This paper reviews how scholars use learning as an analytical concept across the political science and public policy literature. Three questions guide our discussion: (1) what do political actors in policy learn about (e.g., ideas or policy instruments)? (2) who learns from whom and for what reason? And, (3) how does learning happen against the background of organizational and political realities. Our perspective offers an original contribution by synthesizing key concepts and empirical challenges of the learning research.

1. Introduction

This article reviews the way researchers in political science and public policy refer to learning. It contributes to the literature in accounting for the increase in scholarship that deals with learning, in recent years. The paper summarizes the main literature strands on learning and connects their main themes to move forward the research agenda.

Learning has been a classical issue on the agenda of political analysts for a long time. For example, Karl Deutsch (Deutsch, 1966), Herbert Simon (1947, 1957) as well as Hugh Heclo
(1974) and Charles Lindblom (1959) made important contributions to the literature early on. During the last twenty-five years or so, the field of learning has broadened considerably. Researchers discussed learning in relation to ideas (Hall, 1993, p. 278; Béland & Cox, 2011), learning types (Bennett & Howlett, 1992; May, 1992), policy diffusion (Braun & Gilardi, 2006), policy transfer and lesson-drawing (Dolowitz & Marsh, 1996; Rose, 1991), as well as political learning (P. Pierson, 1994; Radaelli & Dunlop 2013). On a different level, the interest in learning continues to be strong in political science literature, even more since mutual learning has become a cornerstone of European governance, with the introduction of the Open Method of Coordination (OMC) (Dunlop & Radaelli, 2012, p. 600). More recent contributions have worked towards the development of learning into a theory of policymaking (Dunlop and Radaelli 2018; Dunlop et al. 2018a). Therein, the authors suggest that the policy process should be understood through four different modes of learning – instrumental, reflexive, bargaining, and hierarchical learning (Dunlop and Radaelli 2018).

The variety of literature strands and research problems to which scholars have applied learning, in political analysis, demonstrates that learning is very important for problem-solving and progress in both politics and policy. Nevertheless, because learning is subject to different strands of literature it is often hard for readers to clearly see the overall picture and distinguish among such a diversity of theories and interpretations of policy learning. Therefore, this article provides an overview of the different strands of literature, connects them, and identifies challenges and areas for future research.

To gain a better picture of the field our literature review divides the learning literature into three perspectives. Firstly, we focus on how researchers have analyzed the contents of learning, for example broad ideas and specific policy instruments. Secondly, we assess how scholars have examined who learns from whom by including the policy diffusion and policy transfer literatures. Thirdly, we discuss how political and organizational interests and structures frame learning. This organization of the material is inspired by other articles from the learning literature (Bennett and Howlett 1992; Heikkila and Gerlak 2013). However, our paper goes a step further by including more recent contributions, and by taking a wider perspective which includes more explicitly the policy diffusion and transfer literature.

The presentation of the learning literature according to these three perspectives allows us to
discuss the following questions about the learning literature that help to stimulate further work on learning in political research: 1) How can we move beyond more conceptual distinctions (such as different types and modes of learning) to advance the underlying mechanisms of learning? (2) What are the challenges that researchers face to advance empirical research on learning and to distinguish it from mimicking and imitation? (3) How can we improve prospects for learning among governmental institutions and by policymakers? (4) (How) Does policy learning need to be changed conceptually when considering networked and multi-level governance (MLG)? And finally, (5) do different types of policy problems come along with different capacities for learning?

To define learning in politics and public policy is difficult. A common definition refers to learning as the “as the acquisition of new relevant information that permits the updating of beliefs about the effects of a new policy” (Braun and Gilardi 2006, 308). Others have proposed a more encompassing definition that focuses on the learning process and entails, “1) a collective process, which may include acquiring information through diverse actions (e.g. trial and error), assessing or translating information, and disseminating knowledge or opportunities across individuals in a collective, and 2) collective products that emerge from the process, such as new shared ideas, strategies, rules, or policies” (Heikkila and Gerlak 2013, 486). For the purposes of this review, we look at learning in political analysis broadly and our view reaches beyond the policy focus of learning per se.

2. Contents of learning

The first strand of literature that we identify focuses on the contents of learning. Simply put, research has assessed what political actors learn. These can be broad ideas about paradigmatic policy decisions or more specific policy instruments. The ideational dimension entails learning of new values or beliefs about how policy should be made whereas the literature on policy instruments focuses on learning related to specific policy instruments which includes technical aspects and information relevant to implementation (Howlett 1991; May, 1992).
2.1 Social learning and ideas

Researchers have referred to social learning, if there are encompassing changes in the pattern of governmental action, which entail a change in the order of policy instruments in a field. The main reference of social learning in the political science literature is the work by Peter Hall (Hall, 1993, 2013, 1989). In opposition to the work of Hugh Heclo, who emphasized the dimension of political learning (Heclo, 1974), Hall makes the point that the degree of policy change depends on social learning, namely on how much policymakers change their ideas and interpretation of the policy problem (Hall, 1993, pp. 278-279). According to Hall, three degrees of policy change are possible: First order changes, which entail the adoption of existing policy instruments, second order changes that involve the adaptation of new policy instruments and third order changes, which comprise of a change in the hierarchy of policy instruments. Third order changes are similar to changes of the policy paradigm (Hall, 1993, p. 278), which is the basic framework of ideas and standards according to which decision makers interpret a social problem and make policy (Hall, 1993, p. 279). Although he addresses specific policy instruments, Hall mainly focuses on the ideational and paradigmatic aspect of social learning.

Following Peter Hall’s work, researchers have analyzed the importance of ideas and social learning for policy change. These works entail general accounts of ideas and public policy (Braun & Busch, 1999), including accounts on the connection of social learning and paradigms, such as institutional learning (Hemerijck & van Kersbergen, 1999). This view follows the understanding of learning in the context of broad ideas and paradigms. Solutions to social problems are analyzed as a process of rather broad ideas, such as norms, beliefs or cognitive frameworks, which provide the context (Hall, 1993) or the cause (Parsons, 2002) for fundamental policy changes.

On a more implicit account, social learning is connected to the general literature on policy and ideas (Béland & Cox, 2011), as well as policy paradigms (Béland & Cox, 2013). The empirical application of ideas and social learning has been studied regarding a variety of policy fields. For example, researchers have studied learning and ideas in health policy (Greener, 2002; Béland, 2010), environmental policy (Brummel, Nelson, Souter, Jakes, & Williams, 2010; 2 The concept of ideas had already been around before, especially in the study of foreign policy. However, this literature did not connect it explicitly to learning.
Social learning refers to the conceptual use of knowledge, which is a reflexive mode of learning (cf. Dunlop and Radaelli 2018, S55) that unfolds over time periods and requires in depth case analysis. Therefore, the empirical analysis of social learning is usually based on case studies (cf. references in the previous paragraphs). However, a key challenge for further empirical analyses is to find better comparative strategies to assess paradigmatic changes and social learning, which allows comparison of countries and over time, for example in collaborative research efforts.

2.2 Policy and instrumental learning

The second strand of research that focuses on the contents of learning is instrumental learning. It is similar to social learning because it focuses on learning contents. Instead of focusing on broad ideas, however, this research on instrumental learning assesses learning about specific policy instruments (Bennett & Howlett, 1992, p. 289).

Paul A. Sabatier’s work on advocacy coalitions focuses on a social learning approach that is similar to the work by Peter Hall. Sabatier emphasizes, “the effect of policy-oriented learning on the broader process of policy changes by analyzing the manner in which elites from different advocacy coalitions gradually alter their belief systems over time, partially as a result of formal policy analysis and trial and error learning” (Sabatier, 1988, p. 130). Sabatier’s focus is on specific advocacy coalitions who are interested in specific policy instruments and their implementation (Sabatier, 1993; Sabatier & Weible, 2007).

Although Sabatier’s focus is on a learning process (Moyson, 2017), the advocacy coalition framework paved the ways for the concept of policy learning understood as instrumental learning (Moyson, 2017). In this case, learning is understood precisely as an evaluation process of policy instruments and changes of policy designs based on experiences that were made during implementation, experiments, or pilot studies (May, 1992, p. 336). The public policy
literature (Bennett and Howlett, 1992; Zito and Schout, 2009) referred to this way of learning as “policy learning” or “instrumental learning”. The latter term is more precise because policy learning overlaps with social learning. From the perspective of learning modes, instrumental learning is part of epistemic learning that entails the use of knowledge by rationally acting decision makers (Dunlop and Radaelli 2018, S55).

The political science and public administration literatures have frequently used the concept of instrumental and policy learning. This can be a general account of policy learning in an entire country, as for instance the UK (Pemberton, 2000; Sanderson, 2002), in specific policy fields, such as housing, pension, unemployment, science and technology policy (Dunlop et al., 2018b), environmental (Fiorino, 2001), or tobacco control policy (Grüning, Strünck, & Gilmore, 2008; Studlar, 2006; Künzler, 2018).

In the European Union, the concept of policy and instrumental learning has taken a special role because it is a cornerstone of European governance (Radaelli, 2008; Sabel & Zeitlin 2008). Since European institutions have limited possibilities to legislate Europe-wide, especially in the field of social policies, the idea of policy harmonization through learning and soft governance has become a key component of decision-making and implementation. The Open Method of Coordination (OMC) established policy and instrumental learning more formally in the European policy process (Borrás & Jacobsson, 2004; de La Porte & Pochet, 2002). Put differently: learning is part of the multi-level governance structure where task-specific jurisdictions complement general jurisdictions. The OMC received a lot of attention by scholars (Kerber & Eckardt, 2007; Kröger, 2009; Montpetit, 2009; Radaelli, 2004, 2008; Schäfer, 2006), which revealed the possibilities and limits of soft forms of governance, i.e., “governance by learning” (Zito & Schout, 2009, pp. 1112-1114; Vagionaki 2018). After 2011, the European Semester superseded the OMC. Its goal is to improve the “learning structures” of European governance against the background of the Euro crisis (Zeitlin and Vanhercke 2014). The OMC is a good example for how learning has become an important element of political decision-making in a time of network governance that entails collaboration of different public but also private actors.

The main challenge for empirical research on instrumental learning is to distinguish learning from other modes of decision-making, such as mimicking (Heikkila and Gerlach 2013, 486) or
emulation (Maggetti and Gilardi 2016). There is no established standard on how to make this distinction and further research needs to develop such standards for empirical analysis. To uncover whether decision makers have a true intention to learn or just mimic other governments (Goyal and Howlett, 2018) could be one way to deal with this problem.

3. Directions of Learning – Policy Diffusion and Transfer

Another perspective that is important for the understanding of learning concerns policy diffusion and transfer. Scholars who are interested in policy diffusion and transfer have pointed out that learning is one form of how specific policy instruments diffuse or transfer between countries and jurisdictions. The policy diffusion and transfer literature takes therefore a perspective on learning that focuses on the direction(s) of learning, for example between countries, subnational governments, and international organizations.

3.1 Diffusion and Learning

Learning has played a key role in the literature on policy diffusion. Emanating from the seminal article by Walker on the diffusion of innovation amongst states in the US, a large literature has focused on the study of policy diffusion (Walker, 1969). Consequently, in the international relations and public policy literature, researchers have studied diffusion effects. Broadly defined, diffusion refers to the interdependence of states and/or regions and its effects on policy adoption (for a more in depth overview of the diffusion literature: Braun & Gilardi, 2006; Dobbin, Simmons, & Garrett, 2007; Gilardi, 2013; Graham, Shipan, & Volden, 2013; Maggetti & Gilardi, 2016; Simmons, Dobbin, & Garrett, 2006; Trein, 2017). From a general perspective, authors distinguish four forms of policy diffusion: coercion, competition, learning and emulation. Oftentimes, it is possible to tease out and compare these mechanisms in the course of empirical analyses (Dobbin et al., 2007; Gilardi, 2013; Shipan & Volden, 2006, 2008). For instance, Shipan and Volden show how coercion, imitation, learning and competition affect the diffusion of tobacco control policies from US cities to the states (Shipan & Volden, 2008). Other analyses have especially emphasized learning effects in diffusion processes (Füglister, 2012; Gilardi, 2010; Gilardi, Füglister, & Luyet, 2009; Meseguer, 2004, 2005; Shipan & Volden, 2014).
In the original article on diffusion by Walker, the author specifically refers to the concept of competition and emulation. Learning is mentioned only implicitly, although expert knowledge and evidence (which are indicators of policy learning), play an important role in his model (Walker, 1969, p. 898). Later research on policy diffusion defined learning based on the acquisition of new information, theories or beliefs (Simmons et al., 2006, p. 795) according to ones’ own or others’ experiences, which might eventually cause policymakers to change existing policy instruments. This may occur in two ways. Firstly, as purely rational learning in the Bayesian sense. Policymakers update their knowledge based on experiences with a policy program, either at home or abroad (Braun & Gilardi, 2006, p. 306; Meseguer, 2004, 2005). Secondly, learning can be bounded, because actor’s information is imperfect, and as such must rely on cognitive shortcuts (Kahneman & Tversky, 1982; McDermott, 2001; Tversky & Kahneman, 1974).

Empirically, the diffusion literature has researched learning in a variety of policy fields. These are lottery adoption (Berry & Berry, 1990), Indian gaming (Boehmke & Witmer, 2004), privatization policies (Meseguer, 2004), hospital reforms (Gilardi et al., 2009), health insurance contributions and benefits (Füglister, 2012; Volden, 2006), smoking bans (Shipan & Volden, 2006, 2008, 2014), as well as unemployment benefits (Gilardi, 2010) to name a few. In the empirical analyses of learning, authors have modeled the success of policies (Gilardi et al., 2009, p. 559), to understand whether the performance of policies in other countries has an impact on adoption abroad or in neighboring states. However, it is not always possible to empirically implement this approach, and the strategies of operationalizing learning vary greatly in the literature. This is a problem because it complicates the comparability and generalizability of empirical results concerning learning in the diffusion literature (Maggetti & Gilardi, 2016) as such. For example, some authors model learning as success using an objective indicator for this, such as changes of health care expenditure after policy reform (Gilardi et al., 2009, p. 559), while others use the proportion of the state population already covered by a policy (Shipan & Volden, 2008, p. 846).³

³ Empirically, the diffusion literature is of course much broader and extends also to other subfields of the discipline, such as IR. However, at this point, we are only focusing on a very small part of this literature to place it in the learning debate. For a more complete review of the diffusion literature, see for instance Graham et al., 2013.
3.2 Policy Transfer and Lesson Drawing

The exchange of knowledge between states and territories has also been subject to another strand of literature, which can also be linked to the text by Walter (1969), as it is concerned with the interdependence between states and regions and subsequent policy change. Policy transfer literature takes into consideration how policies are transferred from one country or region to another. It focuses, on the one side, on agents responsible for the transfer of knowledge as well as on elements which enable and constrain policy learning. Learning is one way of transferring policy. Coercion is another way by which policies can be transferred from one country to another (Benson & Jordan, 2011).

Specifically, the literature on policy transfer refers to Richard Rose’s article on "lesson-drawing", which claims that researchers need to focus more on the process of how policymakers draw lessons from other policies and jurisdictions, which leads to transferring policy from one state or government to another. For Rose, lesson-drawing is above all the search for new knowledge aiming to improve the situation within a country. If there is a demand for (policy)change, policy makers will search for solutions. This process depends on "a subjective definition of proximity, upon epistemic communities, which link experts together, functional interdependence between governments, and the authority of intergovernmental institutions" (Rose, 1991, pp. 5-6). At the same time, the political implementation of the newly acquired ideas is a highly political process (Rose, 1993).

Dolowitz and Marsh incorporate the concept of lesson drawing in their seminal article on policy transfer, where they take into consideration voluntary and coercive forms of transferring new ideas (Dolowitz & Marsh, 1996, p. 344). Other than the diffusion literature, which focuses on cognitive concepts, such as learning, competition or coercion, the policy transfer literature emphasizes more on a micro perspective. In a later paper, Dolowitz and Marsh are very specific about the entire process of policy transfer, focusing on the following questions: "Why do actors engage in policy transfer? Who are the key actors involved in the policy transfer process? What is transferred? From where are the lessons drawn? What are the different degrees of transfer?" (Dolowitz & Marsh, 2000, p. 6). What is more, the policy transfer literature is more specific about the issue of causality. Following Dolowitz and Marsh (1996) and Rose (1991), the policy transfer literature came up with several elements that
impact on policy transfer: path dependencies, institutional constraints, ideological differences between countries as well as technological, economic, bureaucratic and political factors which might constrain or enable the transfer of policies (Benson & Jordan, 2011, p. 367).

Researchers applied the model by Dolowitz and Marsh in many policy fields, amongst them social and welfare policy (Dolowitz, Hulme, Nellis, & O’Neal, 2000; C. Pierson, 2003), development assistances (Stone, 2004), public education (Bache & Taylor, 2003), environmental policies (Holzinger & Knill, 2008), as well as family policy (Blum, 2014). Empirical examples of the analyzed policy fields entail many countries, such as the UK and the US, as well as a selection of supranational actors, for instance the EU (for a more encompassing discussion of the problems policy transfer has been applied to see: Benson & Jordan, 2011, p. 367).

The research on diffusion and transfer focuses not only on what policymakers learn but it includes also directions of learning, i.e. the direction in which learning contents travel. The diffusion literature is also a good example for the conceptual and empirical challenges that plague the learning literature. In the diffusion literature, learning from scientists plays a minor role, and the impact of international organizations is often referred to as (soft)coercion (Dobbin et al., 2007; Simmons et al., 2006). Contrary to that, Dunlop and Radaelli point to hierarchical learning as a learning mode, which entails the imposition of knowledge (Dunlop & Radaelli 2018, p. S55). In empirical research, scholars have operationalized different mechanisms of diffusion including learning in a very inconsistent way (Maggetti & Gilardi 2016, p. 12). Thus, to identify learning empirically and to distinguish it from emulation or mimicking remains a challenge for researchers.

4. Framing of Learning

The third perspective in the learning literature we are focusing on stresses the political and organizational dimensions of learning. We combine these two aspects because both deal with the question of how political and organizational interests and attitudes frame the update of beliefs in the learning process.
4.1 Political Learning

If new information is available, members of government and administrations might learn not only about how to solve problems and to make policies best for the “common good,” but government and administrations also learn lessons that are relevant for politics, such as: how to adapt their strategies to maintain, gain or even increase their personal or organizational power. This type of learning refers to the general adaptation of political strategies based on experiences. Regarding expert knowledge, political learning means that decision makers use scientific results to legitimize their policy agenda rather than finding the “best” solution for a policy problem independently of political (and partisan) interests. This type of learning has been defined as “political learning”. In the words of Peter May, “Political learning entails policy advocates learning about strategies for advocating policy ideas or drawing attention to policy problems. The foci are judgments about the political feasibility of policy proposals and understandings of the policy process within a given policy domain” (May, 1992, p. 339).

In addition to policy-related learning, Paul Sabatier has also emphasized the importance of political learning. He refers to learning within coalitions regarding actors improving their strategies to advocate policies based on prior experiences (Sabatier, 1988). One possibility to observe political learning is to focus on what Wildavsky has called “strategic retreats,” meaning that policymakers back off from a policy goal, because it is politically too costly to obtain (Wildavsky, 1979, pp. 385-406). Such retreats might be at the cost of learning as policy improvement, i.e., policymakers might learn about new policy instruments but decide to not implement them because political costs are too high (Trein, 2018).

In his seminal empirical work on retrenchment of social policies, Paul Pierson holds that political actors had to adapt and learn new political strategies to reform the welfare state without suffering devastating electoral costs. Specifically, in the UK and the US, after attempting to close down and privatize pension schemes, governments adapted their strategies to make reform policies viable without too high electoral costs (P. Pierson, 1994). Subsequent research confirmed these insights. For example, David Natali’s study of pension reforms in France and Italy show that in both countries policymakers learned from policy failure, proposed fewer radical reforms and negotiated with interest groups to achieve reforms. In both cases, retrenchment of welfare policies remains hidden in rather complex
formulas to hide them from fierce public opposition (Natali, 2002).

The fact that political learning is important has also been emphasized by Timo Fleckenstein’s recent work on labor market reforms, in Germany. This author criticizes the main literature on policy learning for being too instrumentalist and focused only on the implementation of new ideas without sufficiently accounting for political elements. According to Fleckenstein, learning needs to be mediated by two factors. On the one hand, veto players might reduce the degree to which new knowledge can be inserted into a new policy. On the other hand, the generation of knowledge can be politically driven. For instance, if parliament or government rely on research that has been done by a parliamentary research service, or an organization that has been directly funded by government, there is a chance that already the production of knowledge is under political influence as well as the following policy reform that will be based on exactly this research program (Fleckenstein, 2011, p. 195).

The research on political learning points out that policy-oriented learning (in a functional and policy problem-solving aspect) depends largely on the political cost of policy change and might result in learning by bargaining. This mode of learning entails the political symbolic use of knowledge (Dunlop & Radaelli 2018, p. S55). From practical point of view, the research on political learning points to the limitations of functional and problem-solving oriented learning. Researchers studying learning should keep in mind that learning might be a by-product of policy change instead of its cause (Kamkhaji & Radaelli, 2017).

4.2 Organizational Learning

Learning and the use of information therein can also be framed by organizations and their values and interests. The rationale behind the idea of political learning is that individuals and organizations are interested in maximizing their legitimacy and will therefore update their beliefs accordingly. This logic has been spelled out in research on organizational institutionalism (March and Olsen, 1983) that seeks to explain in which contexts organizations try to improve their legitimacy. According to DiMaggio and Powell, organizations particularly strive to improve their legitimacy in unstable environments (DiMaggio, 1991, pp. 30-31). From a similar perspective, Bennett and Howlett refer to political learning as governmental learning, in the sense that state officials learn how to improve the political process to maximize
organizational behavior. For instance, the executive or other political organizations and collective actors learn new strategies to attain their political goals (Bennett & Howlett, 1992, p. 289).

Some authors have pointed out that political and organizational learning has received less attention in the political science literature than social learning and policy/instrumental learning. According to Christina Boswell, the policy and instrumental approach to learning plays a very prominent role, but scholars have insufficiently analyzed how actors use knowledge in a strategic manner (Boswell, 2009, pp. 4-6). In her research, Boswell holds that to create legitimacy, organizations might use knowledge. The way in which they use this knowledge depends on the organization that uses it, namely whether it is an action organization or a political organization. Thereby, action organizations need to legitimize their existence with the impact of their social interventions, whereas political organizations receive legitimacy from deliberation (Boswell, 2008, p. 474; Radaelli, 1999). Based on empirical research in the field of immigration policy, she shows how policymakers use knowledge in an instrumental way to justify their position and to achieve political outputs, which serve their personal interest (Boswell, 2009).

It is important to note that organizational learning is also linked with instrumental learning. Scholars have also pointed out that learning new policy contents, information, and ideas results in changing organizational behavior, instead of organizational preferences influencing how members of the organization change. Thus, they placed organizational learning close to instrumental learning (Benett & Howlett 1992, Radaelli 2009, Zito 2009). For example, according to Schout, organizational learning is the stage following instrumental learning (Schout 2009, 1127). On the other hand, there is empirical evidence that shows that organizational structures and preferences of decision makers can block the transfer of ideas to the organizational level and frame the use of policy ideas according to political agendas (Vagionaki 2018).

5. A Comprehensive Perspective on Learning in Political Research

In this review article, we organized learning in political research along the three perspectives of content, direction, and framing of learning. We chose these perspectives because they cut
across the different types and modes of learning and allow for connecting the various conceptual angles on the topic. Focusing on these three perspectives has two advantages. Firstly, researchers can account for the conceptual building blocks necessary to uncover a learning process. Secondly, the three perspectives are a basis for empirical research dealing with learning. As these perspectives cut across learning in different literature strands, scholars can assess important initial questions such as: is there really learning in the policy process or are new policy ideas rather the result of mimicking or emulation? How does learning unfold, who learns, to which extent does individual learning result in policy change, and how do political and organizational interests frame the use of knowledge, and therefore the update of beliefs?

Against the background of these three perspectives, we now pose five questions to the literature of policy learning: 1) How can we move beyond more conceptual distinctions (such as different types and modes of learning) to advance the underlying mechanisms of learning? (2) What are the challenges that researchers face to advance empirical research on learning and to distinguish it from mimicking and imitation? (3) How can we improve prospects for learning among governmental institutions and by policymakers? (4) (How) Does policy learning need to be changed conceptually when considering networked and multi-level governance? And finally, (5) do different types of policy problems come along with different capacities for learning? These questions (placed on the left-hand column of the following table) substantially contribute in pushing forward the boundaries regarding the research on policy learning, particularly in the context of political science and public policy.

Table 1: Content, Direction, and Framing of Learning

<table>
<thead>
<tr>
<th>(1) How to move beyond more conceptual distinctions to advance the underlying mechanisms of learning?</th>
<th>Content of learning: What is being learned? Which contents do policymakers acquire?</th>
<th>Direction of learning: In which direction do ideas travel? Who learns from whom and what?</th>
<th>Framing of learning: How do organizational and political concerns frame learning? How is knowledge politicized?</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Specific policy instruments</td>
<td>- Which actors are involved (public and private)?</td>
<td>- How is the content of learning selected?</td>
<td></td>
</tr>
<tr>
<td>- Broad ideas</td>
<td>- Power-relation between these actors (hierarchy, network, markets)?</td>
<td>- Learning for which goal (solving a public problem; meet goals of organization)?</td>
<td></td>
</tr>
<tr>
<td>- New political strategies and instruments</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(2) Challenges for empirical research? Identification of learning empirically and distinguishing it from mimicking, or other diffusion/transfer mechanisms, such as competition and emulation, remains a challenge.
(3) How to improve prospects for learning among governmental institutions and by policymakers?

- Distinction of different contents for learning: policy instruments, goals, paradigms;
- Determine their political feasibility
- Macro-level: ensure that policy can be transferred between contexts
- Individual level: ensure that partners in the room are likely to learn from one another and that there is no coercion, ignorance, mimicking instead

Consider:
- Learning might be a byproduct of bargaining
- Assess how political interests and organizational processes might block learning

(4) (How) Does policy learning need to be approached differently (if at all) when considering networked and MLG?

| No difference | The “classroom” includes actors beyond elected officials and bureaucrats at the national level, such as subnational governments and private actors | Learning is part of decision-making and policymaking in MLG; hierarchical decision-making is limited; political and policy learning is a necessary condition for successful problem-solving in MLG structures |

(5) How do differences in policy problems influence policy learning?

| Tractable problems: effective policy solutions are clearly identifiable and can be put on the agenda: epistemic learning | Tractable problems can lead to diffusible and transferable solutions | Preferences of political parties and organizations moderate the link between problem type and learning; i.e., whether policy-oriented learning leads to policy change |
| Intractable problems: effective policy solutions are uncertain; learning towards goals and ideas: reflexive learning | Intractable problems make diffusion of solutions more complicated | Contested policy problems will result in different learning patterns |

To link our three perspectives on the learning literature and the five questions, we create a table, which allows us to effectively summarize the key points of the learning literature (Table 1):

1. The three perspectives on learning that we propose organize the existing conceptual distinctions and allow to better understand the various literature strands referring to learning in political analysis as well as types and modes related to learning. For example, the distinction of contents, direction, and framing of learning, can help researchers to better understand the different modes of learning (Dunlop & Radaelli, 2018). In looking at the three perspectives that we developed in this review, scholars can deconstruct the various modes of learning to develop fine-grained explanations for differences between the distinctive learning modes that complement the two dimensions “problem tractability” and “actor certification,” which Dunlop and Radaelli (2018) propose. Furthermore, our dimensions allow scholars to structure their empirical analyses of learning modes.
2. Challenges for empirical research are to identify and distinguish learning from emulation and mimicking. In the policy diffusion literature, researchers have used different measurements for learning. The most prominent measure is policy success but scholars use also different indicators for learning, such as geographical proximity (Maggetti & Gilardi 2016). Dunlop and Radaelli deal with the identification problem of learning by putting homo discentis – the learning, studying, and practicing person – at the heart of their framework (Dunlop & Radaelli 2018, S53). This way, we look at the policy process as a learning process. This solution is elegant and radical but it comes along with the risk of conflating learning with other concepts, for example decision-making and coordination. Furthermore, scholars have held that policymakers’ intention to learn is not explicitly included in recent theoretical reflections on learning (Goyal & Howlett, 2018). A second challenge for empirical analyses concerns the aggregation of learning. Scholars only begin to assess how learning aggregates for example from individuals to the organizational level but also between constituting units of the state (Ansell et al., 2017; Dunlop & Radaelli, 2017; Vagionaki, 2018).

3. The three perspectives on learning in political analysis that we propose can also improve the prospects for learning amongst practitioners and to identify obstacles to learning “in the real world”. For example, we can assess whether decision makers’ non-learning is due to unclear or too complex contents and whether contents are contested politically. Furthermore, to assess whether there is a potential for learning it is important to consider whether policies can be transferred between contexts and if individuals who exchange policy-relevant knowledge are likely to learn from one another. Personal or professional differences as well as organizational processes and political interests can be obstacles to learning. Thus, researchers could assess whether learning is policy and problem-solving (outcome) oriented learning or rather of a strategic and political nature (Trein, 2018).

4. Does learning need to be approached differently against a multi-level governance context? Two aspects should be highlighted here: firstly, in a multi-level context, learning is part of the decision-making process, as we have discussed in the context of European governance, notably concerning the OMC and the European Semester. Since sovereignty remains distributed amongst the various general-purpose jurisdictions that are part of the multi-level governance arrangement, learning from each other is
an important part of collective decision-making and problem-solving. Secondly, multi-level governance arrangements contain a higher number and more diversity actors than single-level governance arrangements. Furthermore, private actors play an important role in solving collective problems. They exert influence through information and learning on the side of decisionmakers.

5. Dunlop and Radaelli have argued convincingly that learning varies according to the tractability of the policy problem (Dunlop & Radaelli, 2018). Further empirical research is needed to test this argument and assess whether there are other potential explanations for differences in learning types, such as the salience and the politicization of a policy problem. Future research should also uncover how these additional explanations are related to problem tractability and actor certification (Dunlop & Radaelli, 2018), as well as to how the implementation of contested policies is linked to learning (Thomann, 2018).

6. Conclusions and outlook

This paper has discussed learning in political science and public policy literatures by proposing three different perspectives: firstly, the contents of learning, which can either be broad ideas about paradigmatic policy decisions (social learning) or information regarding specific policy instruments (instrumental learning). Secondly, we point to the directions of learning, which refer to who learns from whom. Learning in such cases occurs between countries and/or subnational governments (policy diffusion and transfer). Thirdly, we point the reader to how political and organizational interests and habits frame learning.

These perspectives on the literature point the reader to some of the challenges for future research on learning. Precisely, these are: (1) how to develop a better understanding of the mechanisms of learning; (2) to distinguish learning empirically from other forms of policy diffusion and transfer as well as to assess the aggregation of learning; (3) to develop a better sense for how we can improve prospects for learning amongst practitioners; (4) to be aware that in the context of multi-level governance, learning is part of the decision-making process and governance structures, and, (5) that further research should uncover empirically how different types of policy problems result in differences in learning. The perspectives presented
in this article serve as guidelines which the readers can utilize to navigate, in a comprehensive way, through the richness and diversity of policy learning research.
References


