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Explaining the policy advisory role of civil servants in the policy process: Policy advice and learning dynamics

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Abstract

The involvement of civil servants in the policy process has recently been reconsidered with the studies about policy work and political advice. This communication intends to further theorize their policy advisory role with the theories of policy learning. The policy advisory role refers to the individual's capacity of producing usable knowledge for policy formulation and be listened to. Advice utilization requires mutual learning and adjustment between civil servants and ministers. Both the policy advisory role and individual learning are influenced by the position and individual behaviour of the civil servant. Position relates to the institutional context and individual behaviour to the way civil servants commit themselves in policy advice. The policy advisory role of civil servants increases when those are recognised in their functions, maintain a learning dynamics and create a shared understanding of the policy with the ministers. The communication presents the analytical framework, and opens up the discussion for empirical and comparative research.

Keywords:

Policy advice, civil servants, policy learning, advice utilization

Introduction

Civil servants are essential and often neglected actors in the policy process. Their involvement in policymaking is essential to democracy and good public policy. They play a mediating role between interest groups and politicians who both push their agenda without necessarily weighting the different problem frames and policy options. The detachment of their position makes their advice to politicians more informed and based on an accumulation of in-house knowledge and a plurality of external advice than any other stakeholder.

The involvement of civil servants in the policy process has been studied for long (for example Lindblom, 1959; Dahl, 1961), but it needs a fresh look. In the recent years, civil servants have gained more attention by policy scholars. Their importance in the policy process was reassessed in sector-specific case studies (Montpetit, 2011; Paquet, 2015). Their policy work was specifically investigated (Howlett, 2009; Colebatch, Hoppe *et al.*, 2010), as well as their involvement into political advice (Maley, 2015; Shaw and Eichbaum, 2017).

This communication intends to go beyond description and proposes to further theorize the role of civil servants in the policy process. Relying on a synthesis of the most recent literature, the theoretical framework explains the policy advisory role of civil servants with the theories of policy learning. Their policy advisory role increases when they learn about the policy problem and solutions and improve their understanding of others' mindsets. This learning is both sensible to context and related to the civil servant's behaviour. The policy advisory role refers to the individual's capacity of producing usable knowledge for policy formulation and be listened to and followed by the policymakers, namely the ministers. This role is measured in terms of advice utilization, that is the impact on policy formulation (Landry, Amara *et al.*, 2001). Advice utilization requires mutual learning and adjustment between civil servants and ministers. Both the policy advisory role and individual learning are influenced by the position and individual behaviour of the civil servant.

Position relates to the institutional context (Scharpf, 1997). The national political-administrative relation let more or less leeway for civil servants to be involved in policy formulation which depends from the importance of ministerial cabinets. The position of the civil servant matters too as well as the reputation of their organisation. Differences also arise at the policy subsystem level at which policy networks operate and the involvement of the civil servant in the network.

Individual behaviour refers to the way civil servants commit themselves in policy advice. First, this analytical framework proposes to investigate their policy advisory style. The policy advisory style refers to the kind of advice they produce, from a neutral and fact-driven advice about the substance of public policy to processual advice or normative positions (Nekola and Kohoutec 2016). These advices vary in terms of analysis and content. The second relational component refers to the relation with the minister: Do politicians trust the civil servant and collaborate to develop a shared understanding of the policy problem? The trustworthiness of the civil servant matters of course, but it is a reciprocal tie. Equally, the policy advisory role of the civil servant will increase if both actors have frequent interactions.

This communication develops the proposed analytical framework of the policy advisory role of civil servants. First, the role of civil servants as policy advisers is specified. Second, the importance of learning in this role is assessed. Third, contextual variables are presented, and then the individual behaviour of the civil servants. The last part puts the pieces together and sums up the analytical framework, and opens up the discussion for empirical and comparative research.

The authors believe that civil servants are critical actors in the policy process. The normative background of this analytical framework is to contribute to the formulation of good public policies with the belief that good policymaking relies on a strong administrative capacity. In terms of policy design, good policymaking is able to formulate a consistent policy rationale, with great expectations to reach the policy objectives. Four challenges are inherent in good policy making: (1) informed design, collecting scientific evidence, past experience, and the normative background; (2) internal

consistency of the policy rationale; (3) external consistency, based on a prior analysis of context, cross-sectoral issues, and political feasibility; and (4) fit to available resources. A strong administrative capacity is the ability for the public service (or at least the policy advisory system) to gather the necessary skills to meet these four challenges.

More specifically, the analytical framework relies on two postulates. The first is that administrative capacity relies on the intelligence, training, and availability of individual civil servants. The second that civil servants must learn to meet the demands and expectations of the ministers.

1 The role of civil servants in the policy process

Civil servants run the government activities in a wide array of functions. They are working under different status (career bureaucrats or standard employees) and located in different organisations, that is the ministries, the ministerial cabinets or public agencies. Their position in public administration varies too. A simple distinction can be made between top managers, middle range officials, and street-level bureaucrats. Top managers are expected to manage their departments and be only partly involved in policy formulation. Street-levels bureaucrats and executive agents are usually involved in operational tasks. Usually graduated, middle-range officials are expected to be the most directly involved in policy formulation and this analytical framework is targeting them.

The common perception of civil servants' role in the policy process is that bureaucratic advice is rooted in experience and analysis more than in responsiveness to society's demands which is related to the politicians (Aberbach, Putnam *et al.*, 1981)¹. They are associated with an image of 'neutral competence' which means the application of objectivity and expert analysis (West, 2005: 148-150). However value-free decisions is unachievable and civil servants may not be well listened to if they

¹ The administrative role of civil servants is understood as "a cohesive set of job-related values and attitudes that provides the public administrator a stable set of expectations about his or her responsibilities" (Selden, Brewer *et al.*, 1999: 175).

resist the partisan pressure exerted by politicians without convincing arguments. As well, they are part of the political game, they carry on their own sets of values, beliefs and interests, although they must keep some distance and be loyal to the elected politicians.

The policy advisory role of civil servants oscillates between detachment and responsiveness to the demands formulated by civil society (Montpetit, 2011). The notion of detachment excludes taking orders from clients, as much as from political bosses, but it does not necessarily imply neutrality (Montpetit, 2011: 1253). Detached civil servants serve society's goals and values, but have a relative discretion in the selection of those they serve². "These administrators are not neutral professionals, and they resist being controlled by elected officials and agency managers. Rather, they are action oriented, and they profess strong commitment to their agency, its clients, and the public interest" (Selden *et al.*, 1999: 192-193). Detachment is as "an attribute conferring independence from direct social and political pressures in carrying out expert analysis, which embraces some long-term objectives of society" (Montpetit, 2011: 1253-1254). It involves the provision of expert advice, developed from analysis rather than from demands coming from social or political groups.

Civil servants are supposed to work with a long term perspective fed by their tenured job. "Bureaucratic institutions are designed with the long haul in mind" (Aberbach, 2003: 316)³. Policy subsystems are submerged with huge amount of incoming information justifying policy change (Jones and Baumgartner, 2005). The prohibitive cost of processing this information and cognitive limitations inspire prudence to civil servants, who tend to remain unresponsive, trusting prevailing analysis and administrative experience (Montpetit, 2011: 1257). In practice however, they adopt a policy advisory role that is divided between detachment and responsiveness. Only civil servants who

² These goals and values frequently are empathic in nature, reflecting desires to serve citizens (Brewer, Selden *et al.*, 2000; Perry, Brudney *et al.*, 2008).

³ The full citation is : "One key role of administration in a polity is to provide continuity. Bureaucratic institutions are designed with the long haul in mind. The traditional function of top career civil administrations are to provide expertise, advice, and historical memory for the politicians who come and go in the top offices of the polity" (Aberbach, 2003: 316).

are socialised to roles that promote detachment hold on their opinions more than other policy actors (Montpetit, 2011: 1265).

Role can be both perceived as an attitude or an effect. The policy work literature considers the role of civil servants in terms of their contribution to policy work (Colebatch, Hoppe *et al.*, 2010). Policy work is a rather loose concept revolving around the question of how actors of the policy process commit themselves in the formulation of public policies. It consists of providing analytical support to government for making intelligent choices for solving societal problems (Colebatch, 2006). Policy work is related to maintenance, production, and service (Page and Jenkins, 2005: 56): Maintenance focuses on policy implementation and evaluation, and production to the participation in writing a “variety of sorts of documents” (for example white papers and bills). Service consists in offering knowledge and skills to others who produce policies.

More specifically, this communication questions the policy advisory role of civil servants as part of the broader policy work. Policy advice consists in providing recommendations or opinions about future courses of government action (Brans and Aubin, 2017: 2). It includes “research, data analysis, proposal development, consultation with stakeholders, formulation of advice for decision makers, guiding policy through governmental and parliamentary processes, and the subsequent evaluation of the outcomes of the policy” (Gregory and Lonti, 2008: 838 in Craft and Wilder, 2017). Policy advice may be founded on formal policy analysis using scientific methods, but not necessarily: “Some advice is ‘expert’ expertise; most is not.” (Althaus, 2013: 5). An advice is not necessarily built on scientific knowledge, but on the basis of experience and consultation.

Traditionally, policy advice was generated by bureaucratic officials located at the top of a public organisation to guide policymakers and support their decisions, but the monopoly of contemporary bureaucracies on expertise and policy advice has been increasingly contested (Brans, De Peuter *et al.*, 2012). Nowadays, the government’s capacity to design well-crafted public policies relies on a policy advisory system that extends itself far beyond the borders of the public sphere (Halligan, 1995).

Given that a wide-range of government activities were outsourced or transferred to the private sector and other actors outside government, the overall policy analytical capacity of the policy advisory system must be assessed as well as the remaining contribution of civil servants in the policy process (Howlett, 2015).

Despite important transformations of the policy landscape, middle-range civil servants still matter in the policy process. They do not only advise executive politicians, but are more than often truly taking part in the policymaking process and work with considerable discretion (Page *et al.*, 2005: 81). They are working on broad cross-cutting issues, and are “not simply concerned with subordinate ‘embellishment and detail’ of issues settled at a higher level” (Page *et al.*, 2005: 15). They are still important actors on the policy process and public organizations must be aware of their contribution to overall policy capacity.

Policy advice is a concept with blurred boundaries (Vesely, 2017). Halligan describes policy advising as “analysing problems and proposing solutions. It specifies structuring of the problem, information gathering, analysis, formulation of options, and communication of the results” (1995: 139). However, policy advice may consist of only in one out of two necessary elements of defining a problem or proposing solutions (Althaus, 2013: 5). In this case, a policy advice is not necessarily very different from any other kind of policy-relevant information. Then, the policy advice will be further defined not by its form, but its purpose, that is influencing or assisting a policy decision. The purpose need not be fulfilled either; an advice can also have no effect. In sum, a policy advice is an advice on the content of policies, either the policy design, or the procedural arrangement that operates it. It may provide analysis about the problems or solutions, but only be any piece of information that is sent by the civil servant to the minister (Walgrave and Dejaeghere, 2016).

Advice utilization is a quite recent issue in policy studies and its closer parent is the research on knowledge utilization. Utilization is not only direct and immediate, but also more indirect and general. A distinction is made between three types of uses: instrumental, conceptual, and symbolic

(Weiss and Bucuvalas, 1980). “Instrumental [use] involves applying research results in specific, direct ways. Conceptual use involves using research results for general enlightenment; results influence actions but more indirectly and less specifically than in instrumental use. Symbolic use involves using research results to legitimate and sustain predetermined positions” (Beyer, 1997: 17). Since Weiss and Bucuvalas (1980), instrumental use is thought to be a small fraction of knowledge utilization. Conceptual use would be the most frequent (Daviter, 2015: 493-494). These results concern the use of scientific knowledge only. Concerning the policy advice from civil servants, instrumental use may be more frequent (see box 1).

Box 1 Three types of utilization of policy advice

- Instrumental: The policy advice led to concrete action on the policy problem ;
- Conceptual: The policy advice served to shed light on the policy problem;
- Symbolic: The policy advice served to confirm choices already made on this policy problem.

Source: Amara et al. (2004: 91)

Utilization is conceptualized more as a process than a discrete event (Knott and Wildavsky, 1980). This scale shows a progression of six stages of knowledge utilization: reception, cognition, discussion, reference, effort, and influence. “Each stage is presumed more important than the previous one, and the entire scale is cumulative in the sense that all stages of knowledge use are important indicators and build on each other” (Landry, Amara *et al.*, 2001: 405). The scale of knowledge utilization is transposed to policy advice (see Box 2).

Although this stage model of policy advice utilization is most often used, it does not tell much about the kind of utilization that is made of the advice. “Landry, Lamari, and Amara (2003) identified four major categories of explanations: engineering explanations, organizational interest explanations, two communities explanations, and interaction explanations” (Amara *et al.*, 2004: 82). The engineering

explanation relies on the intrinsic qualities of the research produced. “The production and uptake of research follow a linear sequence from the research findings to the definition of a service and specifications of production, and the application of instrumental findings that conforms the specifications defined by research [...]” (Landry, Lamari *et al.*, 2003: 194).

Box 2 Scale of measurement of the utilization of civil servants’ advice

- Stage 1: I transmitted my policy advice to the political executive, that is the minister or her cabinet;
- Stage 2: Cognition: My policy advice was read, understood and digested by the political executive;
- Stage 3: Reference: My policy advice was cited as a reference in the oral presentations and written reports, notes and proposals made by the political executive;
- Stage 4: Effort: the political executive has appropriated my policy advice and fought for its adoption within the government;
- Stage 5: Influence: my policy advice has successfully influenced the choices and decision of the minister or the government;
- Stage 6: Implementation: my policy advice has given rise to specific policy proposals and applications.

Source: adapted from Landry *et al.* (2001: 336)

In contrast, the social and organisational explanations relies more on the contextual conditions of the research uptake. The ‘organisational interests’ explanations suggest that “knowledge utilization increases when knowledge production incorporates the needs of end user groups [...]” (Crona and Parker, 2012: 34). The ‘two-communities’ explanation concentrates on the actors profile and their compatibility. It assumes that “cultural differences between actors in terms of the types of qualities of knowledge desired can hinder knowledge utilization” (Crona *et al.*, 2012: 34). Finally the ‘social

interactions' explanation contends that "interaction, or a lack thereof, between actors is a major factor determining knowledge utilization" (Crona *et al.*, 2012: 34). These alternative explanations of knowledge utilization may be transposed with some profit to the policy advisory role of civil servants, although some more process and individual variables will enrich the analytical framework. In addition, the main theoretical underpinning of this framework is that individual learning by the civil servants may be critical in explaining the use of policy advice.

2 Learning for a better advice

The key explanation of the policy advisory role of civil servants is learning. Are civil servants able to accumulate and process information which makes them update their beliefs, attitudes and opinions, or do they stick to their prior beliefs (Strickland, Taber *et al.*, 2011)? In order to meet the minister's expectations and have a strong policy advisory role, civil servants are expected to learn both about the policy issue and the political situation, which means here the dynamics of the policy network, stakeholders' interests, and the minister's strategic and ideological positions.

Policy learning is defined as "relatively enduring alterations of thought or behavioural intentions that result from experience and that are concerned with the attainment (or revision) of public policy" (Sabatier, 1998). Put more simply, it is an update of knowledge and beliefs about public policy (Dunlop and Radaelli, 2013). In the context of public policy, the update of beliefs at the individual level mostly concerns processes of knowledge acquisition about public problems and solutions, as well as the opinion changes induced by these processes (Leach, Weible *et al.*, 2014). The first layer of learning concerns the assimilation of new knowledge, and the second a change in beliefs regarding specific issues that this new knowledge induces (Leach *et al.*, 2014). The basic assumption is that the assimilation of knowledge is a prerequisite for any change (or reinforcement) in beliefs.

Learning is a social process that entails interaction (Gerlak, Heikkila *et al.*, 2017). It occurs not only through the acquisition and interpretation of new information by experience and intentional search, but also through social interactions with others (Heikkila and Gerlak, 2013). This interactive nature of learning is modelled as a three-phase process including the acquisition and the translation of information, followed by the dissemination of knowledge, and as a collective product that emerges from this process, i.e. shared ideas or strategies. Dialogue and deliberation are mechanisms that play a key role in all of those phases (Heikkila *et al.*, 2013). In sum, learning is often considered as a process of information acquisition and exchange that leads to cognitive and behavioural changes by exposing individuals and groups to new knowledge and opinions.

However, an individual perspective of learning is privileged in the explanation of the policy advisory role of civil servants. The bathtub model which establishes a causality of learning grasps this social nature through the micro-micro dimension, which “concern learning mechanism affecting an individual A and individual B, and relations between individuals and groups or social networks” (Dunlop and Radaelli, 2017: 311). In this perspective, individuals are central in learning: they are the agents that ultimately collect, interpret and diffuse the information.

Baird *et al.* (2014) make the distinction between cognitive, normative and relational learning. Cognitive learning is related to the acquisition of new or the structuring of existing knowledge. It is about change in opinions (Montpetit, 2009) or the acquisition of information. Normative learning concerns a shift in viewpoints, values or paradigms; and relational learning refers to an improved understanding of others’ mindsets, enhanced trust and ability to cooperate (Baird *et al.*, 2014: 51; Siddiki, Kim *et al.*, 2017). Usually, learning is identified as both cognitive and behavioural change. Behavioural change can be observed as knowledge-utilization in the decision-making process (Crona (Crona *et al.*, 2012; Temby, Sandall *et al.*, 2017), change in practice (Dedeurwaerdere, Polard *et al.*, 2015) or change in policy (Gerlak and Heikkila, 2011).

The acquisition of knowledge by individuals is conceptualized with the three dimensions of learning:

- Cognitive learning refers to the acquisition of knowledge about the public problem at hand and the possible solutions (Resh, Siddiki *et al.*, 2014; Levesque, Calhoun *et al.*, 2017). This includes both the substantial and procedural dimensions of public policy in their technicality and feasibility given the context, resources, social habits and legal procedures;
- Normative learning is associated to opinion changes (Montpetit, 2009)⁴. The question is to know if civil servants change their beliefs about the public policy, and if it influences their policy advisory role. It is expected that civil servants keep a neutral position in their work, and that their opinions remain stable, what is associated to detachment (Montpetit, 2011);
- Relational learning represents the knowledge about the members of the policy network and the individual's organisation. It includes the way of working, behaviour, interests, and room for manoeuvre. Relational learning includes reflexive learning about one own ability and influence and how one must behave with her organisation and as part of the policy network.

The measurement of policy learning by civil servants will be operationalised accordingly (see table 1).

3 The position of civil servants in the policy process

The position refers to a couple of contextual elements on which civil servants have no grip, and which are subject of the inertia of political culture. In the tradition of new institutionalism, the policy advice literature is keen on explaining country differences on the involvement of advisers in policy-making (Craft and Howlett, 2012). Given that the present focus is not so much on policy advisory systems, but the behaviour of individual civil servants, these variables are considered as context. Of

⁴ A common method is to set in advance specific policy beliefs or policy options in a survey and look at respondent changes in the degree of agreement or favorableness on those particular elements (Montpetit, 2009; Moyson, 2018). An alternative is to conduct interview and count the number of changes in opinions. Given the number of possible issues addresses, Leach et al. (2014) proposed that respondents are asked 'yes or no' questions regarding whether they have changed their professional opinion on any significant issues. The final score is the number of topics on which a respondent has changed her opinion divided by the number of debates she identified.

course, the institutional context, composition and relational pattern influence information acquisition. Context is key for the success of information exchange and behavioural change. Thus, the position of civil servants will be explored in terms of political-administrative relation, policy network, and location in government.

Table 1 Measurement of policy learning by civil servants

Cognitive learning			Normative learning		Relational learning		
Acquisition of knowledge on the public problem and policy goals	Acquisition of knowledge on the policy tools including technical feasibility	Acquisition of knowledge on institutional rules	Change in opinion (prior to current) about the policy design	Change in opinion regarding debated topic	Acquisition of knowledge on others' values and interests	Acquisition of a better understanding of the others	Acquisition of knowledge on self-capacity
0 = No 1 = A little 2 = A lot	0 = No 1 = A little 2 = A lot	0 = No 1 = A little 2 = A lot	-1 = From favourable to non-fav. -0.5 = From neutral to non-fav. 0 = no changes 0.5 = From neutral to fav. 1 = From non-fav. to fav.	Number of items (X) on which respondents have changed their opinion divided by the number of debates they identified.	0 = No 1 = A little 2 = A lot	0 = No 1 = A little 2 = A lot	0 = No 1 = A little 2 = A lot

The political administrative-relation is the first contextual element to consider when studying the role of civil servants in policy formulation. This question has been at the core of public administrative studies since their origins, and raises the question of the possible separation between politics and administration (McCandless and Guy, 2013). Although the two activities cannot be isolated, the government's organisation provides different answers from one country to another. The recent perspective on this comes with the role of ministerial cabinets. At a macro level, the size and influence of ministerial cabinets downgrades the contribution of the administration to policy formulation. However, a recent study has confirmed that even in countries with strong ministerial cabinets, civil servants are not limited to functions of mere implementers, but provide a lot of

information and advice to ministerial cabinets, even if most of them answer requests from the cabinets (Aubin, Brans *et al.*, 2017). The same study showed that even in a country like Belgium where ministerial cabinets are strong, about 10% of the civil servants remain very much involved in policy work and bring advice to the minister. The policy advisory role of civil servants is depending also on individual behaviour, and not only structural conditions.

Given the national political regime and the political administrative relation, there may be very important differences between subsystems relative to the composition and dynamics of policy networks. The policy subsystem is “the interaction of actors from different institutions interested in a policy area” (Sabatier, 1988: 131). “[The] most useful aggregate unit of analysis for understanding policy change in modern industrial societies is not any specific governmental institution but rather a policy subsystem, i.e. those actors from a variety of public and private organizations who are actively concerned with a policy problem or issue such as air pollution control, mental health, or surface transportation” (Sabatier, 1988: 131). What counts is how the policy network is organised within the policy subsystem and what kind of relationship do policymakers maintain with stakeholders.

Policy networks are usually divided between policy communities and issue networks (Marsh and Rhodes, 1992) where the first is associated to neocorporatism and the second with pluralism (Dahl, 1961; Lehbruch and Schmitter, 1982). The dynamics of advocacy coalitions is a more recent perspective on policy networks which distinguishes three types of subsystems: unitary, adversarial, and collaborative (Weible, Pattison *et al.*, 2010; Ingold and Gschwend, 2014). Unitary subsystems are closed to policy communities, and the two others types to competing issues networks. The adversarial and collaborative subsystems count at least two advocacy coalitions with different purposes or perspectives about a transversal issue (or a wicked problem) which clash or collaborate (for example energy and the automotive industry in climate change policy). “People associated with the same advocacy coalition have similar ideologies and worldviews and, therefore, wish to change a given policy (concerning health, environmental, or many other issues) in the same direction. The

coalition that these people form is an informal network of allies that usually operate against an opposing coalition consisting of other people who advocate for different policy directions” (Weible and Ingold, 2018: 326).

In unitary subsystems, civil servants are considered by the ministers, but so far that they aggregate information and positions from coalition members, which is a passive role. They would also engage in more relational skills to maintain cohesiveness within the coalition and “make sense together” (Hoppe, 1999). In the presence of at least two coalitions, the civil servants may be called for bringing a clear picture of the situation with fact checking and analysis. If the situation remains conflictual, they would propose policy options or a final decision. The minister will rely more on them in case of competing arguments. If the subsystem is collaborative, civil servants may facilitate collaboration and bring in consensual propositions and organise a deliberation. Once again, relational skills are crucial (Howlett, Tan *et al.*, 2015: 165). The frequency of contacts with the external stakeholders will indicate their intermediary role between interest groups and the ministers.

It would be an error to consider government as a single block. In the context of two advocacy coalitions within a subsystem, civil servants and their hierarchy may be part in each of them and compete internally. In this case, civil servants develop arguments to defend the coalition interests and values and try to get the attention of the minister. These disputes may concern the problem framing, the attribution of the competence to one unit over the other (for example drug addiction as a criminal or a public health matter, or youth protection to the justice department or to youth workers), the selection of the policy instruments, the composition of the advisory bodies, etc.

Location and position in government impact the policy advisory role of civil servants. At individual level, it matters to know if the civil servant is located within the ministry, in a public agency or in a ministerial cabinet. In his study of policy advisory systems, Halligan made a useful distinction of location of advice given government control, notably between public service, location internal to the government and external to the government (Halligan, 1995; Craft and Halligan, 2017). The external

reputation of the organisation which employs the civil servant may play a role too (Crona and Parker, 2011; Crona *et al.*, 2012). Some ministers are reluctant to collaborate with particular departments and agencies and bypass them in the policy formulation process.

Position in the hierarchy may affect the policy role of civil servants as well. Page and Jenkins put the emphasis on middle-range officials who are dealing issues with a considerable margin of manoeuvre (Page *et al.*, 2005). Top officials are more involved in managing the departments or ministries, but also in a bargaining position with the minister to receive the orders and re-orientate or steer their appointees. Street-level bureaucrats are not supposed to have a direct policy advisory role, even if their experience is certainly valuable for their colleagues who are formulating the advice.

The second aspect in term of location in government is the existence of policy units and the recognised function of policy advisor (Craft *et al.*, 2017). Based on this, policy advice utilisation by ministerial cabinet system advisers may increase as it moves from external to internal sources (Halligan, 1995; Halligan, 2001). Coupled to these categories, governmental control might increase utilization of an advice, as advice coming from a controlled supplier is more likely to tell what the minister “wants to hear”. However, low governmental control might also yield a higher utilization, as following the advice may increase public support within the subsystem.

4 Individual behaviour

Empirical studies show that policy analysts are involved in a wide array of activities, which are sometimes rather remote from analysis (Hird, 2005; Radin, 2013). It is usually expected that civil servants involved in policy advice are trained policy analysts who use formal analytical techniques to process information rationally, show evidence and select the most efficient tools to tackle the policy problems (Mayer, van Daalen *et al.*, 2004). However, this emphasis on formal analysis of policy issues is somewhat exaggerated and underestimates the importance of procedural activities (Radin, 2013).

Policy work includes the key activities of making, maintaining and coordinating the actors' interactions as well (Kohoutek, Nekola *et al.*, 2013). It involves analysing the political and multi-actor context (for example using stakeholder analysis) or attempting to 'make sense together' (Hoppe and Jeliaskova, 2006).

This corresponds to the other common distinction in policy advice between substance and process (Hoppe *et al.*, 2006; Nekola and Kohoutek, 2016). Substantive advisors or 'specialists' are civil servants who possess an expertise of a field or hold technical skills without having necessarily been trained as policy analysts (Lindquist and Desvaux, 2007: 123). The procedural analysts, in turn, or 'generalists' rely on capabilities "to develop broader views on policy issues, to identify horizontal linkages across issues, and sometimes to develop more comprehensive as opposed to selective policy initiatives" (Lindquist *et al.*, 2007: 123). Although generalists are expected to engage more in formal policy analysis than specialists, specialists are not kept on the side-line of policy formulation.

As a synthesis, Nekola and Kohoutec proposed a simple cross-sectional typology of policy advisory styles combining these two most used attributes of politics versus technics and substance versus process (Nekola *et al.*, 2016). The typology, largely inspired by Mayer *et al.* (2004) ends up with four types of policy advisory styles (see table 2).

Table 2 Policy advisory styles

	Fact-driven/Rational	Political/Normative
Issue-specific	Rational technicians (1)	Client advisors (3)
Process	Process generalists (2)	Democratic issue advocates (4)

Source: Adapted from Nekola and Kohoutec (2016)

Rational technicians (1) correspond to the standard image of policy analysts. Civil servants find rational solutions to policy problems on the basis of specialized knowledge for problem-solving and formal analytical techniques. They are involved in research and evaluation, and convert findings in policy advice. In terms of interaction, they do not have much contact with relevant stakeholders.

Process generalists (2) possess knowledge of the complex processes leading to the acceptance of a public policy. On the one hand, they monitor the process internally and care for the practical implications of policy proposals. They mobilise skills such as negotiation, bargaining, and building support to facilitate the formulation process.

Client advisors (3) identify different actors and their interests to provide clients with strategic advice on how to most effectively achieve a goal in given political circumstances. They consult and prepare notes to the ministers. They mostly rely on external information, but also on the clients' documents, and seek advice for external actors, including the political parties.

Democratic issue advocates (4) deal with normative issues related to the desirability and usage of public policy. They are sensible to the stakeholder's perception and framing of social problems, and the meaning they attribute to public policy. They consider and aggregate the arguments put forth by the public.

The typology of Nekola and Kohoutec must be coupled with the kind of knowledge contained in policy advice. Partly knowledge is coming from scientific reporting and formal analysis, but civil servants bring other kinds of knowledge in policy, notably their experience of the administrative process and past accomplishments. A typology of knowledge proposed by Aristotle was revived in the policy studies (Flyvbjerg, 2001; Tenbensen, 2006): *episteme*, *techne* and *phronesis*. *Episteme* corresponds to analytical and scientific knowledge. Based on general analytical rationality, it is universal, invariable, and context-independent. *Techne* relates to the technical knowledge or know-how (arts and crafts). This knowledge is pragmatic, variable, context-dependent, and oriented toward production. *Phronesis* relates to ethics, meaning prudence or practical common sense. "The

person possessing practical wisdom (*phronimos*) has knowledge of how to behave in each particular circumstance that can never be equated with or reduced to knowledge of general truth” (Flyvbjerg, 2001: 57). It is a praxis (oriented towards action) that operates after a careful deliberation between the good and bad. Applied to policy advice, *phronesis* is more appropriate than normativity. Normativity refers to general, often universal assumptions on what is good. In contrast, *phronesis* “focuses on what is variable, on that which cannot be encapsulated by universal rules, on specific cases” (Flyvbjerg, 2001: 57). Policy advice orientate decisions and actions taken to tackle specific policy problems, not resolve universal questions. They mix up facts, values, and context.

Policy work is not only analytical, but relational too. Civil servants must be embedded in their working environment in order to increase their policy advisory role. On the one hand, their relationships with stakeholders make them influential as far as they bring in external knowledge in their policy advice (see above). On the other hand, they must maintain a good relationship with the minister. This does not necessarily mean personal ties, but at least trust and frequent interactions, two variables coming from the study of policy learning.

Trust is a major variable in the learning and knowledge-utilization research. It is defined as “a willingness to engage in risk-taking with the focal party” (Mayer, Davis *et al.*, 1995: 124). It involves an agreement to be vulnerable to the actions of a trustee, assuming that he or she will not behave at the expense of the trustor (Rousseau, Sitkin *et al.*, 1998). Because trust reduces transaction costs, it facilitates both the exchange and acquisition of information and the acquisition of information, as people are more inclined to listen to trusted relationships (Levin and Cross, 2004; Klijn, Edelenbos *et al.*, 2010; Heikkila *et al.*, 2013). Successful trust-based interactions support further trust and interactions, enabling more learning opportunities (Henry and Vollan, 2014), and form a “virtuous cycle between communication, trust, commitment, understanding, and outcomes” (Wyborn, 2015: 7).

To a large extent, the trust of a trustor toward a trustee depends on the trustor’s perception of a trustee’s trustworthiness. According Mayer, Davis and Schoorman (1995), trustworthiness is the tridimensional model of Ability-Benevolence-Integrity (ABI): Ability for the skills and competencies; Benevolence for the goodwill regarding the trustor, and Integrity for honesty. Perceiving the source of information as competent, benevolent and honest increases the probability that an individual learns from this source (Levin *et al.*, 2004). In order to operationalize trust, civil servants may be asked about their perception of how much ministers trust them (see box 3).

Box 3 Example of question about minister’s trust in civil servants

Please indicate on a ladder from 1 to 10 (where 1 means not at all and 10 fully agree) whether you agree with the following statements on the advice supplier:

- The minister recognises my competence to deal with the policy problem (ability);
- The minister recognises that I give a great deal of attention to the interests of the stakeholders (benevolence);
- The minister recognises that I try to be fair in dealing with the policy problem (integrity).

Trust is a condition for mutual learning and adjustment between civil servants and ministers (Agranoff, 2006). Temby *et al.* (2017) proposed to measure trust along two dimensions: fair play and relational comfort. Fair play reflects expectations that a collaborator would be fair and unbiased in their dealings”. Relational comfort reflects “longer term investment in the relationship, that is, that the relationship with a collaborator had gone on long enough for it to become comfortable, well understood, and equally reliant on informal and formal outcomes” (Temby *et al.*, 2017: 78). They are closely associated to the two dimensions of procedural trust and affinitive trust (Stern and Coleman, 2015: 122). Relational comfort (or affinitive trust) is a higher predictor for mutual learning and adjustment than trust based on positive procedure-oriented assessments of fairness (Temby *et al.*, 2017: 91-92), which stresses the importance of repeated interactions in the use of policy advice.

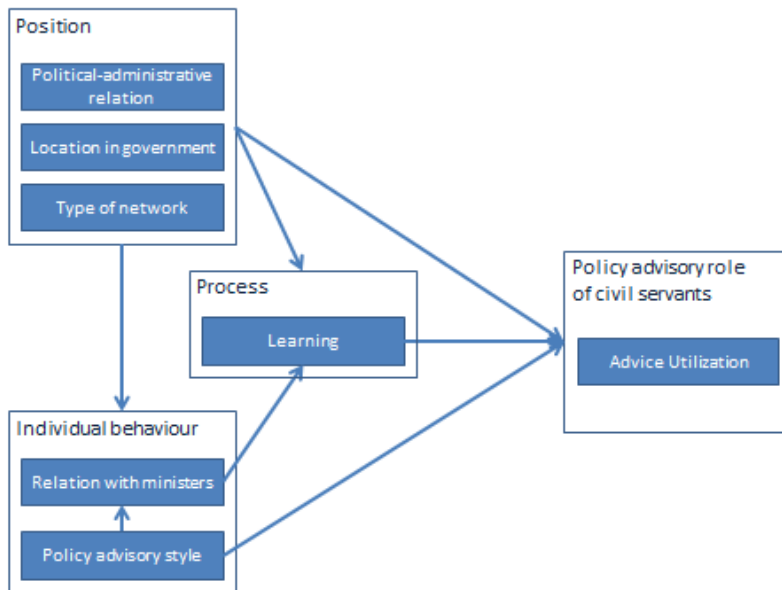
Frequent interactions foster cognitive and behavioural change (Crona *et al.*, 2012). The frequency of interaction is “the amount of time” dimension of the famous Granovetter’s “Strength of tie” (1973:

1361), defined as the combination of “the amount of time, the emotional intensity, the intimacy (mutual confiding) and the reciprocal services that characterize the tie”. Regarding individual learning, the frequency of interactions is seen a major factor fostering the exchange of information and the acquisition of knowledge (Crona *et al.*, 2012; Dedeurwaerdere *et al.*, 2015; Hatmaker, 2015). Temby *et al.* (2017) tested the hypothesis and found a positive relation between frequent communication and the use of information in decision-making. Frequency of both formal and informal communication fosters knowledge acquisition (Temby *et al.*, 2017). Face-to-face information exchange is also key in information sharing (Gerlak *et al.*, 2011).

5 Proposition of an analytical framework for examining the role of civil servants in the policy process

These developments around the policy advisory role of civil servants constitute a puzzle that must be re-assembled (see figure 1). The phenomenon to explain is the involvement of civil servant in policy advice. This role is perceived as giving advice to the minister. The policy advisory role is measured with a scale of advice utilization. The main assumption is that the policy advisory role will increase when the civil servants learn which relates to the process condition in figure 1. Civil servants must be able to acquire and assimilate new knowledge about the policy design, but also relational skills. They must understand the other stakeholders’ mindsets and learn how to interact within the policy subsystem. Learning in its different aspect is a central element in the improvement of policy advice.

Of course learning is contextual and relational and civil servants do not work in a vacuum. The structural conditions of position play both on the advice utilization and learning. The role of civil servants depends on the political-administrative relation and their location in government. This position will influence the attention of the minister to their advice. Also the dynamics of the policy subsystem is influencing the kind of brokerage that civil servants could play between civil society and the minister.

Figure 1 Analytical framework explaining the policy advisory role of civil servants

Individual behaviour of civil servants is influenced by their position as well, but agency matters too. First, civil servants develop specific policy advisory styles. Their styles depends partly from their position (for example a ministerial adviser will provide more political/normative advice), but also from their own preferences. It remains an empirical question to know if a particular style increases advice utilization. The last condition is the relation between the civil servant and the minister. The assumption is that the advice are more used if the civil servant and the minister develop a shared understanding of policy issues. This depends on the trustworthiness of the civil servant as well as the frequency of interactions with the minister. This is partly approached by the 'relational comfort' dimension of trust and a measure of the frequency of communication. Basically, the assumption of this analytical framework is that the policy advisory role of civil servants increases when they are able to learn and develop a shared understanding about policy issues with the minister.

Further elaboration is still needed to turn this analytical framework into a model with testable hypotheses. For the moment, all the variables mobilised have been empirically tested by the cited

authors what makes the operationalization and measurement feasible. In terms of empirical research, a comparative study is planned to be launched in Europe and will target middle-range civil servants. A random sample in each country will be invited to answer a survey questionnaire, which will ideally be completed with an interview. Of course, the size of the sample should remain realistic and adapted to the resources available. This research will be the first attempt to theorise policy work and should open new avenues in policy and public administration research.

References

- Aberbach JD. 2003. Introduction: Administration in an Era of Change. *Governance* **16**: 315-319. DOI: 10.1111/1468-0491.00218.
- Aberbach JD, Putnam RD, Rockman BA. 1981. *Bureaucrats and politicians in Western democracies*. Harvard University Press: Cambridge.
- Agranoff R. 2006. Inside Collaborative Networks: Ten Lessons for Public Managers. *Public Administration Review* **66**: 56-65. DOI: 10.1111/j.1540-6210.2006.00666.x.
- Althaus. 2013. Reflections on advisory practice in politics. *PSCA - Political Science Applied* **2**: 5-15.
- Amara N, Ouimet M, Landry R. 2004. New Evidence on Instrumental, Conceptual, and Symbolic Utilization of University Research in Government Agencies. *Science Communication* **26**: 75-106. DOI: 10.1177/1075547004267491.
- Aubin D, Brans M, Fobé E. 2017. Policy analysis in the central and regional governments. In *Policy Analysis in Belgium*, Brans M, Aubin D (eds). Policy Press: Bristol, pp81-106.
- Baird J, Plummer R, Haug C, Huitema D. 2014. Learning effects of interactive decision-making processes for climate change adaptation. *Global Environmental Change* **27**: 51-63. DOI: 10.1016/j.gloenvcha.2014.04.019.
- Beyer JM. 1997. Research Utilization: Bridging a Cultural Gap between Communities. *Journal of Management Inquiry* **6**: 17-22. DOI: 10.1177/105649269761004.
- Brans M, Aubin D. 2017. Introduction: policy analysis in Belgium - tradition, comparative features. In *Policy analysis in Belgium*, Brans M, Aubin D (eds). Policy Press, pp1-10.
- Brans M, De Peuter B, Ferraro G (2012). Policy work old and new: Challenges to bureaucratic policy work as a craft. *Organization Studies Summer Workshop*. Rhodes, Greece.
- Brewer GA, Selden SC, Facer RL. 2000. Individual conceptions of public service motivation. *Public Administration Review* **60**: 204-214.
- Colebatch HK. 2006. Introduction. In *The work of policy: An international survey*, Colebatch HK (eds). Lexington Books: Lanham, ppvii-xiii.
- Colebatch HK, Hoppe R, Noordegraaf M. 2010. The lessons for policy work. In *Working for Policy*, Colebatch HK, Hoppe R, Noordegraaf M (eds). Amsterdam University Press: Amsterdam, pp227-245.
- Colebatch HK, Hoppe R, Noordegraaf M. 2010. Understanding policy work. In *Working for Policy*, Colebatch HK, Hoppe R, Noordegraaf M (eds). Amsterdam University Press: Amsterdam, pp11-25.
- Craft J, Halligan J. 2017. Assessing 30 years of Westminster policy advisory system experience. *Policy Sciences* **50**: 47-62.

- Craft J, Howlett M. 2012. Policy formulation, governance shifts and policy influence: Location and content in policy advisory systems. *Journal of Public Policy* **32**: 79-98.
- Craft J, Wilder M. 2017. Catching a second wave: Context and compatibility in advisory system dynamics. *Policy Studies Journal* **45**: 215-239.
- Crona BI, Parker JN. 2011. Network Determinants of Knowledge Utilization: Preliminary Lessons From a Boundary Organization. *Science Communication* **33**: 448-471. DOI: 10.1177/1075547011408116.
- Crona BI, Parker JN. 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**: 32. DOI: 10.5751/ES-04534-170132.
- Dahl RA (eds). 1961. *Who Governs?* Yale University Press: New Haven, London.
- Daviter F. 2015. The political use of knowledge in the policy process. *Policy Sciences* **48**: 491-505. DOI: 10.1007/s11077-015-9232-y.
- Dedeurwaerdere T, Polard A, Melindi-Ghidi P. 2015. The role of network bridging organisations in compensation payments for agri-environmental services under the EU Common Agricultural Policy. *Ecological Economics* **119**: 24-38. DOI: 10.1016/j.ecolecon.2015.07.025.
- Dunlop CA, Radaelli CM. 2013. Systematising Policy Learning: From Monolith to Dimensions. *Political Studies* **61**: 599-619. DOI: 10.1111/j.1467-9248.2012.00982.x.
- Dunlop CA, Radaelli CM. 2017. Learning in the bath-tub: the micro and macro dimensions of the causal relationship between learning and policy change. *Policy and Society* **36**: 304-319. DOI: 10.1080/14494035.2017.1321232.
- Flyvbjerg B. 2001. *Making social science matter: Why social inquiry fails and how it can succeed again*. Cambridge University Press: Cambridge.
- Gerlak AK, Heikkila T. 2011. Building a Theory of Learning in Collaboratives: Evidence from the Everglades Restoration Program. *Journal of Public Administration Research and Theory* **21**: 619-644. DOI: 10.1093/jopart/muq089.
- Gerlak AK, Heikkila T, Smolinski SL, Huitema D, Armitage D. 2017. Learning our way out of environmental policy problems: a review of the scholarship. *Policy Sciences*: 1-37. DOI: 10.1007/s11077-017-9278-0.
- Granovetter MS. 1973. The Strength of Weak Ties. *American Journal of Sociology* **78**: 1360-1380. DOI: 10.1086/225469.
- Gregory R, Lonti Z. 2008. Chasing shadows? Performance measurement of policy advice in New Zealand government departments. *Public Administration* **86**: 837-856. DOI: 10.1111/j.1467-9299.2008.00737.x.
- Halligan J. 1995. Policy advice and the public service. In *Governance in a changing environment*, Peters BG, Savoie DJ (eds). McGill-Queen's University Press: Montreal and Kingston, pp138-172.
- Halligan J. 2001. Le rôle-conseil de la fonction publique. In *Les nouveaux défis de la gouvernance*, Peters BG, Savoie DJ (eds). Centre canadien de gestion: Ottawa, pp121-151.
- Hatmaker DM. 2015. Bringing Networks In: A model of organizational socialization in the public sector. *Public Management Review* **17**: 1146-1164. DOI: 10.1080/14719037.2014.895029.
- Heikkila T, Gerlak AK. 2013. Building a Conceptual Approach to Collective Learning: Lessons for Public Policy Scholars. *Policy Studies Journal* **41**: 484-512. DOI: 10.1111/psj.12026.
- Henry AD, Vollan B. 2014. Networks and the Challenge of Sustainable Development. *Annual Review of Environment and Resources* **39**: 583-610. DOI: 10.1146/annurev-environ-101813-013246.
- Hird JA. 2005. *Power, knowledge and politics. Policy analysis in the States*. Georgetown University Press: Washington D.C.
- Hoppe R. 1999. Policy analysis, science and politics: from 'speaking truth to power' to 'making sense together'. *Science and Public Policy* **26**: 201-210.
- Hoppe R, Jeliaskova M. 2006. How policy workers define their job: A Netherlands case study. In *The work of policy: An international survey*, Colebatch HK (eds). Lexington Books: Lanham, pp35-60.

- Howlett M. 2009. Policy analytical capacity and evidence-based policy-making: Lessons from Canada. *Canadian Public Administration/Administration publique du Canada* **52**: 153-175.
- Howlett M. 2015. Policy analytical capacity: The supply and demand for policy analysis in government. *Policy and Society* **34**: 173-182. DOI: 10.1016/j.polsoc.2015.09.002.
- Howlett M, Tan SL, Migone A, Wellstead A, Evans B. 2015. Policy formulation, policy advice policy appraisal: The distribution of analytical tools In *The tools of policy formulation. Actors, capacities, venues and effects*, Jordan AJ, Turnpenny JR (eds). Edward Elgar: Cheltenham, pp163-183.
- Ingold K, Gschwend M. 2014. Science in Policy-Making: Neutral Experts or Strategic Policy-Makers? *West European Politics* **37**: 993-1018. DOI: 10.1080/01402382.2014.920983.
- Jones BD, Baumgartner FR. 2005. A Model of Choice for Public Policy. *Journal of Public Administration Research and Theory* **15**: 325-351. DOI: 10.1093/jopart/mui018.
- Klijn E-H, Edelenbos J, Steijn B. 2010. Trust in Governance Networks: Its Impacts on Outcomes. *Administration & Society* **42**: 193-221. DOI: 10.1177/0095399710362716.
- Knott J, Wildavsky A. 1980. If Dissemination Is the Solution, What Is the Problem ? *Knowledge* **1**: 537-578. DOI: 10.1177/107554708000100404.
- Kohoutek J, Nekola M, Novotný V. 2013. Conceptualizing policy work as activity and field of research. *Central European Journal of Public Policy* **7**: 28-59.
- Landry R, Amara N, Lamari M. 2001. Climbing the Ladder of Research Utilization: Evidence from Social Science Research. *Science Communication* **22**: 396-422. DOI: 10.1177/1075547001022004003.
- Landry R, Amara N, Lamari M. 2001. Utilization of social science research knowledge in Canada. *Research Policy* **30**: 333-349. DOI: 10.1016/S0048-7333(00)00081-0.
- Landry R, Lamari M, Amara N. 2003. The Extent and Determinants of the Utilization of University Research in Government Agencies. *Public Administration Review* **63**: 192-205. DOI: 10.1111/1540-6210.00279.
- Leach WD, Weible CM, Vince SR, Siddiki SN, Calanni JC. 2014. Fostering Learning through Collaboration: Knowledge Acquisition and Belief Change in Marine Aquaculture Partnerships. *Journal of Public Administration Research and Theory* **24**: 591-622. DOI: 10.1093/jopart/mut011.
- Lehmbruch G, Schmitter P. 1982. *Patterns of corporatist policy-making*. Sage: Beverly-Hills.
- Levesque VR, Calhoun AJK, Bell KP, Johnson TR. 2017. Turning Contention into Collaboration: Engaging Power, Trust, and Learning in Collaborative Networks. *Society & Natural Resources* **30**: 245-260. DOI: 10.1080/08941920.2016.1180726.
- Levin DZ, Cross R. 2004. The Strength of Weak Ties You Can Trust: The Mediating Role of Trust in Effective Knowledge Transfer. *Management Science* **50**: 1477-1490. DOI: 10.1287/mnsc.1030.0136.
- Lindblom CE. 1959. The science of muddling through. *Public Administration Review* **19**: 79-88.
- Lindquist E, Desvaux J. 2007. Policy analysis and bureaucratic capacity: Context, competencies, and strategies. In *Policy analysis in Canada: The state of the art*, Dobuzinskis L, Howlett M, Laycock D (eds). University of Toronto Press: Toronto, pp116-142.
- Maley M. 2015. The policy work of Australian political staff. *International Journal of Public Administration* **38**: 46-55.
- Marsh D, Rhodes RAW (eds). 1992. *Policy networks in British government*. Clarendon Press: Oxford.
- Mayer IS, van Daalen CE, Bots PWG. 2004. Perspectives on policy analysis: A framework for understanding and design. *International Journal of Technology, Policy and Management* **4**: 169-191.
- Mayer RC, Davis JH, Schoorman FD. 1995. An Integrative Model of Organizational Trust. *The Academy of Management Review* **20**: 709-734. DOI: 10.2307/258792.
- McCandless SA, Guy ME. 2013. One More Time. *Administrative Theory & Praxis* **35**: 356-377.
- Montpetit E. 2009. Governance and policy learning in the European Union: a comparison with North America. *Journal of European Public Policy* **16**: 1185-1203.

- Montpetit E. 2011. Between detachment and responsiveness: Civil servants in Europe and North America. *West European Politics* **34**: 1250-1271.
- Moyson S. 2018. 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* **33**: 88-117. DOI: 10.1177/0952076716681206.
- Nekola M, Kohoutek J. 2016. Policy work at the sub-national level: Analytical styles of Canadian and Czech directors and managers. *Canadian Public Administration* **59**: 289-309. DOI: 10.1111/capa.12170.
- Page EC, Jenkins B. 2005. *Policy bureaucracy: Government with a cast of thousands*. Oxford University Press: Oxford.
- Paquet M. 2015. Bureaucrats as immigration policy-makers: The case of subnational immigration activism in Canada, 1990-2010. *Journal of Ethnic and Migration Studies* **41**: 1815-1835.
- Perry JL, Brudney JL, Coursey D, Littlepage L. 2008. What Drives Morally Committed Citizens? A Study of the Antecedents of Public Service Motivation. *Public Administration Review* **68**: 445-458. DOI: 10.1111/j.1540-6210.2008.00881.x.
- Radin BA. 2013. Policy analyses reaches midlife. *Central European Journal of Public Policy* **7**: 8-27.
- Resh W, Siddiki S, McConnell WR. 2014. Does the Network Centrality of Government Actors Matter? Examining the Role of Government Organizations in Aquaculture Partnerships. *Review of Policy Research* **31**: 584-609. DOI: 10.1111/ropr.12101.
- Rousseau DM, Sitkin SB, Burt RS, Camerer C. 1998. Introduction to Special Topic Forum: Not so Different after All: A Cross-Discipline View of Trust. *The Academy of Management Review* **23**: 393-404.
- Sabatier PA. 1988. An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences* **21**: 129-168.
- Sabatier PA. 1998. The advocacy coalition framework: Revisions and relevance for Europe. *Journal of European Public Policy* **5**: 93-130.
- Scharpf FW (eds). 1997. *Games real actors play: Actor-centered institutionalism in policy research*. Westview Press: Boulder.
- Selden SC, Brewer GA, Brudney JL. 1999. Reconciling Competing Values in Public Administration: Understanding the Administrative Role Concept. *Administration & Society* **31**: 171-204. DOI: 10.1177/00953999922019085.
- Shaw R, Eichbaum C. 2017. Politicians, political advisers and the vocabulary of public service bargains: Speaking in tongues? *Public Administration* **95**: 312-326. DOI: 10.1111/padm.12281.
- Siddiki S, Kim J, Leach WD. 2017. Diversity, Trust, and Social Learning in Collaborative Governance. *Public Administration Review* **77**: 863-874. DOI: 10.1111/puar.12800.
- Stern MJ, Coleman KJ. 2015. The Multidimensionality of Trust: Applications in Collaborative Natural Resource Management. *Society & Natural Resources* **28**: 117-132. DOI: 10.1080/08941920.2014.945062.
- Strickland AA, Taber CS, Lodge M. 2011. Motivated Reasoning and Public Opinion. *Journal of Health Politics, Policy and Law* **36**: 935-944. DOI: 10.1215/03616878-1460524.
- Temby O, Sandall J, Cooksey R, Hickey GM. 2017. Examining the Role of Trust and Informal Communication on Mutual Learning in Government: The Case of Climate Change Policy in New York. *Organization & Environment* **30**: 71-97. DOI: 10.1177/1086026616633254.
- Tenbenschel T. 2006. Policy knowledge for policy work. In *The work of policy: An international survey*, Colebatch HK (eds). Lexington Books: Lanham, pp199-215.
- Veselý A. 2017. Policy advice as policy work: A conceptual framework for multi-level analysis. *Policy Sciences* **50**: 139-154.
- Walgrave S, Dejaeghere Y. 2016. Surviving Information Overload: How Elite Politicians Select Information. *Governance* **30**: 229-244. DOI: 10.1111/gove.12209.
- Weible CM, Ingold K. 2018. Why advocacy coalitions matter and practical insights about them. *Policy & Politics* **46**: 325-343. DOI: 10.1332/030557318X15230061739399.

- Weible CM, Pattison A, Sabatier PA. 2010. Harnessing expert-based information for learning and the sustainable management of complex socio-ecological systems. *Environmental Science & Policy* **13**: 522-534.
- Weiss CH, Bucuvalas MJ. 1980. *Social science research and decision-making*. Columbia University Press: New York.
- Weiss CH, Bucuvalas MJ. 1980. Truth tests and utility tests: Decision-makers' frames of reference for social science research. *American Sociological Review* **45**: 302-313.
- West WF. 2005. Neutral Competence and Political Responsiveness: An Uneasy Relationship. *Policy Studies Journal* **33**: 147-160. DOI: 10.1111/j.1541-0072.2005.00099.x.
- Wyborn C. 2015. Cross-Scale Linkages in Connectivity Conservation: Adaptive governance challenges in spatially distributed networks. *Environmental Policy and Governance* **25**: 1-15. DOI: 10.1002/eet.1657.