

## **2. Theories on policy learning: Existing approaches and future challenges**

*By Stéphane Moyson & Peter Scholten*

### **Abstract**

Policy learning designates the cognitive and social dynamic leading policy actors to revise or strengthen their policy beliefs and preferences over time. In this chapter, we propose a synthesis of existing research on policy learning. We distinguish three main sets of approaches – namely, the ‘managerialist’ approaches, ‘diffusion and convergence’ approaches, as well as ‘social learning’ approaches – before pointing to their common characteristics: a consideration for the long run; a focus on the role of state but also non-state actors in policy processes; and a recognition that policy actors’ rationality is ‘bounded’. Then, we discuss three challenges of future research: deepening our knowledge on the behavioural aspects of policy learning; recognizing and studying the multiple outcomes of policy learning; and looking for settings and practices fostering or impeding policy learning.

### **Keywords**

Advocacy Coalition Framework; Behavioural; Epistemic communities; Governmental learning; Literature review; Organizational learning; Policy change; Policy convergence; Policy diffusion; Policy learning; Policy transfer; Social learning.

### **2.1 Introduction**

Karl W. Deutsch was arguably the first to express concern for learning in politics and policy in his relatively rationalist theory of government, where the role of ‘feedback’ and ‘steering’ to explain (and enhance) governmental ‘learning capacity’ was pinpointed (Deutsch 1963). The attention for learning resonates in Heclo’s work, who emphasized that politics is not only about power but also about ideas and the management of uncertainty (Heclo 1974). For institutions to operate or for policies to be made, a better understanding of public problems and of their possible solutions is necessary. For this, knowledge must be created, assimilated, and organized. At a similar period, Walker (1974) showed that the ‘management of ideas’ also allows to exert power. Controlling ideas means controlling uncertainties. In other words, it is of primary importance to elucidate the process which “leads actors to select a different view of how things happen (‘learning that’) and what courses of action should be taken (‘learning how’)” (Zito and Schout 2009: 1104).

At its most general level, policy learning may be defined as the updating of policy beliefs and preferences (Dunlop and Radaelli 2013). Policy processes involve diverse types of policy actors ranging from politicians and public officials to managers of public and private companies, members of pressure groups (i.e. stakeholders, lobbyists, users...), academics and consultants or active citizens. As result of various interactions and experiences as well as gradual accumulation of evidence on policy problems and solutions, those policy actors acquire, translate and disseminate new information and knowledge (Heikkila and Gerlak

2013). In turn, they can revise or strengthen their beliefs and preferences regarding policies over time. ‘Policy learning’ designates this cognitive and social dynamic. The literature on policy learning is rapidly growing (for reviews, see for example Bennett and Howlett 1992; Dunlop and Radaelli 2013; Freeman 2006; Grin and Loeber 2007; Parsons 1995). The objective of this chapter is to present a simple synthesis of this literature before pointing to several challenges. We distinguish three sets of approaches on policy learning: the ‘managerialist’ approaches, ‘diffusion and convergence’ approaches, and ‘social learning’ approaches. In the first section of the chapter, we present a synthesis characterizing the main trends in each of these sets without claiming of being exhaustive or that there is no example falling outside this characterization. In other words, this is a ‘stylized’ synthesis (Mahoney and Goertz 2006: 228) of the field. In the second section, we identify several distinctive characteristics that those approaches share. Finally, in the last sections, we look at three challenges of future research on policy learning: deepening our knowledge on the behavioural dynamic of policy learning; recognizing and studying the multiple outcomes of policy learning; and looking for settings and practices fostering or impeding policy learning.

## **2.2 Existing approaches on policy learning**

In the literature on policy learning, three sets of approaches may be distinguished: the ‘managerialist’ approaches, the ‘diffusion and convergence’ approaches, as well as the ‘social learning’ approaches. First, the managerialist approaches of policy learning are grounded in organizational theory and result from the development of, and dialogue between two research streams. On the one hand, in political science, a business perspective on government action has been adopted, and the role of learning in this action has been considered. This is illustrated by Metcalfe (1993), who has underlined the importance of learning processes for governmental innovation. Etheredge and Short (1983) have also proposed the concept of ‘governmental learning’ to name “the process by which governments increase their intelligence and sophistication and in this manner enhance the effectiveness of their actions” (Etheredge and Short 1983: 77–8). Metcalfe (1993) participates in the “worldwide movement to upgrade public administration by using management concepts, tools and techniques, many of which (having been) originally developed in business” (Metcalfe 1993: 292, as quoted in Zito and Schout 2009: 1104).

On the other hand, the adoption of a ‘learning perspective’ on the behaviour of organizations has also contributed to the emergence of managerialist approaches. Reviews of this field include Easterby-Smith and Lyles (2011) or Argote (2013), for example. Organizational learning is concerned with all organizations, but there is a clear niche of public administration research on specific forms of learning in public organizations (e.g. Common 2004; Gilson et al. 2009; Moynihan and Landuyt 2009). Cyert and March (1963)’s book and contention that it is through “organizational learning processes (that) ... the firm adapts to its environment” (Cyert and March 1963: 84) is often considered the foundational contribution to the field. Learning has a strategic character, for organizations, because it determines their ability to identify, react, and adapt to the changes in their environment. As noticed by Argyris and Schön (1996), organizational learning does not only involve the detection and correction of errors which allow to implement existing organizational objectives and norms (single-loop learning). Organizational learning also refers to the modification of those norms and objectives (double-loop learning). Furthermore, an organization can even look at past episodes of learning in order to learn how to learn successfully (deutero-learning). Another important contribution of organizational theory to policy-research is its early recognition that actors’ rationality is bounded (Simon 1991). Research attention has also been given to

processes of inter-organizational learning (Fridriksson 2008) and the specific role of bridging and boundary organizations in learning processes (e.g. Crona and Parker 2012).

Second, several approaches of policy learning use concepts like ‘policy transfer’ (Dolowitz and Marsh 2000), ‘policy diffusion’ (Marsh and Sharman 2009), ‘lesson-drawing’ (Rose 1991), and ‘policy convergence’ (Bennett 1991; Knill 2005). These concepts refer to processes through which decisions are made in one institutional setting according to decisions previously made in another one. These approaches are grounded in two research streams: first, the study of the diffusion of policy innovations within and between particular states and cities, especially referring to US federalism (e.g. Berry and Berry 1990; Walker 1974); second, a sociological tradition of diffusion research “primarily interested in the take-up of information and ideas, practices and technologies among individuals, and principally among networks of peers” (Freeman 2006: 370; e.g. Rogers 2003).

Policy transfer has early been referred to as a process in which the decision-makers in one institutional setting ‘learn’ from the policy decisions made in another setting (Dolowitz and Marsh 2000). Learning from early adopters is also widely recognized as a mechanism of policy diffusion next to competition, imitation and coercion (e.g. Shipan and Volden 2008). Policy learning and transfer do not only involve politicians and public officials from within national or regional settings, but also a variety of actors from outside, including transnational advocacy networks (Stone 2004), transnational philanthropic institutions (Stone 2010), think tanks (Stone 2000), supra-national institutions (Jordan et al. 2012) or international institutions (Moyson 2010). The content of learning may include ‘hard’ components of policies like definitions of problems, objectives or instruments, as well as ‘softer’ aspects like ideas, ideologies and concepts.

However, serious consideration for individual and collective learning processes allowing transfer has emerged only recently (Gilardi 2010; Meseguer 2004; Volden et al. 2008).

‘Lesson drawing’ (Rose 1991) has received much of the attention because it involves an ideal-typical form of learning: this concept translates the will, effective cognitive ability, and practical capacity to draw lessons from other institutional settings in order to meet a given objective in one’s own institutional setting (e.g. Gilardi et al. 2009). It has been recognized, however, that learning can be random, biased or even impossible with imperfect or no lesson-drawing at all (Dussauge-Laguna 2012; Shipan and Volden 2012: 201; Wolman and Page 2002).

Third, social learning approaches are concerned with the management of uncertainty and the puzzling of ideas by policy actors. According to Heclo (1974), in one of the foundational formulations, “politics finds its sources not only in power but also in uncertainty – men collectively wondering what to do [...]. Policy making is a form of collective puzzlement on society’s behalf; it entails both deciding and knowing [...]. Much political interaction has constituted a process of social learning expressed through policy” (Heclo 1974: 305–6). As noticed by Parsons (1995), social-learning approaches do not simply oppose rational learning to political power. There has been an early recognition, in particular by Friedman (1984) in planning theory, that policy knowledge is socially embedded and results from power relations between human groups. Beyond these premises, three main social learning approaches may be distinguished: Haas (1992)’s ‘epistemic communities’, Hall (1993)’s ‘social learning’ and Sabatier and Jenkins-Smith (1993)’s ‘advocacy coalition framework’.

Epistemic communities (Haas 1992; Haas and Haas 1995; for a recent review, see also Dunlop 2013) are groups of ‘like-minded professionals’ unified by a belief system composed of “[1] a shared set of normative and principled beliefs; [2] shared causal beliefs; [3] shared notions of validity; and [4] a common policy enterprise” (Haas 1992: 3). The members of epistemic communities are highly specialised experts sharing some consensual knowledge, especially the elements [2] and [3] of the belief system. As such, they may be considered as

the main producers of knowledge in an issue area (Dunlop 2009). Furthermore, they have an authoritative position and can use other resources to translate their message into institutionalized practices and policies. In Haas' view, policy learning refers to the process of informing policy actors' beliefs. Empirically, many studies have focused on members of international organization secretariats informing national policy actors' decisions. Hall (1993) defines social learning as "a deliberate attempt to adjust the goals or techniques of policy in response to past experience and new information" (Hall 1993: 278). In Hall's view, "(social) learning is indicated when policy changes as the result of such a process" (Hall 1993: 278). Hall distinguishes three 'orders' of policy change. In first-order policy changes, the settings of the policy instruments are altered (e.g., increasing an incentive in order to influence a behaviour). In second-order policy changes, the policy instruments themselves are changed (e.g., opting for a tax rather than an incentive). Third-order policy changes mean that the whole policy paradigm is changed (e.g., trying to influence another behaviour). A policy paradigm is the common interpretive framework of a policy. It addresses the nature and definition of the problems the policy should deal with, the goals of the policy, the instruments that should allow to achieve these goals, and the settings of these instruments. As the connection between policy learning and change is straightforward, the orders of policy change have often been used to distinguish the different orders of policy learning too. Hall (1993)' approach is probably the most social of the social-learning approaches with its strong recognition that various groups from the society can be involved in learning processes. The advocacy coalition framework (Jenkins-Smith et al. 2014; Sabatier and Jenkins-Smith 1993; Sabatier and Weible 2007) is one of the most common theories of policy processes looking at the role of policy learning. In Sabatier's view, the policy process occurs in a 'policy subsystem', i.e. a set of actors "who are involved in dealing with a policy problem such as air pollution control, mental health, or energy" (Sabatier and Jenkins-Smith 1993: 24). One factor of policy change is policy learning, defined as "relatively enduring alterations of thought or behavioral intentions that result from experience and which are concerned with the attainment or revision of the precepts of the belief system of individuals or of collectivities" (Sabatier and Jenkins-Smith 1993: 42). According to Sabatier and colleagues, however, the relative strength of policy learning in influencing policy changes is very limited, compared to power games between policy actors as well as the 'shocks' that they do not control (e.g., a natural or human catastrophe).

## **2.3 Distinctive characteristics of policy learning research**

The existing approaches on policy learning share at least three distinctive characteristics. First, they pay attention to the relation between the society and the state. The state-society frontier is neither static (Hall 1993) nor impermeable (Sabatier and Jenkins-Smith 1993). Political and policy-relevant ideas (and power) exist in the state but also among experts, scientists, stakeholders, and citizens. Ideas circulate within the state but also between state and society. For this reason, the policy learning literature is intimately related to the development of the notion of 'policy network' (Parsons 1995). Indeed, to look at policy actors' participation in policy processes, policy network theories rely on the ties that link actors together rather than on their attributes. A focus on ties, such as between a civil servant and an academic expert, allows to integrate the contribution of a broader range of actors into the analysis of policy processes, especially the societal actors without official attribute (e.g., active citizens, experts, etc.) (see Rhodes 2016).

Second, flowing from psychological and organizational research, policy learning research adopted the 'behavioural turn' which highlights that actors' rationality is 'bounded' (Robbins

et al. 2013; Simon 1991). This means recognizing that policy actors are constrained by the environment (limited amount and quality of available information) and that their cognitive abilities are imperfect (limited capacity to collect, acquire and translate the available information). In addition, policy learning is not only a cognitive process of calculations, but also a social dynamic. This means that actors' updates of policy beliefs result from their interactions with the other actors of the policy process. In other words, if policy learning focuses on the role of ideas in politics, it must not neglect the role of power and (inter-)subjectivity. With learning, we can explain the behaviour of decision-makers with a "combination of social conflict, rational analysis, institutional incentives and symbols" (Zito and Schout 2009: 1109).

Third, policy learning theories consider the policy process over time. Indeed, "one of the principal factors affecting policy at time-1 is policy at time-0" (Hall 1993: 277). This point is important because ideas have two contradictory forces on policy processes. On the one hand, their relative stability imposes some inertia. On the other hand, ideas are collected, selected, assembled, arranged, and then communicated, advocated or abandoned. Those processes are dynamic, and their influence on policymaking may be captured only by considering (quite long) periods of time in the analysis of policy processes (Dunlop 2013; Sabatier 1993). In the last sections of this chapter, we focus on three theoretical challenges of policy learning research. We do not discuss any methodological challenges related to the study of policy learning here: they are discussed from a general perspective by Heikkilä and Gerlak (2013, 2016), for example, and from a more specific, 'place-based' perspective in **Chapter 4** of this book.

## **2.4 Deepening our knowledge on the behavioural aspects of policy learning**

Following Shafir (2013)'s call for a behavioural approach to policy processes, the first challenge of policy learning research is deepening our knowledge on the socio-psychological factors, mechanisms and outcomes of policy learning. At the cognitive level, the ability of policy actors to process information is limited, especially in contexts of urgency (Birkland 2006; Moynihan 2008; Svenson and Maule 1993). In fact, policy actors tend to rely on heuristic-based modes of reasoning such as aversion to risky decisions (Kahneman 2011) or reluctance to admit they are wrong (Leach et al. 2014). These attitudes impede their acquisition of new policy knowledge and their ability to process this information consistently (Moyson 2017). Furthermore, policymaking is also a matter of interests, not only of beliefs and values. However, interests themselves are cognitive constructs. Policy actors acquire new information and update their policy beliefs and preferences according to the impact of those updates on their personal well-being and the prosperity of their organization (Gilardi et al. 2009; Moyson 2016). How do policy actors acquire policy-relevant information? How do they use their knowledge to model their policy preferences? What is the influence of their values, interests and beliefs? What are the individual characteristics of policy actors influencing their cognitive understanding of policy change processes? Given the influence that actors' psychology exerts on policy learning and policy change, it would be worthwhile to develop our knowledge of the cognitive processes underpinning policy learning processes.

In addition, new actors have appeared in policymaking processes. In particular, with the development of interactive and participatory governance (Edelenbos and Meerkerk 2016), 'simple' citizens have been invited to participate in learning-induced policy change processes or even to 'co-produce' (Voorberg et al. 2017) those changes with public officials. Citizens have also imposed themselves as new policy actors through social mobilization (e.g. Chailleux and Moyson 2016) and social media have been a key tool in this respect. From a

behavioralist perspective, this raises new research questions. For example, what are the specific ideas that those new actors introduce into the policymaking process? How do they treat policy information? What is their knowledge of policy tools? Do they learn and diffuse new ways to make and promote policy solutions? Do they influence the social dynamics of learning in specific ways? What are the implications for the democratization of policymaking processes? The research on these questions (e.g. Papadopoulos and Warin 2007; Schillemans et al. 2013) is worth to be further developed.

Finally, policy learning researchers should not only draw attention to who the learning agents are but also to whom they learn from and with. Network dynamics have always been central, in social learning approaches, while the importance of learning sources or teacher-learner 'dyads' has early been recognized, in convergence and diffusion approaches (e.g. Dolowitz and Marsh 2000; Gilardi 2010; Gilardi et al. 2008). However, there is divergence among theoretical perspectives on the inter-individual conditions of policy learning. For instance, actor-network theories (Rhodes 2016; Schneider and Ingram 2007) or theories of deliberation (Cohen 1997; Mansbridge 2003) suggest that larger networks of policy actors are likely to create better learning conditions. Greater diversity in opinions, it is argued, and the deliberative ethic of some actors may encourage them to join large-scope networks and to participate in learning processes in a constructive way. In contrast, some theories suggest that policy change processes will be more complex when more actors with diverse backgrounds or divergent policy beliefs are involved because of lower levels of trust, divergent expectations regarding the information that they are likely to use (Jenkins-Smith et al. 2014; Oh and Rich 1996) or a tendency to overestimate the threat that they represent for each other (e.g. Fischer et al. 2016; Leach and Sabatier 2005). These insights into the sociopsychology of actors in policy networks could be further developed. From whom do policy actors learn? How do diverse policy actors such as elected officials, civil servants, academic scientists, lobbyists, policy consultants or citizens interact with each other? What (and how) do they learn from each other? What are the factors influencing those social interactions? Are there any intermediaries such as policy brokers or policy entrepreneurs (Christopoulos and Ingold 2015) (pro)actively shaping these dynamics? These are only examples of research questions that could be addressed by future studies (for a review, see Riche et al. 2017).

## **2.5 Studying the multiple outcomes of policy learning**

The second challenge of policy learning research is recognizing and studying the multiplicity of learning outcomes. One of the main reasons to look at policy learning is the role that it plays in policy change. Indeed, generally speaking, human learning is a fundamental intermediate factor of change processes. Change requires actors to create or to deal with new information and new experiences. This results in the enduring acquisition or modification of abstract constructs (Vandenbos 2007). Those alterations, in turn, transform actors' behavioural intentions and their contribution to change (Fishbein and Ajzen 2010). Hence, policy learning is a causal mechanism linking over time the beliefs held by individual policy actors, the revision of those beliefs, the alterations of collective ideas, and policy change. There are still doubts, however, on the actual influence of policy learning on policy change (e.g. Eberg 1997; Hoberg 1996; Nohrstedt 2005). Does learning contribute to change (or not)? Does change result from learning (or from other factors)? The literature has suggested that the effect of learning on fundamental policy decisions is more likely to be significant in the long run (Sabatier 1993). However, changes always depend on learning processes, even in the short run. But their nature is probably more dependent on heuristic-based modes of reasoning after unexpected shocks or in contexts of urgency than in the long run (Birkland 2006;

Moynihan 2008; Svenson and Maule 1993) – which confirms a need for socio-psychological insights into policy learning processes in such contexts.

To bring insightful contributions to our understanding of the policy learning-change dynamic, future studies should do justice to the quantitative and qualitative diversity in policy changes. Timeframes and degrees of policy change should be more clearly distinguished. Learning can contribute to long-term processes of major or minor scope as well as to short-term processes of major or minor scope too (Howlett and Cashore 2009). Variations in the deepness of policy changes do not only exist between changes in policy objectives and changes in policy instruments. As far as policy aims are concerned, changes can relate to the general types of ideas that govern policy development, to the formal aim of one policy, or to its specific, on-the-ground requirements. As far as policy instruments are concerned, changes can relate to the general norms that guide the implementation preferences, to the types of instruments that are utilized, or to the specific ways in which the instruments are used (Howlett and Cashore 2009). Differences in policy changes can also be more qualitative (Weible and Carter 2015). For example, changes can concern the causal theories of policies, their effects on target populations (and the definition of those populations) or the type of sanctions and inducements that ensure compliance. Future studies could examine whether the conditions and mechanisms of learning processes leading to these various types of policy change are different (for recent contributions to the analysis of policy change, see also Bauer and Knill 2014; Hogan and Howlett 2014).

In addition, learning can also contribute to policy stability when new policy information convinces policy actors that they are right (Montpetit and Lachapelle 2015). In a similar vein, policy learning does not always lead to the reinforcement of new or existing policies: it can also push for policy ‘dismantling’ (Jordan et al. 2003). Finally, too often, learning is given a role in policy change only when the analysis of other factors has not been conclusive. In other words, the ‘alternative’ hypothesis that belief updates matter is rarely confronted to the ‘null’ hypothesis that they do not (Radaelli 2009). Researchers interested in the effects of policy learning on policy change should systematically focus on the exact influence exerted by policy learning on various patterns of policy change.

Last but not least, policy change is not the only possible outcome of policy learning. First, learning can increase the amount of policy information and knowledge that can be mobilized in a policy process (Crona and Parker 2012). Second, the cognitive and social dynamics leading policy actors to update their beliefs can facilitate the emergence of shared understandings and compromises (Brummel et al. 2010) or, at least, transform relations between parties to a conflict (Diduck et al. 2012). Third, policy learning is not only useful in case of disagreement or conflict: generally speaking, when private- and public-organization members have a better understanding of each other’s policy beliefs, values and interests, we speculate, it can facilitate their collaboration on uncontentious issues too. Such outcomes are important as such. They can also be important intermediate variables of policy change. Hence, the ongoing research efforts (de Vente et al. 2016; Leach et al. 2014) on the outcomes of policy learning should be furthered (see, for example, Moyson et al. 2017).

## **2.6 Looking for settings and practices fostering or impeding policy learning**

The third challenge of policy learning research is deepening our knowledge of the institutional settings and organizational practices enabling or impeding policy learning. This issue, of course, has not been ignored until now. For example, several studies based on the advocacy coalition framework have looked at the characteristics of ‘professional forums’ conducive to policy learning, agreement and compromise among policy actors from different backgrounds

and coalitions (Jenkins-Smith et al. 2014; Sabatier and Weible 2007). Crona & Parker (2012) have proposed a ‘holistic’ framework to examine the settings fostering the production and learning of policy knowledge in boundary and bridging organizations (see also Hoppe 2005). De Vente et al. (2016) have examined the design of participatory processes and their influence on information gain, learning, and trust among participants, as well as the likelihood of policy implementation. Finally, institutional and organizational settings can be a challenge in transforming the individual outputs of learning into collective changes in policy ideas, paradigms and decisions (Witting and Moyson 2015). Nevertheless, there remain many questions. Why do certain policy networks or professional forums facilitate dialogue, learning and compromise among participants whereas others do not? Why do government-initiated participatory processes are less conducive to learning? Are there ‘ideal’ settings or practices in order to foster learning? On a more normative level, is learning always desirable and should settings and practices be modelled in order to facilitate it? Answering this kind of questions requires comparative research designs – in order to contrast settings or practices with each other – and (again) a good knowledge on the socio-psychology of policy learning – in order to link setting and practices with beliefs updates causally.

## **2.7 Conclusion**

Policy learning designates the cognitive and social dynamic leading policy actors to revise or strengthen their policy beliefs and preferences over time. In the first section of this chapter, the existing research on policy learning has been presented. Three main sets of approaches have been distinguished. First, ‘managerialist’ approaches rely on insights from political and organizational sciences to look at the development of the intelligence, sophistication and effectiveness of public policies and public administrations. Second, ‘diffusion and convergence’ approaches look at processes through which decisions are made in one institutional setting according to decisions previously made in another one. Third, ‘social learning’ approaches focus on the cognitive and social mechanisms through which policy actors in one institutional setting manage uncertainty and puzzle ideas to make policies. In the second section, we have argued that these three sets of approaches share: a consideration for policy processes on the long run; a focus on the role of state but also non-state actors in those processes; and a recognition that policy actors’ rationality is ‘bounded’. Finally, we have discussed three avenues for future research. First, despite the adoption of a behavioural turn by policy learning research, there is much room for deepening our knowledge on the socio-psychological dynamic of policy learning. We have called for new studies on the cognitive mechanisms (e.g., heuristic-based modes of reasoning) fostering or impeding learning as well as on the network dynamics behind learning processes, with a special focus on the new actors of policymaking (e.g., active citizens). Second, future studies could improve our knowledge on learning outcomes through recognizing that policy changes are more diverse (in amount but also in nature) than it is often assumed, that policy learning can also lead to policy stability or dismantling, and that policy change or stability are not the only outcomes of policy learning (e.g., learning can also increase the available information on policies or change the relations between policy actors). Third, we need more research on the institutional settings and organizational practices fostering or impeding policy learning. This theoretical need could be related to a call for more practice-oriented research looking at the appropriate strategies to model policy learning processes.

## **Acknowledgements**



This work was supported by the Belgian Fund for Scientific Research (F.R.S.-FNRS).

## References

- Argote, L. (2013), *Organizational Learning: Creating, Retaining and Transferring Knowledge*, Springer US.
- Argyris, C. (1996), *Organizational Learning II: Theory, Method, and Practice*, Addison-Wesley Publishing Company.
- Bauer, M. W. and C. Knill (2014), 'A Conceptual Framework for the Comparative Analysis of Policy Change: Measurement, Explanation and Strategies of Policy Dismantling', *Journal of Comparative Policy Analysis: Research and Practice*, **16** (1), 28–44.
- Bennett, C. J. (1991), 'What Is Policy Convergence and What Causes It?', *British Journal of Political Science*, **21** (2), 215–33.
- Bennett, C. J. and M. Howlett (1992), 'The lessons of learning: Reconciling theories of policy learning and policy change', *Policy Sciences*, **25** (3), 275–94.
- Berry, F. S. and W. D. Berry (1990), 'State Lottery Adoptions as Policy Innovations: An Event History Analysis', *The American Political Science Review*, **84** (2), 395–415.
- Birkland, T. A. (2006), *Lessons of Disaster: Policy Change after Catastrophic Events*, Georgetown University Press.
- Brummel, R. F., K. C. Nelson, S. G. Souter, P. J. Jakes and D. R. Williams (2010), 'Social learning in a policy-mandated collaboration: community wildfire protection planning in the eastern United States', *Journal of Environmental Planning and Management*, **53** (6), 681–99.
- Chailleux, S. and S. Moyson (2016), 'The French Ban on Hydraulic Fracturing and the Attempts to Reverse It: Social Mobilization, Professional Forums, and Coalition Strategies', in *Policy Debates on Hydraulic Fracturing*, Palgrave Macmillan, New York, pp. 115–45.
- Christopoulos, D. and K. Ingold (2015), 'Exceptional or just well connected? Political entrepreneurs and brokers in policy making', *European Political Science Review*, **7** (3), 475–98.
- Cohen, J. (1997), 'Deliberation and democratic legitimacy', in J. Bohaman and W. Rehg (eds), *Deliberative Democracy: Essays on Reason and Politics*, Cambridge MA: MIT Press, pp. 342–60.
- Common, R. (2004), 'Organisational learning in a political environment', *Policy Studies*, **25** (1), 35–49.
- Crona, B. and J. Parker (2012), 'Learning in Support of Governance: Theories, Methods, and a Framework to Assess How Bridging Organizations Contribute to Adaptive Resource Governance', *Ecology and Society*, **17** (1), accessed at <https://doi.org/10.5751/ES-04534-170132>.

- Cyert, R. M. and J. G. March (1963), *A Behavioral Theory of the Firm*, Prentice-Hall.
- de Vente, J., M. Reed, L. Stringer, S. Valente and J. Newig (2016), 'How does the context and design of participatory decision making processes affect their outcomes? Evidence from sustainable land management in global drylands', *Ecology and Society*, **21** (2), accessed at <https://doi.org/10.5751/ES-08053-210224>.
- Deutsch, K. W. (1963), *The Nerves of Government: Models of Political Communication and Control*, Free Press.
- Diduck, A., A. J. Sinclair, G. Hostetler and P. Fitzpatrick (2012), 'Transformative learning theory, public involvement, and natural resource and environmental management', *Journal of Environmental Planning and Management*, **55** (10), 1311–30.
- Dolowitz, D. P. and D. Marsh (2000), 'Learning from Abroad: The Role of Policy Transfer in Contemporary Policy-Making', *Governance*, **13** (1), 5–23.
- Dunlop, C. A. (2009), 'Policy transfer as learning: capturing variation in what decision-makers learn from epistemic communities', *Policy Studies*, **30** (3), 289–311.
- Dunlop, C. A. (2013), 'Epistemic communities', in M. Howlett, S. Fritzen, W. Xun, and E. Araral (eds), *Routledge Handbook of Public Policy*, New York, NY: Routledge.
- Dunlop, C. A. and C. M. Radaelli (2013), 'Systematising Policy Learning: From Monolith to Dimensions', *Political Studies*, **61** (3), 599–619.
- Dussauge-Laguna, M. I. (2012), 'On The Past and Future of Policy Transfer Research: Benson and Jordan Revisited', *Political Studies Review*, **10** (3), 313–24.
- Easterby-Smith, M. and M. A. Lyles (2011), *Handbook of Organizational Learning and Knowledge Management*, John Wiley & Sons.
- Eberg, J. (1997), *Waste Policy and Learning. Policy Dynamics of Waste Management and Waste Incineration in the Netherlands and Bavaria*, accessed 19 September 2017 at <http://dare.uva.nl/search?identifier=75f46cca-cc3a-4ca5-91bc-27dd778da22a>.
- Edelenbos, J. and I. van Meerkerk (2016), *Critical Reflections on Interactive Governance: Self-Organization and Participation in Public Governance*, Edward Elgar Publishing.
- Etheredge, L. S. and J. Short (1983), 'Thinking About Government Learning', *Journal of Management Studies*, **20** (1), 41–58.
- Fischer, M., K. Ingold, P. Sciarini and F. Varone (2016), 'Dealing with bad guys: actor- and process-level determinants of the “devil shift” in policy making', *Journal of Public Policy*, **36** (2), 309–34.
- Fishbein, M. and I. Ajzen (2010), *Predicting and Changing Behavior: The Reasoned Action Approach*, Psychology Press.
- Freeman, R. (2006), 'Learning in public policy', in M. Moran, M. Rein, and R. E. Goodin (eds), *The Oxford Handbook of Public Policy*, Oxford ; New York: Oxford University Press, pp. 367–88.

- Fridriksson, H.-V. (2008), *Learning Processes in an Inter-Organizational Context: A Study of KrAft Project*, accessed 19 September 2017 at <http://www.diva-portal.org/smash/record.jsf?pid=diva2:3674>.
- Friedmann, J. (1984), 'Planning as social learning', in D. Korten and R. Klauss (eds), *People Centered Development: Contributions Toward Theory and Planning Frameworks*, West Hartford, CO: Kumarisna Press.
- Gilardi, F. (2010), 'Who Learns from What in Policy Diffusion Processes?', *American Journal of Political Science*, **54** (3), 650–66.
- Gilardi, F. and K. Füglistner (2008), 'Empirical Modeling of Policy Diffusion in Federal States: The Dyadic Approach', *Swiss Political Science Review*, **14** (3), 413–50.
- Gilardi, F., K. Füglistner and S. Luyet (2009), 'Learning From Others: The Diffusion of Hospital Financing Reforms in OECD Countries', *Comparative Political Studies*, **42** (4), 549–73.
- Gilson, C., P. Dunleavy and J. Tinkler (2009), *Organizational Learning in Government Sector Organizations: Literature Review*, Monograph, accessed 19 September 2017 at <http://www.nao.org.uk/report/helping-government-learn/>.
- Grin, J. and A. Loeber (2007), 'Theories of policy learning: Agency, structure, and change', in F. Fischer, G. Miller, and M. Sidney (eds), *Handbook of Public Policy Analysis: Theory, Politics, and Methods*, Boca Raton, FL: CRC Press, pp. 201–19.
- Haas, P. M. (1992), 'Introduction: epistemic communities and international policy coordination', *International Organization*, **46** (1), 1–35.
- Haas, P. M. and E. B. Haas (1995), 'Learning to Learn: Improving International Governance', *Global Governance*, **1**, 255–84.
- Hall, P. A. (1993), 'Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain', *Comparative Politics*, **25** (3), 275–96.
- Heclo, H. (1974), *Modern Social Politics in Britain and Sweden: From Relief to Income Maintenance*, Yale University Press.
- Heikkilä, T. and A. K. Gerlak (2013), 'Building a Conceptual Approach to Collective Learning: Lessons for Public Policy Scholars', *Policy Studies Journal*, **41** (3), 484–512.
- Heikkilä, T. and A. K. Gerlak (2016), 'Learning', in C. Ansell and F. Torfing (eds), *Handbook on Theories of Governance*, Cheltenham, UK: Edward Elgar Publishing, pp. 225–35.
- Hoberg, G. (1996), 'Putting Ideas in Their Place: A Response to "Learning and Change in the British Columbia Forest Policy Sector"', *Canadian Journal of Political Science/Revue Canadienne de Science Politique*, **29** (1), 135–44.
- Hogan, J. and M. Howlett (2014), *Policy Paradigms in Theory and Practice: Discourses, Ideas and Anomalies in Public Policy Dynamics*, Palgrave Macmillan UK.

- Hoppe, R. (2005), 'Rethinking the science-policy nexus: from knowledge utilization and science technology studies to types of boundary arrangements', *Poiesis & Praxis*, **3** (3), 199–215.
- Howlett, M. and P. B. Cashore (2009), 'The Dependent Variable Problem in the Study of Policy Change: Understanding Policy Change as a Methodological Problem', *Journal of Comparative Policy Analysis: Research and Practice*, **11** (1), 33–46.
- Jenkins-Smith, H. C., C. Nohrstedt, C. M. Weible and P. A. Sabatier (2014), 'The advocacy coalition framework: Foundations, evolution, and ongoing research', in P. A. Sabatier and C. M. Weible (eds), *Theories of the Policy Process*, Boulder, CO: Westview Press.
- Jordan, A., H. van Asselt, F. Berkhout, D. Huitema and T. Rayner (2012), 'Understanding the Paradoxes of Multilevel Governing: Climate Change Policy in the European Union', *Global Environmental Politics*, **12** (2), 43–66.
- Jordan, A., R. Wurzel, A. R. Zito and L. Brückner (2003), 'European governance and the transfer of "new" environmental policy instruments (NEPIs) in the European Union', *Public Administration*, **81** (3), 555–74.
- Kahneman, D. (2011), *Thinking, Fast and Slow*, Farrar, Straus and Giroux.
- Knill, C. (2005), 'Introduction: Cross-national policy convergence: concepts, approaches and explanatory factors', *Journal of European Public Policy*, **12** (5), 764–74.
- Leach, W. D. and P. A. Sabatier (2005), 'To Trust an Adversary: Integrating Rational and Psychological Models of Collaborative Policymaking', *American Political Science Review*, **99** (4), 491–503.
- Leach, W. D., C. M. Weible, S. R. Vince, S. N. Siddiki and J. C. Calanni (2014), 'Fostering Learning through Collaboration: Knowledge Acquisition and Belief Change in Marine Aquaculture Partnerships', *Journal of Public Administration Research and Theory*, **24** (3), 591–622.
- Mahoney, J. and G. Goertz (2006), 'A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research', *Political Analysis*, **14** (3), 227–49.
- Mansbridge, J. (2003), 'Rethinking Representation', *American Political Science Review*, **97** (4), 515–28.
- Marsh, D. and J. C. Sharman (2009), 'Policy diffusion and policy transfer', *Policy Studies*, **30** (3), 269–88.
- Meseguer, C. (2004), 'What Role for Learning? The Diffusion of Privatisation in OECD and Latin American Countries', *Journal of Public Policy*, **24** (3), 299–325.
- Metcalf, L. (1993), 'Public management: From imitation to innovation', in J. Kooiman (ed), *Modern Governance: New Government-Society Interactions*, London: SAGE.
- Montpetit, E. and E. Lachapelle (2015), 'Can policy actors learn from academic scientists?', *Environmental Politics*, **24** (5), 661–80.

- Moynihan, D. P. (2008), 'Learning under Uncertainty: Networks in Crisis Management', *Public Administration Review*, **68** (2), 350–65.
- Moynihan, D. P. and N. Landuyt (2009), 'How Do Public Organizations Learn? Bridging Cultural and Structural Perspectives', *Public Administration Review*, **69** (6), 1097–105.
- Moyson, S. (2010), 'L'impact des réseaux d'acteurs sur le transfert des recommandations de l'enquête PISA en Communauté française et en Communauté flamande de Belgique [The impact of actor networks on the transfer of the recommendations of the PISA survey in the French Community and the Dutch Community of Belgium]', *Administration Publique*, **34**, 445.
- Moyson, S. (2017), 'Cognition and policy change: The consistency of policy learning in the advocacy coalition framework', *Policy and Society*, **36** (2), 320–44.
- Moyson, S. (2016), 'Policy learning over a decade or more and the role of interests therein: The European liberalization policy process of Belgian network industries', *Public Policy and Administration*, 0952076716681206.
- Moyson, S., P. Scholten and C. M. Weible (2017), 'Policy learning and policy change: theorizing their relations from different perspectives', *Policy and Society*, **36** (2), 161–77.
- Nohrstedt, D. (2005), 'External shocks and policy change: Three Mile Island and Swedish nuclear energy policy', *Journal of European Public Policy*, **12** (6), 1041–59.
- Oh, C. H. and R. F. Rich (1996), 'Explaining use of information in public policymaking', *Knowledge and Policy*, **9** (1), 3–35.
- Papadopoulos, Y. and P. Warin (2007), 'Are innovative, participatory and deliberative procedures in policy making democratic and effective?', *European Journal of Political Research*, **46** (4), 445–72.
- Parsons, D. W. (1995), *Public Policy: An Introduction to the Theory and Practice of Policy Analysis*, Edward Elgar.
- Radaelli, C. M. (2009), 'Measuring policy learning: regulatory impact assessment in Europe', *Journal of European Public Policy*, **16** (8), 1145–64.
- Rhodes, R. (2016), 'Policy network analysis', in M. Moran, M. Rein, and R. E. Goodin (eds), *The Oxford Handbook of Public Policy*, Oxford, UK: Oxford University Press, pp. 423–45.
- Riche, C., D. Aubin and S. Moyson (2017). *Learning in networks: A systematic review of public administration research*, Oslo, Norway: General Conference of the European Consortium for Political Research.
- Robbins, S., T. A. Judge, B. Millett and M. Boyle (2013), *Organisational Behaviour*, Pearson Higher Education AU.
- Rogers, E. M. (2003), *Diffusion of Innovations, 5th Edition*, Free Press.

- Rose, R. (1991), 'What is Lesson-Drawing?', *Journal of Public Policy*, **11** (1), 3–30.
- Sabatier, P. A. (1993), 'Policy change over a decade or more', in P. A. Sabatier and H. C. Jenkins-Smith (eds), *Policy Change and Learning: An Advocacy Coalition Approach*, Boulder, CO: Westview Press, pp. 13–39.
- Sabatier, P. A. and H. C. Jenkins-Smith (1993), *Policy Change and Learning: An Advocacy Coalition Approach*, Westview Press.
- Sabatier, P. A. and C. M. Weible (2007), 'The advocacy coalition framework: Innovations and clarifications', in P. A. Sabatier (ed), *Theories of the Policy Process*, Boulder, CO: Westview Press, pp. 189–222.
- Schillemans, T., M. V. Twist and I. Vanhommerig (2013), 'Innovations in Accountability', *Public Performance & Management Review*, **36** (3), 407–35.
- Schneider, A. and H. Ingram (2007), *Ways of Knowing: Implication for Public Policy*, Chicago, IL: Annual meeting of the American Political Science Association.
- Shafir, E. (2013), *The Behavioral Foundations of Public Policy*, Princeton University Press.
- Shipan, C. R. and C. Volden (2008), 'The Mechanisms of Policy Diffusion', *American Journal of Political Science*, **52** (4), 840–57.
- Shipan, C. R. and C. Volden (2012), 'Policy Diffusion: Seven Lessons for Scholars and Practitioners', *Public Administration Review*, **72** (6), 788–96.
- Simon, H. (1991), 'Bounded Rationality and Organizational Learning', *Organization Science*, **2** (1), 125–34.
- Stone, D. (2000), 'Non-Governmental Policy Transfer: The Strategies of Independent Policy Institutes', *Governance*, **13** (1), 45–70.
- Stone, D. (2004), 'Transfer agents and global networks in the “transnationalization” of policy', *Journal of European Public Policy*, **11** (3), 545–66.
- Stone, D. (2010), 'Private philanthropy or policy transfer? The transnational norms of the Open Society Institute', *Policy & Politics*, **38** (2), 269–87.
- Svenson, O. and A. J. Maule (1993), *Time Pressure and Stress in Human Judgment and Decision Making*, Springer Science & Business Media.
- Vandenbos, G. R. (2007), *APA Dictionary of Psychology*, American Psychological Association.
- Volden, C., M. M. Ting and D. P. Carpenter (2008), 'A Formal Model of Learning and Policy Diffusion', *American Political Science Review*, **102** (3), 319–32.
- Voorberg, W., V. Bekkers, K. Timeus, P. Tonurist and L. Tummers (2017), 'Changing public service delivery: learning in co-creation', *Policy and Society*, **36** (2), 178–94.

- Walker, J. L. (1974), *The Diffusion of Knowledge and Policy Change: Toward a Theory of Agenda Setting*, Institute of Public Policy Studies, University of Michigan.
- Weible, C. M. and D. P. Carter (2015), 'The composition of policy change: comparing Colorado's 1977 and 2006 smoking bans', *Policy Sciences*, **48** (2), 207–31.
- Witting, A. and S. Moyson (2015), 'Learning in post-recession framing contexts: Framing UK road policy', in N. Schiffino, L. Taskin, C. Donis, and J. Raone (eds), *Organizing after Crisis: The Challenge of Learning*, Brussels: Peter Lang, pp. 107–30.
- Wolman, H. and E. Page (2002), 'Policy Transfer among Local Governments: An Information–Theory Approach', *Governance*, **15** (4), 577–501.
- Zito, A. R. and A. Schout (2009), 'Learning theory reconsidered: EU integration theories and learning', *Journal of European Public Policy*, **16** (8), 1103–23.