and political attention, agenda change, and most importantly redistribution of coalition resources and opening and closing of policy venues" as enabling policy change (p. 145), internal and external shocks that "mediate the effect from external shocks" (p. 146), and learning (p. 157). However, the ways in which these effects might obtain are not specified.

The chapter points to an extensive empirical literature using the ACF, comprising cases, surveys, and experiments. What is striking, though, is the extent to which important processes are underspecified from a "policy mechanism" perspective. How do deep values, policy core, and secondary aspects of belief systems of individuals and advocacy coalitions change? How does

policy learning occur? How do policy brokers and forums further learning and changes of view? Such questions – and the list could go on – are not answered. But the authors act as if they appreciate this gap, with a long list of researchable topics. Many of these could easily be cast as seeking more detailed delineation of causal linkages at a finer-grained level along with empirical studies for understanding belief systems, learning, coalition dynamics, venues and forums, and conflict and role of science and policy analysis (see pp. 154–9).

Narrative Policy Framework (NPF): Embryonic and Component of Other Frameworks?

This theoretical framework is a relatively new addition to the *TPP* collection, featured in the last two editions. Situated, styled, and elaborated as a post-positive approach – as a contrast to the Multiple Streams, Punctuated Equilibrium, and Advocacy Coalition Frameworks – it focuses on the structure, uses, and impact of contending narratives on policy-making, largely from a poststructuralist orientation. The framework is still being elaborated but mimics many of the features of ACF theorizing and hypothesis development, including working at three levels (micro or individual, meso or sector, macro or system). Empirical studies rely on textual and interpretive analysis, surveys, social media data, and experiments. While empirical work has been carried out, a considerable amount of space is devoted to justifying the need for the framework and describing theoretical underpinnings.

The chapter by Shanahan et al. (2018) refers to causal mechanisms in several places, but they seem to refer to internal elements or components of narratives, incentives or strategies of those using narratives, and different high-level pathways (pp. 177–8, 193) and empirical relationships (p. 186). Thus, NPF is ontologically interpretivist rather than causal. But these assertions of causal mechanisms fall short of what policy mechanism advocates call for in terms of delineating how variations in the components, incentives, or strategies achieve their effects, even if the effects were observed in certain empirical studies. Much of the literature's appeal that points to causal effects are, in fact, those theories from very different disciplines and subdisciplines (very much like ACF). Most of the theorizing and causal chains are not directly connected to policy change – there is no theory or stylized circumstances delineated concerning when new narratives, different kinds of narratives, or differently structured narratives might have more of an impact on policy outcomes or in combination with other variables.

Narratives are surely important as a political and policy tool, but even with deeper specification the potential of this approach to explain policy changes and outcomes could be overstated. It is surprising that NPF is not more explicitly linked to the ACF's belief systems that define and structure advocacy

coalitions. Indeed, evolving narratives could be an important indicator and means of policy-oriented learning, as well as how they become adapted in response to external and internal perturbations and new scientific and technical information, and even more closely linked to the "policy images" associated with PET and policy monopolies. This points to the overlap and interlocking quality of many of the frameworks and their components.

Institutional Analysis and Development (IAD): A Broad Framework in Need of Mechanisms?

The IAD is largely a highly context-specific evaluative framework that has been extensively used to analyze and address collective action problems, self-governance arrangements, and the management of shared resources. All governance arrangements, regardless of their scale, are determined by institutional rules. Specifically, institutions are defined as sets of rules used by individuals to organize repetitive activities. This approach involves individuals seeking agreements with each other that could be enshrined in a set of meaningful rules. At the center of the IAD is the "action situation" where various actors interact to produce various patterns of interaction, which in turn leads to various outcomes. Ostrom identifies seven "rules-in-use" (boundary, position, choice, payoff, scope, aggregation, and information) that are exogenous, context-specific, and affect or structure action situations (Schlager and Cox, 2018, pp. 219–221).

This chapter by Schlager and Cox (2018) has several mechanism-type references (e.g., design principles identifying institutional variables, congruence between appropriation and provision rules and local conditions, low-cost conflict resolution mechanisms interacting to support users of common pool resources). Ostrom states that an analyst must make assumptions about how and what participants value, their information-processing capabilities and internal mechanisms they use to decide upon strategies. Moreover, there are implicit causal assumptions within and between operational, collective, and constitutional "situations." Economic theory, game theory, transaction-cost theory, social choice theory, theories of public goods and common-pool resources are all compatible with the IAD and lend themselves to mechanism-based research. The IAD is, by design, by far the broadest framework that has allowed scholars from fields beyond public policy to address collective action problems. Given its portability, IAD policy scholars might be well served by borrowing policy-specific mechanisms developed in other policy process frameworks.

Innovation and Diffusion Model (IDM): Ontological and Methodological Reconsiderations

The adoption of new programs by governments according to the IDM approach is explained by "internal determinants" and diffusion models. The internal determinants model postulates that political, economic, or social causal factors leading a jurisdiction to innovate are internal to the state. A number of internal determinant hypotheses are illustrated, including examples from organizational theory (e.g., resource slack). Diffusion models examine the adoptions of policies as emulations of previous adoptions by other governments. There are three contexts: when governments learn from one another by borrowing successful innovations from other jurisdictions, compete with others, or respond to public pressure to adopt policies.

In their chapter, Stokes Berry and Stokes (2018) identify five alternative mechanisms for diffusion: learning, imitation, normative pressure, competition, and coercion. They draw attention to multiple mechanisms, which can change over time due to contextual factors such as the characteristic of the state. The focus of IDM research, however, has been on developing three testable models: national interaction, regional diffusion, and the leader-laggard. Unlike the other *TPP* approaches that rely on case studies, its empirical insights have largely come from probabilistic regression analysis from national and regional datasets. Despite operationalizing independent and dependent variables employed in their models, Stokes Berry and Berry (2018, p. 282) note that there has been inattention to isolating the mechanisms for a policy's diffusion. Quite forcefully, they advocate a shift to a mechanisms approach:

> A key challenge for researchers in the decade ahead is to continue to conduct empirical research seeking to identify the mechanism(s) underlying policy diffusion but to focus attention on developing better empirical indicators for the presence of specific mechanisms. For each diffusion mechanism – learning, imitation, competition, coercion, and normative pressure – the goal should be to construct indicators for the presence of the mechanism that can not only successfully detect this mechanism when it is present (avoiding false negatives) but also fail to detect the mechanism when it is not present (avoiding false positives).

Stokes Berry and Stokes (2018) acknowledge that for policy process theorists to shift from a general process framework to a mechanistic approach it requires disaggregation and greater specificity of mechanisms. Moreover, they recognize the challenge of empirically identifying mechanisms.

MECHANISMS AND POLICY FRAMEWORKS: TAKE-UP TO DATE AND POTENTIAL

What follows looks across the high-level findings presented in the previous section. We consider to what extent, as covered in the latest *TTP* collection, the policy process studies field has embraced mechanisms to guide theoretical and empirical work. We consider the challenge of theorizing about complex policy systems, when that very complexity and reality bandwidth pushes scholars to embrace more rather than fewer variables and causal factors and pathways. This also leads to considerable overlap across these frameworks, and we suggest that mechanism perspectives could further and usefully link parallel investments in theorizing more deeply and precisely within and across these process frameworks.

Policy Mechanism Nomenclature and Specification Not Yet Evident in *TTP*

Efforts to apply mechanisms has arrived selectively in certain policy journals (*Policy Studies Journal*, *Journal of European Public Policy*). Our review of the chapters in the most recent edition of *TPP* suggests that the policy mechanisms movement has yet to establish a strong beachhead across the waterfront of policy process theorizing, and, despite the advocacy of progenitors such as Sabatier for more causal elaboration, no connection is made with the mechanism approach as a cross-cutting guide to the next generation of theorizing. To be sure, some *TPP* authors do invoke the term "mechanism" but typically not in ways consistent with the spirit and approaches suggested by the policy mechanism movement.

This reflects the state of policy process theorizing and empirical work that, although it has made enormous strides over the last 30 or 40 years, proceeds at a fairly high level of abstraction and aggregation. Our sense, though, is that many of these frameworks – while intuitive at the system or macro level, and typically designed to study the dynamics of policy domains at the meso level – have less empirical traction with respect to specific cases at the micro level. Whether for the purpose of more detailed explanation of policy processes or, instead, moving towards a design orientation, we believe that the next wave of theoretical elaboration, along with empirical research, will require finer-grained theories that move from identifying higher-level processes, functions, and causal pathways to more precise delineation of causal connections and conditions under which they obtain.

Some Policy Theory Frameworks Lean Towards Policy Mechanism Approaches

Some chapters, while not using policy mechanism nomenclature to assess the causal depth and richness of the theoretical framework in question, nevertheless seem disposed to and rely on approaches congruent with a mechanism perspective (e.g., PET). In other words, taking up the challenge put on the table by the policy mechanisms movement ought to be consistent with many of the frameworks. For example, the hypothesis-testing posture of other traditions (ACT, NPF, etc.) suggests that, regardless of the empirical methods employed by their colleagues, they would embrace the key messages of PMM and more precisely elaborate how mechanisms work rather than assert the dynamics and effects (likewise, with regard to PET they might start using other methods rather than stochastic approaches). We think this will be an exciting agenda because, in part, to give credit where it is certainly due, the progenitors and contributors to the literature associated with each framework have laid important foundations as a point of departure. The essential research questions and accompanying distinctive theoretical approaches will neither be diluted nor go away; rather, they stand to be strengthened.

Table 2.3 represents our first cut effort to identify what might constitute the mechanisms, working at different levels of analysis, for each policy theoretic framework. It provides an overview of the broad characteristics of the mechanisms in seven frameworks featured in *TPP* (2018). However, to further policy mechanisms research, issues of mechanism specificity and disaggregation discussed by Falleti and Lynch (2008) need to examined.

The Challenge of Theorizing About Policy Systems Across Levels of Analysis

In reviewing the chapters comprising *TPP*, we were constantly reminded of the challenges of theorizing across levels of analysis of complex systems (micro, meso, or macro perspectives; or, put differently, the individual, policy subsystem, and system levels of analysis). First, each of the traditions, in vary degrees, point to causal pathways moving up, down, and across these levels of analysis. Second, many of the frameworks comprise different combinations of theories and bundles of assumptions assembled to factor in local or broader environments. This is similar to inserting pre-built subroutines or component parts, but for mechanism seekers they still function as opaque "black box" or at best "gray box" convertors. These multiple levels of analysis and reliance on theoretical components make it difficult to ascertain what is presumed and what actually gets measured, tested, and proven.

We find this state of affairs intriguing because each of the frameworks are attractive, plausible, and compelling. However, when one scratches the theoret-

Table 2.3   *"Table 4" – mechanisms in theories of the policy process*

	MSF Multiple Streams Framework	PET Punctuated Equilibrium Theory	ACF Advocacy Coalition Framework	NPF Narrative Policy Framework	IAD Institutional Analysis and Development	ID Innovation and Diffusion
Types of mechanisms: Environmental, cognitive, ideational, psychological, structural, institutional and relational	Largely psychological	Cognitive, institutional and psychological	Coalition stability belief systems Dominant ACs Conflict External shocks	Cognitive Policy beliefs Story-telling/analysis Conflict Devil/angel shift	Institutional	Learning Imitation Normative pressure Competition Coercion
Levels of mechanisms: Situational (macro to micro) Action formation (micro to micro) Transformative (micro to macro)	Situational	Situational	Pathways: External shock Internal AC event Policy learning Negotiated deal	Macro, meso, micro but essentially leaves macro to the ACF approach	Situational and action formation	Stokes Berry and Stokes call the above mechanisms but note later that they do not qualify as such

	MSF Multiple Streams Framework	PET Punctuated Equilibrium Theory	ACF Advocacy Coalition Framework	NPF Narrative Policy Framework	IAD Institutional Analysis and Development	ID Innovation and Diffusion
Mechanism dynamics: Sequencing, tempo, duration, lag, slow or fast	Slow	Slow and fast	Slow and fast	Not yet identifying mechanisms and how they influence policy-making; survey/ focus/cluster		Not addressed but essentially suggest this is an avenue to pursue
Disaggregation: High level (sketches/schema), mechanisms-as-types, mechanisms-as-examples, mechanisms-as-causes, mechanisms-as-indicators	Bounded rationality	Bounded rationality, (parallel processing serial processing) Negative feedbacks (incrementalism, policy image) Positive feedbacks	Very underspecified where mechanisms are concerned	Very underspecified where mechanisms are concerned	Common pool resource theory, game theory, evaluative, action situation determined by rules (boundary, positions, choice)	Differentiation between national and regional innovation, but that is about it – no micro level of analysis

ical surface in a process-tracing manner (regardless of whether those working in the field rely on quantitative and qualitative methods), the evidence appears increasingly more tenuous and the assumptions loom larger. This suggests that we do not have strong foundations for even rough order-of-magnitude predictions of when certain outcomes might obtain, what the relative impact or explanatory value of different variables or causal pathways or functions might be, or what ought to be the crucial design elements for good policy, process or governance designs.

Implications of Mechanism Approaches for Significantly Overlapping Frameworks

Our review of *TPP* reinforced an obvious point: each theoretical framework is animated by distinctly different research questions, although they often share many of the same variables and causal links, which most contributors acknowledge in varying degrees. The precise explanatory focus means that researchers will identify different variables or effects as dependent, intervening, independent, or more proximate and material. However, when all the frameworks are lined up together, the extent of overlap is considerable. It is difficult to keep track of all the frameworks, let alone fully appreciate where one starts and the others leave off, particularly since, as noted above, many of the frameworks import or point to similar components from other frameworks.

This state of affairs can lead to confusion or the perception that the frameworks agree in the main about many things, but disagree or diverge in order to address particular dynamics and issues in policy systems. *But bringing a mechanistic perspective to bear on this challenge raises the intriguing possibility that delineating causal chains and animating conditions for one policy framework might lead to progress in another*. Likewise, it suggests that the perhaps difficult decisions of scholars and graduate students to invest time working with one framework and associated methodological approaches may not constitute a pure trade-off: that continuing work across the framework domains may lead to increasing theoretical returns. While not suggesting the prospect of a "unified policy process field theory" (because what variables a scholar invokes depends on the research questions asked), we are suggesting that much more progress can be made in thinking about the equivalent to the causal "wiring" or vascular network fanning out vertically, horizontally, and diagonally in the representations we have created to capture policy systems. Deepening our understanding of these connections with mechanism approaches may well sharpen our appreciation of what each framework does and cannot do.

INVIGORATING POLICY PROCESS INQUIRY: IMPLICATIONS FOR RESEARCH, DESIGN, PEDAGOGY

In our first endnote of this chapter, we alluded to an "end of policy theorizing" hypothesis, which suggests that the leading theories of public policy theories have attained a level of maturity, while greatly respecting the groundwork that has been laid. There is considerable agreement on what constitutes the most plausible frameworks invoked and relied on by established and new scholars in thousands of articles and dissertations around the world. The *TPP* collections have provided a useful compilation, crossroads, and appraisal of the state of theorizing and empirical work associated with each of these traditions, adding new ones as they gather momentum. However, these frameworks have considerable overlap in terms of identifying the variables, components, and functions at play in policy-making systems. At one level this is reassuring, and at another level, concerning, because it seems increasingly difficult to distinguish where one framework ends and another begins. This chapter suggests that, from a policy mechanism perspective, the frameworks as articulated in the *TPP*4 collection have, going forward, different levels of maturity and promise. Many authors seem more interested in documenting the take-up and citation rates of the tradition they have invested in than more carefully appraising whether they have become theoretically better developed, and whether and how empirical studies could test and deepen theoretical assumptions and propositions.

At the end of *TPP*4 (2018), Weible (2018) asks how scholars can improve the quality of theoretical and empirical work. He suggests that more attention should be directed to empirical studies and testing, and less to more theory and propositions. We think that delineating policy mechanisms that link theoretical assumptions and empirical investigation offers an exciting opportunity to infuse policy process theorizing just as it has become a bit staid and reified, and yet it does not purport to challenge what each of the traditions seeks to accomplish. Focusing on mechanisms may assist those working with different *TPP* traditions: a more granular approach can encourage further parsing out and deepening theories associated with broad frameworks with the goal of identifying more specific empirically grounded studies. Even more exciting is the possibility that, by working in more detail with policy mechanism thinking and process testing, policy scholars can better work *across* the frameworks to develop theoretical and empirical insight into how their components link together, potentially enabling progress in different functional domains to buttress development in other domains. Indeed, the policy mechanism approach will not rival established and emerging policy process frameworks – rather, it collectively challenges them and points to a way forward.

Our study has reviewed the latest version of the *TPP* collection, but this is not a survey of the scholarship associated with each theoretical framework. We need deeper reviews of the empirical literature associated with each of the seven frameworks reviewed in the *TPP* to more definitively ascertain the state of the art (i.e., to what extent is mechanism thinking used explicitly or implicitly by scholars?). This would be no small task, and could perhaps focus on exemplar studies that might serve as benchmarks of sorts, pointing to new avenues for empirical and theoretical research. This is a significant research agenda, engaging all *TPP* traditions, but would provide spillover benefits due to the overlap in theories.

Finally, given the design orientation of this collection, we would be remiss not to consider the promise of policy-mechanistic perspectives for design practice and pedagogy. Seeking out policy mechanisms, and the conditions under which they obtain, will not just be an exercise in theory specification and testing; it should also lead to better understanding of the circumstances and conditions under which initiatives have promised or predicted effects, always allowing for the complexity, inertia, and multifaceted nature of policy-making and governance. We also see important pedagogical implications: teaching students about how the policy process works, how to navigate it, and how to undertake policy analysis, has always been a design enterprise, even if scholars working in different traditions variously cast this as "craft" or "science." There is great potential for the bottom-up practical design thinking to meet on empirical middle ground (at a variety of different policy domain sites) the top-down theorizing from multiple frameworks. These frameworks have always sought to capture the complexity and essential features of policy-making as context and something to be shaped, but have not always reached their full potential as reliable diagnostic and design tools. We think that the research and theoretical research agenda stimulated by policy mechanism thinking can bridge these divides.

NOTES

1. This does not quite amount to the "end of policy theorizing," but the stability in the number of approaches given the complexity and diversity of policy challenges and governance arrangements is worthy of note.
2. A "second cut" has proceeded on a collaborative basis with our colleagues Jeroen van der Heijden and Johanna Schulman (Van der Heijden et al., forthcoming), based on a systematic review of literature using MSF, ACF, PET, NPF and IAD.
3. This terminology will clarify things later when we evaluate how *TPP* authors use "mechanism."
4. Since the time of presenting this work, Howlett and Capano (in the current volume) have made a distinction between "first-order" and "second-order" mechanisms, which we do not take up in this chapter.
5. The *TPP* collections have not been the only efforts to compare and contrast leading theoretical frameworks on policy-making. The first significant overview was

Schlager and Blomquist's (1996) review paper comparing three "emerging theories of the policy process." It examined the ACF, Elinor Ostrom's Institutional Rational Choice (IRC, which later became IAD), and Terry Moe's politics of structural choice approach. Issues of mechanisms and causality were briefly discussed, with ACF touted as a more sophisticated incorporation of the roles of information and learning; it challenges the other frameworks to consider the "ideological filtering of information, and changes in individuals' beliefs, as mechanisms promoting or inhibiting policy change" (p. 666).

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PART II

First-order mechanisms and cases

3. Structural mechanisms affecting policy subsystems activity: beyond individual and group behavioral propensities in policy design and policy change

Michael Howlett

INTRODUCTION: POLICY MECHANISMS AND POLICY CHANGE

Policy sectors constitute distinct policy regimes consisting of the current collectively accepted definition of an issue, the current relevant policies (laws, regulations, fiscal instruments, government programs and relationships), and the actors and institutions (both inside and outside government) actively engaged in implementing and modifying them (Harris and Milkis, 1989; Eisner, 1994a, 1994b). These regimes are constructed at the "subsystem" level (McCool, 1998), that is, as subsets of political, social and economic systems and the various actors and activities of which those are comprised.

According to Sabatier (1998, p. 99), "[a] subsystem consists of actors from a variety of public and private organizations who are actively concerned with a policy problem or issue, such as agriculture, and who regularly seek to influence public policy in that domain." Such subsystems, he argued, provide "the most useful unit of analysis for understanding the overall policy process," superior to the use of other units such as government organizations or programs.

How these subsystems operate and what impact they have on policies and vice versa is a long-standing question in the policy sciences (Cater, 1964). Often these subsystems are viewed as examples of a general class of stable "homeostatic" systems that are self-adjusting or self-equilibrating in routine circumstances and often thought of as changing only under the pressure of external shocks or "jolts" that introduce new extraneous elements into the system, throwing them out of equilibrium (Sabatier, 1988; Aminzade, 1992). This notion of the exogenous nature of subsystem change focuses analytical attention on the various types of external crises that could provoke changes in

policy goals and objectives, and instruments or their settings, an approach that is common in comparative policy studies, for example (Wilsford, 1994).

However, the empirical purchase of the metaphor of contemporary policy-making as a homeostatic system has increasingly been challenged in the policy sciences. Contemporary policy thinking now tends to favor more adaptive constructs in which it is assumed that policy actors not only react to external changes but can also affect their own environments and, as a result, can endogenously induce or prevent significant policy change (Buckley, 1968; Daneke, 1992; Smith, 2000).

This reconceptualization has led to greater efforts to measure, chronicle, and account for the precise mechanisms that are activated in policy changes and of the capacities of the instruments that activate them. Many of these mechanisms are operative at the level of individual or group behavior and include mechanisms such as the propensity of individuals to search for advantage or normative harmony, status and prestige discussed in other chapters in this volume, as well as group behavior such as rent- or influence-seeking, which motivate policy-relevant aspects of organizational dynamics and activities.

As shall be discussed below, however, there is a third class of such "first-order" mechanisms, those that directly affect policy actors, one in which policy network relationships alter as new nodes and links are added to subsystems. These structural adaptations can be triggered by government policy interventions that introduce new actors and ideas into policy structures, often through the deployment of "procedural" policy tools specifically intended to trigger this adaptive reflex in policy subsystem structure and activity (Howlett, 2000; Lang, 2016). These activators and structural mechanisms are key ones that can precipitate and reshape specific types of policy behavior on the part of network members. By affecting the number and type of anodes and links of a policy subsystem, these changes in turn can affect the nature of policy deliberations and discourses, and ultimately policy outputs (Lang, 2016).

POLICY CHANGE: THE DESIGN-MECHANISM PROBLEMATIC

In a widely cited study, Peter Hall identified three different levels or "orders" of policy outputs associated with alterations in policy means or goals: the *settings* of policy instruments; the types of *instruments*; and the *goals* of policy (Hall, 1993).[1] However, as Daugbjerg correctly pointed out, the logic behind Hall's insight in analytically distinguishing between instruments and settings is that policy outputs differ not only according to whether the goals or means of policy are affected, but also according to differences in their conceptual or practical aspects (Daugbjerg, 1997).

Taking these two dimensions (conceptual and practical) into account yields a four-fold taxonomy of policy outputs: goals, objectives, instruments, and settings or calibrations. Any or all four of these four basic policy outputs can be affected by change processes. At the level of ideas and concepts, for example, policy change can involve alteration or reformulation of abstract policy goals or ends, or of the general nature of types of policy instruments used as the means to implement those goals. At a more practical or programmatic level, change can involve shifts in program objectives or the calibration of specific policy instruments in use.

How exactly such changes occur and why remains an outstanding question in the policy sciences (Capano, 2012). Adopting a mechanistic perspective on this issue, however, is very helpful and quite revealing of the actual processes through which change takes place (Bunge, 1997, 2004; Glennan, 2002; Kay and Baker, 2015). Although most explanations of policy activity based on mechanistic logics to date have been firmly situated at the level of individual behavior and have followed the precepts of methodological individualism (Miller, 1978; Hedström and Ylikoski, 2010), there is also a set of studies that have emphasized the significance of institutional and other structural elements of public policy (Peters, 1992; Schmidt, 2008) with which mechanistic studies have not yet grappled. The logic of this third level of policy mechanisms and how it is related to the individual and group levels is set out below.

The Logic of Mechanisms: Policy Change as Behavioral Change

Policy changes come about as governments and social actors wrestle with the basic problematic and expectations of policy interventions. As set out in Figure 3.1, the mechanisms approach to policy-making and policy dynamics centers around the idea that the use of policy tools activates certain propensities on the part of policy actors, leading to changes in their behavior and policy outputs.

This is a process that is seen as involving a complex causal chain centered around existing policy behaviors and policy-making contexts, policy interventions that trigger – intentionally, consciously or not – policy mechanisms, and changing or affecting "target" behavior in some new direction (Hedström and Swedberg, 1996, 1998; Falleti and Lynch, 2009; Hedström and Ylikoski, 2010).

This approach thus views policy-making as largely about affecting behavioral changes in target populations, with policy instruments used as a means to influence a shift from behavior (1) to a reformed or now behavior (1A or 2) (Balch, 1980).

Exactly how policy instruments activate mechanisms, and which mechanisms are involved in these processes, however, is not well known. That is, the behavioral consequences and mechanisms activated by policy tools and how "tools match targets" (Howlett, 2018) remains an outstanding research question and agenda that the chapters in this book address.
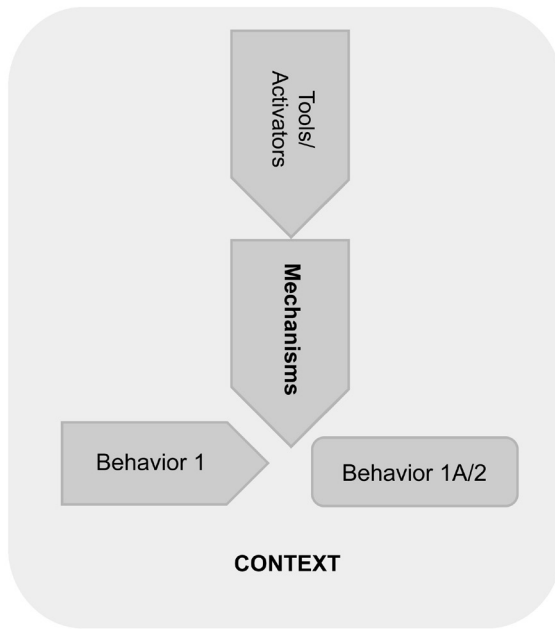
Figure 3.1   The behavioral expectations of policy design

The linkages between policy instrument invocation and behavioral or policy change are very rich. As Figure 3.2 shows, a mechanistic process of behavioral change involves at least four linkages, all of which are affected by contextual aspects present at the exact moment at which instruments are invoked and mechanisms triggered. These are:

1. The link between tools and the governing resources present at any moment in time.
2. The link between resources and the mechanisms that tools activate.
3. The links between the mechanisms and the actual behavioral changes that occur post-activation.
4. The link between changes in behavior and changes in policy outputs.

All four of these linkages are susceptible to various barriers and impediments to instrument choices, mechanism activation, reception and impact. That is, each link in this chain is affected by contextual factors that can serve to block or make the linkages across the tools–output chain problematic, that is, difficult to predict and control (Falleti and Lynch, 2009). There are many such barriers and factors, which include the preferred policy style and governance

Design–Output Linkages and Contextual Factors

e.g., Regulations, Subsidies	Policy Capacities (NATO)		More, Less, Changed	Policy Impact
Tools	Resources	Mechanisms	Behaviors	Outputs

Contextual Barriers and Constraints

Figure 3.2   Links in the policy instrument–mechanism–output chain
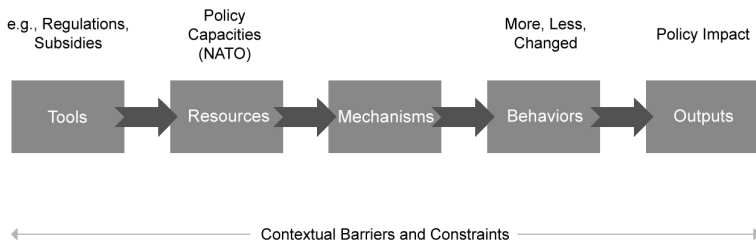
mode, which can affect preferences for certain tools over others (Howlett and Rayner, 2013; Howlett, 2017); the various capacity strengths and weaknesses that can limit the capability of governments to use particular tools or eliminate them altogether (Wu, Ramesh and Howlett, 2015; Howlett and Ramesh, 2016); possible countervailing demands and constraints on behavioral change that can undermine the effect and impact of a mechanism on subsequent behavioral change (Weaver, 2014, 2015; Howlett, 2018); as well as various kinds of implementation and other issues that can lessen, or enhance, policy outputs (Hupe and Hill, 2016; Lindqvist, 2016). These potential contextual factors are set out in Figure 3.3.

OPENING UP THE BLACK BOX OF POLICY MECHANISMS: INDIVIDUAL-, GROUP- AND SUBSYSTEM-LEVEL MECHANISMS

This discussion of the general logic of a mechanistic approach to policy-making, of course, begs the question of what is in the "black box" at the center of the analysis. That is, what mechanisms drive these processes of policy change? What are the mechanisms that lead more or less regularly to one type of output even if this regularity is limited to some circumstances and not others? Who do they affect, and how?

In general, two kinds of mechanisms can be identified: those that more or less directly affect actor behavior and those that involve learning and more reflective activities. The latter second-order mechanisms are important, but are covered elsewhere (Levitt and March, 1988). The discussion below centers in the first instance on those mechanisms that more directly affect actor behavior.

Design–Output Linkages and Contextual Factors

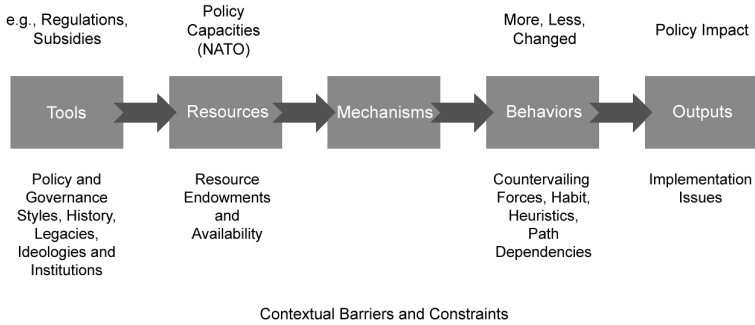| e.g., Regulations, Subsidies	Policy Capacities (NATO)		More, Less, Changed	Policy Impact
Tools	**Resources**	**Mechanisms**	**Behaviors**	**Outputs**
Policy and Governance Styles, History, Legacies, Ideologies and Institutions	Resource Endowments and Availability		Countervailing Forces, Habit, Heuristics, Path Dependencies	Implementation Issues

Contextual Barriers and Constraints

Figure 3.3   Context-related mechanism constraints

These kinds of "first-order" mechanisms have received treatment in the literature before, which has variously termed them "micro-meso-macro" or "transformational," "action-forcing" or "situational" (Hedström and Swedberg, 1998; Hedström and Ylikoski, 2010). However, these definitions are quite vague as to what exactly is micro and what macro, for example, in the case of the former, and why only three types exist in the latter case. A more robust and clear way to distinguish between such mechanisms is to look at what or whose behavior is being affected. Here a central distinction can be made between "individual," "group" and "structural" mechanisms.

Individual and Group-level Behavioral Mechanisms

A great deal of the literature on social mechanisms in general, and policy mechanisms in particular, has focused on the individual level and there is little doubt that individual-level "micro" mechanisms of the type compose one key set of mechanisms.

Until recently most studies focused on so-called "system 1" mechanisms, that is, those that appealed to the more rational bases of human cognition, such as the ability to accurately assess the costs and benefits of specific proposed courses of action and decide upon a maximizing or optimal strategy (Elster, 2009). Under the sway of behavioral economists and others, however, in recent years many works dealing with "system 2" or automatic less "rational" motivations and cognitive strategies have increasingly been added to this lexicon

Table 3.1   *A resource-based taxonomy of procedural and substantive policy instruments*[2]

		Governing Resource and Target Need			
		Information	Authority	Treasure	Organization
Purpose of tool	Substantive	Public information campaign	Independent regulatory agencies	Subsidies and grants	Public enterprises
	Procedural	Official Secrets Acts	Administrative advisory committees	Interest group funding	Government reorganizations

(Shafir, Simonson and Tversky, 1993; Sunstein et al., 2001; Ariely, 2010; Shafir, 2013). Although often pitched purely at the level of individuals, many of these same mechanisms also operate at the more collective or group level (Olson, 1965; Buchanan, Tolleson and Tulloch, 1980; Riker, 1986).

In this view, at the individual level the mechanisms activated by policy instruments in order to trigger policy change are characteristics of human behavior such as greed, fear, risk aversion, or the use of heuristics and others affect the logics of calculation and appropriateness individuals take towards such issues such as whether or not to perform a crime or quit smoking or invest in a pension fund or donate to a charity (March and Olsen, 2004).

These mechanisms are triggered or activated by "substantive" policy instruments (Howlett, 2000), which are the typical kinds of policy tools discussed in the literature around economic incentives and disincentives such as the provision of subsidies or the creation of regulatory regimes (Tupper and Doern, 1981; Hood, 1986, 1991, 1995; Howlett, 1991; Salamon, 2001). These tools rely on a set of governing resources for their effectiveness, including "nodality" (or information), authority, treasure or the organizational resources of government (Anderson, 1975; Hood, 1986) (Table 3.1).

Thus information-based instruments, for example, can both facilitate the provision of information as well as suppress it, and can involve the release of misleading as well as accurate information (Goodin, 1980). One of the main reasons one tool would be chosen over another was supply oriented: that is, that a government would utilize specific kinds of tools deploying resources it had in ample supply or which could be easily replenished (Hood, 1983).

This is an important insight. But in addition to "supply-side" capacity issues, "demand-side" considerations are also very significant in policy design. That is, in general, each category of tool involves the use of a specific governing resource expected to trigger or lever a specific characteristic or receptor in targets, inducing a certain behavioral response. Thus, the effectiveness of the deployment of such tools is linked not just to resource availability – a precon-

Table 3.2   *Behavioral needs for resource effectiveness*

Tool Type	Statecraft Resource Applied	Target Behavioral Prerequisite
Nodality	Information	Credibility/trust: willingness to believe and act on information provided by government
Authority	Coercive power/force	Legitimacy: willingness to be manipulated by government-invoked penalties and proscriptions
Treasure	Financial	Cupidity: willingness to be manipulated by gain/losses imposed by governments
Organization	Organization	Competence: willingness to receive goods and services from government and enter into partnership arrangements

dition of their use – but also to the existence of different "receptors" on the part of policy targets that make them respond in a predictable way to the use of this resource when deployed.

Table 3.2 presents a model of the behavioral prerequisites that governing tools rely upon for the effect.

In the case of information use, for example, tool effectiveness relies both on the availability of knowledge and the means to distribute it ("resources") and also upon the target's belief in the accuracy of the messages being purveyed, or their *credibility* ("receptor"). Similarly, the effectiveness of the use of authoritative tools, as discussed above, depends not just on the availability of coercive mechanisms and their enforcement, but also upon target perceptions of government *legitimacy*. Similarly, the effective use of treasure resources depends not just on the availability of government funding, but also on target group financial need and especially their receptivity to government funding or their *cupidity*. Likewise, the effective use of organizational tools depends both on the existence of personnel and other organizational resources but also upon target group perceptions of government *competence* and fairness in the deployment and training of personnel to provide services and rules. This logic is set out in Figure 3.4.

These are important considerations in policy design and especially in the calibration of policy tools. Thus, the use of authority-based tools such as laws and regulations, for example, involves considerations of legitimacy on the part of targets but must not overreach or overburden the extent of legitimacy that a government enjoys (Suchman, 1995; Hanberger, 2003). If a policy measure does so it most assuredly will require much monitoring and enforcement activity to be even minimally effective, involving large administrative costs and burdens that may well undermine its own efficiency and effectiveness

Design–Output Linkages and Contextual Factors

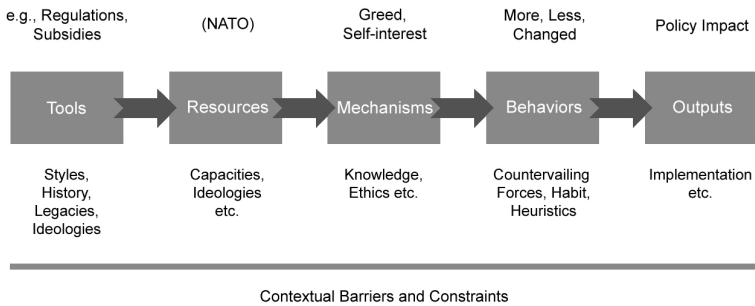| e.g., Regulations, Subsidies	(NATO)	Greed, Self-interest	More, Less, Changed	Policy Impact
Tools	**Resources**	**Mechanisms**	**Behaviors**	**Outputs**
Styles, History, Legacies, Ideologies	Capacities, Ideologies etc.	Knowledge, Ethics etc.	Countervailing Forces, Habit, Heuristics	Implementation etc.

Contextual Barriers and Constraints

Figure 3.4   Links in the design chain – individual and group level

considerations, as has occurred in the past in many countries in areas such as marijuana or alcohol prohibition (Issalys, 2005).

Group-level Mechanisms

This same logic can be applied to groups or collections of individuals who enter into coalitions in order to pursue collective aims and goals. Such groups are sometimes viewed as mere aggregates of individual preferences with no interests or aims beyond those of their members (Olson, 1965), although more careful study has shown that many more complex motivations and proclivities exist at the collective or organizational level that are not reducible in such a fashion (Halpin and Binderkrantz, 2011). These include propensities to search for new issues or retain existing issue orientations, decisions about whether to specialize or generalize in issue orientations and the nature of membership appeals, for example, rather than simply an interest in membership or revenue growth.

Structural or Subsystem-level Mechanisms

A third set of mechanisms, however, is the main focus of this chapter: those that affect the structure of policy subsystems. This set of mechanisms is quite different from the individual- or group-level ones that are the typical subjects of mechanistic analysis in that they are less behavioral than structural in nature.

This important third category of mechanisms is often ignored in the literature on policy mechanisms, which overwhelmingly focuses on the micro or individual level, occasionally venturing into a discussion of the meso or group level.

This third set of mechanisms is activated by many policy tools, especially "procedural" ones that affect the manner in which individuals and groups act and interact in attempting to affect policy outcomes (Howlett, 2000). A sizeable literature in the policy sciences has noted the importance to policy outputs and processes of two aspects of subsystem structure, namely the number of type of actors arrayed in a subsystem or network, and especially their ability to block off or close off entry of new actors, as well as the nature of the ideas that circulate within such subsystems (Howlett and Ramesh, 1998, 2002; Howlett, 2000).

Like any kind of networks, subsystems are composed of nodes and links. Manipulating nodes and links – adding, subtracting and changing them – thus constitutes a set of triggers that activate a variety of mechanisms at this network level, including the ability and willingness of policy actors to enter into relationships with other, proximate, actors in the network (rather than more distant ones) or their ability to act as leaders, entrepreneurs or brokers, between other actors and governments. That is, they affect the propensity for subsystems to see the emergence of relatively consistent sets of policy actors and ideas interacting within more or less well-established relational parameters or whether more chaotic relationships and interactions exist.

That is, changes in the ends of policies, be they conceptual or practical, require new ideas to be incorporated into policy-making processes (Hall, 1993; Blyth, 1997; Campbell, 1998; Sabatier, 1999), meaning such ideas have to be able to penetrate into the policy communities and networks that control or dominate policy discourses (Howlett and Ramesh, 1998). Similarly, changes in the conceptual aspects of policy-making can be linked to the ability of actors in policy subsystems to achieve and retain "monopoly" or hegemonic status (Baumgartner and Jones, 1993; Howlett and Rayner, 1995; Jacobsen, 1995; Pontusson, 1995; Hoberg, 1996).

These aspects of subsystem structure are linked to outputs in terms of affecting the propensity for specific types of policy output changes to occur. Policies' goals, for example, tend to change only if there is a simultaneous presence of new actors (as a result of systemic perturbations and/or subsystem spillovers) as well as new ideas (emerging from policy learning and/or change in the venue where policy is made). At the opposite end, minimal changes are accomplished when stability processes such as closed networks and path dependency predominate. Pressures for change from new ideas countered by closed networks tend to lead to changes in policy objectives, while the entrance of new actors into a path-dependent situation is likely to lead only to a change in instruments. At any particular conjuncture, therefore, the propensity for specific types of policy change is determined by the interactive effects of policy

*Table 3.3   A model of the structural effects of the presence or absence of
                  new actors and ideas on types of policy change*

	Presence of New Actors	Continuity of Old Actors
Presence of New Ideas	Change in goals	Change in objectives
Presence of Old Ideas	Change in instruments	Change in settings

change and stability processes on subsystem membership and deliberations
(Howlett, 2001). The logic of this model is set out in Table 3.3.

   Hence, there is a third major type of policy behavior, with a specific set of
mechanisms, that policy-makers can, and do, activate, which can be labeled
structural ones (Figure 3.5).

Structural Instrument–Output Linkages and Important Contextual Factors
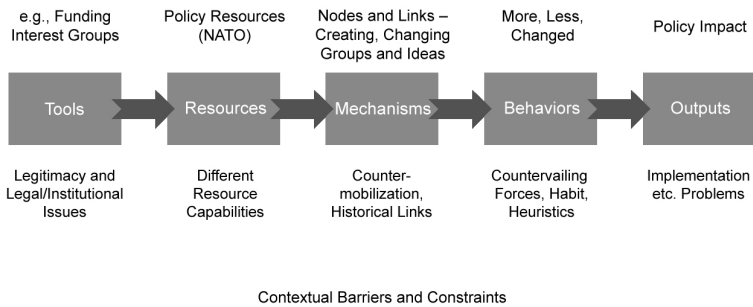
Figure 3.5   Links in the design chain – structural level

THE ROLE OF PROCEDURAL TOOLS AS STRUCTURAL MECHANISM ACTIVATORS

These mechanisms are activated in different ways and with different tools
than individual-level behavioral ones. What kinds of policy tools are availa-
ble for these purposes?

   In general, procedural tools are not as well studied as are substantive instru-
ments, and are less well known in their impact and effects, although several
techniques such as the use of public participation and administrative reorgani-

zations are quite old and well used and form the basis of study in fields such as public administration and organizational behavior (Woolley, 2008).

As set out in other chapters, most attention in the literature has been paid to "substantive" tools, that is, those that activate individual and group behavioral mechanisms of the types described above (Hood, 1983, 1986; Howlett, 2000). These tools can affect network structure, such as when, for example, subsidies to an industry lead to the creation of more firms than otherwise would exist, altering the nature of production systems and industrial ecologies. However, procedural policy tools affect aspects of subsystem structure and behavior more directly (De Bruijn and ten Heuvelhof, 1997). They are "the set of techniques by which governmental authorities wield their power in attempting to ensure support and effect social change" (Vedung,1997).

These procedural tools are an important part of network management activities "aimed at improving game (policy) interaction and results" but, as Klijn, Koppenjan and Termeer (1995) also note, the network structures the game without necessarily determining its outcome (p. 441). These tools affect many activities of actors in policy subsystems (Table 3.4).

Procedural tools activate a number of structural mechanisms that affect the number and type of actors and ideas circulating in policy networks (Klijn, Koppenjan and Termeer, 1995; Goldsmith and Eggers, 2004; Klijn and Koppenjan, 2006). They include:

- changing actor policy positions;
- setting down, defining or refining actor positions;
- adding actors to policy networks;
- changing access rules for actors to governments and networks;
- influencing network formation;
- promoting network self-regulation;
- modifying system-level policy parameters (e.g., levels of market reliance);
- changing evaluative criteria for assessing policy outcomes, success and failure;
- influencing the pay-off structure for policy actors;
- influencing professional and other codes of conduct affecting policy actor behavior;
- regulating inter-actor policy conflict;
- changing policy actors' interaction procedures;
- certifying or sanctioning certain types of policy-relevant behavior;
- changing supervisory relations between actors.

Examples of policy tools with this procedural orientation include a government creating an advisory committee of select citizens or experts to aid it in its policy deliberations in contentious issue areas such as local housing development or chemical regulation, or its creation of a freedom-of-information or access-to-information legislation, making it easier for citizens to gain access

Table 3.4   *Aspects of policy processes and structures affected by procedural policy tools*

	Network Structure	
Process	Actors	Interaction
Goal formation	*Actors and preferences set-up*	*Deliberation and consensus orientation*
	Authority	Authority
	Restrict/invite participation	Rules for decision making (consensus vs majoritarian)
	Information:	
	Issuing mission statement	Interaction guidelines (e.g., joint declaration of intent)
	Treasure	
	Funding of participants	Information
	Trading influence for compromise and commitment	Providing and acknowledging interest positions
		Treasure
		Establishing political opportunity structures (sponsoring of events/ secretariat)
Effective implementation	*Commitment to deliver results*	*Joint production orientation*
	Authority	Authority
	Compliance mechanism (binding vs non-binding)	Rules for joint production and collaboration
	Accountability	Information
	Effective control over implementing agencies	Promotion/exhortation of participation
	Information	Joint action plans
	Reporting	Treasure
	Monitoring	Incentives to collaborate (joint responsibility)
	Treasure	
	Funding of participants	

to government records, information and documents. Reorganizing their own internal structure can have an effect on policy processes – for example, as occurs when natural resource ministries are combined with environmental ones, forcing the two to adopt some form of new operating arrangements.

CONCLUSION

A mechanisms approach to policy-making has several advantages over other approaches, not least in how it clarifies the tool-to-output process of policy-making and the key factors and relationships existing in such processes. Many policy mechanisms operate at the level of individual and group behavior and have been discussed elsewhere. However, there is a third class of such

"first-order" mechanisms that directly affect and change policy subsystem or structure and behavior. This chapter explores this category of network mechanisms, one in which policy tools activate structural components of policy subsystems affecting the number of type of nodes and links present in a policy community or network rather than individual or group behavior per se. Procedural policy tools in particular utilize statecraft resources to activate mechanisms that affect subsystem structural elements – nodes and links – by introducing new actors or reconfiguring relationships in order to affect policy targets and drive policy change. While use of such mechanisms and instruments is common, surprisingly, studies and understanding of them are not. This chapter helps fill this gap in the policy design and mechanisms literature.

NOTES

1. The use of the term "setting" by Hall has caused some confusion. This term does not refer to the general context or policy environment, but rather to the specific calibration of a policy tool – as in the "settings" for a machine tool or lathe.
2. Cells provide examples of instruments in each category.

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4. The mechanisms of food waste prevention: theory, design, and practice for changing behaviours

Simone Busetti and Bruno Dente

INTRODUCTION

There is growing international attention to food waste as an environmental, health, economic and social problem. Depletion of resources in producing food and the environmental and economic costs of discarding waste combined with the social, ethical and symbolic values of wasting food, while poverty and hunger are still a global issue.

The two 2008 crises – the global food crisis and the most renowned financial crisis – have changed public attitudes towards food. Old certainties about food commodities and security were disrupted and food got new public attention, no longer as a moral issue towards developing countries, but as an internal security problem threatening the Western world (Collier, 2008; McMichael, 2009; Lang, 2010). Such developments certainly provided a favourable context for food sustainability, one where wasting food was considered less desirable and harder to afford and where policy measures tackling food waste could enjoy new visibility and global attention (Evans, Campbell and Murcott, 2013; Manzocco et al., 2016).

In 2015, in fact, the UN adopted the 17 Sustainable Development Goals, which included a specific commitment to halve food waste at the retail and consumer levels and reduce food losses along production and supply chains, including a commitment to address post-harvest losses (United Nations, 2015). Similarly, the 2014 Commission Communication promoting a zero-waste programme for Europe and the following 2015 Action Plan for the Circular Economy paid specific attention to food waste, in particular for improving measurement, date marking, food recovery and donation. In 2016, three EU countries – Italy, France and Romania – passed legislation for reducing food waste.

If – as it appears – the time has come for action, the evidence base is still uncertain. As agreed by several commentators, how food waste prevention

works, how it is implemented, and how impacts are produced, remain unclear, mostly because of a lack of comparable data, the paucity of evaluations, and the relative novelty of such measures (Cox et al., 2010; Thyberg and Tonjes, 2016). With the ambition of partially remedying these gaps, the chapter provides an analysis of the Italian food waste policy, aimed at reconstructing its underlying causal mechanisms.

The analysis is interesting in at least two respects. First, Italy has a consolidated experience in tackling food waste. For a long time it was the only EU country with a 'Good Samaritan Law' and one among the few with tax benefits on donations (Visschers, Wickli and Siegrist, 2016; Baglioni, de Pieri and Tallarico, 2017). Further, the 2016 reform introduced innovative measures – such as the possibility to donate food beyond the 'best-before' date – that have a central place in the debate on reforming food waste (FUSIONS, 2016a). Second, the causal logic of many of these measures seems simple and straightforward and such apparent simplicity can further highlight the importance of an approach based on causal mechanisms, as a way to identify the implicit assumptions of policy designs, the contextual features supporting – or impeding – their working, and the conditions for possible replicability.

In conducting the analysis, we took the same approach of our previous work on 'mechanism-based design', stressing the importance of switching from a tool-centred to a mechanism-centred approach to designing (and analysing) policies (Busetti and Dente, 2018). The chapter makes a review of academic literature, newspapers, government documents and grey literature. In completing this review, we took inspiration from the method of realist synthesis (Pawson, 2002, 2006) a qualitative review aimed specifically at reconstructing causal mechanisms. Three in-depth interviews with one policy-maker, a food redistribution organization, and an expert were then performed in order to discuss findings.

The chapter proceeds with five main sections. The first provides a brief introduction to food waste by paying specific attention to drivers and policies. The second presents the Italian policy for reducing food waste. The third provides a brief introduction to the use of causal mechanisms for designing and analysing policies, while the following two sections analyse two of the new measures introduced in 2016: bureaucratic simplifications and the permission to donate food once it has passed the best-before date.

PREVENTING FOOD WASTE: A BRIEF REVIEW

There is a recurrent distinction in the literature between food loss and food waste (Parfitt, Barthel and Macnaughton, 2010; Manzocco et al., 2016; Thyberg and Tonjes, 2016). Food loss generally refers to edible material lost in producing, processing and preparing food, whereas food waste indicates all

food produced for human consumption, but then discarded or not consumed. The two terms partly overlap and do not provide a clear distinction between edible and non-edible material, which is, however, fundamental when it comes to designing policies for contrasting food waste.

With these shortcomings in mind, Garrone, Melacini and Perego (2014a) start with the concept of 'food availability' – that is, all food produced – and then distinguish that into either food scrap, surplus food or consumed food. Food scrap includes non-edible food, such as production-line leftovers at the manufacturing stage, damaged products below quality standards (e.g., melted ice cream), and non-edible parts of food (e.g., vegetable peel). Surplus food is instead edible food that is produced, manufactured, retailed, or served, but for several reasons ends up not sold or consumed by the intended customer. Finally, consumed food is the one delivered through the traditional market and consumed by humans. Following this distinction, policies contrasting food waste should target surplus food (either lost or wasted) and pursue two prevention goals: reducing total surplus and ensuring that most surplus will be recovered for feeding humans (and not to go to the landfill or be used for animal feed).

Beginning with the reduction of total surplus, related policies are varied and run the whole spectrum of policy instruments. Consumers are typical targets of awareness campaigns and education measures promoting new skills of food preparation, reuse, and storage (Hebrok and Boks, 2017). Similar effects can also be achieved in food services, also by nudging customers in order to induce less wasteful practices of displaying, serving and portioning (Kallbekken and Sælen, 2013). The remodulation of waste fees towards 'pay-as-you-throw' schemes is a typical negative incentive that can make producers and retailers change marketing and organizational routines in order to reduce disposal costs (Mena, Adenso-Diaz and Yurt, 2011; Garrone, Melacini and Perego, 2014b). Producers may also be the target of positive incentives, however, such as subsidies to encourage the introduction of new technologies like advanced packaging systems or selective fishing gears that reduce by-catch (FUSIONS, 2016b). Finally, regulation can support surplus reduction in several ways, by introducing new quality regulations in agriculture (FUSIONS, 2014) or new labelling standards (European Commission, 2018).

Although policy-makers are beginning to experiment with such a diverse mix of policies, determinants of food surplus are hard to address. Food has been wasted throughout all civilization, but in the past most wastage was for reasons not controlled by people, such as bad weather, deficient infrastructure, and lack of technologies (Schneider, 2013). Today, new technological, institutional and social drivers add to old motives and affect the behaviours of producers, retailers and consumers (FUSIONS, 2014). Growth in consumption (Thøgersen, 1996), low cost of food (Visschers et al., 2016), dietary transition towards healthy (and perishable) food (Parfitt et al., 2010), wasteful marketing

strategies (Aschemann-Witzel et al., 2015) and serving practices (Thyberg and Tonjes, 2016) are only some among the many determinants of surplus food.

Beretta et al. (2013) distinguish avoidable, possibly avoidable, and unavoidable losses. The first regards phenomena such as overbuying, overcooking, and poor storage, but also overproduction, unharvested crops, suboptimal processing, and unsold products. Possibly avoidable losses are those related to taste, aesthetic preferences, lack of demand and quality standards not regarding safety or health, but are nonetheless rooted in consumers' preferences. Finally, unavoidable losses involve mainly non-marketed food from production and processing notwithstanding the use of best-available technologies (such as in the case of seasonality and unpredictable demand fluctuations; Mourad, 2016).

One cannot fail to see that even the 'easy' case – avoidable losses – requires demanding technological, organizational and behavioural changes. If one adds the difficult cases, it is undisputable that – even with the introduction of rigorous prevention programmes – the amount of surplus food will nonetheless be considerable (Manzocco et al., 2016; Thyberg and Tonjes, 2016). This introduces the second goal of prevention policy, that is, ensuring that existing surplus is recovered and used for feeding humans. In the perspective of a systematic amount of 'unavoidable losses', in fact, policies supporting donation, recovery and redistribution are not residual instruments of inefficient production systems, but fundamental tools of food waste prevention.

In the case of donations, policies aim at either creating incentives or removing barriers to donations. Concerning the former, typical measures include VAT exemption on donated products (FUSIONS, 2016b), tax credits and tax deductions (FUSIONS, 2016a). As mentioned, fiscal incentives can be coupled with the remodulation of waste fees through pay-as-you-throw schemes, which can increase the economic advantage of donations over disposal (Visschers et al., 2016). Good Samaritan Laws are instead a typical way of removing barriers (Baglioni et al., 2017; Priefer, Jörissen and Bräutigam, 2016). Under such laws, donors' liability for donated products ends once non-profit organizations collect the food. The law works as a legal protection for donors who are not responsible for the consequences of the potential mismanagement of their products. Finally, another typical barrier regards limits on the types of food that can be donated. Regulations permitting donations of mislabelled food or food past its best-before date are good examples of enlarging the range of donatable products.

THE ITALIAN POLICY FOR PREVENTING FOOD WASTE: A BRIEF HISTORY

Italy has a rather long policy history of preventing food waste, with the introduction of the first incentives to donors dating back to the late 1990s and subsequent additions and improvements until the last reforms in 2016.

Concerning incentives, the first fiscal benefits were introduced in 1997, when Law 441 included donations among VAT-exempted operations. The same year, Law 460/1997 clarified that donations were not part of company profits and, in 1999, Law 113 established that donated goods were to be considered as destroyed, and hence suitable for a VAT deduction. Finally, a further economic incentive was provided in 2005, when Law 80/2005 established that donations could be partly deducted from taxable income.

Although the mix of incentives may appear rich, they are the same of goods gone unsold or destroyed, and hence donations do not enjoy a special fiscal advantage over disposal (PINPAS, 2015; Baglioni et al., 2017). Furthermore, Italian municipal waste fees are generally based on size and hence independent of the amount of food actually disposed of (or recovered). Interestingly, the 2016 reform introduced the possibility for municipalities to establish discounts on waste fees on the base of food donations, but both the novelty of the reform and the fact that only a few cities are introducing such discounts make it difficult to evaluate their effects.

A second relevant feature of the Italian food waste policy regards donors' liability for donations. In 2003, Law 155/2003 made a major leap, by establishing that – concerning conservation, transport, storage and usage of donated food products – non-profit organizations distributing food for free to disadvantaged people were to be considered equal to final consumers. It is a typical 'Good Samaritan Law', determining the legal responsibility of food distribution organization for the safety of donated food products and freeing donors from all liability subsequent to donations. Donors remain responsible for the production and transformation phases and have to donate safe products, but are protected if non-profit organizations misuse donations. Further, the equivalence to final consumers eliminated several bureaucratic burdens for non-profit organizations (which in their food-related activities have the same status of 'consumers' instead of that of professionals).

The law was considered fundamental in smoothing the donation process, especially for those products donated by supermarkets and canteens, which have shorter lives and need quick recovery. It is in fact no coincidence that it was right in 2003 that the biggest Italian food recovery and distribution charity – Banco Alimentare – could start Siticibo, a new programme of local recovery especially dedicated to supermarkets and canteens.[1] Following the law, also in

2003, Coop – a large cooperative of Italian supermarkets – started its corporate programme to prevent food waste.

In 2014, the Ministry of the Environment approved the National Plan for Food Waste Prevention (PINPAS), which contained ten priority actions for reducing surplus food (Ministero dell'Ambiente, 2014). Following the PINPAS, a consultation initiative was launched and a position paper was published collecting critical points and proposals for further reform (PINPAS, 2015). Among the several proposals for change, the most notable were the possibility to donate food beyond the best-before date, a streamlining of bureaucratic procedures, the possibility to have discounts on waste fees to account for donations and the inclusion of private organizations as possible recipients of food donations.

In the favourable context of the Milan Expo 2015 (which was dedicated to food), a new law including all the mentioned proposals was approved (Law 16/2016). Regarding the streamlining of bureaucratic burdens, it established that communications to the fiscal authority registering donations were to be sent once a month, as a monthly summary communication for all donations performed within the month. It was a striking simplification with respect to the former system, in which donors were obliged to produce communications for each single donation and with a five-day advance. Concerning the quality of donations, the law significantly enlarged the range of products admitted, including confiscated and mislabelled goods, and bread after 24 hours of its baking. Most importantly, the law introduced the possibility to donate food beyond the best-before date.

Although the implementation of the law is in its infancy, it has received an incredibly positive coverage by the media (Rubino, 2017), policy-makers (Gadda, 2018) and stakeholders (see the several comments in Toia, 2018), all claiming the almost immediate success of the policy. More reliable data is certainly needed for a proper appraisal of its effects, but an analysis of causal mechanisms can provide useful insights into how the policy works and how its design features may (or may not) be responsible for the claimed success.

A MECHANISM-BASED ANALYSIS OF FOOD WASTE POLICY

Policy programmes are always based on some causal hypothesis on how design features can change a certain undesirable condition. Such causal logic is usually implicit and not fully articulated in the policy statute. In its basic form, the logic resembles an if-then model, in which the known factors are design features and desired outcomes (e.g., *if* design features, *then* desired outcome).

In the food waste policy described above, the design features are mainly of three kinds: bureaucratic simplifications, economic incentives, and permission

to donate new products. In this case, a basic if-then hypothesis would read as follows: *if* bureaucratic simplifications and economic advantages are provided and new products are admitted to donation, *then* more food will be donated, recovered, and redistributed for human consumption.

The logic makes immediate sense. It is simple, direct, and there are apparently no holes in the causal chain. It has, however, one major miss: there is in fact no explicit mention of the actors of the policy. Design features are supposed to act on certain actors who are supposed to react by increasing donations, recovery and redistribution. These actors nonetheless have their goals, preferences, routines and skills that interact with the design of the policy and may impede or reinforce the expected change of behaviour. Even when the policy may look incredibly advantageous and actors' reactions are almost certain, in fact an explicit in-depth analysis of how actors respond to design features may reveal unexpected interactions and unpredicted causal paths.

In the case of food waste, design features should ensure that former donors donate more food, that new donors start donating, and that non-profit organizations recover and distribute donations. In order to do so, they should trigger a certain causal mechanism that changes actors' behaviour in a way congruent with the goals of the policy. In this respect, the correct prediction of the causal mechanism that – given certain contextual conditions – may trigger such response is fundamental. In fact, it is in starting with this prediction that designers should build their designs. These should in fact include a hypothesis of the possible causal interaction between design features, actors and context, understanding which causal mechanisms could work, which design features may trigger that mechanism, which actors respond and how, and how contextual conditions may support or hinder such response.

The following analysis is divided into two sections that investigate two simple design features introduced by the 2016 reform: bureaucratic simplifications and the possibility to donate food after the best-before date (BBD). The two are supposed to work by triggering trivial causal mechanisms. Bureaucratic simplifications cut the costs of donation and hence make donors increase or start donations. The BBD innovation expands the types of products that can be donated and hence enlarge the set of actions available to donors, who can eventually donate all the surplus that they were previously forced to waste. Both mechanisms make immediate sense, and it seems almost self-evident that those design features will trigger those mechanisms and produce the reactions described. Unfortunately, however, their causal logic is only partially correct and this is mainly because the causal power of actors' responses and context conditions have been largely disregarded.

CUT THE COSTS AND DONATIONS WILL GROW

Bureaucratic simplifications are supposed to trigger a simple mechanism of cost–benefit calculation. As long as the benefits are larger than the costs, so the logic goes, donors will prefer donating and more food will be recovered and redistributed. Cutting the costs is hence a fundamental lever for increasing donations and the 2016 reform did so by profoundly streamlining procedures for fiscal communications. Although everyone would generally agree with this logic, several qualifications are in order, mainly related to two elements: the diversity of donors and the recovery ability of charities.

First, one should consider that donating is costly. Donors have to change their procedures for product disposal, make an agreement with a non-profit organization (or organize donations case-by-case), provide a space for storing donations and have some employees working on the donation process (i.e., selecting and storing products). Also, if donors want to enjoy existing tax benefits, they have to record their donations and send communications to the fiscal authority. Briefly put, a procedure additional to that of disposal should be introduced and this will be more or less expensive depending on the quality of donations. In fact, costs will rise if donations need special management (e.g., refrigerators) or if they include one or a variety of products (i.e., if different management procedures are required for the products to be donated).

Combining these elements, two opposite prototype donors can be imagined. At one extreme, big manufacturing companies donating large amounts of homogeneous products will incur less costs and have all the management and administrative capacity to perform donations. At another extreme, small retail shops with small amounts of heterogeneous surplus will have high costs and a far smaller capacity to manage the donation procedure. Accordingly, a 2016 study by Coop reported that, even if 75 per cent of its affiliates participated in the corporate programme of donations, participation depended significantly on shop size, with 100 per cent of hypermarkets engaged in the programme and much lower participation rates for smaller shops (Coop, 2016). Similarly, when surveying the management of food surplus by hotels, Pirani and Arafat (2016) reported that the main reason for not donating was that surplus was not enough to justify initiating a donation procedure.

Interestingly, the new fiscal communication – quite a simple design feature that uniformly reduces costs – interacts differently with such diverse targets. As mentioned, before the 2016 reform, there was the need for fiscal documents to be communicated for each donation and with a five-day advance. It was a system made precisely for big donors, who could bear all the logistic and administrative costs and could plan large one-off donations in advance. In this respect, the introduction of monthly summary communications – although

certainly beneficial – was not particularly relevant for such donors who could keep on with the former system.

Instead, the new procedure was apparently decisive for small operators with diversified surplus, who have neither the capacity nor the quality of surplus that could permit compliance with the former procedure. Storing different products for donation in a little supermarket and keep them there for five days was simply impossible. In this respect, the new procedure removed a fundamental barrier to donations. Not surprisingly, in fact, in commenting on the 2016 reform, the Coop manager recognized the fundamental role of bureaucratic simplifications, which permitted a more complete, systematic and consistent donation activity, in particular for those small supermarkets that could not comply with previous procedures (Bruzzone, 2018).

Let us now assume that the policy works and our small supermarket decides to start donating its surplus. In order to do so, it has to contact a non-profit organization and make an agreement for planning the collection of its surplus. The policy has no design feature directly targeting food redistribution organizations, apparently assuming that new donations will automatically be recovered.

However, the recovery ability of charities is a fundamental point in the analysis of the causality of bureaucratic simplification. Increased donations will increase costs for charities, and these costs also depend on the quality of such donations. Garrone et al. (2014a) talk of a degree of recoverability that depends on management intensity (such as maintenance or transportation) and intrinsic recoverability (such as shelf life). Charities will not be indifferent to the costs and quality of donations, but will obviously prefer food surplus with high intrinsic recoverability and low management intensity.

In this respect, the big manufacturing company – our 'easy donor' – also permits easy recovery. It provides a great quantity of homogeneous food through large one-off donations and entails low management costs for charities. Small donors with variable products offer instead low amounts of surplus that require high management costs, such as selection activities and higher costs of transport. As confirmed by Alexander and Smaje (2008), a back-of-store collection – necessary to engage small retailers – imposes considerable costs and is likely to yield poor-quality donations (i.e., varied and with short shelf life).

Following this reasoning, the causality of bureaucratic simplifications depends not only on donors' costs and capacity, but also on the capacity (and will) of charities, a capacity that the policy apparently considers as a given. The organization of efficient local networks of collection and redistribution, possibly with neighbourhood hubs and just-in-time and km0 (zero kilometre) recovery and delivery, is fundamental for collecting small donors' surplus. However, it is not necessarily given in any context. Although bureaucratic simplifications may actually help in removing barriers for small donors, there is no design feature in the policy that can make back-of-store recoveries more

appealing. Examples of auxiliary design features that may conserve the mechanism at its full working capacity include direct support to charities (as established in some Italian regional laws on food donation) or partnering charities in the creation of local networks (as is now being experimented with in Milan).

To conclude this section, although bureaucratic simplifications are supposed to work by cutting costs, they do not so in a linear and straightforward way. Depending, in fact, on donors' capacity, the mechanism can be largely neutralized (as for big manufacturers) or magnified (as for small retailers). Moreover, the fundamental interaction with the capacity of charities may ultimately hamper the full working capacity of the (possibly) activated mechanism.

THE SHELF-LIFE GAME AND THE REPUTATION GAME

The second feature of interest is the possibility of donating food once it has passed its best-before date (BBD). Again, the causal mechanism supposedly triggered is simple. Although it may not be at its best, food after the BBD is edible and safe, but unmarketable. Opportunity to donate this food would possibly divert large amounts of food from disposal to donation, extending food life beyond its market value. In fact, thanks to the new rule, donors will – at last – be able to donate all the food that they were unfortunately forced to waste following previous regulations.

A preliminary test of the causal relevance of this design feature relates to the actual amount of food that is disposed of because it has passed the BBD. Such data are not directly available, but some information can be extrapolated by looking at the sources of surplus food produced by potential donors (Garrone et al., 2014b). For manufacturing companies, food surplus is generated mainly because it has reached the internal sell-by date (66.9 per cent of total surplus), which is normally set at one-third of the entire shelf life of the product. Other reasons for food surplus are non-compliance with commercial standards, such as aesthetic criteria (12.2 per cent), product refusal (9.1 per cent), packaging non-compliance (5.7 per cent) and returns of unsold products (6.1 per cent). Only in this latter case (and partly in product refusal for the chilled segment), surplus would include food beyond the BBD. All other sources of surplus are made of food well below that date and hence perfectly available for high-quality donation.

Retail distribution centres have the following dynamic of food surplus generation: internal sell-by date reached (48.7 per cent), returns of unsold products (28.1 per cent), product non-compliance (12.8 per cent), packaging non-compliance (10.4 per cent). No reliable quantitative data were available for retail stores, however, but the main reason reported was related to sell-by date (in a different study the same authors also mention package damages; see Garrone et al., 2014a). Although naturally provided with a shorter life with

respect to surplus in manufacturing companies, most of these products will have not passed the BBD.

Overall, these results signal that the supply of food beyond the BBD may be relatively small, so limiting the scope of the new rule. One may certainly agree that this is not a major issue and that the more food is recovered, the less resources are wasted and the more disadvantaged people may be helped. Let us see then how donors and recovery organizations use this rule in practice.

A possible hypothesis is that the two play a 'shelf-life game', that is, a sort of zero-sum game in which donors and charities are one against the other. Since donations are a loss and a missed revenue, donors would try to sell their products until the very last day of market utility – that is, until the BBD. On the opposite side, non-profit organizations will try to recover food as early as possible, in order to have time for redistribution and to deliver high-value food to beneficiaries. According to the game, donors would respond enthusiastically to the new rules, whereas charities will fear to receive lower-quality donations and may largely prefer not collecting this food. Let us see how the game works in practice.

Concerning retailers, the outlined strategy is possibly correct. In studying retailers' practices, Alexander and Smaje (2008) revealed that retailers followed a normative hierarchy in which donations were rated fifth after 'sell to customer', 'sell to customer at a reduced price', 'use in staff restaurant', 'sell to staff'. Promotions for food close to its BBD or reuse options of damaged food (such as for preparing new products like chopped fruits) are now frequent strategies in retailing, which certainly help in both reducing waste and extracting profits from potential surplus. When the BBD has finally come, the product is donated or disposed of.

For manufacturers, a completely different strategy seems to be at work. In fact, manufacturers have their names on donated products and hence are particularly sensitive to the reputational consequences of donations. They fear that donations backfire and adversely affect – instead of enhance – their reputation (Baglioni et al., 2017). This, in fact, can happen for several reasons. In the worst case, donated food could be mismanaged and harm beneficiaries; in the best, news that the company gives its 'leftovers' to disadvantaged people may certainly not enhance its social image. Interestingly, notwithstanding the possibility provided by the law, manufacturers will resist the new rule and avoid donating food after its BBD.

As De Boeck et al. (2017) put it, the interface between donors and non-profit organizations is key in this respect, since the development of a trusted relationship could be fundamental for smoothing the donation process. Interestingly, in the case of Banco Alimentare – the largest food redistribution organization in Italy – not only do manufacturers not provide food past the BBD, but they also make periodic inspections to the warehouses of the charity in order to ensure that their products are managed according to the highest standards.

Cognizant of the importance of conserving donors' trust, Banco Alimentare also performs several inspections of the canteens and associations to which it provides food, to be sure that no mismanagement may occur and donors' reputations are kept intact. Notice, however, that such professional management is not to be expected of all food redistribution organizations, so that one may assume manufacturers to be generally very cautious about their donations.

Concerning how charities will respond to the new rule, consider first that recovered surplus can be used either for preparing meals in social canteens or for preparing food aid packs. In order to provide high-value support to disadvantaged people, organizations distributing packs collect only food with a long shelf life, and hence would not accept products after the BBD. These organizations, moreover, incur reputational risks similar to those of manufacturers, since distributing food past the BBD is seen as potential damage to the image of the charity (Lopasso, 2017). For organizations preparing meals, the BBD is not visible and hence more flexibility is to be expected. However, the shorter the shelf life, the more capacity is needed on the part of charities, who will have to set up a quick – if not just-in-time – collection and delivery. Again, such capacity is not necessarily available for all charities and this may hamper the actual utility of donations of food after their BBD.

To conclude this section, as simple as the mechanism may appear, its causal logic is possibly flawed. The market for food beyond the BBD is in fact limited, because of lack of both its supply and demand. While retailers may (marginally) shift their donation dates thanks to the new rules, manufacturers will refrain from donating food that could possibly damage their reputation. Charities will not be particularly favourable either, because of the preference for high-value food, risk aversion, and possible lack of capacity. As shown in the case of Banco Alimentare, donors and charities do not play an adversarial 'shelf-life' game, but a largely cooperative reputational game.

CONCLUSIONS

As simple and predictable as the two design features might have appeared at the beginning, they revealed a complex causality. Unforeseen actors' preferences, their (lack of) resources and some relevant contextual conditions interact with the design of the policy and alter its ability to trigger the hypothesized causal mechanisms. The analysis has certainly great explanatory power. It highlights how features such as the capacity of donors, the recovery skills of charities, and the reputational risks incurred by both actors may importantly affect the implementation of the policy. These elements are not directly under the control of designers, but they are nonetheless fundamental for ensuring that design features successfully trigger a causal mechanism and produce the expected changes of behaviour.

Following this reasoning, the first advantage of an approach based on causal mechanisms is that it permits focusing designs on a fuller understanding of the causal relations actually in place. The analysis can in fact provide a useful guideline for designers, by suggesting by which mechanism actors might change their behaviours and highlighting which design features and contextual conditions may trigger and support that mechanism. In this respect, in the two examples described above, some important causal factors were certainly underestimated, following the faulty assumption that the design of the policy would have been sufficient to change actors' behaviours.

As well as helping in the crafting of new policies, this analysis would also show how existing designs may be complemented and reformed, for instance by adding new design features that may be needed in order to support and conserve the triggered mechanisms. Concerning the case of food donations, the creation of local networks of collection and delivery seems a promising auxiliary feature that may help sustain the behaviours triggered by the hypothesized causal mechanisms. Such a local network could, in fact, support both the recovery from small donors and the quick use of food beyond its BBD for canteens preparing meals. Similarly, the analysis shows that the causal mechanism of the BBD rule is largely neutralized by the reputational worries of both donors and charities. In this case, designers may wonder which auxiliary design features might help in protecting their reputation (and not only their legal responsibility, as both the BBD and the 'Good Samaritan Law' do).

A third point is the ability of such an approach to provide suggestions on the actual working of the policy. Outcomes of food waste policies are difficult to investigate, since reliable data are largely absent, there are few evaluations and many of these interventions are relatively young. It is no surprise that improving measurement is a typical claim in any proposal for reforming the policy. Interestingly, however, the analysis provided here can give several insights into appraising whether the policy is working. When analysing impacts, it is almost a conditioned reflex to state that correlation is not causation and that correlations should be supported by a causal mechanism. Investigating such mechanisms can provide interesting insights into the possible impacts of the policy, showing which results are likely, which are not, and which design features would be responsible for those impacts.

If our analysis of food waste policy is correct, bureaucratic simplifications will mostly work for small donors and depending on the collection capacity of charities. The rule admitting donations of food past the BBD would instead face strong limits in its implementation, because the supposed causal mechanism is not supported by congruent behaviours by most implementers. Notice that we are not saying that the 2016 reform does not deserve the positive coverage reported above. However, our analysis reminds us to be cautious since the actual operation of the mechanisms supposedly triggered by two of its most

prominent design features have revealed severe limitations. In this regard, for instance, the special context in which the reform was born – that is, the major focusing event produced by the Universal Exposition, 'Feeding the Planet, Energy for Life', held in Milan in 2015 – might probably be worth investigating for its effects in raising awareness and provide a strong springboard that possibly pushed the policy beyond the scope of its sole design features.

NOTE

1. From its start in 2003, thanks to Siticibo, amounts of recovered bread, fresh fruits, and prepared meals kept increasing with impressive growth rates, with fresh fruits – a food that is normally hard to recover – passing from 17 425kg in 2004 to 156 758kg in 2012 (Banco Alimentare, 2013).

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5. How neglecting policy mechanisms can lead to policy failure: insights from public–private partnerships in India's health sector

Altaf Virani and M Ramesh[1]

1 PUBLIC–PRIVATE PARTNERSHIPS AS POLICY INSTRUMENTS

Public–private partnerships (PPPs) have emerged as popular instruments for delivering public services to citizens. Functions that governments were formerly expected to fulfil are increasingly being passed on to the private sector to operationalize the public mandate. PPPs serve as vehicles for such transfer of functions. They are essentially medium- or long-term arrangements between the government and private agencies for the development of public infrastructure or the provision of public services by the private sector with *clear* agreement on *shared* objectives (World Bank Group, 2014). They can exist in a range of sectors, each subject to different legal, regulatory and investment considerations, and can assume a variety of forms with varying degrees of involvement of the private partner.

Proponents of PPPs have argued that traditional organization of public services is often and increasingly inefficient and ineffective. Governments, especially in developing countries, lack the capacity to deliver good public infrastructure and services. Weak governance institutions and practices, poor information and performance measurement systems and weak accountability arrangements have been identified as hurdles to the success of large-scale public provisioning of goods and services (Fritzen, 2007). It is argued that the introduction of professional private sector management can potentially infuse efficiency and productivity in the management of public works and services, and enhance the ability of governments to effectively deliver on their civic responsibilities (Borins, 1995). In the healthcare sector, contracting out of health services to private providers has been found to boost performance in

terms of higher outputs, widen the range of services and improve the quality of healthcare provided (Lönnroth, Uplekar and Blanc, 2006; Liu, Hotchkiss and Bose, 2008; Bisht and Virani, 2016).

Critics, however, have pointed to the drawbacks of PPPs, particularly in social policy. Mills (1998) and Liu et al. (2008) find that PPPs lower the costs of production for the private provider, but have questionable effects on overall costs of service provision for the government. They have also been known to suffer from poor transparency and democratic accountability, and grievous issues arising out of poorly designed contracts (Daniels and Trebilcock, 1996; Boase, 2000; Morgan and Campbell, 2011). PPPs have blurred the boundaries between the market and the state. This fragmentation of role and authority has had serious ramifications for the comprehensiveness of services provided by the government, the governance of such services and their accountability to citizens (Baru and Nundy, 2008). Governments are accountable to citizens in ways the private sector is not and cannot abnegate their responsibility to protect their citizens (Moe, 1994). There are also economic arguments for why the provision of public goods (and the ownership of public assets) should rest with the government, especially in matters that are central to the government's mandate, and where the private sector has few shared objectives (Besley and Ghatak, 2001; Hart, 2003; De Bettignies and Ross, 2004; Iossa and Martimort, 2015).

Nevertheless, PPPs are legitimate albeit contentious instruments of public policy. Their efficacy depends on their design and deployment in promotion of public interest. In this chapter, we explain how approaching PPP design from a mechanism-based perspective promotes more effective PPP interventions. We consider issues of policy coherence, contract design, policy capacity and regulation that affect the nature of the interactions that are triggered by PPPs. We then examine these issues in the context of the policy framework for healthcare PPPs in India and the experience of three partnership projects. Based on this review, we identify common design failures that need to be addressed to make PPPs more effective. We argue that the failure of PPPs is essentially a consequence of weak design that stems from poor understanding of the conditions that are required to make them work. Recognizing the causal pathways involved in how PPPs produce their effects is crucial for instituting design features that can lead them to be successful.

2 A MECHANISTIC APPROACH TO PARTNERSHIP DESIGN

The aim of policy design is to develop effective policy solutions that can potentially address the problem at hand in a given socio-political context. The task is inherently multifaceted and involves a multistep problem-centred approach (Figure 5.1).
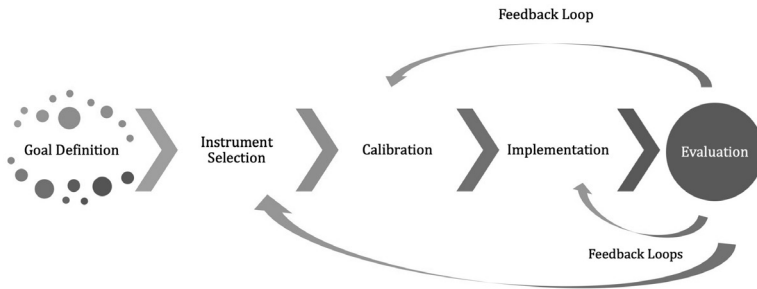
Figure 5.1   The policy design process

The key is to identify what end-state one wants to achieve, and reverse engi-
neer a design that can potentially lead to the achievement of that end-state
(Maskin, 2008). Because policy mechanisms constitute the processes through
which policies produce their effects, policy failure can be construed as failure
to discern and leverage key mechanisms to inform the selection and deploy-
ment of instruments that can facilitate or nudge actors to behave in ways that
are conducive to the achievement of overarching policy goals.

   The policy design process entails a careful consideration of the following
questions:

- What is the nature, extent and root cause of the policy problem to be tackled?
- What would a satisfactory resolution look like?
- What are the tools available to the policy-maker to deal with the problem?
- How does a given instrument affect change?
- What is the cost–benefit calculus?
- How effectively can the instrument be deployed?
- To what extent can contextual economic and political variables be purpo-
  sively manipulated to enhance effectiveness?
- Based on these considerations, which is the instrument best suited to
  resolve the problem in a given context?
- How would one determine policy success or failure?
- How would evaluation results affect next steps in terms of policy continu-
  ation, course correction or termination?

These same questions are relevant to PPPs. In practice, however, their use is
often based on misconceptions about the capabilities and limitations of the
instrument. There is a tendency to prescribe them as a universal remedy for
government failure, without attention to the conditions required for making
them work. While they are politically attractive solutions in the short term,
their complexity and long tenure make it difficult to ensure their designs are
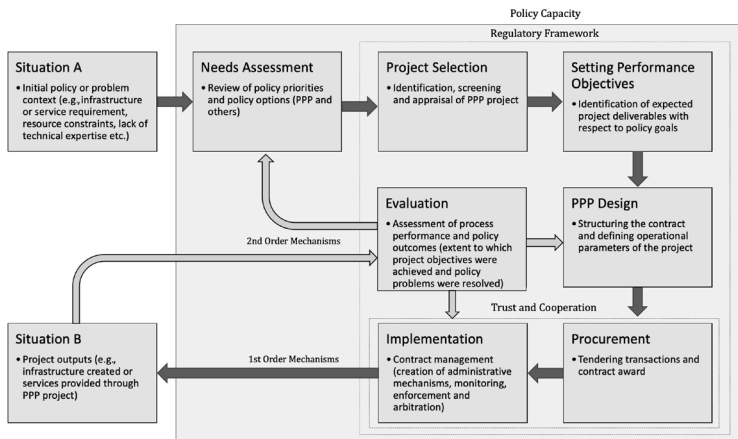effective (Vining and Weimer, 2016). A piecemeal approach would yield no

Figure 5.2   A model of causal mechanisms in PPP policy

or minimal efficiency gains and produce undesirable outcomes (e.g., reduced government control and discriminatory access) (Crowe, 1998; Fourie and Burger, 2000). Figure 5.2 presents a simplified causal model to help identify various elements in the PPP cycle that affect outcomes. What follows is a reflection on the levers that policy-makers can modulate to channel causal interactions in the desired direction.

2.1   Performance Goals

It is common for governments to not explicitly outline the objectives of PPP projects. Failure to agree on what constitutes success can cause partners to work at cross-purposes and lead to accountability problems (Teisman and Klijn, 2001, 2002; Hodge and Greve, 2010, 2011). It is important to align the performance objectives of PPP projects with their larger policy goals (Trivedi, 1989; Yuan et al., 2009) and to recognize that PPP goals are primarily social-centric. Notions of performance must therefore encompass the expectations of citizens, and display traits that citizens naturally expect from providers of public services in terms of equitable access, democratic accountability, oversight and recourse to grievance redress (Behn, 1998, 2001; Watson, 2003).

2.2   Contract Design, Trust and Cooperation

The partnership agreement or contract provides the legal foundations for the partnership and specifies the operational triggers that activate the causal

interactions that determine PPP outcomes. It typically spells out the objectives of the partnership, the *modus operandi* through which the project will achieve the objectives, the rights and obligations of each partner, the risk-sharing arrangement, the manner in which performance will be ascertained, the system for handing rewards and penalties, and the process through which disputes will be addressed, adjudicated and remedied.

PPPs can potentially lead to loss of government control over the quantum, quality and accessibility of services provided (as some anecdotal experiences show), unless these aspects are clearly incorporated in the contract (De Bettignies and Ross, 2004). Yet, literature on the theory of contracts suggests that most contracts in the real world are simple and inherently incomplete (Hart and Moore, 1988, 1999; Tirole, 1999; Eggleston, Posner and Zeckhauser, 2000). It is practically impossible to specify all contingencies in a contract, due to cognitive limitations, lack of full information, and prohibitive costs involved in implementing and monitoring such contracts. Incomplete contracts create avenues for partners to engage in regulatory opportunism (Iossa and Martimort, 2009), and can lead risk-averse partners to underinvest, resulting in suboptimal outcomes (Grossman and Hart, 1986).

Task bundling (such as concession of both construction and operational control to a single private player) is one method to inhibit underinvestment by the private partner, when there are clear benefits that can be accrued in the long run from higher initial investments (Martimort and Pouyet, 2008). It also gives the government an alternative means to hold the private partner accountable if performance objectives are difficult to operationalize or measure (Hart, 2003). However, this can be challenging because service quality outcomes pertaining to complex service environments such as healthcare, are more difficult to measure and monitor than those for civic infrastructure projects like roads and airports or public utilities like water and electricity plants.

In such situations, the question of who holds ownership becomes important because ownership provides residual control in matters not directly addressed by the contract. Because governments have the primary welfare mandate, and ostensibly value policy objectives more than the private partner, it is imperative that ownership of public assets rest with the government (Besley and Ghatak, 2001; Iossa and Martimort, 2015). One exception might be partnerships with non-governmental organizations (NGOs), which, given their philanthropic character, might be at least as sympathetic to social justice considerations, and perhaps more committed than the government (Besley and Ghatak, 2001).

These issues highlight the pitfalls of a purely transactional approach to contract design. The test of a good contract is its ability to keep stakeholder interests aligned (Evans and Bowman, 2005; Ni, 2012). This often requires contracts to be renegotiated from time to time, in light of new information and experiential learning (relational contracting). Therefore, while being as

explicit as possible, contracts must offer sufficient flexibility to allow for the management of unanticipated risks, fluctuations in the environment and other externalities. Such ongoing management requires trust and cooperation among partners to keep them engaged in long-term collaborative behaviour that is mutually beneficial (Darwin, Duberley and Johnson, 2000).

2.3   Regulatory Infrastructure and Policy Capacity

One of the ironies that Fourie and Burger (2000) point to in their economic analysis of PPPs is that while governments frequently cite their lack of management capacity as one of the reasons for involving the private sector through PPPs, they overlook the fact that designing good contracts and effectively managing partnerships require higher levels of capacity (Wu, Ramesh and Howlett, 2015). Government officials often do not have the required knowledge or expertise to design effective partnerships, monitor and evaluate performance, and hold partners accountable (Ni, 2012). Policies meant to provide the regulatory framework for PPP projects are often vague and generic in their prescriptions, or simply non-existent. Such policies are necessary to clearly articulate the *raisons d'être* for PPPs, their sector-specific relevance, norms and processes for choice of projects and selection of partners, delivery standards, expected outcomes and governance structures. Istrate and Puentes (2011) and Casady (2016), for instance, have documented the positive effects of creating competencies within government departments to manage PPP processes in countries like Canada. Such initiatives can help in preventing second-order governance design failures, arising from the inability of policy-makers to effectively deploy what otherwise might be a perfectly sound instrument (Howlett and Ramesh, 2014). Regulatory and policy capacity are among the conditions necessary to catalyse the positive effects of PPPs, and therefore critical components in the mechanistic chain.

3   PUBLIC–PRIVATE PARTNERSHIPS IN INDIA'S HEALTH SECTOR

3.1   Policy Background

Since the onset of economic liberalization in 1991, India's policy-makers have used PPPs as one of the ways to overcome the challenges of its underfunded, poorly managed and largely overwhelmed public health system (HLEG, 2011). The general direction of government policy has seen a marked reduction in public expenditure on direct health infrastructure creation, and encouragement of private investment to bridge the gap.

The central government and many state and local governments began to formally articulate plans and policies for promoting PPPs in the health sector during the 1990s (Bhat, 2000). Early attempts were limited to simple contracting out arrangements for ancillary services such as laundry, house-keeping and catering in public hospitals. In recent years, the private sector has been involved in providing outsourced diagnostic services, generic drugs and surgical products, rural obstetric services, and secondary and tertiary care under government-sponsored insurance programmes. In more close-knit arrangements, the government has engaged the private sector in the actual construction and management of public health infrastructure. Many state and local governments have formulated policies for the operation of dysfunctional public health facilities like Primary Health Centres (PHCs), diagnostic centres and secondary and tertiary hospitals, and for the creation of new health facilities by private players in return for financial incentives (Planning Commission, 2012).

Projects of this latter variety have been particularly prone to perverse provider behaviour, and in many cases have restricted public access to healthcare services. Nonetheless, PPPs continue to be a favoured policy approach for expanding public health services in underserved areas, particularly for secondary care (Planning Commission). The Niti Aayog (Policy Commission) has recently recommended the PPP model for the provision of medical services in cardiology, cancer and pulmonology by the private sector in select district hospitals in Tier 2 and Tier 3 cities.

3.2   Policy Approach

The government has taken a myopic view of PPPs. Their implementation illustrates many of the same design concerns mentioned earlier in this chapter. The problems are compounded by India's federal structure, which impedes coherent deployment. PPP projects are typically commissioned by state and local governments based on their respective priorities, service requirements, fiscal conditions and political considerations. Only about a third of all projects are implemented by the central government (Hans, 2017).

In the health sector, the National Health Mission (NHM) has identified PPPs as a supplementary strategy to achieve India's public health goals (MoHFW, 2013), but there is little clarity about what challenges are expected to be specifically addressed through their use (e.g., financing needs, staff shortages, lack of management expertise etc.), and how this intent is to be operationalized. In the absence of such details, most projects are fragmented standalone initiatives operating in policy silos, decoupled from macro sectoral policies, unsynchronized with other policy interventions, and unsupported by systematic evidence on their effectiveness. Case study evidence from some of the existing projects suggests that project objectives are seldom properly identified, expected utility

is rarely assessed, norms for service delivery are weakly specified, implementation processes are non-transparent, and institutional capacity to manage and monitor contracts is limited (Bhat, 2000; Raman and Björkman, 2009).

Of late, exclusive policies for the implementation of PPPs have been formulated in some sectors (e.g., housing development). In other cases, PPPs have been incorporated within existing sector strategies for developing certain classes of infrastructure (e.g., Metro rail projects). However, most PPP projects still operate outside the purview of any formal policy or governing institution (Hans, 2017). A National PPP Policy was drafted as a guiding framework in 2011 but is yet to be enacted (DEA, 2011). Efforts have mainly focused on the following elements: (1) provision of financial support to encourage private investment in public infrastructure development; (2) creation of fast-track appraisal and approval procedures; (3) guidelines for vetting project proposals, and for awarding and implementing contracts; and (4) state-level capacity building through training, technical assistance and the creation of PPP Cells (DEA, 2017). While the actual status of these initiatives is unclear and beyond the scope of this chapter, there are clearly attempts being made to streamline PPP processes, optimize outcomes (in terms of cost savings, fresh expertise and new technologies), and promote accountability by curbing the inclination of state governments to enter into ad hoc concessionary arrangements without competitive bidding.

However, this approach fails to connect process strengthening efforts to the big picture. Its emphasis is lopsidedly on creating a business-friendly investment climate, reducing transaction costs and incorporating global best practices in procurement, all of which, while critical, are not sufficient for policy success. There is acknowledgement of the need to ensure that projects benefit end users, but this concern is not reflected in policy design or in the norms for appraisal and evaluation, which is contrary to design logic.

In addition, current policies are oriented towards *hard* infrastructure projects where the rationale for PPPs is easier to justify, objectives are well defined and assessments more straightforward, as against *soft* service projects where the policy goals are nebulous and their linkage with stated deliverables is unclear. Recommended templates for social sector PPPs such as hospitals, diagnostic centres and medical colleges are fairly generic with no sector-specific guidelines or policy inputs.[2]

Last, there is no unified authority or coordinated interagency mechanism for the regulation of PPPs in the new framework. The nodal agency in many states is an Infrastructure Development Board or PPP Cell that has technical competence to oversee procurement and contract management processes, but little sectoral expertise. For substantive regulation of core PPP activities (e.g., healthcare delivery, medical education etc.), projects are subject to sector-specific or issue-specific line agencies (e.g., State Departments of

Health, Medical Councils etc.) that have limited mandates and little expertise in designing and managing PPP projects. Such fragmentation of authority impairs the effective deployment of PPPs as a health sector strategy. Mahalingam, Devkar and Kalidindi (2011) have found similar coordination issues in water and sanitation projects, which indicates a problem with the general policy approach to PPPs, rather than a sector-specific issue.

3.3   Three Cases of Design Failure

We briefly examine the experience of three PPP projects that deal with the provision of hospital-based secondary and tertiary care services in three Indian states: Maharashtra, Karnataka and the National Capital Territory of Delhi. The cases involve different contracting arrangements and a range of concessionary benefits. Because there are no standardized evaluations, and because the original sources are wide-ranging in the type and quality of information they provide, there are some differences in the different aspects discussed across the three cases.

3.3.1   SWAN Municipal General Hospital[3]
The SWAN Municipal General Hospital project in Mumbai (Maharashtra) was conceived by the Privatization Initiative Cell of the Municipal Corporation of Greater Mumbai (MCGM) as a part of its campaign for redeveloping dilapidating civic amenities, including government peripheral hospitals and maternity homes, through PPPs. Given the high cost of setting up new infrastructure and upgrading existing facilities, the government had permitted private players to develop such amenities, in return for floor space (Urban Development Department, 1991; Privatization Initiative Cell, 2000). This allowed the government to develop public facilities without the need to acquire land under private ownership and any additional financial burden. The prime real estate locations of public hospitals were crucial considerations in the government's decision.

SWAN Hospital was the first government health facility that was brought under this new regime. It was originally an 86-bed maternity hospital used for obstetric care by women from the nearby slums. By the mid-1990s, its bed strength had reduced significantly due to negligence and lack of public funding. A state-owned power company (SWAN) offered to upgrade the hospital to a 100-bed secondary care hospital, in return for subsidized healthcare for its employees. Because the government was unable to meet the operational costs once the new facility was constructed, a charitable trust (CT) was brought in after a cursory review of experienced NGOs for operating the facility on *caretaker* and *no-profit-no-loss* basis for 30 years under a tripartite agreement in 2002. The allotment of prime land without lease rent reduced the CT's capital expenditure and shortened the project's gestation period. The CT also

received tax benefits and subsidies from the government and was permitted to build additional infrastructure and provide new medical specialities to private clients. In return, it was required to reserve 40 per cent outpatient and 33 per cent inpatient facilities for poor patients and provide them selected medical services at nominal charges set by the government. Patients were required to pay higher private charges for accessing services not covered by the agreement.

The effective quantum of services for poor patients was grossly deficient.[4] Many in the surrounding communities were unaware of their entitlements and reported experiencing stringent gatekeeping by the security staff. There have been allegations of malpractice, overcharging, denial of care and non-adherence to prescribed allocations. Government authorities occasionally cautioned the hospital, and issues were often settled through negotiation but with little long-term resolution. Since certain clauses in the agreement were ambiguous and lent themselves to different interpretations, and also because service obligations were fairly limited in scope, the lacunae allowed the service provider to argue that reservation targets had been consistently met, even though healthcare access for the general population had clearly declined. The government had little supervisory control over hospital operations and no effective mechanism for addressing patient grievances. This encouraged a system of political patronage and conflict, creating avenues for local politicians to get involved in routine administrative matters and pressure the management in ways that were obtrusive and inimical to the smooth functioning of the hospital.

After over a decade's partnership, the government issued an eviction notice to the hospital in 2014 for violating structural norms and for denying care to patients, which was legally challenged. The notice was later withdrawn and the issue was mutually settled out of court.

3.3.2   Rajiv Gandhi Super-Speciality Hospital[5]

The 350-bed Rajiv Gandhi Super-Speciality Hospital (RGSH) in Raichur (Karnataka) was set up as a joint venture of the Government of Karnataka and the Apollo Hospitals Enterprise Limited (AHEL), a public listed company that owns and operates a chain of hospitals, clinics, diagnostic centres and pharmacies. It was initiated with seed funding from the Organization of Petroleum Exporting Countries (OPEC) with the objective of providing quality super-speciality services at low cost to people in northern Karnataka. The government began construction in 1997, and unsuccessfully tried to operate the hospital for a year before deciding to invite a non-profit private sector organization for managing the hospital. A service agreement was signed in 2001 between the Department of Health and Family Welfare (DHFW) and Apollo Hospitals to run the hospital for an initial period of ten years.

The government made huge capital investments in the form of land, hospital buildings, medical equipment, and infrastructure such as roads, power, water and other utilities while Apollo provided management expertise and personnel. Under the contract, Apollo was permitted to generate revenue from user fees and charges for medical services to patients above the poverty line. The government would reimburse all expenses incurred towards the provision of basic medical services to patients below the poverty line. It also agreed to compensate the anticipated losses for the first three years, to incentivize the service provider to start operations in the predominantly rural district and reduce the financial risks. Starting from the fourth year, Apollo was allowed to retain 30 per cent of the net profit. In case there were no profits in a given year, the government was required to pay a service charge of up to 3 per cent of the gross billing as payment for services. Apollo was responsible for all operational matters such as complying with medico-legal requirements, payment of utility tariffs and maintenance of hospital buildings.

An internal evaluation by the government concluded that the project had suboptimal outcomes and had failed to achieve the levels of utilization required to sustain operations. The hospital was unable to capitalize on government-sponsored insurance schemes to generate revenue and attain self-sufficiency. This was compounded by the failure of the government to fulfil its obligations for maintaining equipment and other civic facilities, as well as for the timely disbursement of funds. Shortage of medical equipment and specialists led to the suspension of some speciality services, forcing the hospital to curtail operations. Moreover, the operator's focus was on servicing paying clients.[6] Average billing for patients below the poverty line was substantially higher than for others, and patients were coerced to pay at the point of service while the hospital fraudulently submitted insurance claims for reimbursement. The evaluation report also raised serious accountability concerns about equipment purchases and highlighted the failure of monitoring and redress mechanisms over the project's life cycle.

A change in the government post elections, led to a decision against renewing the contract or calling for fresh tenders. The partnership was terminated in 2012, and the hospital was later converted to a postgraduate teaching facility affiliated to a government medical college, in response to a long-term lobbying effort by medical education interest groups in the state.

3.3.3   Indraprastha Apollo Hospital[7]

The Indraprastha Apollo Hospital project was created through a joint venture between the Government of the National Capital Territory of Delhi (GNCTD) and the Apollo Hospital Group in 1988. The government provided land for the project on a 30-year renewable lease to Apollo starting in 1994 for a token annual payment, paid part of the expenditure for constructing the hospital

building and provided equity capital. Apollo made the remaining required investments for building and medical equipment and assumed the role of operating the 600-bed super-speciality hospital.

As per the agreement, Apollo was entitled to all the revenue generated by the hospital, but responsible for the payment of operating expenses, repair costs, utility bills and taxes. In return, it was expected to provide speciality medical services specified in the contract (including medicines and diagnostic tests) free of cost to at least 30 per cent inpatients and 40 per cent outpatients who are poor and referred by the relevant government authority. The government was responsible for monitoring the implementation of the contract, and for inspecting the hospital to ensure that service obligations were met. Any disputes were to be resolved through discussion, and if necessary through arbitration.

The PPP has been hugely successful from Apollo's perspective in terms of commercial viability and profits. The group's flagship hospital has expanded through its network of secondary catchment facilities in the region. It has been consistently featured among the country's best-ranked hospitals and top accredited destinations for medical tourism and won numerous awards for quality of care and clinical excellence. At the same time, the project has faced accusations of high hospital tariffs, non-compliance with contractual commitments, failure to provide information to the public about its obligations and procedures to make benefits available, arduous referral procedures making access difficult, and overcharging for patients eligible for free treatment. There have been several public interest litigations on these violations, and the hospital is found to have been perennially in breach of contract (High Court of Delhi, 2009; CIC, 2015).[8] Notwithstanding the legal directives, compliance remains a problem. The project lacks an effective monitoring framework and the government is widely recognized to have failed in reining in the private partner and in taking corrective action against violations. Despite providing major funding in the formative stages, and holding a 26 per cent stake in the project, the government has ineffectual representation on the Board of Directors and little say in governance. There is also potential conflict of interest because the government holds part equity and is thus a concessionaire subject to supervision, but at the same time tasked with supervisory responsibilities as the public authority. This inherently creates a regulatory dilemma.

3.4   Leveraging Partnership Mechanisms for Policy Success

While many reasons are offered in support of employing PPPs, they often boil down to limited capacity of the government. It is assumed that PPPs will help overcome the government's limitations by leveraging private sector capacities to achieve policy objectives. While they are occasionally effective, such expectations are often not borne out by experience. The presented cases

demonstrate how PPPs can fail to live up to expectations and aggravate rather than ameliorate problems. The argument here is not that PPPs are inherently ineffective instruments but rather that they require specific conditions to be effective. The three case studies highlight some of the common reasons for their failure and identify the conditions under which they can be expected to be more effective.

As alluded to below, policy failure can occur from weaknesses at any step in the policy process. In the cases shown in Table 5.1, failures occurred at multiple levels: (1) failure to clearly identify the policy goals (goal ambiguity); (2) failure to ascertain if PPPs were appropriate to achieve the goals, and if there were better alternatives (instrument mismatch); (3) failure to design incentive compatible contracting arrangements (poor calibration); (4) failure to effectively implement contracts and manage partnerships (weak deployment); and (5) failure to draw experiential lessons for making policy corrections and continual design improvements (non-learning). These process failures were nested within (and catalysed by) larger institutional weaknesses in policy capacity, regulation, and interorganizational trust and cooperation.

It is not surprising therefore that India's healthcare PPPs have produced mostly poor results. Indeed, it is unclear what concrete outcomes policy-makers seek to achieve through PPPs (beyond generic pronouncements of good healthcare for all) and how they intend to get there. Most PPP projects are currently operating under ambiguous (or in the absence of any) policy directives. The policy framework is geared towards harnessing the investment potential and operational proficiencies of the private sector via PPPs without a consideration of their relative utility in helping the government achieve welfare objectives. As a result, the operational emphasis is on strengthening procurement processes and encouraging the private sector (process considerations), rather than on aligning incentives such that the pursuit of underlying profit motives leads to outcomes that are consistent with public sector goals (programmatic considerations) (Marsh and McConnell, 2010). Without a concerted effort to understand PPP mechanisms and create a conducive institutional environment, it is conceivable that PPPs might lead to more efficient outcomes, productivity improvements and enhancements in systemic capacity, but not necessarily in ways that serve public interest.

The cases also underscore the importance of transparent, unambiguous and explicit language in the operationalization of contract provisions. Uncertainties provide an avenue for stakeholders to use discretion to interpret provisions, in a manner that is self-serving but unfavourable for the partnership. The ambiguity on reservation provisions in the contract for the SWAN Municipal General Hospital is a case in point. Also important is the creation of capacity within the government to design and implement contracts, and monitor compliance, and the institution of effective systems through which accountability can be

Table 5.1   Levels of PPP failure

Project	Issues	Level of Failure
SWAN Municipal General Hospital	Ad hoc decision-making	Goal definition, instrument selection, learning
	Narrow coverage Contract ambiguity Weak monitoring and remedial framework Lack of effective government involvement in project governance	Calibration, learning
	Non-competitive procurement Limited public access to information Gatekeeping and denial of care Unethical hospital practices Political interference	Implementation, learning
Rajiv Gandhi Super-Speciality Hospital	Ad hoc decision-making	Goal definition, instrument selection, learning
	Poor specification of service deliverables Misaligned incentive structure Weak monitoring and remedial framework Lack of effective government involvement in project governance	Calibration, learning
	Operational inefficiency Unethical hospital practices Government default on payment obligations	Implementation, learning
Indraprastha Apollo Hospital	Misaligned incentive structure Weak monitoring and remedial framework Lack of effective government involvement in project governance	Calibration, learning
	Limited public access to information Gatekeeping and denial of care Unethical hospital practices	Implementation, learning

exercised. These were major issues in all three cases, which ensured that only minimal public sector gains were achieved.

There are also reasons to question some common assumptions behind the advocacy for PPPs. First, both the Rajiv Gandhi Super-Speciality Hospital and the Indraprastha Apollo Hospital projects saw massive financial investments by the respective state governments even though lack of funds is a commonly cited reason for PPPs.[9] The cases show that governments are often capable of making upfront investments, committing long-term financial resources and providing considerable subsidies (foregone revenue) to PPP projects, so their motivations for entering into partnership arrangements may be other than the need for private capital (Hart, 2003). However, in both cases, the governments' financial contributions were disproportionately higher than the welfare returns realized on the investments. In fact, in all three cases, the contracts reduced governmental control and legally restricted access to free or subsidized services to a narrow band of citizens deemed eligible based on unreasonable economic criteria, contingent on their ability to prove their eligibility at the point of care, and subject to arbitrarily determined caps on reservation. Second, the proposition that partnerships with NGOs for social projects are likely to be more successful is refuted by the case of the SWAN Municipal General Hospital (Besley and Ghatak, 2001). Getting the contract right is critical even when the private partner is ostensibly committed to social welfare. Last, in the case of the Rajiv Gandhi Super-Speciality Hospital project, there were negligible, if any, efficiency gains from the partnership. In fact, the project outcomes were suboptimal, suggesting that private sector involvement by itself does not lead to improvements in efficiency. Promoting efficiency requires thoughtful design and deliberate effort.

Together, the cases call for a cautious approach in determining when and under what conditions PPPs are likely to produce effective results. A nuanced understanding of the pathways through which they operate and interact with the policy environment is necessary to harness their potential as policy instruments and prevent counterproductive policy effects.

NOTES

1. Research for this project was funded by the Lee Kuan Yew School of Public Policy, National University of Singapore.
2. For instance, the draft policy suggests the adoption of the annuity-based build-operate-transfer (BOT) model for PPPs in the social sector, because cost recovery through user fees may be difficult and economic returns are less assured, but there is little clarity on how economic evaluations are to be carried out, or how value for money (VfM) is to be ascertained, given the social nature of the goods in question.
3. The empirical data and narrative is drawn from Bisht and Virani (2016) and background materials used in their study, including the contract agreement and general media report-

age. The hospital's identity and that of other parties in the contract was masked in the original study to preserve anonymity. The same naming convention is followed here.

4. For instance, while the array of medical specialities in the hospital went up significantly, the number of beds available for the general population out of the total 100-odd was less than 30, of which a mere six were reserved for obstetric care.

5. Information for this case is derived from DHFW (2011), Karpagam et al. (2013), KPMG (undated), Raman and Björkman (2009) and general media reportage.

6. Only 11 per cent of functional beds were allocated for the treatment of poor patients. Their numbers as a proportion of total patients declined from 95 per cent to 21 per cent for inpatient services and from 93 per cent to 8 per cent for outpatients over ten years.

7. The case draws on information from the following sources: Anon (undated); CIC (2015); High Court of Delhi (2009); Lefebvre (2010); Sama (2012) and Thomas and Krishnan (2010).

8. Only 140 out of the total 650 hospital beds were allocated for free treatment (considerably less than the stipulated one-third). Of these, only about 20 beds were occupied at any given time because the hospital charged patients for all medicines and consumables, making it unaffordable.

9. Raman and Björkman (2009) found the Rajiv Gandhi Super-Speciality Hospital project to be one of the most expensive from among the several PPP projects they analysed.

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6.   Design activation in multi-level settings
Maria Tullia Galanti and Sarah Giest

1   INTRODUCTION

As discussed in other chapters of this volume, causal mechanisms can be conceived as a sequence of phenomena that link input to an outcome in a causal manner. This causal relationship can be a component of an encompassing theory of change, but the existing literature is often quite prudent in offering examples of how agents can contribute to the activation of specific causal mechanisms. Hence, many causal mechanisms exist, but the literature on how they can be triggered is scarce.

In this research, we focus on the contextual factors that shape entrepreneurial strategies, which, in turn, affect first-order change. Hence, this chapter focuses on the agency of actors to trace how they may trigger the behaviour of policy targets. We hypothesize that policy entrepreneurs trigger first-order mechanisms through selecting strategies that are based on the context of policy design and the availability of skills and resources. The goal is to contribute to the growing literature on the context in which entrepreneurial action takes place and make the connection with the type of strategies being selected. This is based on the assumption that policy entrepreneurs are limited in what they are able to do based on the combined effects of governing structure, current policy settings, behaviours and expectations of other groups and individuals (Mintrom, 2000). Also, the policy ideas that entrepreneurs are pursuing are not created in a vacuum, they are shaped by the social and political context in which they are developed (ibid.). At the same time, the literature on policy change has said very little about the role of entrepreneurs in 'making things happen' (Zahariadis, 2007), and on how behavioural change comes about (Cairney and Jones, 2016). These elements are crucial for policy design, especially when looking at the promotion of change linked to means and goals. In this sense, design choices and subsequent policy failures or implementation gaps may imply the involvement of different actors who influence the policy dynamic through the activation of specific first-order mechanisms of behavioural change.

In the chapter we draw on empirical examples at European level and the Italian national and local context to highlight the connection between policy context, entrepreneurial strategies and first-order behavioural changes. The examples are situated within a multi-level policy setting to show variation in context and resources for strategy selection and first-order change. Thereby, multi-level policies offer an interesting angle to investigate the role of actors in triggering policy change through first-order mechanisms. In fact, the multi-level nature of these policies often implies two different kinds of challenges that can be dealt with by a skillful policy entrepreneur. First, the compliance of design choices by local actors might be difficult because of information asymmetries, lack of resources and autonomy at local level, as well as the heterogeneity of target populations (Weaver, 2014). Thus, in a multi-level context, compliance problems may require the strategic use of knowledge, financial and organizational resources to deal with capacity issues. And second, the policy design and the implicit theory of change developed at superior levels might have to be adapted to the local context – to the preferences, motivations and rationales of local actors. This is because the implementation of multi-level policy change barely implies the need to engage local elites and to build local coalitions in support of the proposed change. For local coalition-building to activate first-order mechanisms locally, networking, ideational and authoritative resources can play a major role in fostering the activation of causal mechanisms.

We focus on the role of actors at different levels to investigate whether the characteristics of actors activated by policy design affect first-order mechanisms of behavioural change in a multi-level setting. In other words, our chapter aims to show how causal mechanisms for policy design may be triggered by purposeful individual or organizational actors and, in turn, how these triggers may preselect the way the policy is designed down the line, by activating specific strategies and by using different resources. To address these questions, we concentrate on policy entrepreneurs as 'the people who seek to initiate dynamic policy change' (Mintrom, 1997, p. 739).

Based on the literature on policy entrepreneurship, our working hypothesis is that policy entrepreneurs make strategic choices based on a pre-existing context and, in a second step, these strategies affect first-order changes. Entrepreneurs can thus perform very different strategies, according to the features of the context of actions, and the type of the causal mechanism at play. The literature points towards the fact that the context in which policy entrepreneurs act matters (Palmer, 2015; Mukherjee and Giest, 2017). However, there is little research on how the context shapes the entrepreneurial process and ultimately first-order policy change. The following section highlights the existing theoretical underpinnings of these aspects of policy entrepreneurship.

2   THEORETICAL UNDERPINNINGS

2.1   **Policy Design, Policy Context and Entrepreneurial Action**

Current research defines the context in which policy entrepreneurs make strategic decisions in three different ways. Some look at the network environment in which entrepreneurs operate, which includes the level of trust among network members, the type of actors participating and the strategic actions of fellow stakeholders (Fisher et al., 1983; Scharpf, 1997; McCown, 2004; Brouwer, 2013). At the network level, researchers take into account the complexity and interdependencies among members and the power base of the entrepreneur within this weave of relationships (Stokman, 1999; De Bruijn and ten Heuvelhof, 2000; Brouwer, 2013). In short, 'frequent reference to the relevance of networks for entrepreneurial action has been associated with the effects of networks on actor accumulation of social and political capital, actor reach, effective manipulation of resources and the manipulation of others' (Christopoulos, 2006, p. 761). This builds on a wide array of research that looks at network relationships more generally and ties that occur within them (Christopoulos, 2006). Based on the example of the European Commission Trading Scheme, Christopoulos (ibid.) concludes that actors with low political capital within a network engage in more high-risk opportunistic actions, while actors with high political capital opt for low-risk incremental actions.

   Others emphasize the policy proposal within which entrepreneurs are active. This includes the proposal's characteristics such as its scope and interconnectedness as well as its topic (Brouwer, 2013). This also applies to policy more broadly when it comes to salience and current developments (McCown, 2004). Factors derived from this argument include the number and type of actors involved and also the willingness for change when an issue is high or low on the political agenda. The type of actors that are active is further determined by the policy sector in which the entrepreneur is aiming for change. Mintrom (2000) also points towards the policy problem an entrepreneurial solution relates to, since this affects the rhetoric and the ability to point to actual working examples. Meijerink and Huitema (2010) further find that while strategies of policy entrepreneurs are specific to a policy sector, they are consistent within a policy field across countries. In the case of water management, for example, they uncover that there are striking similarities in the ways in which water management issues are framed. This example also shows that entrepreneurs use rhetoric that relates to or manipulates existing policy images (Baumgartner and Jones, 1991). This implies that pre-existing policy images frame the discussion and solutions around a certain topic. Overall, the strategic choices that policy entrepreneurs make in this context can be summarized as

coalition-building. As for the policy options available, research shows that generally policy-makers are more willing to adopt a solution that is from an existing menu of policies with the goals of high levels of acceptability and technical feasibility (Zahariadis, 2008).

Finally, another stream of research focuses more heavily on the institutional setting in which the policy entrepreneur is active, in other words, the opportunity structure that the institutional framework at a specific government level or within a country offers for entrepreneurial action (Meijerink and Huitema, 2010). 'Complex decision-making processes in which many different parties and levels of government are involved usually feature a wide range of venues where change agents may place their issues on the agenda or seek support for their ideas' (ibid., p. 21; Lebel et al., 2009). Schneider, Teske and Mintrom (1995) find that, specifically, the existence of neighbourhood organizations can be a springboard for entrepreneurs. 'By lowering organizational costs and providing a mechanism by which to build a reputation as a reliable and trustworthy political actor, neighborhood groups can directly ease the costs of entrepreneurship' (ibid., p. 92). Schneider et al. (1995) further point out that a strong tax base enables a wider range of policy options for entrepreneurs to choose from. In this situation, entrepreneurs would pick from existing solutions during a window of opportunity for change. If, however, existing solutions are blocked due to negative feedback or evidence of failure, policy entrepreneurs have to reframe existing solutions for them to be adopted (Copeland and James, 2014).

Overall, recent literature shows that the context contributes to the type of strategies that are being pursued by policy entrepreneurs and linked to that the likelihood of success. The social and political context shapes both the ideas that policy entrepreneurs come up with as well as the strategic action taken to put them into place. Research identifies three broader themes that include the network environment, the policy proposal and the institutional setting. Individually they affect entrepreneurial work, as well as in unison when it comes to putting in place policy innovations. Finally, this is not understood in a deterministic way, but rather as a way to look at how entrepreneurial action is shaped by different contextual characteristics that lie outside individual traits of policy entrepreneurs. Knowing about these contextual factors can thus help in understanding why certain entrepreneurial action is chosen and, in a second step, how it affects first-order change.

2.2 Policy Entrepreneurs: Definitions, Strategies and Resources for Behavioural Changes

For the purpose of this chapter we define policy entrepreneurs as 'the people who seek to initiate dynamic policy change' (Mintrom, 1997, p. 739). We

further assume that policy entrepreneurs active in the policy design context can have a paramount role in affecting behavioural changes. Policy entrepreneurs are the actors who invest their resources – time, energy, reputation and money – to promote a position in return for anticipated future gains, and take advantage of windows of opportunity for change also at other levels of government (Kingdon, 1995, p. 188). Their success in promoting change depends on the strategic use of different resources and skills.

2.2.1   Entrepreneurial activities

Contextual factors influence entrepreneurial actions in a way that impacts their activities and strategy selection (Giest, 2018). Thereby, policy entrepreneurs can activate different causal mechanisms (such as compliance of others), through different strategies. For example, the Multiple Streams Approach has been extensively applied in order to explain how change is achieved: through the advocacy of policy ideas and the brokering; through negotiations to match problems, solutions and political momentum; through the pushing of ideas higher on the agenda; and through the softening up of the system and of the solutions (Kingdon, 1995, p. 241).

   Other researchers have built on the work of Kingdon to better characterize the activities of policy entrepreneurs in fostering policy change also beyond coupling mechanisms. Policy entrepreneurship discovers unfulfilled needs, bearing the risks of uncertainty, resolves collective action problems by assembling and coordinating networks; moreover, it sells ideas by identifying problems, shaping policy debates, networking and building coalitions (Mintrom and Vergari, 1996). Thus, policy entrepreneurs make efforts to display social acuity; define problems; build teams; and lead by example (Mintrom and Norman, 2009). Moreover, Mintrom and Norman (2009, p. 657) emphasize the need for a good sense of timing for entrepreneurs to take advantage of windows of opportunity.

2.2.2   Entrepreneurial resources

Policy entrepreneurs have to develop an array of skills and qualities that makes them more successful, not just in fostering policy change by coupling problems, solutions and policies, but also in activating other first-order mechanisms. For example, Kingdon proposes that policy entrepreneurs have four main qualities: they have some claim to a hearing; they have political connections and negotiating skills; they have tenacity and are persistent in pushing their ideas; finally, they have to be ready to take advantage of opportunities (Kingdon, 1995, pp. 189–90). Zahariadis (2007) states that policy entrepreneurs are more effective when they have greater access to policy-makers and commit more resources to pushing their proposals, and when they are able to avoid the decoupling and the failure of coalitions in the implementation

phase through issue linkage and framing, side payments, and institutional rule manipulation (Zahariadis and Exadaktylos, 2016). Thus, policy entrepreneurs may rely on material incentives to affect the behaviour of the target population. When acting as policy entrepreneurs, policy-makers may further resort to a strategic use of symbols and emotions (Zahariadis, 2016).

2.2.3   Entrepreneurial strategies

Policy entrepreneurs may activate different strategies, acting as triggers for the desired first-order mechanism of behavioural change. According to the literature, some of the most common strategies of policy entrepreneurs are framing, salami-slicing tactics, using symbols and affect priming (Zahariadis, 2007, p. 74); the selection of policy ideas at the EU level (Copeland and James, 2014); or the use of ideas as coalition magnets (Béland and Cox, 2016) to establish a coherent message to build more stable coalitions of political supporters across levels of government (Saurugger and Terpan, 2016).

Hence, we propose that specific strategies are more appropriate for the different contextual conditions highlighted in the previous section. In other words, we propose that the characteristics of the policy design context affect the preferred entrepreneurial strategy. In particular, we propose that coalition-building strategies are important to deal with the network environment; framing strategies and the softening up of policy ideas are crucial to the type of policy proposal and sector; and venue manipulation strategies and taking advantage of windows of opportunities at multiple levels are important to foster change in complex institutional settings.

Coalition-building strategies
Coalition-building is a strategy that has an impact on the network of relevant actors, by creating ties and trust among different groups. Trust and ties can be built on symbols and emotions (Zahariadis, 2007), and also on interests and incentives (Mintrom and Norman, 2009). The type of coalition-building of policy entrepreneurs can thus be very different: they can build a coalition of advocates who share the same policy beliefs, or a more restricted alliance of actors who benefit from specific policy incentives or tools. Several studies on policy reforms emphasize the variety of strategies that policy entrepreneurs may employ during policy reforms to make other actors change their behaviour and, ultimately, allow policy change. Policy entrepreneurs not only build coalitions in support of policy change at the political level, they also act upon motivation of managers and target populations activated by the policy design at the managerial level. They propose new visions of a problem; they develop the policy content of policy change by enlisting stakeholders and the expertise of strong allies; they enrol local policy teams as well as national and regional stakeholders; and they clarify the problem repeatedly to attract interest from

potential users and contributors (Oborn, Barrett and Exworthy, 2011, p. 330). This multi-level dimension of coalition-building emerges in different studies on policy change, including delicate instances such as anti-corruption policies (Navot and Cohen, 2015) and post-conflict cooperation (Arieli and Cohen, 2013, pp. 252–3), where policy entrepreneurs engage in horizontal and vertical coalition-building across levels of government and support bottom-up initiatives to overcome local opposition.

Framing strategies

In water policy reforms, policy entrepreneurs use framing strategies to promote water transitions as changes in specific policy tools or in the overall governance of water delivery (Crow, 2010). Meijerink and Huitema (2010) suggest that entrepreneurship in water management is often collective, and focuses on strategies for developing and disseminating new ideas within multi-level governance networks. Brouwer and Biermann (2011) focus on the behaviour of policy entrepreneurs at the micro level. They employ four types of strategies: (1) attention and support-seeking strategies, to demonstrate the significance of a problem and to convince a wide range of participants about their preferred policy; (2) linking strategies, to connect with other parties, projects, ideas, and policy games; (3) relational management strategies, to manage the relational factor in policy-change trajectories; and (4) arena strategies, to influence the time and place wherein decisions are made, thus following the idea that entrepreneurs act upon the opening of windows of opportunity for change.

Venue manipulation strategies

Meijerink and Huitema (2010) offer some ideas about how the institutional context constrains or enables the activity of policy entrepreneurs. These strategies involve anticipating, manipulating, and basically exploiting windows of opportunity that can also open up at different levels of government. Various country and governance settings may offer different opportunity structures for entrepreneurs to achieve their goals. For example, complex decision-making processes with different levels of government involved offer a variety of venues for change agents, but also more centralized systems may present opportunities, especially when entrepreneurs manage to access the main decision-makers. This is particularly important when the policy design and the implementation of policy change require the use of financial resources that are not accessible for the lower levels of government.

3   EMPIRICAL EXAMPLES

3.1   Entrepreneurial Strategies as Triggers for Behavioural Changes in Multi-level Settings

When policy change entails multi-level dimensions, policy entrepreneurs can be activated by policy design choices at different territorial levels and in different institutional venues (state, regions, cities). Further, in a multi-level policy context, the role of information, risk, and trustworthiness become paramount in cases where the issues are complex and their effects on citizens seem remote, even if they could be significant in the future (Mintrom and Norman, 2009, p. 661). The need to match different types of resources at the right moment suggests concentrating on the role of policy entrepreneurs as activators of change.

The literature on policy entrepreneurs suggests there are three main strategies that they may use to promote behavioural change: coalition-building, framing and venue manipulation. These strategies seem particularly appropriate to deal with the policy design context, and respectively with the features of the network environment, of the policy sector and of the institutional setting.

Our proposal is to make reference to existing empirical examples of policies designed or implemented at local level to see whether different entrepreneurial strategies are able to trigger first-order behavioural change. As said, we are not deterministic in matching a type of entrepreneurial strategy with specific context conditions, or with one type of first-order behavioural change. Nonetheless, we will concentrate on a variety of policy sectors to show the link between context and different instances of behavioural change (see Table 6.1).

Additionally, we focus on the local level, since the connection between design and implementation allows easier observation of actors' behaviours, and thus to develop a clearer understanding of their roles in the development of the causal mechanism (Kalafatis and Lemos, 2017). The examples stem from the European context and include a case at EU level (transnational climate change networks), one at national level (industrialization in Italian water reforms) and two at local level (Turin social housing and urban planning). The cases were chosen based on the representation of different governmental levels as well as a variation in policy field, which translates into variation in contextual and resource factors.

Table 6.1   Empirical examples of entrepreneurial activities

Examples/Cases	Policy Design Context	Entrepreneurial Resources	Entrepreneurial Strategy	First-order Behavioural Change
Example 1: European transnational climate change networks	Multiple government units at various levels responsible for climate change; loose network with top-down support and varying horizontal commitment	Variety of knowledge resources; Political connections	Vertical coalition-building	*Local commitment and engagement*
Example 2: Industrialization in Italian water reforms	Fragmentation in local public utilities, national governments imposing privatization and municipal governments resisting the change	Ideational; Incentives; Partisan affiliation at the regional level	Horizontal coalition-building; Framing	*Inventive activity:* Industrialization of service operators; creation of regional multi-utility in the Emilia-Romagna region
Example 3: Social housing in Turin (1997–2006), Italy	Retrenchment of the central government from public housing, municipal government oriented towards policy innovation (rent housing subsidies)	Ideational; Incentives and organizational innovations	Horizontal coalition-building; Framing (a new image for the municipality as a mediator in the real estate market)	*Inventive activity:* Increase in the number of subsidized rents; pilot projects in co-housing
Example 4: Urban planning in Turin (1993–2006), Italy	Resistance of local and national stakeholders to the implementation of the new urban master plan; promotion of urban policies at the EU level; promotion of sports events at the national level	Access to multiple institutional venues; Economic incentives	Exploiting multi-level windows of opportunity (EU level for urban regeneration projects; national level for Winter Olympic Games)	*Compliance:* New pro-growth coalition for urban renewal spreading from urban strategic planning and great events (Winter Olympic Games)

3.2 Policy Entrepreneurs in Transnational Climate Change Networks (Example 1)

Transnational climate change networks are complex multi-level governance arrangements, because their organizational structure has multiple, relatively independent local centres while following EU goals on sustainability targets (Sandström and Carlsson, 2008; Giest and Howlett, 2013). These networks have increasingly become a tool for the EU to implement place-sensitive programmes and designing wider policies. The transnational networks thereby have two goals: first, engaging member states in climate change targets while leaving space for place-specific initiatives; and second, facilitating the exchange of knowledge among network members (Giest and Howlett, 2012). Examples are Eurocities or ICLEI – Local Governments for Sustainability.

In this set-up where there is a top-down force to comply with climate change targets as well as bottom-up collaboration, policy entrepreneurs play a central role as connectors. As Kern and Bulkeley (2009, p. 326) point out:

> Political support at local level and the existence of policy entrepreneurs are, therefore, crucial for the governing capacity of a network because they have a decisive influence on the changes on the ground and provide the means through which the network assesses progress. If such policy entrepreneurs are missing or marginalized, it is almost impossible for the network to stimulate action on the ground.

The context in which these entrepreneurs operate varies from region to region, however the common characteristics include:

- various government units at different levels: local, network, European;
- connections among network members with forms of cooperation ranging from information sharing to taking action together;
- loose commitments by local stakeholders.

In this setting, policy entrepreneurs choose strategies that can be described as vertical coalition-building. They link up committed, local stakeholders to the network to facilitate collaboration and create wider acceptance. Entrepreneurs also play a role in diffusing knowledge from one place to another (Mintrom and Norman, 2009). The first-order behavioural change that entrepreneurs are aiming for with this strategy is that of local commitment to the transnational climate change goals while also participating in the network-wide collaborative activities, such as sharing of best practices and working with partner cities.

3.3   Policy Entrepreneurship in Water Reforms and Local Public Utilities in Italy (Example 2)

Water reforms in Italy are in response to the inefficiencies of local service provision and the deficiencies in water infrastructures in a period of deep public debt crisis (Massarutto and Ermano, 2013). National governments fostered the privatization and industrialization of service operators, whose dimensions corresponded to the municipal territory, being rather small on average. The traditional municipal public utilities epitomized the power of local elites, resistant to any form of change. Privatization encountered strong resistance in the periphery, as the presence of private actors and the introduction of competition for service provision threatened local enterprises. Therefore, the design context presented a fragmented network of local public utilities, with the timid intervention of the national government to promote privatization and industrialization, and local municipalities striving to cope with financial problems.

In this context, some mayors acting as policy entrepreneurs were able to shape the negative perceptions over privatization and to create trust among decision-makers affiliated to the same political party. In doing so, they pushed local governments to implement the industrialization of water service provision reform in their region far beyond initial expectation, by creating a regional champion in the multi-utility sector, HERA S.p.A – the result of the merger of more than 100 former local public utilities. The role of some mayors of the Emilia-Romagna region and of the top management of the largest service operators in the implementation of the water reforms was crucial for several reasons. First, they translated the guiding principles of the water reform into concrete advantages for the municipalities in the implementation phase. Second, they were able to create mutual trust among local governments of the same region, also relying on the common partisan affiliation of most of the mayors (Di Giulio, Galanti and Moro, 2016). The role of entrepreneurs was of paramount importance given the wide range of options that the national policy design allowed to local actors and the massive opposition of local governments to the reforms throughout the country.

It can be said that the creation of a regional multi-utility as a unique model for service providers is a case of inventive activity. A composite policy entrepreneurship of mayors and top managers from the Emilia-Romagna region triggered this innovation through two main strategies. First, they were able to reframe the privatization issue according to a common discourse in water reforms worldwide (Meijerink and Huitema, 2010). They exhorted for the inclusion of private capitals and organizational models in order to ameliorate the efficiency of the service provision. Second, they convinced other mayors in the same regions to merge the small municipally owned utilities into a greater industrial player. This could be done by taking advantage of some financial

incentives to privatization provided by the national law, and by consolidating the network of mayors with reciprocal trust. The trust among mayors was possible also due to the cohesiveness of the regional dominant party at the time, the former Communist Party.

Hence, policy entrepreneurs were able to trigger the creation of the regional multi-utility HERA as a case of innovative activity from water reform by involvement in the framing of the consequences of privatization and by building reciprocal trust in horizontal coalition-building. These strategies entailed the use of ideational resources, as well as the exploitation of economic incentives present in the national policy design.

3.4 Policy Entrepreneurship in Social Housing in the City of Turin (1997–2006) (Example 3)

Housing policies were traditionally based on public housing financed with national funds and assigned at the provincial and municipal level, with a scarce number of dwellings and financing. From the 1990s on, the state progressively retrenched from the financing of public housing, while delegating planning to the regional level, leaving most of the management at the local level. Thus, Italian municipalities designed very different policies, with few policy options: assignation of the existing stock of public housing on the one hand, and the promotion of subsidized rents on the other. In the 1990s, the Italian city of Turin was already experiencing a serious housing crisis, after the economic crisis of the automobile company FIAT, which was the main industry at the time. In response to the economic crisis, many associations, charities and local banks were active at the city level, collaborating with the municipal government for other welfare services (Galanti, 2018).

This context of scarce financing and multiple private actors inside and outside the local housing market was fruitful for the action of policy entrepreneurs, spreading from within the administration. In particular, one senior manager and a couple of politicians used a double strategy to make local public and private actors act in coordination and to experiment with innovative policy solutions to the housing crisis. On the one hand, policy entrepreneurs started to frame housing policies in a new way. They abandoned the view of housing as pure assistance, leading inevitably to marginalization, while proposing the idea that public housing should present a good social mix of classes of people. At the same time, the municipality proposed subsidized rents as the main policy instrument to intervene in the housing market, by creating economic incentives for landlords to propose this type of contract, and by creating dedicated municipal offices for the tenants to gather information and offers of this type. On the other hand, policy entrepreneurs were able to create a more cohesive network of public and private actors on housing issues, by involving private

partners in some experimental projects of co-housing aimed mainly at young people and families.

In other words, these local policy entrepreneurs used ideational and economic incentives to make landlords and tenants change their mind about initiatives of public housing. The municipality actually became the connector between the demand and the supply of housing both in the public realm and in the private market on the one side, and by experimenting with new solutions for public housing on the other. This could also be done by taking advantage of extra EU funding for renovation activities, which was partly used also to finance the amelioration of existing dwellings.

3.5   Policy Entrepreneurship and Urban Planning in Turin (1993–2006) (Example 4)

The role of Italian municipalities in urban planning is paramount. In fact, national legislation only intervenes in the case of great infrastructures and big events, while the regional level ratifies the modifications to urban master plans decided at the local level (Vettoretto, 2009). In the midst of the local economic crisis of the 1990s, urban planning was seen as the way to redesign the industrial vocation of Turin as a typical Fordist city, and to propose a different type of economic renaissance based on knowledge economy, culture and leisure (Galanti, 2014). After almost 15 years of political conflict, the local government approved a new master plan that intervened heavily on the infrastructure of the city, proposing to intervene in many of the existing post-industrial buildings, to create new transport infrastructure, residential areas, museums and universities. These transformations encountered the resistance of the residents, trade unions, academics, and of some major national and local private owners. The context was then characterized by a difficult implementation at great risk of non-compliance, with a fragmented network of opponents at the local level, and with few policy instruments at the disposal of the administration to boost construction investments.

In this context, the mayor, the executives of the local government and some of the managers from the marketing sector were able to play the role of policy entrepreneurs by diffusing ideas about the necessity of a new economic vocation for the city, and, most of all, by taking advantage of windows of opportunity at the local and at the national level. This in turn created a strong commitment to comply with the urban transformation by various civic associations, interest groups and ordinary citizens. First, the mayor and his urban planning representative pursued an unprecedented strategy of top-down involvement of the citizens in different projects of transformation, through the use of strategic planning – an instrument for local participation that was quite innovative at the time and was regarded as a success of the administration

(Pinson, 2002). Second, the mayor and the city manager hired from the private sector several managers specialized in project development, with the goal of proposing the candidature of Turin for urban regeneration projects at the EU level (like the Urban I and II initiative) and, most importantly, for the 2006 Winter Olympic Games (WOG). The participation of an Italian candidate for such a big event was promoted by the national government but local governments had not been interested in participating. Instead, the composite policy entrepreneurship of Turin saw in the WOG the opportunity to gather financial resources to implement part of the master plan, and to create a sense of community and pride among citizens. The WOG in 2006 proved to be a success, both in symbolic and economic terms. The exploitation of windows of opportunity at multiple levels and access to EU financial resources for urban regeneration corroborated the framing of urban transformation as a new renaissance for Turin, thus bringing success in the implementation of the master plan, despite the initial resistance and the initial mistrust of many relevant stakeholders at the local level.

4   CONCLUDING REMARKS

These examples of successful policy entrepreneurship are intended to show how the action of an individual or organization is able to trigger first-order mechanisms of behavioural change. Our hypothesis is that contextual factors and resource availability shape entrepreneurial strategies that trigger behavioural changes. The cases of the European transnational climate network, Italian water privatization, social housing and urban planning show how vertical and horizontal coalition-building, framing and taking advantage of windows of opportunity are viable strategies when the context is characterized by a fragmented network environment, by specific policy solutions available, and by the possibility to access multiple levels of government. All in all, we propose that policy entrepreneurship can assume different formats, being composed of one or more agents, and that it can deploy an array of very different activities. Nonetheless, given the characteristics that link policy design to the implementation phase, the most important strategies are those aimed at the building of a trustworthy network of actors in support; at the use of symbols and emotions to rouse commitment in favour of a policy idea; and at the exploitation of windows of opportunities at different institutional levels, to cope with the endemic scarcity of financial resources to support urban transformations, and to provide incentives for collaboration among dispersed actors in loosely coupled networks.

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PART III

Second-order mechanisms and cases

7. Policy instruments, policy learning and politics: impact assessment in the European Union

Claire A. Dunlop and Claudio M. Radaelli

INTRODUCTION

What causal mechanisms generate learning and what is their relationship with policy instruments? It is almost obvious to observe that the type and success of policy learning is related to and mediated by the policy process. In particular, we can think of learning mechanisms as triggered by policy instruments. More precisely, by using certain instrumentation in public policy-making processes, constellations of actors are supposed to make some choices, give priority to some values, enfranchise some interests and so on. These activators can potentially trigger some mechanisms, for example monitoring and control, and at the same time hinder other mechanisms, for example capture or bureaucratic drift. 'Potentially' means that we have to consider special occurrences, events, actions (the 'activators') as well as the role of context – another dimension we will explore later. For now it is sufficient to say that, in line with the editors, we stick to the definition of mechanisms as collections of activities or entities that produce some regularity in processes of change that unfold from an origin in time to an end state. In short, mechanisms are what is inside the black box of causality. Yet, the conceptual and empirical connections between policy instruments and mechanisms have never been made explicit.

In this chapter, we weave in the theme of learning mechanisms with policy instruments. At the level of concept formation, we seek the mechanisms associated with learning in different modes. Breaking learning down in this way allows us to understand that the world of policy learning is dappled and full of variation. Learning happens in a range of arenas populated by different actors according to different logics. Similarly, a policy instrument is not a monolith either. To show how a single instrument can trigger different learning types, we use impact assessment (IA) in the European Union (EU) as an exemplar.

In most countries, IA is an instrument with which to design primary legislation (the USA is a notable exception where all IAs are Regulatory Impact Assessments – RIAs). IA systems create appraisals of how proposed legislation will affect stakeholders (broadly conceived). In the EU, this instrument is central to the better regulation strategy of the European Commission (2015). It has three central foci – that is, to examine the effects of different policy options in terms of their economic, environmental and social impact on a wide range of stakeholders, markets and the environment. The Commission is committed to accompanying its policy proposals (legislative or not) with a document, the IA, reporting on the process that led the officers to a given definition of the policy problem, the baseline, identification of a range of feasible options, consultation of stakeholders, experts and citizens, the evidence on the likely impacts of the options, the choice of an option according to an explicit set of criteria, and how the new proposal will be monitored and evaluated. The European Parliament and the Council are also committed to the logic of IA via an interinstitutional agreement on better law-making.[1] When they introduce substantial amendments to the proposals made by the Commission, in principle they have to carry out an analysis of how the initial IA will change as a result of the amendments.

While IA is an instrument of policy formulation, it can also be used to examine regulation in force but under scrutiny. Empirical research attests to the malleability of IAs. In the EU, this appraisal process involves a variety of policy actors and institutions who shape it for a variety of purposes (Renda, 2006, 2016; Cecot et al., 2008; Turnpenny et al., 2009; Radaelli, 2010; for specific sectors see Torriti, 2010).

And so, IA has distinct functions and it is common to think in terms of the many usages of IA (Dunlop et al., 2012; Dunlop and Radaelli, 2016a). Most obviously, this is an analytical instrument that exists to bring evidence to policy-makers before policy design is complete. Yet, IA is much more than an epistemic product. It functions as a process through which publics are consulted and an arena for policy networks and stakeholders can reshape, negotiate and contest prospective policies. IA also aids regulatory compliance as it begins to emerge in the legal system as the standing justification used by courts to interpret the original rationale for a decision or regulation.

We proceed as follows. In the next section, we briefly rehearse the types of policy learning we seek to explain. In the second section, we delineate our approach to mechanisms and how IA stimulates them. Using empirical examples from the EU, in the third section we uncover mechanisms of learning triggered by the discussions and information IA brings to the policy process. In the conclusions, we reflect on how IA systems can be modified and strengthened to support learning mechanisms and on wider implications of learning in regulatory policy for accountable governance.

VARIETIES OF POLICY LEARNING

To identify mechanisms triggered by policy instruments to generate policy learning, we must first be clear about how we understand policy learning. Let us start with the near-universal definition. Despite using contrasting ontologies and epistemologies, policy learning studies are founded upon a general conception of learning as 'the updating of beliefs based on lived or witnessed experiences, analysis or social interaction' (Dunlop and Radaelli, 2013, p. 599). Thus, by identifying causal mechanisms, we are capturing the ways in which the knowledge that comes from these experiences, analysis and interaction becomes considered by policy actors. This centrality of the *process* of knowledge acquisition and belief updates reveals why policy learning is amenable to a mechanistic approach. Critical to our interest in mechanisms is that we have something to explain. Though policy learning may be unintentional, it is not random – not all policy processes have the same chance of producing learning outcomes. Thus, any answer to the question 'Why does learning happen?' cannot be a statistical one. Rather, it requires analysis that specifies the *processes* by which learning outcomes are facilitated. Here, we are interested specifically in policy instruments as a key part of those processes. But, we are getting ahead of ourselves.

With our definition in hand, the next step is to delineate our dependent variable: the possible modes of policy learning. While policy learning is dominated by empirical studies, over the last three decades there have been various attempts at systematizing our knowledge using typologies (Bennett and Howlett, 1992; May, 1992; Dunlop and Radaelli, 2013; Heikkila and Gerlak, 2013). Mechanisms offer an explanatory bridge between theories and evidence, and to identify them we require an explanatory model of learning. The varieties of learning approach has strong attachment both to theory and empirics (see Dunlop and Radaelli, 2013 on theory and 2016b for an empirical application), and so offers a promising analytical framework from which we can first extrapolate mechanisms and make the link to policy instruments.

The building blocks of the varieties model lie in the policy learning literature (for details on the literature underlying the model see Dunlop and Radaelli, 2013, p. 601, endnote 2). This literature reveals the presence of four learning modes – epistemic, reflexive, bargaining and hierarchical. These types are explained by high or low values on two conditions of the policy-making environment: the tractability (Jenkins-Smith, 1990; Hisschemöller and Hoppe, 2001) and certification of actors (McAdam, Tarrow and Tilly, 2001) associated with a policy issue.

Let us zoom in on these dimensions for a moment. Tractability concerns the degree of uncertainty linked to the policy issue. In highly tractable cases,

preference formation is relatively straightforward – this is the arena of interest groups and political elites – or policy-making operates on auto-pilot where institutional rules and bureaucratic rules take over. At the polar case, tractability is low. This radical uncertainty results in either reliance on epistemic experts or being opened up to widespread social debate. Learning type is also conditioned by variation in the existence of a certified actor who enjoys a privileged position in policy-making. So, we can think of expert groups (epistemic learning) and institutional hierarchies – for example, courts and standard-setting bodies – as possessing such certification (learning by hierarchy). Where an issue lacks an agreed set of go-to actors, policy participants are plural. Just how plural depends on the level of issue tractability. Where this is high we have interest-driven actors (learning through bargaining); where both tractability and certification are low we have the most plural and social of policy arenas (reflexive learning). Taken together, these two dimensions provide the axes along which the four types vary (Figure 7.1).

A REALISTIC APPROACH TO POLICY INSTRUMENTS AND LEARNING MECHANISMS

We now move to the connection between learning and policy instruments. At a basic level, the link seems obvious. If learning occurs in the policy process

Source: Adapted from Dunlop and Radaelli (2013, p. 603, Figure 1).

Figure 7.1   Conceptualizing modes of policy learning

as a result of cause-and-effect relationships, policy instruments must play a central role in mediating how and with what success beliefs are updated and priorities reshuffled. But, we can go deeper than this. Analytically, examining instruments as enablers (one could also examine the opposite case of instruments hindering mechanisms, of course) of learning mechanisms fits the processual nature of policy learning, and offers opportunities for redesign of tools. By discovering more about the nature and success (or otherwise) of the learning triggered by a tool, we can adjust, reimage or replicate those tools in response.

There is also a broader reason to bring these concepts together. As we mentioned, the policy learning literature in social science is huge (see Dunlop and Radaelli, 2013 for a review of political science and Dunlop and Radaelli, 2018a on public administration). This has resulted in many areas of policy analysis exhibiting a 'learning turn' – most notably, organizational design and theories of the policy process (think advocacy coalitions, target populations, narratives). Yet, the potential for policy learning to inform the study and, indeed, design of policy instruments has lagged somewhat. This chapter addresses this analytical gap.

Early studies of policy instruments focused on the characteristics of the big policy levers used to implement policy objectives – for example, taxation, regulation, and so forth – and why government decided to use one instrument or another (Hood, 1983; Salamon, 2002; Macdonald, 2005). In these, the emphasis is very much first on the relationship between command-and-control regulation and its alternatives.

The second generation shifted gear towards the interplay between instrument mixes and governance (Eliadis, Hill and Howlett, 2005). The key issue here is how governments manage families of tools, especially in relation to the question of how government steers complex networks of actors towards a given governance goal, such as innovation, legitimacy (Webb, 2005) or sustainability or joined-up government. This second generation is concerned with procedural instruments (Howlett, 2000) – for example, voluntary codes, partnerships, co-regulation and 'new modes of governance' (Héritier and Rhodes, 2010) – in a context of 'regulatory reconfiguration' of the state (Gunningham, 2005).

Most recently, there has been a renewed interest in going back to the interrogation of individual policy instruments. This has two dimensions. The first concerns empirical focus. Authors are increasingly turning attention towards formulation tools associated with policy appraisal (Dunn, 2004; Nilsson et al., 2008; Turnpenny et al., 2009; Radin, 2013; Jordan and Turnpenny, 2015; Howlett, Mukherjee and Woo, 2015); and, more specifically, impact assessment systems (for a review of the evaluation of the field see Dunlop and Radaelli, 2016a). The second dimension is analytical. Social scientists have moved away from the functionalism implicit in some of the early literature that tracked the impact of instruments against stated objectives, to approaches that

acknowledge the mediating role instruments play in policy dynamics. The very process of policy-making, and for us policy learning, is shaped by the design of the tool (Lascoumes and Le Galès 2007; Turnpenny et al., 2009; Dunlop et al., 2012). Policy instruments carry ideas or 'scripts' in part by dint of the 'constituencies' – actors and practices – that enact them (Voß and Simons, 2014; Simons and Voß, 2018).

Let us now piece together our analytical approach by explicating our take on causal mechanisms. Analytically, mechanisms are tools with which we can model the hypothetical links between events (Hernes, 1998). Keith Dowding helpfully introduces the idea of mechanisms as conceptual 'narrations' that allow researchers to fill the black box of explanation and take us beyond the particularism descriptive accounts (2016, p. 64). This requires mechanisms of sufficient generality that go beyond reference to specific events or tactics (Hedström and Swedberg, 1998, p. 10).

Before identifying our mechanisms of learning, we must also think about the analytical level our mechanisms operate (Stinchcombe, 1998, p. 267; see also Coleman, 1990). In short, what or who are these mechanisms acting on? The pre-eminent way of thinking about this is to treat 'the action being analysed [as] always action by individuals that is oriented to the behaviour of others' (Hedström and Swedberg, 1998, p. 13). The varieties of learning approach follows the 'weak methodological individualism' of mechanistic analysis (ibid., pp. 11–13) placing *homo discentis* (Dunlop and Radaelli, 2018b) – learning, studying and practising people – at the centre of instrument constituencies. Yet, this does not mean that policy action, and the impact of policy instruments, is located only at the micro level. While we agree that agency is ultimately embodied in individual action, policy learning processes are social phenomena generated by individual action as they encounter and use policy tools at a variety of levels – between powerful elites (micro), in groups (meso) and societal (macro) – which may or may not work in sequence with each other (see Dunlop and Radaelli, 2017). Rather than artificially restrict our focus to the micro level alone, the key to analytical clarity is that our mechanism levels are distinct from the level of the entity being theorized (Stinchcombe, 1998, p. 267).

There are, of course, several approaches to mechanisms in the social sciences and, closer to home, analytical sociology and political science (Gerring, 2007 lists nine distinct meanings; see also Hedström and Swedberg, 1998; Gerring, 2010). As mentioned, we stick to a definition of social mechanism as a causal relationship between causes and effects in a given context. In this volume, we argue that there is a relationship between activators and mechanisms. Activators are occurrences, events, or decisions that trigger or stimulate mechanisms. We follow the editors in their differentiation between first-order and second-order mechanisms. The first-order mechanisms alter the behaviour of individuals, groups and structures to achieve a specific outcome.

The second-order mechanisms are central for our analysis of policy learning. These mechanisms describe the response or reaction of individuals, organizations and systems to the deployment of an activator. Conceptually, we can have second-order mechanisms like learning, and counter-mechanisms like negative framing or contestation.

Second, we understand mechanisms as part of a context, following a realistic ontology of the social sciences (Pawson and Tilley, 1997; Pawson, 2006): a mechanism generates an outcome in a given time or space context, but not in other contexts. For example, a mechanism of prime ministerial leadership may produce effective decisions in a Westminster system with single-party government but not in a parliamentary system with coalition governments.

Third, given a certain historical, political, administrative context, we accept the possibility that more than one mechanism may be at work. As mentioned, a certain mechanism may be counteracted by another mechanism. Think of the well-known case, explored by Charles Sabel (1994), when learning in a system is muted by the presence of monitoring in that same system. In fact, monitoring may suppress innovation and serendipity, and limit the learning options of policy actors. Thus, in our analysis of learning modes, a mode may work inefficiently because the underlying mechanisms are incoherent (on dysfunctional learning see Dunlop, 2017).

Fourth, mechanisms do not just happen all the time given a certain cause and a certain outcome variable affected by the cause. They have their own activators. Thus, if we say that a policy instrument designed for accountability promotes trust in government, we have to specify what it is exactly that makes an accountability device 'productive' in terms of trust. It can be something about the structure of the policy context (in which case we are back to the analysis of context and its effects on mechanisms) or something about agency – in particular, the style of interaction within a constellation of actors or instrument constituency. The two are related: interaction is affected by decision rules, and these are often given by the structural properties of a policy system.

In both cases, unless we fully theorize causality and say how mechanisms affect the outcome, we only have a very partial causal story about mechanisms. There are different options available, and indeed we find notions such as the 'power' (of mechanisms), 'disposition' or 'capacity' in the literature (Salmon, 1990; Cartwright, 1999). To simplify matters, we direct our theorization towards triggers and hindrances effected by policy instruments. As mentioned, the search for triggers and hindrances covers both structure and agency. This is our take on the much more complex discussion of whether mechanisms belong to the structural or to the agency properties of a system – a debate that we cannot rehearse here (see Wight, 2009).

A social mechanism, then, 'is a precise, abstract, and action-based explanation which shows how the occurrence of a triggering event regularly generates

the type of outcome to be explained' (Hedström, 2005, p. 25; see also Hedström and Swedberg, 1998). Mechanisms define tendencies and probabilities of certain outcomes. Consequently, they belong to a type of social science that has the ambition to generalize (Gerring, 2010). As Mill put it in 1844, mechanisms describe a tendency towards a result, or 'a power acting with a certain intensity in that direction' (Mill, 1844, as cited by Hedström, 2005, p. 31).

We acknowledge that there is a big debate out there concerning whether mechanisms are compatible with any notion of empirical observation of reality or, as Bunge (1997, p. 421) once put it, 'no self-respecting empiricist (or positivist) can condone the very idea of a mechanism' (cited by Gerring, 2007). Our analysis certainly does not answer the big question, but we are clear about the concepts about mechanisms that guide empirical observations. We say this to be explicit about our aims and motivation as researchers: for us it does not make sense to provide a conceptual apparatus if it does not allow us to go out in the field and make observations. Note that we do not say that to 'go mechanistic' means to deny the value of other aspects of causation – such as equifinality or correlation. All we need for our analysis is to accept that mechanisms are a sufficiently interesting aspect of causation to deserve our attention. We believe that, although the mechanism itself is theorized and cannot be falsified, we can systematically make empirical observations about the following:

*   The identification of a learning mechanism. This is the 'What mechanism is this?' question. Especially in policy analysis, we cannot simply say that there is a mechanism determining learning. We want to know whether this is a mechanism of, say, conflict or dialogue.
*   The key resource and activators involved in learning as second-order mechanism, be it information, experience, knowledge and so on.
*   How IA as a policy instrument mediates mechanisms in three regards:
    *   activators;
    *   the content of the second-order mechanism, in our case what is learned;
    *   the value or quality of a given mode of learning, or 'What is learning good for?' – within policy processes, different modes of learning are productive of different qualities such as exploiting the gains of cooperation or problem-solving.

In the next section, we go into the detail of each dimension in our discussion of learning modes.

Table 7.1   *Unpacking policy learning modes*

Learning as. . .	Epistemic	Reflexive	Bargaining	Hierarchical
Predominant actors. . .	Experts	Citizens	Interests	Courts and standard setters
Activator	Evidence	Communication	Negotiation	Compliance
Policy instrument activates. . .	Teaching through evidence-based rationality	Dialogue via participation	Exchange through consultation	Monitoring and scrutiny
What is learned?	Cause-and-effect relationships Policy relevance of science	Exposing norms Learning how to learn	Composition of preferences Costs of cooperation	Scope of rules Significance and rigidity of rules
What is it good for?	Reduction of uncertainty Opening up the peripheral vision	Upholding and renewing legitimacy Conflict resolution	Exposing the Pareto frontier Intelligence of democracy	Predictability Control

MECHANISMS FOR POLICY LEARNING AND THE ROLE OF IMPACT ASSESSMENT THEREIN

With these definitions and dimensions, we are ready to begin our discussion of mechanisms in the four modes or types of learning, starting with epistemic learning (Table 7.1).

Epistemic learning is found in situations where issue intractability is high and decision-makers need or want to learn. When this is coupled with the existence of an authoritative body of knowledge and analysts who are willing and able to teach, teaching has fruitful ground. The activator is evidence, or more precisely the use of evidence – in turn, this usage can be instrumental, linked to how to deal with a given problem, or 'enlightening' – that is, opening the peripheral vision of policy-makers.

Teaching involves the translation and transmission of new ideas, principles and evidence by socially certified, authoritative actors. The search for cognitive authority and evidence may be driven by either side – for decision-makers this could be a technological problem or complex disaster and, for experts, the push may be a scientific breakthrough and diffusion of innovation.

IA processes are fundamentally underpinned by a teaching logic, after all this is the archetypal evidence-based policy-making device. In the EU, the potency of IA's lessons is mediated by two important factors. First, and perhaps most obviously, policy-relevant knowledge must exist or be discoverable in the first place. More often than not the key epistemic issue when it comes to questions of relevance concerns the analytical methods used in the

IA. Since its establishment, debates have raged about the more appropriate ways of establishing the impact of policy options. The European Commission has not chosen a hierarchy of methods. For sure, there are advocates of cost–benefit analysis (CBA), but the official toolbox covers other techniques such as compliance cost analysis (arguable more in use at DG ENTR; Renda 2016), and multi-criteria analysis (MCA) (used among others by DG EMPL, DG Justice, DG Regio) (see Renda, 2016).

This issue of contextual 'fit' is critical – if IA analyses do not speak to the political environment, the prospects for epistemic learning are limited. Fit is also temporal, the time dimension in teaching matters because it concerns whether decision-makers are sufficiently ready to learn or not, and whether their learning objectives (i.e., the policy decision) are truly open. Policy-making timelines are erratic and dynamic. While IA takes place at the beginning of the policy-making process, analysis takes time to form and political pressures may weigh heavily. Here is where Herbert Simon's (1957) famous idea of bounded rationality kicks in – teachers who want to influence their political pupils may have to temper their analytical perfectionism and aim to satisfice.

What is being learned and what is it good for? In an ideal typical manifestation, impact assessment analysis will delineate complex cause-and-effect relationships for decision-makers and how this knowledge can be linked to desired policy outcomes. In this way, IA reduces uncertainty. In more profound ways, epistemic learning in IA can also open up the peripheral vision of policy-makers. Models that integrate the environment, human behaviour and public policy can show how a given policy choice has multiple causal effects and can lead to unexpected consequences once we zoom out of narrow financial analysis and embrace wider cost–benefit analysis and complex modelling tools (Jordan and Turnpenny, 2015).

Reflexive learning is generated by dialogue and debate. This most social form of learning takes place against the backdrop of radical uncertainty about how to move an issue forward. We scrutinize and reform the logic of appropriateness in policy-making through debate: this is how we confront the ideas held by ourselves and others (Majone, 1989). Such exposure, and the scrutiny it entails, makes reason and social consensus possible (Habermas, 1984). Dialogic learning outcomes, in their purest form, are reliant on force-free deliberations – recall, in reflexive settings, the 'how' of learning is more pertinent than the 'what' (Freeman, 2006) – this requires public engagement technologies that occurred as far 'upstream' in the policy process as possible (Willis and Wilsdon, 2004). In IA, consultation processes are central in triggering such dialogue. Activators are occurrences, events, decisions about communication. It is indeed a special type of communication that activates this mechanism.

If communication is the activator, where do we find it? Most likely in the participatory and consultative features of IA. With the 2015 revision of the

better regulation strategy of the Commission (Radaelli, 2018), the Commission has invested considerably in consultation, by strengthening its role in IA as well as in other instruments (for example, in the retrospective evaluation of EU legislation).

Consultation is in fact a key component of IA (Radaelli, 2004, pp. 733–4; Hertin et al., 2009, p. 1190) and is mandatory in the EU (European Commission, 2009). But, we should be careful here. Consultation involves two distinct groups of participant: (1) organized interests, private firms and non-governmental organizations (NGOs), commonly referred to as stakeholders, and (2) citizens. The dialogue we are interested in is that generated by the latter (we deal with stakeholders in the next account of learning through bargaining). Despite many best practice guides on how to convene consultations (e.g., OECD, 2005, 2012), there is a good deal of variation in how they are run. Looking across countries, many consultations fall short of a fully plural dialogue where the 'ownership of the proposed regulation is shared' with publics (OECD, 2008a, p. 48). Research on US rulemaking has identified the problem of the missing stakeholder (Farina and Newhart, 2013). This means that there are instances where consultation is specifically designed to capture a particularly weak stakeholder, but exactly because the stakeholder does not have familiarity with the procedures of rulemaking and consultation in particular, the formal consultation exercise misses this category entirely.

The European Commission uses a range of tools such as active consultation devices like open hearings, focus groups, citizen juries and more passive ones including online consultations and questionnaires. We have no data on the missing stakeholder in EU consultations, although it is plausible to imagine that the problem exists everywhere, not just in the USA. Bozzini and Smismans (2016) have gathered 800 IAs between 2003 and 2013. With one exception (DG EMPL), in the process of preparing the IAs the DGs tend to prioritize the inclusion of other DGs with specialized competences over the inclusion of external actors. Thus, internal coordination is more important than dense interaction with citizens – something that most scholars of bureaucracies would not find surprising. A more interesting finding is that the more DGs produce IAs, the more they tend to be inclusive in consultation. This is a learning-by-doing process that chimes with another study, this time on the UK, on the production of IA in central government departments in Britain (Fritsch, Kamkhaji and Radaelli, 2017).

Yet, even in the most limited cases, dialogue has its benefits. Most obviously, engaging publics yields some level of input legitimacy. It provides a single moment where policy proposals are made public and forces decision-makers to think about the wider social context they operate in. Consultations should also provide an opportunity to reach out to hard-to-reach or marginalized groups who may be disproportionately affected by a particular policy option. Often

these stakeholders, as mentioned, are missed but one can look at the case of indigenous peoples whose right to participate in certain decisions is enshrined in the United Nations (UN) principle of free, prior and informed consent (FPIC) (see Blanc and Ottimofiore, 2016, p. 156). Intense communication also brings its own compliance dividend – citizens whose views have been taken into account being more likely to comply with resultant regulations (Van Tol, 2011).

Dialogue triggered by sophisticated consultation can enable forms of reflexive learning. Open and deep communication is an activator of learning about social norms (Checkel, 2005). This opens up a wide social frontier for debate and value-driven argumentation. This is why the inclusive, energetic debates about fundamental values that fuel reflexive learning are most closely associated with paradigmatic policy change down the line (Hall, 1993). As well as the proto-lessons generated around values, dialogue also holds the promise of deuteron- or triple-loop learning (Bateson, 1972; Argyris and Schön, 1978). Simply stated, by arguing and debating, policy actors may get a clear picture of how we can build consensus and adjust our norms – that is, we learn about how to learn and develop (Argyris, 1999). In conclusion, reflexive learning is good for stable conflict resolution and upholding legitimacy.

Next comes **learning through bargaining**, which is activated by negotiation. Issues are eminently tractable. Authority is plural. These processes are dominated by organized stakeholders and policy networks who must accept there is no settled monopolistic position on an issue. Rather, policy and politics is what they make of it. As such, actions and interactions are underpinned by exchange. Though intuitively we tend to link negotiation to material outcomes, we think of the way information is handled and changed during exchanges as an intrinsic part of the generation of learning. After all, how actors select, acquire and trade information to inform their negotiating positions ultimately influences what they are willing to 'give' to competitors.

In IA, consultation with organized interests is central in facilitating these exchanges. In the EU, finance ministers and business groups spearheaded the push to a more economically focused, decision-making system (Radaelli and Meuwese, 2010). The result is an IA system whose development is intimately related to the post-millennium agenda for better regulation and economic effectiveness – with some special tests like the small and medium-sized enterprise (SME) test (Radaelli, 2004) that are supposed to give priority to this type of stakeholder. Further down the line, environmental and socially focused NGOs have advocated for an EU IA system open to social and environmental tests. The official guidelines of the Commission on IA balance economic, social and environmental analyses and tests. Recall that all three dimensions deserve the same attention, according to the Commission's better regulation toolbox.[2]

In recent years, the Competitiveness Council of Ministers of the EU has tried to forge consensus on a business impact target for the EU – that would

mean that the EU institutions make a commitment to reduce the total regulatory costs on business by a certain predefined amount, over a period of time. In a sense, there has been meta-bargaining between some national delegations who have influence in the Competitiveness Council and the Commission over the purpose of IA, with the Commission resisting the unidimensionality of the business impact target. In late 2017, the Commission argued that the target 'may lead to undue deregulation because "necessary costs" to achieve regulatory benefits are not distinguished from "unnecessary costs". A burden-reduction policy of this sort will not have the necessary legitimacy among stakeholders' (European Commission, 2017, p. 44). For the time being at least, this deregulatory steer of IA has been blocked by the Commission – which interestingly makes an argument about legitimacy among stakeholders in resisting the imposition of the target on EU regulation.

The precise nature of exchange and the learning that is generated is indeed dependent on the context of the interaction between member states and the Commission. At its core, this is bargaining about who is control of the law-making process of the EU, and whether the bureaucracy, the Commission, should be saddled with regulatory targets or free to examine regulations one by one via IA. More generally, in policy issues where stable policy communities dominate, interaction around the IA will be routinized. Here, decision-making risk is calculable. Exchange is underpinned by actors' probability judgements derived from long-standing experience (for more on decision-making under risk see Elster, 1989, p. 26). While these calculations will be adjusted and recalibrated over time, the lessons generated may be thought of as little more than the realization of expectations as opposed to any new discovery. In such circumstances, though it is never complete, transparency will be sufficient for actors to be able to make an accurate prediction of other parties' stances. On the other hand, where the issue is novel or one-off, or a new actor enters the arena, interactions are underpinned by increased risk and, potentially, reduced transparency. In such contexts of incomplete information, interaction will be marked more by negotiation and bet-hedging. Here, exchanges do not simply create lessons about the most efficient means to secure mutually beneficial outcomes, they may create new understandings about the issue entirely.

What is learned, and what is it good for? At a basic level, exchange of information can secure better policy solutions (OECD, 2008b). As sector specialists, organized interests and private firms are experts who can help decision-makers avoid controversial policy options or outdated assumptions. More centrally, however, the value of involving organized stakeholders in IA rests on the negotiation it triggers. In their ideal form, policy-making gains in efficiency by generating lessons about actors' preferences and the costs of cooperation. Taking preferences first, through bargaining and negotiation we learn about the composition of preferences on an issue, the salient outcomes

around which parties can coalesce and about breaking points – the red lines held by ourselves and others beyond which an agreement cannot be forged. We also learn about the cost of reaching agreements (for a deeper discussion of these see Elster, 1989, Chapter 4). Where policy problems are time-sensitive, policy efficiency is increased where decision-makers understand these red lines and points of potential friction that may threaten future compliance. Learning via bargaining assists constellations of actors in exploring the Pareto frontier – the set of choices that are Pareto-efficient and can only be discovered by repeated interaction and negotiation. Systems of political exchange can work like markets: in a free economy, no individual has all the information necessary to find what the efficient solutions are, but it is sufficient that individuals be allowed to exchange on the basis of the information contained in the price system. Similarly, in political systems no individual or group knows what is good for the community, but partisan mutual adjustment and competition allow constellations of actors to find out what is good for me, given an acceptable initial distribution of resources (this is the intelligence of democracy in a nutshell). In a sense, IA in the European Commission forces all DGs concerned with an issue to bring their own evidence to the table, so that an evidence-based competition over problem definition and solutions is activated. The end result is a choice of policy options that takes a sufficient number of dimensions into account (see Radaelli and Meuwese, 2010 for details).

Finally, we consider **learning in the shadow of hierarchy**. Here, the activator we are interested in is compliance. The concept of hierarchy reminds us of the vertical nature of this mode of learning. In that, there is similarity with epistemic knowledge. In the latter, we have a teacher and a pupil, whilst in hierarchical learning we have those who set the rules and those who follow the rules. Compliance is an important dimension of learning – over time, policy actors and citizens learn about rules and how they are enforced. These systems of rules cast a long shadow over our lived experiences.

We can relate IA to learning about rule compliance in two main ways. Delegation theorists demonstrate how IA is shaped by political principals who use it to constrain their bureaucratic agents (McCubbins, Noll and Weingast, 1987). So, in the EU we can think of this in terms of member states making use of IAs to tame the political agenda-setting activities of the European Commission. Perhaps a more apt way to use principal–agent reasoning in this learning argument is to consider the role of the Commission's own central oversight body charged with coordinating the IA outputs of the various Directorate Generals (DGs) – the Regulatory Scrutiny Board (RSB). The RSB evaluates the quality of IAs and can place the legislative process on hold by instructing a DG to revise and resubmit their IA. Through this process of monitoring, the RSB pulls and pushes DGs towards compliance and so learning. But in this case again the context of the interaction between Commission

and member states is important. Over the years we have seen some member states demanding an independent regulatory oversight body, not staffed by officers working for the Commission. The latter has responded that oversight on IA is part of its right to identify, appraise and propose new legislation. In consequence, regulatory oversight should be in some ways connected to the Commission and its services, the DGs. At the moment these two different interpretations have found an equilibrium, perhaps fragile, in an RSB that is staffed by three independent experts, recruited for a limited period, and by three Commission officers, and chaired by a senior officer of the Commission. This is yet another indication that the context of learning in the hierarchical mode is identified by the question of who has control over the process of policy formulation – the bureaucracy or the member states. The features and mission of bodies like the RSB incarnate the results of this core tension between an intergovernmental notion of the EU and another, more supranational vision of European integration.

A second vector triggering our compliance mechanism is the European Court of Justice (ECJ). The ECJ increasingly uses IA as *obiter dicta* – materials that are non-binding but are nonetheless mentioned in rulings as helpful in establishing the original rationale for regulations (Alemanno, 2011, 2016). The EU's integration of IA in the court system has only just begun and we are some way off any US-style judicialization. IA can be both the subject of legal challenge and invoked in the cases where the validity of the regulation is being considered (Alemanno, 2016, p. 129). We are interested in this latter usage. The ready availability of policy analysis ensured by IA has resulted in an 'evidence-based judicial reflex' increasingly being exercised (Popelier, 2012, p. 257 in Alemanno, 2016, p. 129). Alemanno (2016) offers two examples where the ECJ has noted the content of IAs as an assurance of the proportionality of the regulatory option selected and that various options were considered in the first place. In this way, the IA process becomes a compliance tool – mediating challenges both ex ante *and* ex post in the policy process.

What is this scrutiny and compliance good for? We know, hierarchical rules are indispensable to organized societies. Monitoring and scrutiny of IA are indispensable for the legitimacy of EU regulations. Sanctions like negative opinions of the RSB are lessons for the DGs concerning the expectations about the quality and type of evidence they have to produce to support their policy proposals. Interestingly, other EU institutions, specifically the European Parliament, have invested in scrutinizing the IAs of the Commission to inform and support the work of the committees (Radaelli, 2018), thus adding an interinstitutional dimension to this variety of learning via IA. In the end, learning via hierarchy provides predictability and allows different actors (from the European Parliament to national delegations and stakeholders) to exercise control on the policy formulation process of the European Commission.

CONCLUSIONS

In this chapter we have explored the logic of learning in four different modes: epistemic, reflexive, via negotiation and within hierarchies. By considering the case of the most important instrument for evidence-based policy in the European Union, impact assessment, we have shed light on the relationship between second-order mechanisms, activators and policy instruments. One big question for us at the end of this journey is, where is politics in this framework? Does the language of mechanisms and policy instruments bracket politics away? We do not think so. First, mechanisms do not play regardless of the state of institutions but only make sense in a given context. As real features of the world, mechanisms connect and are mediated by wider features of a political system. The Commission has a right to initiate legislation defined in the Treaty (the highest source of law in the European Union). This shapes how constellations of actors learn by using IA in this peculiar system, where a bureaucracy has the right to introduce proposals for new legislation.

At the deeper level, our analysis of mechanisms and policy instruments reveals other fundamental dimensions of politics and interinstitutional conflict. Evidence-based policy and IA in particular are the terrain where a fundamental fault-line about who is in control on the law-making process plays out. We have seen that tensions about the role of regulatory oversight, the freedom of the Commission in carrying out IA, the reach of consultation, expose different answers to the question of who is in control of the making of EU policies, and who is accountable. The Commission wants to learn via IA how to coordinate policies and generate legitimacy, by bringing its services (the DGs) in line with the priorities of the president and the stakeholders behind the proposals that are sent to the other EU institutions as part of the legislative procedure. The European Parliament scrutinizes the IAs of the Commission to make it more accountable. The national delegations sitting in the different formations of the Council want to learn how the adoption of a business impact target or an independent RSB would allow more control on the bureaucracy and a more intergovernmental EU.

To us, it does not look surprising that a policy instrument like IA has moved into the very political territory of learning the boundaries of proportionality (Alemanno, 2016) and subsidiarity – that is, what is more efficiently done at the EU level and what should be left to the member states. In launching the new industrial strategy on 13 September 2017, the Commission President, Jean-Claude Juncker, announced a new task force led by Frans Timmermans on subsidiarity and proportionality.[3] The task force was set up in November 2017 with members from national parliaments and the committee of the regions. Its task is to clarify the principles of subsidiarity and proportionality and identify

policy sectors that should be given back to EU countries or re-delegated to the EU. Writing IAs, defining regulatory oversight bodies, involving stakeholders, launching dialogues with citizens and experts and setting the rules for what should go inside an IA are more than routines of technical, dull, operational, low-politics learning. They are also avenues to learning how to approach inter-institutional politics, accountability, proportionality and subsidiarity – that is, the core political dimensions of European integration.

ACKNOWLEDGEMENTS

NOTES

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3. See European Commission President Juncker's State of the Union address 2017, accessed 14 October 2018 at <http://europa.eu/rapid/press-release_SPEECH-17-3165_en.htm.>

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8. Accountability mechanisms: the case of the European banking union

Mattia Guidi

1 INTRODUCTION

Accountability is an increasingly popular concept in policy-making and in social sciences (Flinders, 2001; Koop, 2011; Maggetti, Ingold and Varone, 2013; Fernández i Marín, Jordana and Bianculli, 2015; Koop and Hanretty, 2018). Its importance has grown together with the complexity of policy-making. As policy-making turns out to be more and more technical and increasingly delegated to experts, the question of how citizens, political bodies, stakeholders can assess and influence policy-making has become crucial. Democracy cannot be conceived without proper access to information, and without the possibility to engage with policy-makers and steer their behaviour. Yet, there are technical and political obstacles to putting the apparently uncontested concept of accountability into practice.

Accountability, in particular, seems to be at odds with other goals of policy-making (efficiency, credibility, consistency) that instead are meant to require policy-makers to be insulated from political control, and thus from political accountability as well. Therefore, the institutional design of new bodies is never simply about maximizing the number of accountability mechanisms, but rather about striking a balance between conflicting goals.

To better understand how policy-makers find a particular equilibrium in this trade-off, this chapter analyses a recent instance of policy change (and institutional change) that took place at EU level: the establishment of the European banking union. At the moment, the banking union is composed of two policies: a Single Supervisory Mechanism (SSM) and a Single Resolution Mechanism (SRM) (see Fabbrini and Guidi, 2018 for a more detailed analysis). There are plans to complete the banking union with a European Deposit Insurance Scheme, but this is currently under negotiation. The SSM (created with Council Regulation 1024/2013, 'SSM Regulation' henceforth) consists of a system of centralized supervision for all the main banks of the Eurozone. Supervision is exercised by the European Central Bank (ECB) in collaboration

with national supervisory authorities. The SRM (created through Regulation 806/2014, 'SRM Regulation' henceforth) has instead been established to deal with banks that are 'failing or. . .likely to fail' (Article 18.1 SRM Regulation).

Both policies aim at minimizing the risk of banking crises, which have been one of the main causes of the European sovereign debt crises. On the one hand, unreliable banking supervision by national authorities has brought some financial institutions in several European countries close to bankruptcy. On the other, the need for national governments to save failing banks has resulted in increased government deficit and debt, which in turn fuelled a large-scale credibility crisis for several Eurozone members. The banking union seeks to avoid similar vicious circles in the future. With the SSM, banking supervision should become stricter, and banking crises less likely. With the SRM, the 'resolution' of failing banks should not rely on national governments' (and national taxpayers') money, but on a Single Resolution Fund built with contributions levied on all banks. This, combined with the provision that shareholders must suffer losses before external money is used (the so-called *bail-in* procedure), should reduce moral hazard and the risk of negative externalities.

The SSM assigns centralized banking supervision to the ECB, and in particular to an internal body named the Supervisory Board (see Section 3.1), appointed by the ECB itself with the participation of Commission and Council. The SRM policies have instead been delegated to a newly created body, the Single Resolution Board (SRB), whose members are appointed by the Commission, the Council and the European Parliament (EP). The SSM and the SRM have a number of significant differences in their institutional design, the appointment of their members, and the external controls on their activities (see Section 3.3 for a detailed analysis). Since they substantially deal with two components of the same policy, these differences are worth examining. This chapter seeks to explain why EU legislators provided for greater political accountability in the SRM than in the SSM. The empirical analysis, based on a comparison of the two policies and of their functions, leads to the conclusion that the main factor explaining the differences in accountability between the two policies is the inherently redistributive nature of the SRM.

The chapter proceeds as follows. Section 2 discusses the concept of accountability and its relationship with regulatory autonomy, the nature of EU agencies, and the possible explanations for the variation in accountability mechanisms observed in the SSM and SRM. Section 3 analyses and compares the provisions relating to accountability in the two policies. Section 4 discusses how the activators included in the two policies could actually trigger mechanisms of accountability, by comparing the EU banking union to EU competition policy. Section 5 provides some concluding remarks.

2   THEORETICAL FRAMEWORK

2.1   What is Accountability and Why it Matters

The concept of accountability has considerably evolved in the last 30 years. From a narrow, intra-organizational definition, scholars have come to consider accountability not just as a concept referring to the interaction between a principal and an agent, but also as a set of mechanisms going in multiple directions: towards political principals, but also towards citizens, interest groups, stakeholders (Fernández i Marín, Jordana and Bianculli., 2015; Jordana, Bianculli and Fernández i Marín, 2015). The most accepted definition of accountability is that of Bovens (2007, p. 450), who defines accountability as 'a relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences'.

Put in this way, accountability is very much connected to the concept of delegation. This is because an actor has been delegated power, within specific limits and with a specific mandate, and that this actor must offer explanation for her or his conduct, and possibly face sanctions. The classical accountability relationship is that between voters and elected politicians: in this sense, 'democratic accountability usually means that voters know. . .what parties have done in office and reward or punish them conditional on these actions' (Stokes, 2005, p. 316). However, modern democratic systems have evolved by creating numerous 'chains of delegation' (Strøm, 2000) that go from voters to MPs, from MPs to executives, from executives and from MPs to regulatory agencies, and so forth. When the chain of delegation gets messy, it becomes difficult to determine who must be accountable to whom.

What is more, the creation of regulatory agencies, which has characterized all democracies in the last 30 years (Jordana, Levi-Faur and Fernández i Marín, 2011), poses a fundamental problem for democratic accountability, in that their establishment is not meant to allow for systematic control of their activities, but rather the contrary: they are explicitly granted *independence* from political principals. The theoretical justification for the independence of regulatory agencies dates back to the seminal contribution of Kydland and Prescott (1977), and it was first applied to the institutional design of central banks (see Barro and Gordon, 1983; Rogoff, 1985). From there, in a spectacular spillover, these ideas spread in the realm of regulation studies – particularly in the 1990s and early 2000s, policy-makers and scholars agreed on the need for non-majoritarian institutions in a growing number of policy fields (see Majone, 1996, 1997, and Guidi, 2015a, 2016 for an overview).

Independence from political principals is seen as a resource that allows regulatory agencies to implement consistent policies through time, benefit from the expertise of their members, and avoid the risk of political uncertainty (see Guidi, 2016, pp. 66–76). So it is precisely the (relative) *lack of accountability* that is expected to improve the agencies' regulatory performance – although the relationship between independence and performance has not been unequivocally proven (Voigt, 2009; Buccirossi et al., 2012; Guidi, 2015b; Vining, Laurin and Weimer, 2015). These supposed benefits of independence are at odds with the universally recognized benefits of accountability, which should make policy-makers as responsive as possible to the voters. Can this contradiction be reconciled?

The answer to this question must probably be negative, meaning that there is an unavoidable trade-off between accountability and independence (for a more detailed explanation of this trade-off, see Guidi, 2015a). Therefore, every time politicians need to establish a new agency or bureaucratic body, they have to decide to what extent they want it to be democratically controlled (and, conversely, to what extent they want it to be independent). There are various ways in which democratic accountability can be pursued. Agencies can be accountable to ministers, governments or parliaments through the presentation of annual reports, hearings and other similar tools. Similarly, agencies can be required to make some information available to the public in general, by publishing reports, resolutions or minutes (Fernández i Marín, Jordana and Bianculli, 2015). However, if we recall the definition of accountability that we gave at the beginning of this section, we must notice that the *sanctioning* element is crucial to it: the mere fact of publishing some information on a website does not necessarily increase the agency's accountability, if those who obtain this information have no means to influence the way the agency behaves.

For the purpose of this volume, it is useful to clarify that accountability can be conceptualized as a second-order mechanism. In fact, rules define certain activators that enable political principals to exercise (first-order mechanism) direct or indirect control on some agency. The presence of these mechanisms (and the threat of using them) is then expected to trigger accountability (second-order mechanism) on behalf of the agency.

2.2   Accountability in EU Agencies and Banking Regulation

EU agencies, like those created in the context of the European banking union, can be analysed through their features like national agencies. European agencies are organizations, established by EU legislators, endowed with regulatory tasks and operating with some degree of autonomy from the Commission, the Council and the European Parliament (Keleman, 2002; Dehousse, 2008; Trondal and Jeppesen, 2008; Kelemen and Tarrant, 2011; Mathieu, 2016). They

were set up to carry out activities for which the Commission lacked the expertise or the staff, or for which the Council (and the European Parliament) wanted to have an enforcer independent from the Commission (Keleman, 2002). The already complex chain of delegation that characterizes EU policy-making has become even more blurred with the emergence of bodies that have the most various tasks, powers, and appointment procedures (Curtin, 2005).

How does accountability relate to the establishment and the activity of EU agencies? Based on the definition of accountability given in the previous section, three main issues deserve attention. The first is which decision-makers participate in the creation of the agency. As the agency would not exist without some legislative act, it is self-evident that the legislators are the 'political principals' that decide to make the agency more or less accountable to themselves. The second issue concerns the appointment of the members of the agency, or of its board (however it may be called). As the policy preferences of the appointees are generally known before the appointment, those who appoint the board certainly have an influence on the decisions that the agency will take. Strictly linked to this aspect is the possibility to dismiss members of the agency. Finally, an important aspect to consider is the way in which the decisions of the agency will be 'checked' and constrained by the political principals. Depending on a variety of factors, those who delegate may decide either to make future interventions in the agency's activity impossible, or to reserve for themselves the possibility to amend or block the agency's decisions.

Concerning the case on which this chapter focuses, it must be noted that the ECB, envisaged with the Maastricht Treaty of 1992 and established in 1998, has several features in common with agencies: its members are appointed among renowned experts in the ECB's field of activity; it enjoys great independence from other EU bodies; it is in charge of carrying out only the specific tasks that are delegated to it. Unlike other agencies, the ECB is explicitly mentioned in the Treaties: for this reason, it cannot be dissolved, and its task of adopting the Eurozone's monetary policy cannot be delegated to any other body, unless all EU member states agree on a treaty change. From this point of view, the ECB is much more 'protected' from interference, and it enjoys a sort of special status.

2.3   Theoretical Expectations

What do theories of delegation predict in terms of independence and accountability of regulators? To answer this question, it is useful to start from the distinction between redistributive and regulatory policies (Majone, 1996, p. 5; Hix and Høyland, 2011, pp. 190–91; Levi-Faur, 2011, p. 4). While the first 'aim [is] to improve the conditions of one group in society at the expense of another', the latter aim is to find solutions 'capable of improving the conditions

of all, or almost all, individuals and groups in society' (Majone, 1996, p. 5). Redistributive policies require decision-makers to determine from whom taxes should be levied and to whom revenues should be distributed. Being zero-sum games, which do not necessarily improve the general welfare of a society, they can be legitimately made only by decision-makers who are granted such power by voters. Differently, regulatory policies can be legitimately taken by non-majoritarian bodies, because they aim at correcting market failures and increasing the overall efficiency of the economic system. Majone summarizes this distinction by claiming that:

> the delegation of important policy-making powers to independent institutions is democratically justified only in the sphere of efficiency issues, where reliance on expertise and on a problem-solving style of decision-making is more important than reliance on direct political accountability. Where redistributive concerns prevail, legitimacy can be ensured only by majoritarian means. (Majone, 1997, p. 162)

This distinction, however, is not only normative. It is true that the legitimacy of redistributive decisions taken by independent regulators could be questioned. However, it is also evident that politicians themselves are less willing to delegate when key redistributive issues may arise. This is because where there is redistribution, there are also electoral costs and benefits. Decisions involving transfers of money are more easily perceived by voters, and they can easily yield electoral gains (or losses) for politicians. If a policy is likely to redistribute costs and benefits across groups in a society, politicians will be more likely to keep it. To provide an example related to EU policy-making, consider to what extent national governments have delegated powers in 'regulatory' policies (like competition policy, monetary policy, regulation of the Single Market) and how intergovernmental the approval of the Multiannual Financial Framework has remained.

Beside this distinction, the main reason for granting independence to regulators has been identified with the need to reassure economic actors that a certain policy choice will be implemented consistently through time (Majone, 1996, 1997). The act of delegation to an agency, which is given the power to take decisions that were once made by political bodies (parliaments and/or governments), serves as a signal of credible commitment. The higher the degree of independence granted to an agency, the higher the cost of reneging on the promise made with the act of delegation.

Politicians can also delegate to protect their policy choices from future majorities that could overturn them (Moe, 1990). By insulating a policy from political discretion, policy-makers not only tie their own hands (Giavazzi and Pagano, 1988), but also those of future incumbents. The overall effect is that of making some policies more stable. Scholars have also stressed the importance of putting

experts in charge of policies 'in informationally intense issue areas' (Franchino, 2004, p. 274), in which politicians do not possess enough knowledge and ability to formulate sound and effective policies (Bawn, 1995). Finally, delegation can be convenient also from an electoral point of view: when a regulator has to take decisions that might be unpopular to voters, it can be useful for politicians to be able to distance themselves from the independent decision-makers, allowing them to avoid blame (Fiorina, 1982; Thatcher, 2002).

How can this theoretical framework help us explain different degrees of political accountability in the two EU policies that were so far created in the framework of the European banking union? The answer is not straightforward, because the bodies in charge of managing the SSM and the SRM perform their activities in the same policy area, with very similar requirements of technical expertise, and their creation happened almost at the same time (the approval of the SRM Regulation was only nine months after that of the SSM Regulation). Therefore, it is difficult to find significant differences that may explain why their degree of political accountability is different. There is, however, one feature that the two policies do not have in common, and which strictly relates to the distinction made at the beginning of this section: while the SSM is based on regulatory activities (like requests for information, investigations, on-site inspections, authorizations to operate in a participating member state, assessments on the acquisition of qualifying holdings in banks[1]), the SRM's activities, in that they may imply the use of the Single Resolution Fund to help failing banks 'ensure the continuity of essential financial services' (SRM Regulation, Recital 58), have a redistributive nature. In other words, taxes levied on banks from the whole Eurozone might in future be used to save a bank (or a number of banks) based in a specific country.

In the next sections, I will analyse how the institutions of the European banking union have been designed in terms of activators of accountability mechanisms, focusing in particular on the interplay between the decision-makers during the negotiations. At the end of this analysis, it will be possible to evaluate which institutions are characterized by greater mechanisms of political accountability, and to assess the plausibility of the explanation advanced here.

3   THE INSTITUTIONAL DESIGN OF THE EUROPEAN BANKING UNION: HOW ACCOUNTABLE ARE THE SUPERVISORY BOARD AND THE SINGLE RESOLUTION BOARD?

As argued in the introduction, the European banking union is meant to be composed of three pillars: (1) a Single Supervisory Mechanism (SSM), passed in October 2013 and entered into force in November 2014; (2) a Single Resolution

Mechanism (SRM), approved in July 2014 and became operative in January 2016; (3) a European Deposit Insurance Scheme that is still being negotiated. For obvious reasons, this chapter will focus just on the first two pillars.

A first distinction needs to be made with regard to the decision-making procedures for establishing the SSM and the SRM. The SSM has been passed with a procedure involving just the Commission (with its power of legislative initiative) and the Council, acting under unanimity rule. EU legislators were able to use this procedure because Article 127.6 of the Treaty on the Functioning of the European Union (TFEU) envisaged it to 'confer specific tasks upon the European Central Bank concerning policies relating to the prudential supervision of credit institutions'. When creating a European system of banking supervision, Commission and Council found a policy that had already been called for in the TFEU, and for which they could use a 'fast-track' procedure (without involving the EP) – provided they chose the ECB as 'agent'.

The SRM case was different in many respects. First, the policy was not explicitly envisaged in the treaties. Therefore, the legal basis was much more uncertain than in the SSM case. The legal basis for the SRM was found in Article 114 TFEU, which deals with 'measures for the approximation of the provisions. . .which have as their object the establishment and functioning of the internal market'. Second, the decision-making procedure prescribed by Article 114 is the ordinary legislative procedure, which means that Council and EP had to find an agreement on a proposal laid down by the Commission. This means one more veto player in the decision, and one more political principal. Third, the SRM in its entirety has been set up by three separate acts: a directive (Directive 59/2014), a regulation (Regulation 806/2014) and an intergovernmental agreement (signed by all the member states that adopt the euro on 14 May 2014).

3.1   Accountability Provisions Introduced in the Single Supervisory Mechanism

As explained in the introduction, the supervisory functions of the ECB are performed by an internal body that is formally separated from the Executive Board and the Governing Council that manage monetary policy – the Supervisory Board. The board is composed by six fixed members (among which there are a Chair and a Vice-Chair) and by one representative from each supervisory authority of a participating member state.

Regarding the appointment of the Chair and the Vice-Chair of the Supervisory Board, the legislators have opted for a procedure with shared responsibility of ECB, EP and Council. Although the Council and the EP do not have means to interfere in the Supervisory Board's activity, their participation in the appointment ensures at least some ex ante influence. This influence, however, is rather

limited, as the candidates for Chair and Vice-Chair are proposed by the ECB itself. The Chair is appointed for five years, and her or his appointment is not renewable. The Vice-Chair, instead, must be selected among the members of the ECB's Executive Board.

A second instrument that can potentially trigger mechanisms of accountability is the presence of a procedure for removing the Chair in case of serious misconduct. Article 26.4 of the SSM Regulation prescribes that '[i]f the Chair of the Supervisory Board no longer fulfils the conditions required for the performance of his duties or has been guilty of serious misconduct, the Council may, following a proposal by the ECB, which has been approved by the European Parliament, adopt an implementing decision to remove the Chair from office'. However, the fact that the proposal to remove the Chair must come from the ECB indicates how far this is from being a substantial check or a constraint on the Supervisory Board's activity.

Finally, other provisions of Regulation 1024/2013 oblige the ECB and the Chair of the Supervisory Board to offer information and participate in hearings when requested. In particular, Article 20 of the SSM Regulation requires the ECB to submit an annual report to the EP, Council, Commission and Eurogroup (Article 20.1). In addition to that, the Chair of the Supervisory Board can be heard by the Eurogroup (Article 20.4), by committees of the EP (Article 20.5), and must reply 'orally or in writing to questions put to it by the European Parliament, or by the Eurogroup' (Article 20.6).

3.2 Accountability Provisions Introduced in the Single Resolution Mechanism

The SRM, as we noted above, is composed by three separate legislative acts. Notably, one of them is an intergovernmental agreement, which has been used to prescribe how funds gathered from banks at state level must be merged into a Single Resolution Fund, that the SRB is expected to use in case of a banking crisis. The use of the intergovernmental agreement has been criticized by many commentators, as it would allow any country to withdraw its 'compartment' of the fund if the SRM were changed against its will or applied in a way that the country perceives to represent a 'fundamental change of circumstances' (see Fabbrini and Guidi, 2018). This is not an explicit accountability provision, but it is certainly one that gives participating member states a strong implicit power with regard to the Single Resolution Board.

Which provisions of the SRM are meant to trigger mechanisms of accountability? Concerning the appointment of the members of the SRB, the procedure entails a proposal by the Commission, which is submitted to the EP and, after its approval, to the Council, which ratifies the appointment. The two

co-legislators are given a substantial veto power on the choice of the members of the SRB (Article 56 SRM Regulation).

Another aspect on which there are relevant checks is the resolution procedure. Although the SRB is autonomous in deciding whether to start a resolution procedure or not, the Commission and the Council have the power to block the resolution scheme or to amend it. This power must be exercised jointly by Commission and Council: this means that if one of the two does not agree with the other's view, nothing is done and the resolution scheme is adopted as the SRB sees fit (Article 18 SRM Regulation). The time for the Commission and the Council to object or amend the proposal is a maximum of 24 hours. It could be argued that having such a short time for amending the resolution scheme makes it less likely for the Commission and the Council to exercise their power.

Regarding accountability and reporting obligations, the SRB has a few more obligations with regard to other actors than the ECB Supervisory Board. It must present its annual report not only to the EP, Council, and Commission, but also to the European Court of Auditors (ECA) and to all the member states' national parliaments (Article 45.2 SRM Regulation). Its Chair cannot be heard by the EP only, but also by the Council (Article 45.4–5). Similarly to the ECB Supervisory Board, it must reply orally or in writing to questions from the EP and the Council (Article 45.6).

Finally, removal of the Chair and of the Vice-Chair is possible with a procedure involving the three main political bodies of the EU: EP, Commission, and Council (Article 56.9).

3.3   Comparison

Based on the analysis of the previous sections, we can now compare the accountability provisions present in the SSM and in the SRM. In short, there is no doubt that the Council and EP have a greater control on the SRM than on the SSM. First, the SSM is managed by an internal body of the ECB. The fact of being physically located inside an institution that is by far the most independent of the EU signals how autonomous policy-making is in this field. Indeed, for the SSM there was no need (and no political will) to create a new body: the ECB was delegated an additional power, and this came with few checks on the Supervisory Body's activity.

The only institutional feature that allows for some influence of the Council and of the EP in the Supervisory Body's status is their involvement in the appointment of the Chair and of the Vice-Chair. However, it must be noted that the ECB remains a veto player, as the actor that proposes candidates in the first place. Therefore, the room for external, 'political' influence of the Supervisory Body is minimal.

Also regarding policy-making, the ECB is completely autonomous from 'democratic' bodies like the EP and the Council, as well as from the Commission. Its supervisory activities are not controlled, authorized, or checked by any other EU institution. The ECB's Supervisory Body decides under majority rule, with the Chair having a casting vote in case of a tie (Article 26.6 SSM Regulation). Finally, although removal of the Chair of the Supervisory Board is theoretically possible, the fact that it must be requested by the ECB itself excludes any 'political' removal, and it restricts this tool to cases of serious personal misconduct – very unlikely to arise.

The SRM, in contrast, appears more permeable by political bodies. First of all, it is a '*de novo* body' (see Bickerton, Hodson and Puetter, 2015, p. 705): the member states decided not to delegate further regulatory powers to the Commission or the ECB – though they could have done that, in principle. This means that it cannot benefit from the 'institutional shield' of a powerful body like the ECB: its autonomy depends exclusively on the rules that protect it and on the way in which it will carry out its tasks.

The appointment of the members of the SRB is also different from what we observe in the SSM. First, while in the SSM only the Chair and the Vice-Chair are appointed by bodies that are external to the ECB (and the Vice-Chair is bound to be a member of the Executive Board of the ECB), here six members are appointed. Second, in the appointment of the six members of the SRB there is no involvement of 'internal' actors, as was the case in the SSM. Commission, Council and EP are free to choose whoever they want, without taking into account the SRB or the ECB's preferences.

Also regarding checks on the regulators' activity, the SRB is more constrained than the Supervisory Body of the ECB. The SRM Regulation provides for a specific procedure to be followed in case Commission and Council want to object to, or to amend, a proposal of the resolution scheme drafted by the SRB. Obviously, there is an objective limitation on the use of this tool – because their power can only be exercised jointly, the Commission and the Council must agree on the objections they make to the SRB's scheme. Objections or amendments must be proposed by the Commission and confirmed by the Council. If the Commission's concerns are not shared by the Council, the procedure will not be stopped. Similarly, if the Council has objections but the Commission does not share its concerns, no intervention will occur. However, the fact that this intervention is always possible constitutes a relevant check on the SRB, which must always make sure not to deviate too much from the joint preferences of Commission and Council.

Finally, removal of the Chair and the Vice-Chair of the SRB is possible, and it must not be requested or authorized by the body itself. We can thus say that this procedure, which requires the agreement of EP, Commission and Council, is more likely to be activated in the SRM than in the SSM. That said, the

Table 8.1   *Accountability of regulators to EU legislators in the Single*
             Supervisory Mechanism and Single Resolution Mechanism

	Single Supervisory Mechanism (Supervisory Board)	Single Resolution Mechanism (Single Resolution Board)
Institutional status of regulator	Internal body of the ECB (–)	Ad hoc agency (+)
Appointment of regulators	Only Chair and Vice-Chair appointed by EP and Council (but with the ECB) (–)	Six members appointed by EP, Commission and Council (+)
Checks on regulatory activity	None (–)	Resolution schemes can be amended or rejected by Commission and Council (+)
Removal of regulators	Possible for Chair only (requested by the ECB itself, decided by EP and Council) (–)	Possible for Chair and Vice-Chair (decided by Commission, EP and Council) (+)
Transparency and information provisions	Annual report (to EP, Council, Commission, Eurogroup), can be heard by the EP, must reply to questions from EP and Eurogroup (–)	Annual report (to EP, national parliaments, Council, Commission, ECA), can be heard by EP and Council, must reply to questions from EP and Council (+)

language of Article 56.9 of SRM Regulation seems to exclude dismissals for 'political' conflicts, by specifying that removal of the Chair and Vice-Chair is possible when he or she 'no longer fulfil the conditions required for the performance of his or her duties or has been guilty of serious misconduct'.

4   FROM ACTIVATORS TO MECHANISMS: CAN ACCOUNTABILITY BE TRIGGERED?

In the previous section we have seen which activators (see introduction to this volume) have been put in place by EU legislators in designing the banking union. The presence of these activators, however, does not necessarily trigger accountability mechanisms. The reason for not having real accountability can be twofold: on the one hand, it may be because activators are weak (meaning that they do not assign strong powers of sanction or intervention); on the other, there might be a lack of political will to intervene, due to the sensitive nature of the policy and the unwillingness to not interfere with the body. In this section we will analyse how accountability can be triggered with the existing activators in a policy field like the EU banking union. In doing so, it will be useful to refer to a more established EU policy like competition policy.

The institutional set-up of EU competition policy very much resembles that of the banking union. First, the power to implement the policy, as envisaged in the Treaties since 1957, has been delegated to an existing body: the European Commission. Second, the actual decision-making process takes place in an internal body: like the Supervisory Board within the ECB, DG Competition (DG COMP) within the Commission deals with every aspect of enforcement. Third, the body in charge of the policy enjoys a sort of 'monopoly of information' with regard to other bodies (Cini, 1997). Fourth, competition policy is enforced with a decentralized system: like the EU bodies in charge of banking supervision and resolution work with national authorities, the DG COMP works with national competition authorities (Guidi, 2016).

The way a policy like competition policy has evolved since its establishment (in 1962) can offer a good basis for predicting the evolution, in terms of accountability, of the banking union. Although competition policy has not always enjoyed a prominent status, especially until the mid-1980s, its insulation from the influence of the Council and the EP allowed the competition commissioners to pursue an autonomous agenda (Cini and McGowan, 1998). The DG COMP's independence from the Commission, and subsequently from the member states and the EP, was further strengthened by the 2003 reform (Wilks, 2005). The only real check on the DG COMP has been, historically, the Court of Justice of the EU, before which infringement decisions issued by the Commission can be brought. However, jurisdictional checks are not proper mechanisms of democratic accountability.

Although the banking union is still in its infancy, the first steps do not show any relevant influence exercised by the political body of the EU on the process. As far as the SSM is concerned, the ECB has adopted a series of decisions[2] aimed at speeding up decision-making by delegating many technical decisions to lower-level offices inside the ECB. Although this responds to a logic of efficiency and efficacy, it contributes to making decision-making even less transparent to external actors and bodies. Regarding the SRM, the first resolution decision authorized by the Single Resolution Body (concerning the Banco Popular Español[3]) has been passed with no objections by the Commission. The press release announcing the 'green light' by the Commission shows that the Commission has provided a mere 'procedural' check.[4] The decision of the Commission to not object to the SRB's proposal has not allowed the Council to debate the resolution scheme.

What is left for accountability in such a system? Very little, it seems. For the good or for the bad, the activators included in these policies that should trigger second-order accountability mechanisms require considerable effort to be activated. This is a feature that the EU banking union has in common with other EU policies, like competition policy (as we have briefly seen above) or monetary policy. Thus, we observe that in these policies EU legislators seem to *choose*

to exert little or no control on the enforcers. It must be stressed, however, that we have not yet seen the SRB use the Single Resolution Fund to 'rescue' some bank. Given that redistributive issues appear to explain the relatively stronger accountability activators in the SRM, it might be that the perspective of a substantial redistribution might increase the pressure to activate them.

5   CONCLUSIONS

This chapter has highlighted that accountability activators go beyond the mere disclosure of information, or the publication of reports. They include all aspects of relationships of delegation in which principals can exercise some form of control, check, influence on the agent. What is more, mechanisms of implicit accountability (giving principals powers that they do not necessarily use) can be more effective than hearings and reports.

It has been shown that redistributive aspects are important in explaining the degree of accountability that legislators want to impose on agencies. Regarding the activators of accountability mechanisms included in the institutional design of the EU banking union, this chapter has illustrated that the Single Resolution Mechanism envisages instruments that allow more accountability to legislators than the Single Supervisory Mechanism. Regardless of the fact that even 'pure' regulatory policies have redistributive implications, EU politicians are less likely to give up control when a delegated policy may entail transfers of money from one country to another. It is not clear whether this is good or bad for the quality of enforcement, especially in a policy that has just been established and still finds itself in a transitional phase. To make such an assessment, we will have to analyse how banking resolutions, especially those involving the use of shared funds (and therefore some form of 'covert redistribution'), will be practically carried out under the new rules.

Evidence from other policy fields with similar institutional set-ups suggests that accountability mechanisms will be activated rarely, and without substantial influence on the decision-making process. Comparing the banking union to competition policy leads us to expect that there will be little accountability of the newly created bodies to the EU legislators. Overall, it appears that accountability mechanisms are not the primary goal of legislators in these policy fields, and the design of these policies rather aims at making the decision-making bodies independent from legislators, to ensure credibility and consistency of policy-making.

NOTES

1. See Articles 10–15 of SSM Regulation.

2. Decision (EU) 2017/933 of the European Central Bank of 16 November 2016, Decision (EU) 2017/934 of the European Central Bank of 16 November 2016, Decision (EU) 2017/935 of the European Central Bank of 16 November 2016, Decision (EU) 2017/936 of the European Central Bank of 23 May 2017, Decision (EU) 2017/937 of the European Central Bank of 23 May 2017.
3. See details at: <https://srb.europa.eu/en/node/315, accessed 14 October 2018>.
4. See at: <http://europa.eu/rapid/press-release_IP-17-1556_en.htm>, accessed 14 October 2018.

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9. Advancing the theory and practice of public sector reform through the analysis of social mechanisms

Edoardo Ongaro

INTRODUCTION AND OVERVIEW

Since the early 2000s, a strand of research works in public management has systematically resorted to the analysis of social mechanisms (basically as defined in Hedström and Swedberg, 1998 and Gambetta, 1998 – more on defining issues below) to improve our understanding of the dynamics of public sector reform processes.

This chapter appraises the adequacy of the analysis of social mechanisms as conceptual building blocks for an improved theoretical understanding of organizational reform processes in the public sector. The main questions can be formulated as follows: are social mechanisms 'adequate' building blocks for a form of theoretical understanding of public sector reform processes, complementary to other theories used to study such processes? And if so, how can they be employed for bettering our understanding of the dynamics of reform processes: what is the 'added value' of the analysis of social mechanisms? And finally, in a more prescriptive fashion, how can such knowledge be used for public sector reforms to be 'successfully' carried out by policy-makers?

The key thrust of the research agenda outlined in this chapter, which is aimed at improving our understanding of the dynamics of public sector reform by resorting to the systematic usage of social mechanisms, lies in identifying developmental patterns (Van de Ven, 1992) of public sector reform processes: patterns that can be understood in terms of concatenations of social mechanisms, which may be manipulated – triggered of defused – so as to achieve desired public sector reform goals.

In terms of methods, this work is partly theoretical-speculative and partly it proceeds by revisiting already published works (e.g., Ongaro, 2006, 2013; the Special Issue of *Governance* guest edited by Barzelay and Gallego, 2010a,

2010b; Asquer, 2012) in the light of the research questions and frame of analysis worked out in this chapter.

The chapter unfolds by, first, addressing issues of definition, then by reviewing the scientific literature on the analysis of social mechanisms for the study of public sector reform processes. The adequacy of social mechanisms analysis is then gauged, and the usage of this approach examined by contrasting social mechanisms-based explanations and institutionalist accounts of public sector reforms (the latter being the mainstream in the field). A discussion follows and the main conclusion is that social mechanisms-based explanations and institutionalist accounts chart a largely different terrain and are highly complementary to each other: their combined usage may be beneficial for the advancement of the knowledge about the dynamics of public sector reform processes.

DEFINITIONS

Social mechanisms can be defined as conceptual tools that can be employed in the analysis of complex change processes, like those triggered by reforms of the public sector, tools that – it is argued – are capable of revealing the multiple causes of change (Pettigrew, 1990) and specifying the social 'cogs and wheels' of the phenomenon investigated (Elster, 1993, p. 3).

Social mechanisms can be defined (Hedström and Swedberg, 1998, p. 7) as unobserved analytical constructs that provide hypothetical links between observable events: 'a social mechanism is a plausible hypothesis, or set of plausible hypotheses, that could be the explanation of some social phenomenon; the explanation begins in terms of interactions between individuals, or between individuals and some social aggregate' (Schelling, 1998, p. 32). Elster (1989) and Stinchcombe (1991) interpret social mechanisms as 'the building blocks' of an advocated middle-range theorizing that, in their opinion, can provide an important contribution to revitalizing the study of social phenomena, by getting beyond contenting oneself with merely establishing systematic covariation between variables or events, rather aiming at investigating the causal texture of social phenomena. This approach has strong roots in sociology, as illustrated by Boudon (1991, revisiting the work of Merton, 1968, pp. 43–4 in particular).

Social mechanisms are generally used in combined ways: concatenation of mechanisms is central in understanding change processes (Gambetta, 1998, p. 105), as '[e]xplanations of most concrete social events or states require resort to several elementary mechanisms; one is not enough. Sometimes, these mechanisms counteract one another, and sometimes they work together' (Hedström and Swedberg, 1998, p. 21). Social processes (McAdam, Tarrow and Tilly, 2001, p. 24) are in this perspective seen as regular sequences (concatenations) of such mechanisms. In particular, purposive organizational change processes

(as a subset of the broader social processes), such as those that can be detected in public sector reforms, can be seen as developmental patterns (Van de Ven, 1992) from a certain state of affairs (generally, the current status) to another state of affairs (interpreted as the resultant of the reform itself).

As to the notions of public management reform, administrative reform, and public sector reform respectively, there are various definitions, each emphasizing different aspects and profiles. For the purposes of this chapter, which aims at discussing the employability of social mechanisms for improving knowledge about the dynamics of organizational reforms, also in a 'design science' perspective (i.e., intending knowledge as applicable for intervening on a social system, i.e., for 'managing' a reform), we adopt the following definitions (Kickert and Ongaro, forthcoming; see also Ongaro, Ferré and Fattore, 2015; Di Mascio et al., 2017; Ongaro and Kickert, forthcoming, 2019):

- *Public sector reforms* are deliberate attempts to reconfigure the public sector, or significant portions of it, broadly intended – the regulation and organization of public services at large (thereby including social security, taxation, economic regulation, etc.) – to make the public sector work better, according to given criteria of 'betterment' and 'improvement'.
- *Administrative reforms* are deliberate attempts to reconfigure the public administration of a given jurisdiction (mostly but not necessarily only in the executive politics order), to make it – in some sense – work better.
- *Public management reforms* are deliberate attempts to change the structures and processes of public sector organizations with the objective of getting them (in some sense) to run better (see Pollitt and Bouckaert, 2017).

In a nutshell, public sector reforms encompass a larger phenomenon; administrative and public management reforms concern subsets of the broader public sector reforms. Both are change processes that, under certain conditions, may be conceptualized as a policy process.[1] Throughout the chapter we refer mostly to public sector reforms, unless differently specified.

Finally, it may be noted that the analysis of social mechanisms may be employed more broadly beyond the investigation of processes of reform and change (e.g., for the study of the routine, everyday delivery of public services); crucially, the analysis of social mechanisms may represent a key component in framing theoretically one way in which the field of public policy, on one hand, and the field of public management, on the other hand, may be more closely interconnected through an agentic and event-centred theoretical framework that emphasizes how actors may perform in interconnected ways both functions of the policy process and public management functions (Asquer and Mele, 2018); however, this chapter has a more focused scope and the emphasis is here on the analysis of social mechanisms for the study of processes of reform (change management).

A SELECTIVE REVIEW OF PUBLISHED CASE STUDIES OF ANALYSES OF SOCIAL MECHANISMS FOR UNDERSTANDING PUBLIC SECTOR REFORM PROCESSES

Barzelay and Campbell (2003) is a first attempt, with an organizational-level focus, to produce a thick account of an organizational change process embedding, albeit mostly implicitly, an analysis of social mechanisms at work (mostly, the mechanisms of actor certification; see Chapters 3 and 4 in particular). The studied cases are two exercises of strategic envisioning process in the US Air Force. Chapter 5 in particular delineates a procedure for extrapolating practices from case analysis for replication elsewhere of similar patterns of change (which we may conceptualize as developmental patterns aimed at producing, as their 'end state of affairs', an enhanced capability by a public organization to envision the future and adapt to it). This approach aims at making knowledge derived from the analysis of social processes – seen as concatenations of social mechanisms – utilizable for 'design science' problems, that is, transforming explanatory knowledge – often originally generated from intrinsic case studies – into actionable knowledge, replicable and applicable for enabling the designing of 'solutions' to tackle extant social problems (Barzelay returned more theoretically on this issue in his 2007 paper, and Ferlie and Ongaro elaborate on this in Chapter 8 of their 2015 book).

   A more systematic employment of social mechanisms can be found in the *Governance* Special Issue on the dynamics of public management policy change in selected Southern European countries edited by Barzelay and Gallego. The introduction and conclusion papers (Barzelay and Gallego, 2010a, 2010b) provide an overview also pointing to concatenations of social mechanisms that may be the explanation of dynamics of public management policy change. The paper by Mele (2010) is an application to the public sector innovation policy, and in a later paper Mele and Ongaro (2014), albeit primarily interested in profiling the traits of public leadership in reforming the public sector under conditions of frequent government turnover, also resort to the analysis of social mechanisms in their comparison of reforms in the public personnel policy and the innovation policy in Italy throughout 1992–2007. Asquer (2012) picks up these conceptual tools for the study of an organizational-level intervention of redesign of public agencies in the agricultural policy field. In a similar vein, Ongaro (2006) applies the analysis of social mechanisms to the dynamics of devolution processes in legalistic countries (that is, in jurisdictions where administrative law has become a dominant cultural paradigm around which an epistemic community wields a quasi-monopoly of the policy; Capano, 2003).

What mechanisms do these case studies detect as being in action (or at least purport to have been in action)? The set of mechanisms that can be encountered in these pieces of research include the following. First, the mechanism of **actor certification**: it refers to the validation of actors, their performance and their claims by external authorities (McAdam et al., 2001, p. 121). Second, **attribution of opportunity and threat**: defined as an activating mechanism responsible for the mobilization of previously inert social groups (ibid., pp. 43 and 95); it involves (1) invention or importation and (2) diffusion of a shared definition concerning alterations in the likely consequences of possible actions undertaken by some 'political' actors. Third, **threshold-based behaviour** about whether to accept or resist (some form of looming) change: it is a mechanism belonging to the class of rational imitation mechanisms that is based on the idea that 'an individual's decision whether or not to participate in collective behavior often depends in part on how many other actors already have decided to participate. . . An actor's threshold denotes the proportion of the group which must have joined before the actor in question is willing to do so' (Granovetter, 1978, elaborated in Hedström and Swedberg, 1998, p. 19 (referencing Granovetter 1978)). Fourth, **brokerage**, which can be defined as 'the linking of two or more previously unconnected social sites by a unit that mediates their relations with one another. . .it can become a relational mechanism for mobilization' (McAdam et al., 2001, p. 26). Fifth, **appropriation of mobilizing structures** refers to social spaces put at the service of interpretations of situations and objectives that may be employed to mobilize actors towards certain courses of action (ibid., p. 102).

Interestingly, the probably most famous social mechanism has not been encountered in the (so far limited in number) studies of public sector reforms based on this theoretical perspective: self-fulfilling prophecy,[2] which is a mechanism in the class of rational imitation mechanisms whereby actors are induced to join a certain course of behaviour by the observation of other actors behaving in a certain way (the common example being rumours on a bank's insolvency leading to larger and larger portions of bank account holders to withdraw their savings from the bank, hence ultimately making the bank go bust, even if in the first instance there was no substantiated motive for fearing losing one's savings). It has been debated whether a catalogue or inventory of social mechanisms would be useful (Hedström and Svedberg, 1998; also Hedström, 2005), and if so what criteria should it meet – for example, how do we know it is exhaustive, or should it include pertinent classifications whereby certain mechanisms may be attributed to bear explanatory power 'especially' or 'more often' for certain categories of phenomena?

It may be noticed that other mechanisms are drawn mainly from economic analysis, and their categorization as 'social mechanisms' may be questioned, though they seem to fit, at least if broadly intended, the definition of being

capable of 'providing hypothetical links between observable events': this includes the feedback mechanism (mainly drawn from the discipline of cybernetics and applied in economics studies) and the mechanisms of decreasing or increasing marginal returns (widely used in economics), whereby the relative convenience of a certain course of action decreases (or increases) the more the course of action is pursued. The extent to which learning processes should be encompassed in a catalogue of social mechanisms may also be questioned (Dunlop, 2015; Dunlop and Radaelli, 2017).

SOCIAL MECHANISMS AS BUILDING BLOCKS FOR A FORM OF MID-RANGE THEORIZING ABOUT THE DYNAMICS OF PUBLIC SECTOR REFORMS?

We can now turn to addressing the central question about whether social mechanisms are 'adequate' building blocks for a form of theoretical understanding of public sector (administrative, public management) reform processes, a kind of theoretical understanding that may also guide the design of policies of reform? 'Theoretical understanding' means both supporting theory-intensive explanations of extant reform processes (i.e., knowledge guiding the employment of social mechanisms to conduct intrinsic case studies of reform policies in order to understand the inner dynamics of how the processes unfolded) and developing a form of mid-range theorizing about developmental patterns of organizational reform processes 'more generally', by outlining what forms reform processes take, hence potentially what mechanisms can be activated to facilitate or to prevent reforms from happening.

By 'design of policies of reform' we mean tackling the question: how to design a 'successful' public sector reform (by triggering the 'appropriate' mechanisms). In short, we adopt an 'instrumental-rational conception of policy design' – conscious on the one hand that the reform of the public sector does not always take the form of a public policy (see Barzelay, 2001 and subsequent works), and on the other hand that the 'instrumental-rational conception' may be only part of the story, and that designing a policy may serve purposes other than identifying means and connecting them to more or less 'desirable' goals: designing a policy may be a way for practitioners to engage in highly mediated processes of sense-making and sense-giving, beyond a linear conception whereby the problem is given before the solution is sought for through the design or redesign of a policy – in short, that the instrumental-rational conception of the activity of policy design is but one way of conceiving policy design (see recently Turnbull, 2017).

Knowledge about concatenations of social mechanisms is in turn instrumental to 'making a reform happen', or preventing it from doing so. Triggering, or defusing certain concatenations of mechanisms may facilitate or hamper

certain courses of events associated with the occurrence of a certain reform. Knowledge about the alleged effects of the triggering of certain concatenations of social mechanisms on the unfolding of certain courses of events can be used in both ways: to make a reform happen, or to hinder it. It should be added that this is not an evaluative claim: if a reform is reckoned to bring about more damage than benefit, then preventing it may well be an 'appropriate' course of action. (Though any claim about benefit or damage begs the question, for whom? And it may hence have different answers.) However, sticking to a logic of instrumental rationality, the evaluation of the adequacy of a reform design is made on the bases of its consequences, that is, the effects it produces (that it is expected to produce ex ante, and it actually produced ex post): and if such is the case, then negative effects are a reason for employing knowledge about the effects of the (un-)triggering of certain concatenations of social mechanisms on the unfolding of certain courses of events to prevent the reform from happening.

The key thrust of this research agenda lies in identifying developmental patterns of public sector reform processes; that is, in detecting how certain configurations of social mechanisms may lead to relatively regular ways of unfolding of courses of events that correspond to the implementation of certain reforms of the public sector (like the introduction of a system for the management of performance, or the organizational redesign of some part of the public sector, for example, by decentralizing service delivery, and so on).

There remains a big question in order to be able to frame the scope and remit of a research agenda on the analysis of social mechanisms for the study of public sector reform dynamics: how do explanations based on the analysis of concatenations of social mechanisms relate to explanations based on 'contextual factors' influencing the dynamics of public sector reforms (e.g., like the ones outlined by Pollitt and Bouckaert in their highly cited work analysing public management reforms in different politico-administrative contexts; Pollitt and Bouckaert, 2000, 2017)? It is to this question we now turn.

REVISITING THE STUDY OF PUBLIC SECTOR REFORMS BY CONTRASTING SOCIAL MECHANISMS-BASED EXPLANATIONS AND INSTITUTIONALIST ACCOUNTS

This section tackles the key question of gauging the contribution brought about by analyses of concatenations of social mechanisms for improving our understanding of the dynamics of public sector reforms, by contrasting it with explanations looking for 'influential factors', like the ones outlined by Pollitt and Bouckaert (2011, 2017). We should notice that the latter accounts – which in a very simplistic way can be labelled as 'institutionalist', as the authors place great emphasis on the influence of institutions on such processes, but

actually resort to a much wider array of theoretical sources – are mainstream in studies of public sector reforms.

Let us first see an example of how this perspective may be contrasted with the approach of social mechanisms, by reviewing in a paired way two papers dealing broadly with the same theme, and at least partly studying it in the same polity and jurisdiction (Italy, Spain and the UK). Fedele and Ongaro (2008) tackle the same issue, the dynamics of devolution processes in two legalistic countries (Italy and Spain, using the UK as a comparator from a non-legalistic tradition), as Ongaro (2006, focused on Italy only, and notably on one specific episode of devolution reform in the Northern Italian region of Lombardy), with a different theoretical perspective. Ongaro (2006) relies on the analysis of social mechanisms to identify developmental patterns that may lead to relo-cating tasks and staff from upper to lower tiers of government in the presence of unfavourable conditions that would otherwise tend to hinder and ultimately thwart the implementation of devolution processes. The selected case is an instance of successful implementation of devolution (in the Northern region of Lombardy and in the specific policy sector of agriculture) that contrasts with what was happening nationwide in Italy, where devolution of tasks and reloca-tion of staff had been designed – the devolution law having been enacted – but not implemented. Specific concatenations of social mechanisms are evoked to explain the 'puzzling' outcome.

Fedele and Ongaro (2008) set out to explain why devolution of competences to the devolved regions in the UK (Scotland, Wales and – with its distinctive arrangements – Northern Ireland) was comparatively more intense (factual and rapid in its execution) than in Spain or Italy, and why devolution in Spain was comparatively more intense than in Italy. To address the question, they identify a range of factors that may be influential on the dynamics of the implementation of devolution processes. Such factors encompass: horizontal coordination of central government; the nature of executive government; the social status and prestige associated with working at different levels of gov-ernment; the geographical provenance of bureaucrats; the overall orientation of certain public management systems. In short, Fedele and Ongaro develop an institutional analysis (mostly historical-institutionalist, but with an eclectic flavour) centred on the identification of factors that may enable or hinder the implementation of reforms designed to relocate powers, competences, and staff from a 'central and upper' level of government to 'lower-level' govern-ments by definition larger in number (as aptly noticed by Pollitt, 2005, decen-tralization – and devolution as a special case of decentralization – is defined by the spreading out of power from a smaller to a larger number of actors).

What are the differences in the findings of the two studies? Basically, they are complementary and pitched at different levels. Fedele and Ongaro (2008) point to a range of conditions broadly acting either in the direction of facili-

tating or hampering the implementation of devolution reforms – what we may call 'influential factors' – while Ongaro (2006) analyses what specific con-catenations of mechanisms allowed overcoming the hurdles, enabling devel-opmental patterns leading to implementing devolution under unfavourable conditions. So the two explanations are pitched at different levels of analysis, and broadly complementary with each other (it may be noticed the two papers were prepared at about the same time, and only due to the journals' internal editorial process dynamics carry a different year of publication).

Let us now turn to what is probably the most known model for the study of public management reforms, centred on the perspective of the analysis of 'influ-encing factors'. Pollitt and Bouckaert (2011, 2017) point to five main factors characterizing a(ny) given politico-administrative regime that are singled out as especially significant in affecting both the contents and the process of public management reform. Before delineating such factors, it should immediately be noticed that they also introduce a broader, general model for mapping the dynamics of public management reform, intended as a first approximation model providing a conceptual map and a heuristic device to depict the broad forces at work, both driving and constraining change (Pollitt and Bouckaert, 2011, Chapter 2). They then turn to illustrate more specifically the five factors they have singled out as especially significant in affecting public management reform; they are (Pollitt and Bouckaert, 2011, Chapter 3): the basic structure of the state (vertical as well as horizontal dispersion of power); the nature of the conventions of governing (whether majoritarian or consensual); the manifold relationships between elected and tenured officials (thereby including the form the public service bargain takes; see Hood and Lodge, 2006); the administra-tive and organizational culture; and the sources of policy advice in matters of public management reform.

The range of influencing factors can be enlarged, notably when the cluster of investigated countries/polities is more focused, to make the analysis more accurate: in a study of administrative trajectories of five countries in the 'Napoleonic' administrative tradition (Peters, 2008; Ongaro, 2010; Painter and Peters, 2010) – namely France, Greece, Italy, Portugal and Spain – Ongaro (2009) introduced such factors as: the relationship between centre and periph-ery in the political party system; clientelism and politicization at the bottom; the geographical provenance of civil servants; the conception of the civil service and the role of public sector unions; the configuration of the system of *corps* and *grands corps*; the rise of legalism to the status of a cultural paradigm (Capano, 2003); and the engagement of civil society in politics and public policy as additional influential factors on the dynamics of reform processes.

The influence of 'contextual factors', broadly intended as 'independent variables', is modelled in terms of influencing the following 'dependent var-iables': how radical the reform can potentially be, in terms of difference and

distance from the current state of affairs; how rapid the pace of the reform can be; how government-wide (covering the broader functioning of government) vs sectoral the reform process can be (e.g., performance-related pay across the government or just in some areas); how rapid the reform process can be. Alongside holding sway on process dynamics, contextual features also exert an influence on the selection of the substantive contents of reforms (the second subset of 'dependent variables'): factors like the ones outlined above affect the 'fit' between certain public sector reform doctrines (intended as a generic form of knowledge about 'how the public sector *should* be organized') and certain local contexts as the recipients of the reform 'impulse' (see also Pollitt, Birchall and Putman, 1998; Pollitt, 2005, 2013).

How can this analytical framework, which has become quite 'mainstream' since the appearance of the Pollitt and Bouckaert much-cited book in the year 2000,[3] be combined with the approach of the analysis of social mechanisms? The article by Ongaro (2013) is an explicit attempt to combine the two approaches and integrate an analysis in terms of 'influencing factors', explicitly rooted in the perspective of historical institutionalism, with an analysis of the social mechanisms at work in given reform episodes, notably to provide an explanation of the administrative reform trajectory of the European Commission (see also Ongaro, 2012 and 2015). The paper is built mostly around the Pollitt and Bouckaert framework, then integrating and supplementing such explanation with a second and finer-grained layer of analysis rooted in the investigation of social mechanisms at work, notably during the reform episode also known as the 'Kinnock reforms' over the early 2000s (named after the European Commission Vice-President, Neil Kinnock, who was tasked with administrative reform).

The broad trajectory of reform of the administration of the European Commission is one that is characterized by more than 40 years of striking continuity of the basic organizational-administrative model followed by a critical juncture of radical and relatively rapid reform in the early 2000s, and then by some incremental reforms, mostly as reactions/adaptations to the 'Big Bang reform' and characterized by successive adjustments. The dynamics of this reform are explained by a model of analysis that consists of an adaptation with qualifications of the Pollitt and Bouckaert model, to then explain the finer-grained dynamics of the early 2000s episode of reform (in itself conceptualized as a critical juncture: a notion borrowed from historical institutionalism) by resorting to an analysis of the concatenation of social mechanisms at work to explain why New Public Management-inspired doctrines found their way into a continental European bureaucracy like the European Commission (whose details are summed up in Box 9.1).

BOX 9.1   A FINER-GRAINED ANALYSIS OF THE EARLY 2000S' ADMINISTRATIVE REFORM EPISODE AT THE EUROPEAN COMMISSION

Specifically pertinent to the issue of explaining the reform trajectory is the property of incorporating a significant cohort of staff in key posts for the reform policy process to occur coming originally from a country, the United Kingdom, which had systematically experienced New Public Management (NPM)-inspired reforms over the previous two decades. This feature may have enabled, or at least facilitated, the triggering of mechanisms of displacement via invasion of 'foreign' institutions and practices that supplant indigenous ones. As argued by Streeck and Thelen, such processes not only require that new institutional rules are enacted, which occurred with the formal approval of the Kinnock reform package (an outcome of a public management policy cycle reaching the decision phase – Barzelay, 2001, 2003 – and determining new rules in the areas of public management, like financial regulation and expenditure planning, or personnel regulation): actual change beyond policy formulation and throughout the implementation phase requires the active cultivation by the local actors – acting as enterprising actors – of the 'foreign' institutions and practices (Streeck and Thelen, 2005, p. 21). Such enterprising actors have been made available by the incorporation of staff with a different socialization and previous identity, definitely more receptive towards NPM doctrines.

Moreover, and complementarily, beyond socialization and previous identity of staff, it is the direct access to administrative systems and practices at the national level to be significant in endowing the Commission with access to competencies and cognitive resources for making sense of the new managerial rules and practices. The institutional location of the Commission as the 'executive government' situated at the upper level of governance of a multi-level order is a feature of the politico-administrative context in which the Commission operates. Such an institutional location provides the channels for making sense of and setting to work novel, foreign institutions and practices: it is sufficient that such practices have found their way into one or more of the EU member states. This is a major dissimilarity between the politico-administrative context of the Commission and that of the two countries whose administrative model originally provided the pattern for its administration (continental Franco-German model of bureaucracy). Officials in central government at the national level do not have the kind of direct access to multiple administrative systems that its unique supranational position in the executive sphere provides the Commission with.

By way of complementing the analysis, it may be hypothesized that also the mechanism of conversion – 'the redirection of existing institutions to new goals, functions or purposes [that] can come about through changes in power relations, such that actors who were not involved in the original design of the institution and whose participation in it may not have been reckoned with, take it over and turn it to new ends' (ibid., p. 26) – has been at work. One component of the Kinnock reform was that public competition has been reasserted as the general rule of recruitment by the Commission,[4] and such recruitment process through public competition came to be executed almost exclusively through a novel organization, the European Personnel Selection Office (EPSO), which conducted recruitment in such a way as to strongly privilege staff with skills more attuned to the new managerial practices – like team working, exercise of leadership, and the like – rather than the traditional 'technical' skills, the expertise in technical areas, or in European history and law, which used to be the main areas of expertise tested by the previous selection procedures. This redirection of the recruitment procedures may have played a role in sustaining the institutionalization of the new practices and the consolidation of change.

Source: From Ongaro (2013, pp. 356–7).

CONCLUSION: THE USAGE OF SOCIAL MECHANISMS FOR UNDERSTANDING AND MANAGING PUBLIC SECTOR REFORMS

We can now go back to the main questions: are social mechanisms 'adequate' building blocks for a form of theoretical understanding of public sector reform processes, and how can they be employed for improving the 'successful' management of public sector reforms? To address these questions, we must return to the issue discussed in the previous section of how the analysis of social mechanisms can be combined with the analysis of politico-administrative contextual features interpreted as 'influencing factors'. What is here suggested is that explanations based on the analysis of structural, cultural or functional features of the politico-administrative system – interpreted as 'influencing factors', that is, factors either facilitating or hindering the extent to which reforms are radical, rapid, wide in terms of the process of change, and what substantive contents they tend to favour rather than discard – provide explanations of the dynamics of public sector reform processes both at a higher level of aggregation and of a different kind than explanations resorting to concatenations of social mechanisms. It is not, or not only, that the former tend to be more 'broad brush' explanations, whilst the latter tend to be finer grained – it is that the former tend to be expressed in the terms of enablers or hindrances,

conceptualized as either facilitating or dimming the capacity of the system to get a reform pushed through, while the latter tend to be at the level of specific reform episodes (like the 'Kinnock reform' of the European Commission administration in the early 2000s) and to identify specific developmental patterns that, by either leveraging on the enablers or counteracting the hindrances, may be able under specific configurations of multiple conjunctural causes to put into effect specific reform provisions.

The two perspectives are broadly complementary, and often the latter may tend to complement the former by providing insights into how certain courses of reform found their way 'notwithstanding' generally adverse contextual conditions. In a certain sense, the former perspective sets what has nowadays become the common wisdom, that is, what reform dynamics can be expected in certain politico-administrative regimes, and the latter explains puzzling exceptions (in the social scientific sense), that is, it explains why reform dynamics follow alternative courses than what would be expected by analysing the influencing factors (e.g., why devolution in the field of agriculture in the Italian region of Lombardy throughout 1998–2002 succeeded while the bulk of the devolution reform more widely across the country did not).

We may also add that social mechanisms analysis brings the vivid fabric of social processes to light. It is more empathic with real-life events. It is often coupled with a conception of time as duration rather than a spatialized notion of time (i.e., akin to the so-called process philosophy and the related notion of time propounded by Alfred North Whitehead, or – albeit from different premises – by the philosopher Henri Bergson: for a discussion of the significance of different notions of time for public administration studies, see Ongaro, 2017, Chapter 4, pp. 99–108 and 140–44 in particular). It is also in this sense that the approach of the analytical narratives, which underpins and constitutes the approach of the analysis of social mechanisms, complements institutional analysis of the influencing factors (Ongaro, 2016). Analyses of factors take the broad picture, the bird's eye view, but they may lose contact with the unfolding of events, which is what analytical narratives bring in.

There is, however, an important, and final, qualification: uncovering concatenations of social mechanisms at work is a kind of knowledge that seems to be applicable mostly if not exclusively to focused, specific, circumstantiated cases or types of phenomena. The scope of this approach is both focused and relatively narrow. Its generalizability resembles more that of casuistry,[5] as a method of treating the varied circumstances in which decisions are taken by human beings, than that of generalizable propositions, let alone encompassing law-like generalizations. In sum, the social mechanisms approach may be used on its own, but it is better used and more meaningful when it represents a zooming in to focus on specific dynamics set within a larger explanatory frame.

NOTES

1. In a number of works, Barzelay (Barzelay, 2001, p. 14; Barzelay and Gallego, 2006, 2010a, 2010b) introduced the definition of public management *policy* as: 'institutional rules and organizational routines in the areas of: expenditure planning and financial management, audit and evaluation, organization and methods, labor relations, and procurement that guide, constrain and motivate the public sector'. Such a definition – albeit slightly problematic where it attributes 'agency' to these rules and routines alleged to act towards 'motivating', impersonally, the 'public sector', and might rather read 'public sector officials' or more loosely 'people working in public services' – explicitly conceptualizes the reform of public management as a policy process, thus 'enabling' the application of the conceptual tools of public policy to the analysis of a specific domain: the public management policy domain. Public management is not necessarily a policy domain in every period in any country, but it may become such when changing the rules and routines of the whole government – at the government-wide level – in the areas above specified becomes an issue high on the governmental agenda and in a sustained way.
2. Etymologically, prophecy means 'to speak in the name of somebody else'. It is here used in the common (albeit improper) usage to mean 'forecast (of a future scenario)'.
3. A simple count accessing Google Scholar indicates 8988 citations for the 2nd and 3rd edition of the book, excluding translations (accessed on 8 January 2018).
4. Traditional entry mechanisms included the so-called 'submarine approach', whereby seconded staff or staff initially hired with temporary contracts used to have a privileged access to restricted competitions, and 'parachuting', whereby top positions used to be filled with externals, through processes of political appointment (Stevens and Stevens, 2001).
5. Casuistry, historically developed by the Jesuit Fathers, is mostly concerned with decisions in the moral order under varied circumstances.

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PART IV

Using mechanistic methods for policy design
and analysis

10. Reverse engineering and policy design

R. Kent Weaver

1   INTRODUCTION

A mechanistic perspective on policy analysis and design has been described as focused on "a theory of a system of interlocking parts that transmit causal forces from X to Y" (Beach and Pedersen, 2013, p. 29). Hedström and Ylikoski (2010, p. 53) argue that a "mechanism-based explanation describes the causal process selectively. It does not aim at an exhaustive account of all details but seeks to capture the crucial elements of the process by abstracting away the irrelevant details." In the approach used in this volume, first-order causal mechanisms are seen as those that "alter the behavior of individuals, groups and structures to achieve a specific outcome" through use of policy activators embedded in government policy (Capano, Howlett and Ramesh, Chapter 1 this volume). Second-order causal mechanisms are the use of knowledge about mechanisms at work in individual and collective behaviors to inform revisions to policy "activators." This chapter examines the first- and second-order causal mechanisms at work in a policy sector that many governments have tried to influence through use of policy activators: retirement savings by households. It uses that analysis to draw broader implications for the understanding and utilization of causal mechanisms in policy research, and in particular the potential of and limitations on reverse engineering, that is, using an understanding of how causal mechanisms operate to design mechanisms whose predicted outcomes "coincide with the *desirable* outcome" (Maskin, 2008, p. 567; emphasis in original) sought by government. Reverse engineering can thus be seen as one form of second-order mechanism.

In this analysis, government policy activators are one of several factors that shape individual and household decisions on (and ultimately aggregate levels of) retirement savings. In the terminology used in this volume, the causal mechanisms at work in moving from Stage 2 to Stage 3 of the simplified causal model shown in Figure 10.1 – both policy activators and other factors that may influence individual and household retirement savings behavior – are first-order causal mechanisms. Retirement savings behavior in turn affects

Stage 1	Stage 2	Stage 3	Stage 4

Determinants of policy regime (e.g., "policy evaluation" plus culture, political resources, political institutions, fiscal pressures, etc.)

Retirement savings policy activators (e.g., incentives, autonomy, information, resources and incentives provided)

Implementation of instruments and settings (e.g., monitoring and enforcement)

1st Order Mechanisms

Individual retirement and other savings behavior

2nd Order Mechanisms

Spillover effects

Aggregate levels of retirement savings

Feedback Effects

Determinants of implementation, e.g., bureaucratic capacity

Objectives and attributes of individual workers (e.g., individual resources, autonomy, information, attitudes, peer effects)

Figure 10.1   A model of causal mechanisms in retirement savings policy

aggregate levels of retirement savings, and may also have spillover effects in other policy sectors that may or not have been anticipated and intended when the policy regime was put in place (Stage 4). The impact of aggregate savings and spillover effects that feed back to affect revisions to the policy activators at a later time period are second-order policy mechanisms. While the feedback loop of individual and aggregate retirement savings on objectives and attributes of individual workers is shown in the lower right-hand corner of Figure 10.1, it is not the focus of the analysis in this chapter.

The next section of this chapter briefly introduces the concept of reverse engineering. Section 3 develops a general framework for understanding first-order contextual and activator mechanisms that shape individual behavior and applies it to retirement savings behavior. These attributes include incentive structures, availability of information, cognitive and decision-making biases, and availability or lack of resources. I argue that retirement savings should not be viewed as a single decision but as a series of steps that can be analytically distinguished even when they take place simultaneously; I focus here primarily on the entry stage (decisions to begin saving for retirement) and accumulation rather than decumulation post-retirement. Section 4 focuses on policy activators (instruments and specific settings on those instruments) that have been developed to address those barriers. Section 5 discusses second-order mechanisms: the degree to which and constraints on use of knowledge about the effectiveness of policy activators and context to revise policy activators in later time periods. The concluding section addresses the utility of the retirement

savings case as a vehicle for understanding causal mechanism approaches, and argues that efforts to utilize reverse engineering in policy reform confront a variety of issues in policy adoption, implementation and political sustainability as well as program design.

2   REVERSE ENGINEERING

The primary use of the concept of reverse engineering has, not surprisingly, been in the fields of engineering and software engineering. Perhaps the most famous example of reverse engineering is the Soviet Union's laborious re-creation of the American B-29 strategic bomber as the Tupolev Tu-4 from three interned (and one wrecked) planes that were landed in the Soviet Union during World War II at a time that Russia was still neutral with regard to Japan. The end result was a virtually identical copy, requiring the design and manufacture of 105 000 parts (Gorman, 1998). As Curtis, Harston and Mattson (2011) note, reverse engineering of products is fundamentally concerned with information extraction rather than imitation of those products, though imitation (and possibly improvement) may be the motivation and the result. Indeed, reverse engineering is a common strategy for firms that are "market followers" seeking to overcome the advantages of "first-mover" firms (Fitzpatrick and DiLullo, 2006). A core premise of the reverse engineering approach is the *uniformity and replicability* of causal mechanisms: the performance of a reverse-engineered and copied propeller on a Tu-4 should be very similar to that on the original B-29.

In the social sciences, the concept of reverse engineering has been used more as an informal metaphor for efforts to trace and isolate the causal mechanisms and impact of public policies on complex social processes, as in Richard Elmore's (1979) concept of backward mapping in the policy implementation process. (For a more formal effort at reverse engineering in social science research, see King, Pan and Roberts, 2014.) The applicability of the reverse engineering metaphor is likely to be most problematic, however, when policy outcomes are the result of complex interactions between multiple policy activators (P_1 to P_n) and environmental factors (E_1 to E_n) that may change over time, and a heterogeneous set of actors (A_1 to A_n) whose preference rankings (R_1 to R_n) are fungible and intransitive. All these factors may be subject to change over an extended period of time, especially when processes of policy layering and restructuring (or "packaging") are occurring (Capano, Howlett and Ramesh, Chapter 1 this volume). In such a complex setting, what kind of information can be extracted from reverse engineering the decision processes of individuals responding to policies and a variety of other constraints? And can lessons about first-order causal mechanisms in one national context be applied to other national contexts where cultural contexts, spillover effects

of other policies (e.g., tax treatment of non-retirement savings and mortgage interest deductibility) and other influences on individual behavior all differ? Certainly law-like statements of uniform cause-and-effect are likely to be less appropriate than probabilistic statements about a distribution of effects across individuals, given the impossibility of describing all possible combinations of policy activators, environmental conditions, actors and preferences over an extended period, or even the likelihood that any single policy will have a uniform effect on a heterogeneous intended or unintended target population (see Gerring, 2010 on the limitations of mechanismic analysis). The following analysis will address limitations suggested by this latter, probabilistic conception of causal mechanisms and reverse engineering across heterogeneous target populations, and especially across different national contexts.

3   FIRST-ORDER MECHANISMS IN RETIREMENT SAVINGS POLICY

Population aging has caused provision of adequate incomes for people of advanced age to become an increasing concern for governments in both wealthy and developing societies. As expanded public pension programs have reached their fiscal and political limits, many governments have sought to encourage or require individuals and households to save for retirement. Several pension reforms (notably those in Sweden and Germany) have explicitly promoted increased retirement savings as essential to maintain income in retirement as public pension replacement rates are cut. However, these policies need to address multiple barriers to retirement savings – barriers that differ substantially within the target population of working age residents that is heterogeneous on many characteristics, including income, information levels, work histories and peer effects. Increasing retirement savings, in short, requires addressing complex causal mechanisms that create barriers to retirement savings and that affect the efficacy of policies intended to increase those savings. Indeed, what constitutes "retirement savings" is not entirely clear. Many individuals accumulate assets over time without distinguishing between retirement savings and other forms of asset accumulation, and they may strongly resist government policies that place restrictions on those assets to ensure that they are available as retirement income streams, such as forbidding or penalizing withdrawals before a specific age, withdrawing large lump sums, and requirements for annuitization to provide a steady income flow over the course of an expected lifetime. Any effort to mandate "retirement savings" specifically is likely to encounter resistance if those policy proposals involve restrictions on what assets individuals and households can hold, how long they are held, how they are spent down, and so on.

A second problem is that retirement savings behavior is not a single behavior but several. We can distinguish a number of behaviors involved in retirement savings over the course of a working life, divided roughly into three stages: system entry, asset accumulation, and decumulation. Multiple barriers can discourage or diminish accumulation of retirement savings at each of these steps.

Unless retirement savings is a completely individual and ad hoc activity (as with most Individual Retirement Accounts in the United States, individual savers must enroll in some sort of retirement savings scheme sponsored by their employer, a financial institution (e.g., automatic transfers of funds from a checking account to a retirement savings account every month) or government. Once contributions have actually begun, several additional problems may arise. Individuals may, for example, have low earnings and little disposable income early in their work lives, but fail to increase their contributions when they have more disposable income. Other problems that may arise during the accumulation phase include investing in vehicles that do not provide reasonable risk/return trade-off or charge administrative fees that are excessive, failure to adjust investments over their working life, taking early withdrawals, and failure to re-enroll in a retirement savings plan if they change jobs. In the decumulation stage, individuals may take large lump-sum payments and fail to preserve adequate capital to provide a long-term retirement income stream, or fail to annuitize adequately.

Several barriers may affect retirement savings behavior, with many of the barriers operating across multiple stages. This chapter will use the categorization of barriers to behavior change developed by Weaver (2014, 2015), adapting it to focus on the underlying causal mechanisms at work in shaping retirement savings behavior. These barriers can be divided into three broad categories, which include a total of eight subcategories: barriers that affect the incentives for individuals to save for retirement (incentives, monitoring and enforcement), those that affect their perceptions of the desirability of and ease of saving for retirement (information and cognitive/decision-making biases, beliefs and attitudes, and peer and network effects), and those that affect their capacity to save for retirement (resources and autonomy). Each of these barriers suggest a particular set of causal mechanisms at work in the retirement savings decision. Of course, these are not air-tight categories; there is some overlap in the features of specific barriers to retirement savings.

3.1   Incentives

The incentives approach suggests that the core causal mechanism in retirement saving is individuals' rational calculation of individual, household or intergenerational self-interest (for a discussion of rationality, see Elster, 2007, Chapter 12). Individuals respond to public policies as well as other constraints and

opportunities in a way that maximizes their welfare. If the incentive structure offered by government policies is altered, individuals and households should adjust their behavior accordingly. Thus, policies that provide tax advantages for retirement savings often exempt earnings deposited in retirement savings accounts from taxation at the time they are earned and while they accumulated, with taxation only after retirement in a presumably lower tax bracket. Incentives that favor retirement savings over consumption and other forms of asset accumulation (e.g., incentives for home ownership) are likely to encourage retirement savings through those vehicles. Heavy penalties for early withdrawal from retirement savings have ambiguous effects: on the one hand, such policies make it less likely that retirement savings decisions, once made, will be reversed. On the other hand, they are likely to make it less likely that individuals will utilize retirement savings accounts in the first place, since it reduces their ability to deal with important income and health shocks relative to other potential investment vehicles.

   Other features of program design may also affect the incentives for retirement savings. In Chile, for example, many citizens believe that income from their retirement savings accounts is unlikely to surpass the benefit available from the pension guarantee given to workers with more than 20 years of contributions to the retirement accounts system; they thus have an incentive to evade contributions entirely after reaching that years-of-contribution threshold, and to understate their contributions prior to that time.

3.2   Monitoring and Enforcement

Two further potential barriers to retirement savings suggest more complex incentive-focused causal mechanisms at work. As the Chilean example suggests, where government policies designed to mandate government policies are not consistent with individual preferences, failure to monitor and enforce that behavior is likely to lead to evasion of that policy. Successful evasion can be affected by characteristics of individuals – for example, the self-employed and those working in the informal labor market are most likely to be able to evade mandatory savings markets most readily (Ross, 2011, p. 195). The actions of these workers may be abetted or even required by employers as a condition of employment. Poor government capacity, such as weak data systems to track employment and deter informal employment, exacerbate problems of monitoring and enforcement.

3.3   Information, Cognition and Decision-making Biases

Decisions on retirement savings are also affected by the information that individuals have or lack that would help them to make more advantageous deci-

sions, as well as by cognitive and decision-making biases (for an overview, see Benartzi and Thaler, 2007; see also Tapia and Yermo, 2007), and by cultural attitudes and the behavior of people around them. As a recent New Zealand Financial Markets Authority (2016, p. 7) report noted, making financial judgments and decisions is difficult because those decisions "are complex, require consumers to assess risk and uncertainty, require making trade-offs between the present and the future, can be emotional, [and] are done infrequently so don't provide opportunities to do them well."

Evidence from a number of countries suggests that many individuals lack important information that would help them to make more advantageous decisions. Levels of financial literacy and engagement in retirement savings planning affects preparedness for retirement in a variety of ways. People who are more financially literate are more likely to avoid high cost debt, diversify investment risk, engage in retirement planning, and be aware of pension fund management fees (see, for example, Lusardi and Mitchell, 2011a).

A number of recent studies from many OECD countries suggest that there are major gaps in individuals' financial literacy. These gaps are likely to be particularly large for the less educated, for women and for the young and old. Historically disadvantaged racial and religious groups (for example, African-Americans and Hispanics in the United States, Māori in New Zealand, Muslims in the Netherlands) are also likely to have lower levels of financial literacy (Lusardi, Mitchell and Curto, 2010; Alessie, van Rooij and Lusardi, 2011; Almenberg and Säve-Söderbergh, 2011; Bucher-Koenen, 2011; Crossan, Feslier and Hurnard, 2011; Lusardi and Mitchell, 2011b).

Individuals also have cognitive biases in the way that they acquire, process and apply information and the way that they make decisions. They procrastinate in making plans and decisions, especially when the consequences of their decisions are far off in the future. They are myopic, valuing immediate over delayed gratification. They are loss-averse, weighing a loss from the status quo more than equivalent gain. They may satisfice in considering options rather than continuing to search for optimal outcomes. They may act on impulse with inadequate information, for example in making investment decisions. And they discount risks – for example, of extreme longevity.

Obviously, many of these cognitive and decision-making constraints apply in retirement savings behavior. Individuals do not know how long they will live. Most have little understanding of what level of retirement savings is needed to produce adequate income streams in retirement, understanding of how multiple retirement streams (e.g., from public pensions, employer plans, and personal savings) fit together, or an adequate understanding of how important early saving can be to building up an adequate "nest egg." Acquiring adequate information in investing retirement savings is costly – in time, management fees, or both. Individuals may simply put off making retirement savings to a later date

– and never get around to it. Procrastination is exacerbated by most consumers' lack of understanding of the compounding of savings and investment early in their working lives, which in turn lowers the perceived costs of delaying savings for retirement (McKenzie and Liersch, 2011).

3.4   Attitudes and Beliefs

Broad cultural beliefs (as well as factors related to subgroups within nations) may shape retirement savings behavior in multiple ways, such as through the perceived importance of saving for retirement, sense of obligation to care for one's parents, and trust in pension providers (see, for example, Hershey, Henkens and van Dalen, 2007). More short-term attitudinal factors may also affect retirement savings behavior. Some authors have suggested that the Great Recession in the last decade may have led to "greater public mistrust of financial institutions in the private sector because of the large losses recently sustained and the unreliability of private investment vehicles (Ross, 2011, p. 194).

3.5   Peer and Network Effects

Closely related to cultural effects are what can be called peer and network effects (see, for example, Hedström and Swedberg, 1996). A substantial literature in social psychology suggests that individuals are affected both by what they perceive to be appropriate behavior (injunctive norms) but also by the behavior that they actually observe occurring (descriptive norms). "Network effects" involve *interaction* between different associated individuals as well as observation of their behavior: for example, in a randomized control trial of faculty in several university departments, Duflo and Saez (2003) found that attendance at retirement savings information fairs and subsequent enrollment in the tax deferred retirement account was higher in programs where some faculty members received individual invitations and incentives to attend the event, even for those faculty members who did not themselves receive the invitation and incentive.

3.6   Resources

Individuals' decisions on retirement savings may be influenced by factors that affect their capacity to engage in retirement savings, specifically their resources (defined here to exclude information resources, which were discussed separately above) and autonomy. Most obviously, individuals with very low earnings are unlikely to be able to save substantial sums for retirement in the absence of government policies that subsidize those accounts and restrict early withdrawals.

3.7 Autonomy

Individual autonomy on retirement income decisions refers to factors that limit the range of decisions that workers can make because it requires the cooperation of others. Most notably, policies that make retirement savings mandatory and withhold at source, as in Australia and Sweden, lower the ability of workers to avoid dedicated savings. These can be reinforced by policies that forbid withdrawals from accounts before an individual reaches retirement age to ensure that they are still available at retirement age. On the other hand, employees in the United States who wish to have retirement saving contributions withheld from their paychecks but whose employers do not participate in 401k or employer-sponsored IRA plans are not able to do so. Only a minority of employees of small (less than 100 employees) businesses in the United States have access to an employee-sponsored retirement savings plan (US General Accounting Office, 2013).

4 POLICY ACTIVATORS FOR INFLUENCING BEHAVIOR

As the discussion above suggests, governments can use a variety of policy activators to promote retirement savings, focused on different barriers and with varying degrees of coerciveness (see, for example, Howlett, 2011). Broadly speaking, these instruments can be divided into information, admonition, choice architecture, positive incentives, negative incentives, and requirements and sanctions (Weaver, 2015). Governments can also vary the intensity of the settings on instruments – for example, weak versus strong incentives, admonitions, and enforcement behavior. While potential policy instruments do not map one-to-one on specific steps and barriers, some instruments are more plausible candidates for changing behavior at particular steps than others.

4.1 Information

At the least coercive end of the spectrum, governments can attempt to address informational and cognitive barriers to retirement savings. For example, they can inform the public about longevity risks, and improve information about their likely income streams in retirement. Sweden, for example, has made strides in providing consolidated information about multiple income streams from both public employers and private sources (see, for example, Larsson, Paulsson and Sundén, 2011). Of course, such information is no protection against a public that is not receptive to that information or poorly prepared to make good use of it.

A variety of strategies have been pursued in recent years to try to improve financial literacy, with the Organisation for Economic Co-operation and Development taking a strong role in encouraging cross-national diffusion of effective practices. These campaigns have used a variety of institutional vehicles and venues, including schools, trade unions, pension agencies, pension fund associations (see, for example, Orton, 2007; Atkinson, 2008; Atkinson et al., 2012; Grifoni and Messy, 2012). Despite some success in efforts to increase financial literacy, and increased participation in defined contribution retirement schemes, engagement of citizens in retirement planning remains low in most OECD countries, especially among young workers and those with low levels of education (Lusardi et al., 2010). Experience of a negative income or wealth shock, on the other hand, increases engagement in retirement planning (Lusardi and Mitchell, 2011a).

Tailoring messages to specific groups of retirement savers can be facilitated by using internet-based information vehicles that are user-initiated and allow the user to provide substantial information about their personal financial situation and preferences, such as tolerance for risk. However, those who are most in need of information are probably not those who are most likely to use these vehicles, precisely because they require user initiative.

4.2   Admonition

Admonition instruments do not just provide target populations with information, they also provide direction on what the target population should do with that information – for example, start retirement savings early, adjusting their investment portfolios periodically, and avoiding contribution holidays where they are permitted. Government-provided admonition for retirement savings is particularly fraught, because (1) target populations are heterogeneous, and advice suitable for some might not be suitable for all, yet (2) given low levels of citizen engagement in retirement savings, messages need to be relatively simple if they are going to be heard and acted upon at all. But keeping individuals engaged in retirement planning is just as challenging as getting individuals engaged in the first place – and just as important, since portfolios that are appropriate for young workers may not be appropriate for older workers. Governments also need to think through more specific engagement strategies for particular sectors of the labor force who are least likely to do so on their own, and differentiated messages for different age groups.

4.3   Choice Architecture and Policy Defaults

Governments can also try to affect the choice architecture environment (see, for example, Thaler and Sunstein, 2008) that may influence retirement saving

decisions. Choice architecture narrowly conceived involves manipulating the options or relative visibility of options available to a target population without significantly affecting the payoffs to each option. For example, governments may allow – or even require – employers to offer their employees at the time of employment the option of increasing their retirement savings contribution rate in employer-sponsors plans automatically in future years unless they elect in the future to lower that rate. Such a policy can help to protect against status quo bias and procrastination for employees who are financially pressed at the beginning of their working careers.

One of the most powerful choice architecture tools involves setting the default – that is, what happens if the policy target takes no action. Most notably, research strongly supports the idea that when enrollment in an employment-based retirement savings scheme is the default rather than requiring employees to opt in dramatically increases enrollment rates in such schemes (forced choice, in which employees are required to either opt in or opt out, produces outcomes in the middle). It is not entirely clear whether this effect results from the fact that it is both cognitively and procedurally easier or because an opt-out is perceived as a recommendation from a source with superior expertise: the answer is almost certainly some of each.

Well-designed defaults can be useful to address additional challenges in retirement savings schemes, notably inertia- and procrastination-induced failure to increase savings rates as income increases. In the well-known Save More Tomorrow experiment, for example, Benartzi and Thaler (2004) showed that individuals who are offered the option of pre-committing to put part of future salary increases into higher retirement savings contributions (with the option of later reneging) agree to do so, and that most of them maintain that commitment through several rounds of salary increases.

Defaults can also be used to establish fund allocations for those who do not choose to make an active choice of funds, as well as to shift allocation of accumulated assets toward less volatile investments as retirement nears. Setting defaults in this area is likely to be more controversial, however, because there is no single undisputed criterion for how workers' funds should be invested. One criterion is that investors' principal should not be subject to high risk. In New Zealand's KiwiSaver, participants who do not make an active choice are assigned to one of several privately offered default funds; these default funds are required to follow conservative principles, investing only 15 to 25 percent of their assets in growth assets. So-called "life-cycle" or "generation funds" that gradually shift assets as their owners age without requiring actions by the asset owner are another approach: Sweden uses this approach in the default fund for its mandatory Premium Pension (see Weaver and Willén, 2014).

4.4   Positive Incentives

Government and employer incentives for retirement savings can take a number of different forms. Government incentives for retirement savings often take the form of preferential tax regimes – for example, exempting earnings contributed to retirement savings accounts from taxation at the time they are earned and returns on those accounts while they are in the accounts, taxing them only when they are withdrawn (commonly known as Exempt-Exempt-Taxed, or EET) after retirement, when the individual is presumably in a lower tax bracket than when he or she was working (for an overview of tax incentives, see Marriott and Mackenzie, 2010). But there are many variations on tax advantages for retirement savings. The size of the incentives also varies depending on whether and how incentives exist for other savings vehicles. One problem frequently noted with tax concessions for EET retirement savings plans is that they tend to be regressive: they give the highest benefits to high-income individuals who are able to save more for longer and enjoy higher benefits from lower marginal tax rates at retirement. There are often income limits on contributions to tax-advantaged retirement savings accounts to prevent upper-income earners from reaping disproportionate benefits from those schemes. Government subsidies for KiwiSaver accounts in New Zealand attempt to address the regressivity problem a different way: matching 50 percent subsidies are made on workers' KiwiSaver contributions of up to NZD1043 (benefits were higher prior to July 2011). Homebuyers are further incentivized to participate in KiwiSaver by the availability of grants to first-time home-buyers who have met minimum contribution requirements to KiwiSaver; they are also allowed to withdraw some of their KiwiSaver account for the first-time home purchase.

4.5   Negative Incentives

In addition to offering positive incentives to encourage (but not require) specific behaviors, governments can also put in place negative incentives to discourage (but not prohibit) behaviors. One area where negative incentives have been employed in retirement savings policy is in policies to discourage early withdrawals from accounts. In the United States, withdrawals from IRAs and 401k plans prior to age 59.5 are subject to a tax penalty, though individuals are allowed to borrow from those accounts without penalty.

   Given that individuals tend to be more attentive to negative than to positive information, and to be more sensitive to perceived losses than to gains, policies that are framed as negative incentives may be more efficacious in changing behavior than an equal investment in positive incentives. They may also be harder to adopt and sustain, however, as affected interests resist loss imposition.

4.6   Requirements and Sanctions

Finally, governments can use requirements to influence individuals' retirement savings behavior. The most straightforward applications of requirements in savings schemes is the mandatory savings schemes implemented in Australia and Sweden, with penalties for those who try to evade the requirement. As noted above, monitoring mandatory retirement saving is likely to be easiest (and cheapest) to monitor and enforce when the income is withheld at source. In the absence of mandates, participation rates may decline substantially: in 2016, for example, 1.1 million of KiwiSaver's 2.6 million members were listed as non-contributors (New Zealand Financial Markets Authority, 2016, pp. 3, 13).

5   REVERSE ENGINEERING AND ITS LIMITS

Can "reverse engineering" – extracting information from a more rigorous understanding of interactive social and behavioral and policy processes – lead to improvements in policy activators to achieve the goals set by governments? The case of retirement savings reveals several constraints on these second-order causal mechanisms. One is the extraordinary complexity of retirement decision-making in heterogeneous populations, as well as the high frequency of "non-decisions": engaging in whatever behavior is privileged by defaults and by past patterns and habits of behavior by individual households. Also unclear in many cases is the degree to which the impact of specific first-order causal mechanisms (both policy and environmental) is likely to be uniform and generalizable across different national populations and national subpopulations (e.g., the young and the old, the wealthy and the poor, native speakers and immigrants) and stable over time.

The case of retirement savings policies also suggests that even if policy-makers have a good understanding of the causal mechanisms that pose barriers to achieving government objectives and policy instruments and settings that are likely to be efficacious in addressing those barriers, that knowledge may not succeed in getting those policies adopted or in sustaining them. Constraints on adoption and successful and sustained retirement savings policies can take several forms. Pressures from powerful interest groups, notably the financial services industry, may block policy initiatives that would harm their interests. Path dependence frequently leads to the development of concentrated interests that defend the policy status quo and view any initiatives that would make themselves worse off as both threatening and unjustified. These constraints can restrict policy choices intended to address any of the steps in retirement savings outlined earlier. Individuals (and ideological conservatives) may resist policies that mandate retirement savings as an infringement on freedom of choice. Policies that require financial services advisors to act as fiduciaries for

(that is, in the best interests of) retirement account investors rather than a lower "suitability" standard can help to ensure that savers are not saddled with high transaction and management fees that reduce their account balances. But fiduciary requirements are likely to be resisted by financial services companies that see a fiduciary rule as exposing them to lawsuits and reducing their profits. Policies that restrict or penalize early withdrawal and lump-sum withdrawals of retirement savings account balances are also likely to encounter substantial resistance from citizens, especially in countries like the UK and Australia where such practices have been widespread in private sector pension plans for many years. In policy areas that affect the public in very visible ways, existing policies may also create expectations of entitlement or protection from loss; thus, the creation of KiwiSaver defaults that were low risk made policy-makers reluctant to shift to a life-cycle approach for default funds that might expose them to significant short-term losses early in their working lives.

Target populations' behavior can also be affected by numerous obstacles in the policy implementation process, such as coordination problems across implementing agencies, opposition from front-line workers, and inadequate budgetary and labor force resources of implementing agencies. Reaching groups who are not actively engaged in retirement savings, for example, can be facilitated by enlisting the help of institutions and civil society organizations with particular constituencies such as seniors, students, ethnic and linguistic minorities. Efforts to do so, however, encounter three major obstacles. First, many organizations have well defined "organizational missions" (e.g., provision of specific kinds of social services to their members) and may be reluctant to undertake new tasks unless they are convinced that it helps them to meet that mission (see Wilson, 1991 and McDonald, 2007). Second, they are likely to perceive themselves as lacking in the expertise needed to provide this service, and believe that it will be costly for them to acquire it in an environment that is almost always resource scarce. Third, they may not see a demand from their members, and believe that providing the service may blur the image that they have cultivated with their members. In short, working with civil society organizations, and even government bureaucracies like schools, can be an important vehicle for improving financial literacy. But it is likely to be a complex and long-term process in which the needs, priorities and resource constraints of those organizations need to be fully taken into account.

6   CONCLUSIONS

This chapter has argued that the causal mechanisms affecting individuals' retirement savings decisions are extremely complex. They are also likely to be very heterogeneous across individuals even within a specific country's policy

regime due especially to individual differences in characteristics such as information, income and psychological orientation toward the future or the present.

The research findings and the analytical framework presented here have broader implications for understanding the limitations on using reverse engineering in choosing policy instruments and the settings on those instruments. In retirement savings policy as in most complex policy sectors, governments face very complex trade-offs regarding coverage, adequacy, intrusiveness and equity, among other values, in deciding whether to use more or less intrusive instruments and settings to influence behavior. They need to consider how strong the barriers to behavioral change are for all components of their very diverse citizenry, not just the median citizen, and they need to ascertain and address the distributional consequences of the causal mechanisms on both the behavior of the intended and unintended target populations and their post-intervention welfare – which may extend over a long period of time. They also need to keep in mind that some elements of the population may face very strong barriers to retirement savings, notably resource barriers. If universal coverage for retirement savings schemes are deemed to be important, relatively non-coercive instruments and settings (e.g., providing information, manipulating policy defaults and even providing financial incentives) are likely to be insufficient (Antolin, Payet and Yermo, 2012). The level of uncertainty faced by future retirees exacerbates constraints on retirement savings. They do not know how long they will live, how healthy they will be, what the future return on their retirement savings will be, or how much their home will be worth in the future if they are current homeowners and plan to sell to meet part of their retirement income needs. Given this uncertainty, there is likely to be substantial variation across individuals in the choices that they make on how much to save for retirement and in their choice of investment vehicles. Some individuals will be excessively cautious, others will take risks that they should not take. Some will acquire lots of information, others will not. And these responses are unlikely to be randomly distributed. Those with higher incomes and assets and higher educational attainment are likely to face both easier choices (it is easier to save at a higher rate when your income is higher) and likely to have better information about the consequences of those choices. In this situation, governments will need to consider whether it is more appropriate to give individuals more choices, or to protect individuals against the consequences of poorly informed and highly constrained choices. But governments' ability to process information about these extraordinarily complex first-order mechanisms is generally very limited. At best, highly simplified models of these mechanisms are likely to be utilized, and groups that have privileged access to policy-makers and resources may bias which elements of the complex mechanisms are included.

"Reverse engineering" of social processes can help to illuminate the complex causal mechanisms at work – including the roles played by public policies – but it cannot by itself lead to "optimal" choices of instruments and settings given the underlying policy trade-offs and political conflicts in policy design. More generally, this chapter suggests that a "mechanisms" approach to understanding governmental efforts to achieve "appropriate" behavioral responses from target populations needs to confront a number of problems. First, behavioral responses are often not a single behavior but many, distinctive behaviors, carried out over a long period of time. An overly simplistic definition of the behavior that is being sought while ignoring other behaviors may result in failure to achieve the policy outcomes that were originally being sought, or in the production of negative spillover effects. Second, consideration of policy mechanisms must avoid overly simplistic causal stories – for example, focusing on a single barrier to achieving the desired behavior(s) when multiple barriers are in play. Third, as suggested earlier, a mechanisms analysis should look at how causal mechanisms (including barriers to behavior adaption) may operate differently for different segments of a target population.

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11. Looping to success (and failure): second-order mechanisms and policy outcomes

Mallory E. Compton and Paul 't Hart

INTRODUCTION

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 chapter, 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 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, 2016; Hall, 1982; King and Crewe, 2014; Peirce, 1981; 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, 2010). 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 chapter, 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 that 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 POLICY[1]

In their critique of historical institutionalism, Peters, Pierre and King (2005, p. 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 (Hedström and Swedberg, 1996). Studies of policy change are also critiqued for struggling to specify mechanisms capable of explaining the 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; De Roo, van Wezemael and Hillier, 2012; Jervis, 1997). Even within literature on the unintended consequences of public policy, a linear causal relation is the default option for understanding outcomes (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 this context, however, in unstable or complex systems (which would characterize any contemporary policy program), the linear perspective presents two shortcomings.

First, a linear causal model does not take into account interactive dynamics. Interventions have multiple effects that 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, p. 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.

Second, 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 literature 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, 2000; 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, 2000; 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-built mechanisms that regress to the status quo; disturbances are corrected through the self-balancing patterns (Haraldsson, 2000; 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 that 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; Mahoney, 2000; Van der Heijden and Kuhlmann, 2017). 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, p. 246). Acknowledging the pioneering work by Coleman (1990) and Hedström and Swedberg (1996), in this chapter we adopt the macro–micro relations approach to social science mechanisms as introduced in Chapter 1 of this volume. Within this framework, second-order mechanisms are sets of entities and activities that 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 a 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., 2013). 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 demonstrably 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, for example, 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 that 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 (1) a well-developed and empirically feasible public value proposition and theory of change underpins the policy; (2) achievement of (or considerable momentum towards) the policy's intended and/or other beneficial social outcomes; and (3) 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 stakeholders' support for what it tries to achieve and how it tries to do so. This is achieved by thoughtful and effective policy-making practices. This requires (1) 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; (2) a decision-making process resulting in firm political commitment and adequate levels of funding, realistic time lines, and administrative capacity; and (3) a delivery process that effectively and adaptively deploys (a mix of) policy instrument(s) to achieve intended outcomes with acceptable costs, and with limited unintended negative consequences.

Last, **political assessment** evaluates the degree to which policy-makers 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 the following: (1) a relatively broad and deep political coalition supports the policy's value proposition; (2) that association with the policy enhances the political capital of the responsible policy-makers; and (3) 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 (1) it demonstrably produces valued social outcomes; (2) through deliberate design, decision-making, and delivery processes it enhances both its problem-solving capacity and its political legitimacy; and (3) sustains this performance for a considerable period of time, even in the face of changing circumstances (Compton and 't Hart, forthcoming).

Table 11.1 summarizes this dynamic conception of policy evaluation.

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 (Grzymala-Busse, 2011; Howlett and Goetz, 2014; Kay, 2006). 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 that has effects at the macro level. Scholars of public policy often identify these mechanisms as rein-

Table 11.1   Assessing success in public policies

Programmatic Assessment: Purposeful and Valued Action	Process Assessment: Thoughtful and Fair Policy-making Practices	Political Assessment: Stakeholder and Public Legitimacy for the Policy
A well-developed and empirically feasible public value proposition and theory of change underpins the policy	The policy process allows for robust deliberation about thoughtful consideration 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	A relatively broad and deep political coalition supports the policy's value proposition, instruments and current results
Achievement of (or considerable momentum towards) the policy's intended and/or other beneficial social outcomes	Stakeholders overwhelmingly experience the making and/or the delivery of policy as just and fair	Association with the policy enhances the political capital of the responsible policy-makers
Costs/benefits associated with the policy are distributed equitably in society		Association with the policy enhances the organizational reputation of the relevant public agencies

Time
Degree to which programmatic, process, and political performance is maintained over time
Degree of convergence in citizens' support for the policy's value proposition over time
Degree to which the policy confers legitimacy on the broader political system

Source: From Compton and 't Hart (forthcoming).

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

Figure 11.1 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.

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

Figure 11.1   Linking social mechanisms to policy success and failure

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 40 best practices for financial supervision and regulation, law enforcement guidelines, and protocols for international cooperation that 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 (first-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, Nabatchi and Balogh, 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 2008–09. Programmatic success lay in the non-occurrence of events and consequences that the policy-makers 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$6.3 billion in 2007 to A$5.1 billion in 2008 and A$5.4 billion in 2009. None 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 & Poor's were Australian (RBA, 2009, p. 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, the Treasury department and the Council of Financial Regulators (which included, besides the Treasury, the Reserve Bank of Australia (RBA), the Australian Prudential Regulation Authority (APRA), 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 behaved so differently from their counterparts around the globe because 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 behavior 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 (first-order mechanisms): not only were regulatory policies and the institutional structure of prudential regulation firmed up, but the social ties between the key players in the regulatory community were also strengthened. In parallel, and equally fortuitously, the coincidental combination of personalities and role conceptions of the key regulatory players – all hailing from non-elite social backgrounds, with a no-nonsense, grounded attitude fostered mutual trust so pivotal at the point of crisis. This in turn produced institutional learning (second-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 Hindmoor, forthcoming).

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 Global Financial Crisis 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 so-called "pink bats" (after the color of the commonly used insulation sheets used) 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 – first-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 – second-order mechanism). 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, 2012).

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 (ibid.). 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 that 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 "disastrous" (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 also inflict fatal political damage on the policy chief political architect (macro level) (Butler, 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 (ibid.). 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 over the policy (ibid.).

Public resistance to the bill manifested in more than negative public opinion, however. Non-compliance spread, as individuals craftily avoided the new tax obligation (Butler et al., 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) feed-back (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 chapter we have argued that understanding of policy successes and failures can benefit from an analytical approach that is both dynamic and 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:

1. Program assessment – using the three-dimensional schema of programmatic, process, and political evaluation outlined in this chapter.
2. Selecting two samples of "extreme" (most-different) cases: high-performing and low-performing programs.

3. Within-case intensive process description (i.e., using critical incident analysis).
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 Figure 11.1 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 Figure 11.1 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 policy-makers 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 Figure 11.1 – 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 Figure 11.1 and two of the examples presented earlier, it is by no means definitively demonstrated. What can mechanistic thinking contribute to inform policy-makers' "theories of change" as they go about seeking not only to create policies that "work" but that also 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?

NOTE

1. Parts of this section were adapted from Van der Steen et al. (2015, pp. 325–6), with kind permission of Paul 't Hart's co-authors.

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Index