

Language Policy Instruments and the Promotion of Multilingualism in the Federal Public Administration of Canada and Switzerland

MICHELE GAZZOLA

Working Paper No. 21-3

Updated: 2021-07-22

REAL

Research group "Economics and language"



Language Policy Instruments and the Promotion of Multilingualism in the Federal Public Administration of Canada and Switzerland*

Michele Gazzola[†]

Updated: 2021-07-22

Abstract

While the study of policy instruments is an important component of public policy studies, it has received little attention so far in research in language policy and planning (LPP). This paper contributes to bridging this gap. First, I discuss the relevance of the concept of policy instrument for LPP. Second, I propose a general taxonomy of language policy instruments based on Hood's NATO taxonomy (nodality-authority-treasury-organisation). Finally, I apply the taxonomy to examine and compare the language policy aimed at promoting multilingualism within the federal public administration of Canada and Switzerland. The legislation in both countries requires that the official languages (respectively, English and French in Canada; French, German and Italian in Switzerland) should be treated on an equal footing in the federal public administration. Empirical research and official reports, nevertheless, have shown that the relationship between the official languages (and therefore their speakers) in many respects is characterised by substantial inequality. The results of my comparative analysis show that in both countries we observe a prevalence of informationand organisation-based instruments. These instruments are generally considered less contentious but also weaker than treasury-based and authority-based instruments. This shows that both governments tend to follow a soft and indirect approach to the implementation of the language policy in the federal public administration. Yet, there are some important differences between the two countries. While Canada has chosen an instrument based on financial incentives (with little impact), Switzerland did not. Further, in Switzerland, the language skills required to work in the federal administration depend only on the hierarchical level of staff, whereas in Canada such requirements depend also on the territory where civil servants work. This difference influences the distribution of language skills between civil servants and therefore the potential effectiveness of multilingual communication in the federal administration.

Email: m.gazzola@ulster.ac.uk

^{*}Draft paper presented at the IPSA 26th World Congress of Political Science (10-15 July 2021), Panel "Managing Diversity in Public Administration and Policy

[†]School of Applied Social and Policy Sciences, Ulster University, United Kingdom Research group "Economics and language" (REAL)

Introduction

While governments may claim they practice benign neglect with respect to religion, they cannot practice it regarding languages. Public authorities at any level (i.e. central, regional or local) must decide on a language in which they conduct their business: a fully a-linguistic state simply does not and cannot exist (Kymlicka 1995; De Schutter 2007). The choice of the state as to which language(s) should be used for official purposes is challenging because it influences the extent to which language-related publicly provided goods and services are accessible to people speaking different languages. Official forms, legal texts, websites containing information on the rights and the duties of citizens, procurements procedures, job announcements, call for tenders, phone calls managed by public call centres, oral communication at the tax office are necessarily provided in or held in at least one language. Deliberate decisions to do nothing (e.g. avoiding using a minority language for official purposes) are a form of public policy too (Howlett, Ramesh and Perl 2009).

I call external language policy the way in which public authorities manage linguistic diversity in the public provision of language-related goods and services, as opposed to the internal language policy, which is defined as the way in which multilingual communication is managed within government offices, typically in the public administration. Depending on the set of official languages and on the distribution of skills in the population, the external language policy can entail real or perceived political disenfranchisement (Ginsburgh and Weber 2011), unfair treatment of citizens wishing to apply for jobs in the public administration (Shorten 2016; Carey 2017), and in extreme cases violations of certain human rights (de Varennes 1996). The capacity of ensuring a multilingual external language policy, however, depends to a certain extent on the characteristics of the internal language policy. The state must have multilingual staff and language mediation services to have the capacity of providing goods in several languages, and it must guarantee substantive equity in the access to the public service to applicants speaking different native languages. The lack of such requirements can become a public issue and therefore the object of public policy.

This paper discusses selected aspects of the internal language policy in multilingual countries in a comparative perspective. It focuses on the language policy of the Swiss and the Canadian federal administrations. Canada and Switzerland are two officially multilingual countries. German, French and Italian are national and official languages in Switzerland (Romansch is a national language and official only for the relations between the Confederation and Romansh-speaking people). According to the last census figures available for 2012, 73.2% of Swiss citizens declared German (and its dialects) as their first language, 23.3% French, 6.1% Italian, and 0.7%% Romansch (Pandolfi, Casoni and Bruno 2016; see also Lüdi and Werlen 2005). English and French are the first language of 75% and 23% of the population in Canada, respectively (Borbey and Mendelsohn 2017).

As shown later in this paper, the legislation in both countries requires that languages should be treated on an equal footing within the federal administration. Empirical research, however, has shown that the relationship between the official languages (and therefore their speakers) is characterised by substantial inequality at different levels, including the use of languages in meetings, the level of competence of civil servants in the second/third languages, the representation of linguistic communities in top hieratical positions. This paper examines the language policy designed in the two countries to address these issues in a comparative perspective, focusing on policy instruments adopted by government. Its purpose, however, is deliberately introductory and primarily descriptive. While the study of policy instruments is an important component in the study of public policy (Howlett 2011; Landry and Varone 2005; Peters and van Nispen 1998), it has received little attention so far in language policy and planning (LPP) research (with few exceptions discussed in Section 4). This paper contributes

to bridging this gap. Before discussing the language policy adopted in Canada and Switzerland to promote multilingualism in the federal administration, therefore, this paper must first construct the methods to examine and compare such policies. Consequently, Section 1 positions the paper in the LPP literature. Section 2 discusses the relevance of the concept of policy instrument in LPP, and it develops for the first time a general taxonomy of *language policy instruments*. In Section 3, the taxonomy is applied to the case of language policy aimed at promoting multilingualism in the Canadian and Swiss federal public administrations. I present the policy instruments designed and implemented in recent years to achieve policy maker's goals in the two federal administrations, and I point out the differences observed in the two countries in a comparative perspective. Section 4 summaries and concludes.

1 Language Policy and Planning and the Public Policy Sciences

Language policy (or language planning, or language policy and planning – LPP) is defined as the set of measures adopted by the government public authorities to affect the structure (or corpus) and the functions (or status) of a language (Hornberger 2006; Fishman 1991; Cooper 1989). Corpus planning refers to interventions on language itself such as changing its alphabet, modernising its lexicon, update its vocabulary, and developing a grammar. Status planning consists in allocating functions to a given language in society such as the use of a language for official purposes, in public services, and in public signage. Some authors use the term "acquisition planning" for measures aimed at modifying the number of speakers of a language, typically through education and training both for children and adults. For the purposes of this paper, however, acquisition planning is regarded as a specific form of status planning in the area of education and training.

The term "language policy and planning" (LPP) also defines the interdisciplinary field of research that studies language policy. It emerged as an international academic concern within sociolinguistics in the early 1960s, and it was institutionalised during the 1970s (Kaplan and Baldauf 1997; Ricento 2000; Lo Bianco 2004; Lo Bianco 2010; Jernudd and Nekvapil 2012; Johnson 2013: 26-55). In the first phase of LPP (until the 1970s), LPP scholars were involved in helping policy makers in developing countries to standardise and modernise the local languages, and to select one or more official languages in order to promote economic development and nation building (Fishman, Ferguson and Das Gupta 1968; Fishman 1974). During this phase, sometime named "classic LPP", scholars were influenced by policy analysis both regarding the terminology as well as the methodology used. According to Rubin and Jernudd, for example, language policy "is focused on problem-solving and is characterised by the formulation and evaluation of alternatives for language problems to find the best (or optimal, most efficient) decision" (1971: xvi).

The paths of LPP and policy analysis have started to diverge in the 1970s, and they have not met again since then (with various exceptions discussed below). The view of LPP as a technical and instrumental problem-solving approach was subject to relentless criticism "as part of a critical turn in LPP scholarship, influenced by neo-Marxist, poststructural, and postmodern reasoning" (Lo Bianco 2015: 71). Scholars inspired by critical theories have examined the ideological nature of language planning, the power issues hidden behind it, and the resulting socio-economic inequalities (e.g. Tollefson 1991; Tollefson 2008; Phillipson 1992). Postmodern approaches (Pennycook 2006; Tollefson and Pérez Milans 2018) have inspired studies in which the discourse on language policy is examined from different theoretical perspectives (Wodak 2006; Barakos and Unger 2016). As a result, "a lot of language policy analysis is, essentially, discourse analysis" (Johnson 2013: 152). Empirical LPP research usually follows ethnographic methods (see Hornberger and Johnson 2011) that examines "the agents, contexts, and processes across the multiple layers of language policy creation, interpretation, and appropriation" (Johnson 2013: 44). Contributions in this area

typically focus on the tensions and contradictions between the general objectives of a formal language policy and the observed practices on the ground (especially in education). In this sense, they contribute to the study of LPP implementation.

In LPP, therefore, scholarship has not followed a linear incremental development, and the field is characterised by substantial fragmentation (Tollefson and Pérez Milans 2018). While critical and postmodern approaches have improved our understanding of the ideological, discursive and ethnographic aspects of LPP, their relative prevalence in the field during the last decades has entailed a gradual separation of LPP from the classic approach inspired by public policy analysis, and consequently a neglect of the practical and organisational aspects of LPP. As Ricento correctly notes "what has not been much discussed is the practice of language planning, that is, the development, implementation, and evaluation of specific language policies" (2006: 18, emphasis added). To wit, the standard heuristic model of the policy cycle mentioned in any textbook in public policy is virtually unknown in contemporary LPP research, although it was mentioned in classic LPP (see above; see also Rubin 1971; Thorburn 1971).² The idea according to which "planning language means planning inequality" (Tollefson 1991) has hidden the simple observation that LPP in reality can be positive, democratic, diversity-oriented and precisely aimed at reducing inequalities (as the example discussed in this paper shows). Much of contemporary research in LPP is too focused on the descriptive reporting of inequalities and too little concerned with the technical design and implementation of actual instruments to reduce such inequalities.

Likewise, researchers in public policy tend to ignore LPP (see Sonntag and Cardinal 2015). This lack of attention is somewhat surprising, considering that the state cannot be entirely absent form matters of language (see introduction above), and that it is involved in nation building processes and political unity (Safran 2015).

There are several noteworthy contributions to LPP by political scientists (including political philosophers) and economists. These contributions tend to focus either on the first phases of the policy cycle (i.e., problem recognition and agenda-setting), or the last phase of the cycle (i.e., evaluation). Contributions in the first group typically deal with the politics of language, that is, the ideological and political reasons underpinning and justifying language policies.³ Papers in the second group have concentrated on the evaluation of the effects of language policy, on the quantification of the costs and the benefits of alternative policy options, and on the evaluation of distributive consequences of policy choices⁴. As a result, the intermediate phases of the policy cycle, that is, policy design and implementation have remained less explored so far.

_

evaluation.

¹ One of the most extensive reference books in LPP, the *Cambridge Handbook of Language Policy* (Spolsky 2012), for example, contains over 2,000 references in the field, but no single reference to the item "public policy" (there are just two references to "language policy evaluation").

² There are some differences in the literature about the exact definition of each phase of the policy cycle. According to some authors, the policy cycle stages consist in agenda setting, policy design, implementation, and evaluation (Mintrom and Williams 2013; Knoepfel *et al* 2015), while for other authors split policy design into two separate stages, namely, policy formulation and decision-making (Howlett 2011). Agenda setting is preceed by a preliminary phase sometimes named "problem identification/definition".

³ E.g. Bonotti (2017), Léger and Lewis (2017), Shorten (2016); Peled, Ives and Ricento (2015); Robichaud and De Schutter (2012); Van Parijs (2011); May (2011); Patten (2009); Kraus (2008); Laponce (2006); Safran and Laponce (2005); Sonntag (2003); Kymlicka and Patten (2003); and Réaume (1991).

⁴ See Pool (1991); Grin and Vaillancourt (1999); Wickström (2016); Strassoldo (2016); Gazzola, Grin and Vaillancourt (2020). See Gazzola, Grin and Wickström (2016) for a bibliography of language policy

This paper contributes precisely to research about language policy design and implementation by discussing how the concept of "policy instrument" can be adapted and applied to research in LPP. The study of policy instruments is a central component in the study of public policy (Howlett 2011; Peters and van Nispen 1998). Policy instruments are "the means by which governments attempt to induce individuals and groups to make decisions and take actions compatible with public policies" (Schneider and Ingram 1990: 527, quoted in Landry and Varone 2005: 108). Hence, policy instruments aim to influence the attitudes and the behaviour of actors who are the target of the public policy, thereby facilitating the achievement of policy maker's goals. Policy instruments are often seen as a theoretical device through which the phases of policy design and implementation can be studied. Howlett notes that "instrument choice ... in a sense is public policy making, and understanding and analyzing potential instrument choices involved in implementation activity is policy design" (2011: 22, italics in the original). First, they orient the process of policy design by informing decision makers on what is feasible. Second, studying the conditions under which instruments are likely to be effective can help policy makers evaluate the relative advantages and disadvantages of different policy options, thereby making trade-offs clearer. Third, studying policy instruments is important in implementation, when concrete action plans are executed. Policy instruments "affect the content or process of policy implementation, that is, [they] alter the way goods and services are delivered to the public or the manner in which such implementation process takes place" (Howlett 2011: 24). It necessary to understand how to manage them, as well as to spell out the likely effects of their combined interaction on policy outcomes.

2 A General Taxonomy of Language Policy Instruments

Public policies are the "results made by governments to alter aspects of their own or social behaviour in order to carry out some end or purpose" (Howlett 2011: 19). In this respect, an important distinction is often made between *substantive* and *institutional* public policy (Knoepfel *et al.* 2015: 43). The former aims at solving a problem politically defined as collective in nature, e.g., reducing CO_2 emissions at the national level. The latter focuses on state institutions, e.g., a change in the structure of public offices or a reorganisation of human resources. Institutional public policies aim at creating the conditions for the accomplishment of the tasks of the state, including the implementation of substantive policies (Knoepfel *et al.* 2015: 136).

Yet, this distinction is not straightforward in language policy due to the ubiquity of language in virtually any aspect of social life. Language policy often consists both of substantive and institutional elements that cannot easily be separated. A policy aiming at improving migrants' skills in the official language of the host country through funding to private language schools is an example of substantive language policy. But in other cases, the distinction may be less clear-cut. Assume that in one country the "public problem" politically defined as collective in nature is the capacity of providing public services in more than one language. In this case, the government must set up and maintain a bilingual public administration (see the introduction above). This, however, requires both substantive and institutional measures because the government apparatus becomes at the same time the subject and the object of the language policy. In other words, the government is both the actor that must design and implement the policy, and its primary target. An additional difference between language policy and other forms of public policy consists in the fact that language policy can target the language itself (corpus planning) in addition to its social and official functions (status planning), and the two aspects are related. These differences must be considered in the study of policy instruments used in LPP, and therefore in language policy design and implementation.

I name "language policy instruments" (LPI) the set of policy instruments used in LPP, that is, the means by which governments deliberately attempt to influence the status and the corpus

of a language with a view to inducing individuals and groups to change their linguistic practices and attitudes in a certain direction that is consistent with LPP objectives. The set of LPI is potentially endless. A first question, of course, is whether they can be grouped in some consistent macro-types.

A good starting point is to revisit existing taxonomies of public policy instruments. In this paper, I'll consider the NATO taxonomy first proposed by Hood (1986), which has become mainstreaming in the literature in public policy. Recall that NATO is the acronym of Nodality-Authority-Treasury-Organisation. Hood argues that policy instruments can be grouped in four general types depending on the types resources the government uses in public policy, i.e.:

- Nodality refers to the fact that the government is a key nodal link in the policy network, and it both receives and disseminates information in accordance with its position in these informal and formal information channels. There are different examples of policy instruments that use the nodality (information) resource, e.g., setting benchmarking, establishing performance indicators, organising information campaigns, and providing advice.
- 2. Authority refers to the legal or official power to demand, forbid, guarantee, and adjudicate. There are various policy instrument relying on this resource, e.g., enforcing rules, prohibitions, laws, and executive orders as well as setting standards and granting permits, conceding privileged advisory status in the policy process to some organisations.
- 3. *Treasury*-based policy instruments rely on public financial resources. Taxes and other financial disincentives, grants, financial incentives, monetary transfers, tax expenditures are common treasury-based policy instruments.
- 4. Finally, governments confront public policy using the formal *organistion* available to them, e.g., public servants' skills, government's buildings, materials, and equipment, through which the government can directly or indirectly provide goods and services. Government reorganization is included in this type.

Within the NATO taxonomy a further distinction is usually made between *substantive* and *procedural* policy instruments (Howlett 2011), which recall the distinction between substantive and institutional public policies (the terms "institutional" and "procedural" are used in this paper as synonyms). Procedural policy instruments are mainly designed to change or affect aspects the policy process rather than individuals' or business' behaviour per se. Their function, however, is usually to support substantive policy instruments. An example of procedural authority-based policy instrument is an advisory committee. The government selects representatives to sit on it, and it grants those representatives some special rights within the policy process.

A general taxonomy of language policy instruments can be developed on the NATO taxonomy, and it should consider the specific nature of language policy, notably the difference between corpus and status planning. The categories of corpus planning and status planning have no equivalent in any other area of public policy. A general taxonomy of language policy instruments ("LPI Taxonomy"), therefore, should include three distinct analytical dimensions, namely, the resource mobilised by the government (i.e., nodality, authority, money, and organisation), the nature of the policy (substantive or procedural), and the scope of language planning (status or corpus). The "LPI Taxonomy", presented in Table 1, can be used as a starting point for systematically studying the nature of language policy instruments, as well as their relative advantages and disadvantages.

Table 1: General Taxonomy of Language Policy Instruments (LPI Taxonomy)

	Status planning		Corpus planning	
	Substantive	Procedural	Substantive	Procedural
Nodality	1al	1bl	1all	1bll
Authority	2al	2bl	2all	2bII
Treasury	3al	3bl	3all	3bII
Organisation	4al	4bl	4all	4bII

Note: The numbers in the table refer to the examples in the text

A non-exhaustive list of examples is provided as follows:

- 1. Nodality (information-based) language policy instruments.
 - a. Substantive
 - I. (Status) Sociolinguistic surveys; Labels⁵
 - II. (Corpus) Information campaigns to popularise a new official orthography
 - b. Procedural
 - I. (Status) Disclosure of information in more than one language via official websites
 - II. (Corpus) Censorship of foreign words in official documents
- 2. Authority-based language policy instruments
 - a. Substantive
 - I. (Status) Translation requirements for packages; language requirements to have access to jobs in the public administration
 - II. (Corpus) Compulsory guidelines for private actors about the usage of genderrelated words in applications for public procurements
 - b. Procedural
 - I. (Status) Consensus conferences (e.g., European Civil Society Platform for Multilingualism)
 - II. (Corpus) Granting special advisory status to language academies
- 3. Treasury-based language policy instruments
 - a. Substantive
 - I. (Status) Subsidizing learning material in a minority language; allowance for bilingual public servants
 - II. (Corpus) Subsidizing a new vocabulary
 - b. Procedural
 - I. (Status) Advocacy funding, i.e., provision of seeds money for interest group creation (e.g., activists promoting the use of a specific variety of a language)
 - II. (Corpus) Funding philological associations
- 4. Organisation-based language policy instruments
 - a. Substantive
 - I. (Status) Bilingual front offices; direct provision of language courses to public servants
 - II. (Corpus) Provision of free terminological databases
 - b. Procedural
 - I. (Status) Executive LPP coordination agencies
 - II. (Corpus) Governmental terminological committees

⁵ This is a symbolic form of recognition aimed at stimulating pro-multilingualism initiatives, e.g., the European Language Label, an EU award encouraging the development of new techniques and initiatives in the field of language teaching and learning, as well as the enhancement of intercultural awareness across Europe.

The LPI taxonomy contributes to the development of research in LPP studies in two ways. First, it establishes a clearer link between the vast literature on policy instruments in public policy studies, and the literature in LPP. It does this by importing concepts from the former and adapting them to the latter. Governments cannot avoid language policy choices, but there is still no systematic classification of existing policy instruments that can used for this purpose. By enriching the NATO taxonomy with the distinction between status and corpus planning, the proposed taxonomy of language policy instruments stresses the specific nature of language policy with respect to other form of public policies. Providing bilingual public services in a minority language that still lacks a stable and widely accepted standard is very different from providing the same services in a highly standardised and widespread language. Second, the LPI Taxonomy can be used to structure and frame comparative analyses at the international or regional level. An example of application is provided in the next section.

3 Promoting Multilingualism in the Federal Public Administration of Canada and Switzerland 3.1 Legal basis and existing evidence

In Canada, the language policy targeting the federal public administration finds its legal basis in the *Official Languages Act* (OLA), in force since 1969, and modified through time (1988 and 2005). Article 34, Part V (entitled "Language of Work"), provides that "English and French are the languages of work in all federal institutions, and officers and employees of all federal institutions have the right to use either official language in accordance with this Part". The OLA (Art. 35, emphasis added) also provides that

every federal institution has the duty to ensure that (a) within the National Capital Region and in any part or region of Canada, or in any place outside Canada, that is prescribed, work environments of the institution are *conducive to the effective use of both official languages and accommodate the use of either official language by its officers and employees*; (b) and that in all parts or regions of Canada not prescribed for the purpose of paragraph (a), the treatment of both official languages in the work environments of the institution in parts or regions of Canada where one official language predominates is reasonably comparable to the treatment of both official languages in the work environments of the institution in parts or regions of Canada where the other official language predominates.

In practice, OLA establishes that in certain regions, named "designated bilingual regions", the working environment must be conducive to the effective use of both official languages, and accommodate the use of either official language by its officers and employees. The goals of the policy are detailed in the remaining articles of Part V of OLA and will not be repeated here. Suffice it to recall the most important ones: officers and employees have the right to be supervised in the language of their choice; training and professional development services, documents and work instruments must be available in the officers and employees' language of choice; any management group that is responsible for the general direction of the institution as a whole has the capacity to function in both official languages.

Table 2 shows the results of a descriptive analysis of data available in the *Public Service Employee Survey*, that was conducted in 2017. The *Public Service Employee Survey* was led by the Office of the Chief Human Resources Officer of the Treasury Board of Canada Secretariat, in collaboration with Statistics Canada. This comprehensive survey measured federal government employees' opinions about their engagement, leadership, workforce, workplace, workplace well-being and compensation. Results reveal that there are differences

between Anglophones and Francophones about the use of their preferred language on the workplace in the federal administration. While most officials and employees can use their preferred language, there are still substantial inequalities between Anglophones and Francophones, notably in the written use of the language on the workplace and in meetings.

Table 2: Percentage of Anglophones and Francophones who can use of their preferred language on the workplace in the Canadian Federal Administration

	Anglop	hones	Franco	phones
Question	Yes	No	Yes	No
The material and tools provided for my work, including software and other automated tools, are available in the official language of my choice.	94%	2%	86%	7%
When I prepare written materials, including email, I feel free to use the official language of my choice	94%	3%	64%	21%
During meetings in my work unit, I feel free to use the official language of my choice	93%	2%	76%	16%
When I communicate with my immediate supervisor, I feel free to use the official language of my choice	95%	1%	88%	8%
During meetings in my department or agency, the chairpersons create an environment where I feel free to use the official language of my choice.		3%	73%	15%
The training offered by my department or agency is available in the official language of my choice	92%	2%	85%	8%

Note: Table compiled by the author using the 2017 Public Service Employee Survey. N= 174,544 employees (Anglophones 68.7%, Francophones 31.3%). Response rate 61.3%. Neutral answers not shown in the table

The legal provisions of the Swiss language policy in the federal public administration are contained in the Swiss Federal Act on the National Languages and Understanding between the Linguistic Communities (LangA) adopted in 2007 and the related Ordinance on the National Languages and Understanding between the Linguistic Communities (LangO) published in 2010). Art. 9 of LangA (entitles "Federal Council and Federal Administration") provides that "the members of the Federal Council, the Federal Chancellor and Federal Administration staff shall work as they wish in German, French or Italian. Federal Administration employers as defined in the legislation on federal personnel shall make the required aids available". Art. 20 ("Plurilingualism in public service") provides that "the Confederation shall encourage its employees to further their knowledge of the national languages. The Confederation shall ensure that the linguistic communities are fairly represented in the federal authorities and extra-parliamentary committees, and shall encourage plurilingualism in the armed forces. The Confederation and the cantons shall make their terminology databases available to each other free of charge".

The results of existing studies, however, show that substantive inequalities between the official languages exist. These inequalities concern both the use of the official languages in the workplace, and the representation of linguistic communities in top hieratical positions. The main findings can be summarised as follows⁶: meetings are mostly held in a bilingual German-French mode, while Italian is not often used; only 73% of employees can work in the official language they prefer; French and Italian-speaking officials are less likely to reach high-

8

_

⁶ See Kübler *et al.* (2020); Gazzola (2016), Coray *et al.* (2015); Christopher Guerra and Zurbriggen (2013); Kübler, Papadopoulos and Mazzoleni (2009).

level positions because they do not have perfect skills in German; there is an over-representation of German-speakers among high-level executives/managers; the Italian-speaking and Romansh communities are under-represented, except for the Federal Chancellery and the Federal Department of Finance, and the French-speaking community is under-represented in some administrative units.

3.2 Policy instruments adopted

The challenges associated with the promotion of equality between languages in the federal public administration have been presented in some official reports (see DFP 2015; DFP 2019 and their annexes for Switzerland, and Borbey and Mendelsohn 2017 for Canada). This section collects and systematically presents the policy instruments adopted in the two countries. I use three sources for this purpose. First, the already mentioned official reports, as well as notes and institutional websites of the Canadian and Swiss government. Second, I rely on existing literature about multilingualism in the public administration in the two countries (Gaspard 2019; Maltais 2018; Hudon 2017; Turgeon and Gagnon 2015; Turgeon and Gagnon 2013; and Kübler *et al.* 2020; Coray *et al.* 2015; Kübler *et al.* 2011). Third, I use and update the material I directly collected in 2016 in an advisory report on plurilingualism in the Swiss federal administration (see Gazzola and Grin 2016; Gazzola 2016), and in 2019 in a research project on plurilingualism in the Canadian federal administration. The results are presented in Figure 1 and in Figure 2 in the appendix.

The results of the comparative analysis show a prevalence of information-based and organisational policy instruments in both countries, and such instruments are similar. Both countries employ various substantive organisational policy instruments, such as language mediation services (i.e., translators and interpreters), provision of language courses, and IT tools and software in the official languages. In both countries, organisational procedural policy LPP instruments are used too, and these typically consist of setting up ad hoc units or organisations dealing with the implementation and organisation of the language policy. Both governments organise internal workshop to promote multilingualism policy, and to inform the head of administrative units and managers about the policy goals. To raise awareness about equality and the policy objectives, both countries rely on exhortation and moral suasion via publication of brochures, organisation of internal surveys about equality and subsequent dissemination of their results, and information campaigns. Periodical official reports, and the presentation of information and figures in a targeted way are used too. Setting indicators and parameters for the assessments of progresses and self-evaluations is another policy instrument. A recent example is the Official Languages Maturity Model prepared by the Office of the Commissioner of Official Languages in Canada. The office defined 28 indicators grouped into nine themes through which units of the federal administration can assess their

⁷ See https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=26160; www.canada.ca; https://www.plurilingua.admin.ch/plurilingua/it/home.html]

⁸ The project was funded by the German Academic Exchange Service, whose support is gratefully acknowledged. During the duration of the project (April-June 2019), I was able to carry out 22 in-depth interviews, including 15 current or former civil servants and key decision-makers working on language policy in the various bodies of the Federal Government and Office of the Commissioner of Official Languages. Interviewees included the President of the Public Service Commission and two former Commissioner of Official Languages. The interview mainly concerned the practice of bilingualism in the public service. I also interviewed seven scholars at the University of Ottawa who work in research areas that were relevant for the project. The interviews were aimed at collecting information about new research methods and theoretical approaches to the study of bilingualism in the public administration.

level of maturity in terms of integration of official languages into their entire decision-making process and business framework.

An interesting difference, however, exist. In line with the new requirements of the OLang, the Swiss federal administration has developed a system for the periodical assessment of the language skills of federal staff. This system includes the self-assessment of the current state of staff's language skills ("Ist-Zustand" in the original version in German), and the specific language requirements of the job post occupied by the person in place ("Soll-Zustand"). The comparison between the real level of skills and what is required in the LangO (both in terms of active and receptive language skills), makes it possible to identify the actual need for language training and the priority investments required to close potential gaps.

The most interesting differences between the approaches of two countries, however, are at the level of policy instruments based on authority and treasury. While both countries adopted subsidies for staff language training, only Canada has adopted direct monetary incentives to promote multilingualism. In the case of the Canadian federal administration, the bilingualism bonus was first introduced in 1967 and formalised in the collective agreement in 1977 (Maltais 2018; Lecomte 2018). It corresponds to 800 Canadian dollars per year, or 1.08% of the average annual salary of a federal civil servant in 2018. This allowance has never been adjusted for inflation, so its value in real terms is deemed to decline over time. In recent years, it has been suggested to abolish it (Borbey and Mendelsohn 2017), but this proposal has been strongly opposed by the public employees' union, which sees the allowance as an acquired right that is now part of the collective agreement.

To my knowledge, there is no systematic study of the effectiveness of the bilingual bonus in promoting multilingualism beyond preliminary evidence provided in Maltais (2018).9 The bilingualism/multilingualism bonus can be viewed as a form of pay linked to the achievement of objectives, i.e., knowledge of a language at a certain level. The literature on "performance" related pay", however, shows that in general this instrument is not very effective in promoting performance improvements in the public sector (Perry, Engbers and Jun 2009; Weibel, Rost and Osterloh 2010; Anderfuhren-Biget et al. 2010). According to these studies, the intrinsic motivation of staff civil servants better explains variation in performance. Under certain circumstances, "performance related pay" can even entail counterproductive effects. A survey report of the World Back about the use of this instrument in non-linguistic fields indicates that financial incentive schemes linked to the achievement of objectives in the public sector generally only work under certain conditions (Hasnain et al. 2012): (i) measuring performance accurately; (ii) describing with clarity the rewards that would result from a specific level of performance; (iii) describing to the employees how their rewards were actually based on historical performance; (iv) be able to offer examples of other employees that have obtained higher rewards due to their better performance.

The bilingualism bonus does not seem to meet these requirements. It may provide an incentive for individual employees to pass a language test, but not to promote multilingual communication in the units of the federal administration. The financial incentive scheme underlying the bilingualism bonus depends only on obtaining a language certificate, which is not followed by other language assessments. Moreover, the bonus rewards knowledge of the language, but not its use. Communication is in fact a social phenomenon. From the point

instruments to achieve the objective.

_

⁹ The author collects option of 123 self-selected members of the federal administration and asks them in a survey what is the best way to increase bilingualism. Less than 30% choose the answer "increasing the amount of the bonus", whereas 60% of respondents support the idea that a change in culture and mindset, and a similar percentage declares that offering language training are better

of view of the individual employee, having skills in a certain language is only a necessary but not sufficient condition for communicating in that language in the workplace. To create an environment which is "conducive to the effective use of both official languages and accommodate the use of either official language by its officers and employees", as the OLA prescribes (see above), it is necessary that staff in general (and managers in particular) be bilingual and that they are willing to use both languages either actively or at least in a receptive mode (Kübler and Zwicky 2018). It is therefore not surprising that the bilingual bonus in Canada has never been strengthened, and that the Swiss federal administration has not considered it so far.

I conclude the analysis by comparing the authority-based policy instruments. In Switzerland, the language policy requires that the percentage distribution of staff in the federal administration should resemble the distribution of the four linguistic communities in the general population. The law, therefore, prescribe the following target ranges (including for management positions): German (68.5 - 70.5%), French (21.5 - 23.5%), Italian (6.5 - 8.5%), Romansh (0.5 - 1.0%). Target ranges or quotas (a related instrument) are not provided for in the Canadian language policy, because this would infringe the merit principle that underpins careers development path in the country's federal public service (Gaspard 2019).

A second important difference refers to the language requirements for the post. In Canada, the language requirements of posts in the federal public administration depend on the type of region where staff work, and this region can be designated unilingual or bilingual (see the *Directive on Official Languages for People Management*). While an executive director in a designated bilingual area must be bilingual, an executive director in a designated unilingual region must be bilingual only under certain specific circumstances listed in the Directive. In Switzerland, such requirements depend only on the hierarchical level. Employers referred to in Art. 8 paragraph 1 of LangO shall ensure that

all employees have the oral and written skills in a second official language required for performing their duties; all middle management employees have good active knowledge of at least a second official language and, where possible, passive knowledge of a third official language; all senior management employees and all middle management employees with team leadership responsibilities have good active knowledge of at least a second official language and passive knowledge of a third official language. Employers shall offer their employees French, German and Italian language courses. If a manager does not have the required language skills when recruited, the employer shall take the measures necessary to improve them within one year of recruitment.

In Canada, therefore, the territorial dimension plays a central role in determining the linguistic requirements of civil servants. These differences, however, create a situation in which meetings between directors and managers from different Provinces cannot necessarily be held in a bilingual mode because some of them have the right to be unilingual. Calls to address this problem come from the Commissioner of Official Languages, who notes that "the advent of virtual teams, the impact of restructuring in many institutions, the increasing popularity of teleworking and the relocation of head offices are all new situations that are not covered by Part V of the Act" (Office of the Commissioner of Official Languages 2019).

It is not possible to derive conclusions about what language policy is better in general, but the comparative analysis is helpful to single out some general conclusions. First, there is a prevalence of information- and organisation-based instruments in both countries. These are generally considered less contentious but also weaker than treasury-based and authority-based instruments. This shows that governments in both countries tend to follow a soft and indirect approach to the implementation of the language policy in the federal public

administration. Second, most policy instruments focus on the development of staff language skills, few instruments address the issue of language use at the level of administrative units, which indeed would be a central (although admittedly difficult) variable to monitor. Finally, the choice of instruments is informed by the traditions of the two countries (on the influence of state traditions in language policy see Cardinal, Gaspard and Léger 2015; Cardinal and Sonntag 2015). As already discussed, the "merit principle" in Canada does not allow to include quotas or target ranges in the set of authority-based policy instruments. In Switzerland, *ad hoc* monetary incentives to promote multilingualism are not seen as an option because language requirements are embodied in the position, and the Federal Administration has strict salary regulations.

4 Final remarks and directions for future research

The study of policy instruments in LPP is a promising area of inquiry with a noteworthy potential for applications. Eliciting language policy instruments from observation of existing polices, systematise them, examining their relative advantages and disadvantages, and their relationship with the context in which they have been chosen is a promising new way to approach the study of language policy design and implementation. This paper establishes a general bridge between the study of policy instruments in public policy studies on the one hand, and language policy and planning on the other hand, by developing a general taxonomy of language policy instruments that lends itself to be applied in other comparative studies at the national and international level. It also presents an example of application of such a taxonomy to the case of language policy aimed at promoting multilingualism in the federal public administration in Canada and Switzerland.

The taxonomy developed in this paper deliberately presents language policy instruments in a neutral fashion as means of government action. It is worth noting, however, that in the literature coexist alternative views about the nature of policy instruments (for a review see Cardinal 2022, forthcoming). In the sociological tradition, for example, policy instruments are viewed as a symptom of the relationships between the state and society (Lascoumes and Le Galès 2007). In this perspective, the choice of policy instruments is not a simple technical selection of one or more tools available in a neutral "policy toolkit"; rather, the choice of policy instruments entails a process resulting in a certain structure of power relations. An application of this approach to the study of language policy instruments have been followed in the Canadian context by Cardinal Gaspard and Léger (2015).¹⁰

-

¹⁰ Cardinal Gaspard and Léger (2015) focus on the *Roadmap for Canada's Official Languages 2013-2018*. The roadmap was an action plan (in the sociopolitical approach actions plans are a type of instrument) that enabled policy makers to incorporate official languages within their respective political programmes and political agendas to transform public spending and initiatives for official languages into tools to promote economic growth. The authors explain how policy actors such as political parties, think tanks and NGOs took part and competed in the process of developing action plans to shape the definition of "representations of the political community".

References

- Anderfuhren-Biget, Simon, Frédéric Varone, David Giauque, and Adrian Ritz (2010) "Motivating employees of the public sector: Does public service motivation matter?", *International Public Management Journal*, 13 (3), pp. 213-246.
- Barakos, Elisabeth and Johann Unger (eds.) (2016) *Discursive approaches to language policy*. Basingstocke: Palgrave Macmillan.
- Bonotti, Matteo (2017) "Political liberalism, linguistic diversity and equal treatment", *Journal of Multilingual and Multicultural Development*, 38 (7), pp. 584-594 https://doi.org/10.1080/01434632.2016.1192179.
- Borbey, Patrick and Matthew Mendelsohn (2017) *The next level: Normalizing a culture of inclusive linguistic duality in the Federal Public Service workplace*. Ottawa: Government of Canada.
- Cardinal, Linda (2022, forthcoming) "Language Policy Instruments", in Gazzola, Michele, François Grin, Linda Cardinal, and Kathleen Heugh (eds.) *The Routledge Handook of Language Policy and Planning.* London: Routledge.
- Cardinal, Linda, Helaina Gaspard, and Rémi Léger (2015) "The politics of language roadmaps in Canada: understanding the conservative government's approach to official languages", *Canadian Journal of Political Science/Revue canadienne de science politique,* 48 (3), pp. 577-599.
- Cardinal, Linda and Selma K. Sonntag (eds.) (2015) *State Traditions and Language Regimes*. Montreal: Mcgill Queens University Press.
- Carey, Brian (2017) "The preference satisfaction model of linguistic advantage", *Critical Review of International Social and Political Philosophy*.
- Christopher Guerra, Sabine and Seraphina Zurbriggen (2013) *Sprachkurse für Mitarbeitende der Bundesverwaltung. Evaluation und Analyse des Angebotes und dessen Nutzung. Ausführlicher Projektbericht.* Fribourg: Institut für Mehrsprachigkeit.
- Cooper, Robert L. (1989) *Language planning and social change*. Cambridge (UK): Cambridge University Press.
- Coray, Renata, Emilienne Kobelt, Roman Zwicky, Alexandre Duchêne, and Daniel Kübler (2015) Mehrsprachigkeit verwalten? Spannungsfeld Personalrekrutierung beim Bund. Zürich: Seismo
- De Schutter, Helder (2007) "Language policy and political philosophy: On the emerging linguistic justice debate", *Language Problems & Language Planning*, 31 (1), pp. 1-23.
- de Varennes, Fernand (1996) *Language, minorities and human rights*. The Hague ; Boston: Kluwer Law International.
- DFP (2015) Promotion du plurilinguisme. Rapport d'évaluation au Conseil fédéral et recommandations sur la politique de plurilinguisme (art. 8d, al. 4, OLang). Développement de 2008 à 2014. Perspectives pour la période de 2015 à 2019, Berne. Département fédéral des finances (DFF), Déléguée fédérale au plurilinguisme (DFP).
- DFP (2019) Promotion du plurilinguisme au sein de l'administration fédérale. Rapport d'évaluation et recommandations sur la politique de plurilinguisme (art. 8d, al. 4, OLang). Développement de 2015 à 2019. Perspectives pour la période de 2020 à 2023, Berne. Département fédéral des finances (DFF), Déléguée fédérale au plurilinguisme (DFP).
- Fishman, Joshua A. (ed.) (1974) Advances in language planning. The Hague: Mouton.
- Fishman, Joshua A. (1991) Reversing language shift. Clevedon: Multilingual Matters.
- Fishman, Joshua A., Charles A. Ferguson, and Jyotirindra Das Gupta (eds.) (1968) *Language problems of developing nations*. New York: Wiley.
- Gaspard, Helaina (2019) *Canada's official languages. Policy versus work practice in the federal public service.* Ottawa: University of Ottawa Press.
- Gazzola, Michele (2016) "Programmazione e controllo della 'politica del plurilinguismo' nell'amministrazione federale svizzera", *Studi Italiani di Linguistica Teorica e Applicata,* 45 (3), pp. 479-497.
- Gazzola, Michele and François Grin (2016) La politique de plurilinguisme de la Confédération. Vers une évaluation globale et systémique de la mise en œuvre de la Loi sur les langues du 5 octobre 2007 et l'Ordonnance sur les langues du 4 juin 2010. Bern (unpublished report): Swiss Federal Department of Finance.

- Gazzola, Michele, François Grin, and François Vaillancourt (2020) "Evaluating language policy and planning: An introduction to the economic approach", in Vigouroux, Cécile and Salikoko S. Mufwene (eds.) *Bridging Linguistics and Economics*, pp. 109-139. Cambridge: Cambridge University Press.
- Gazzola, Michele, François Grin, and Bengt-Arne Wickström (2016) "A concise bibliography of language economics", in Gazzola, Michele and Bengt-Arne Wickström (eds.) *The Economics of Language Policy*, pp. 53-92. Cambridge (MA): MIT Press.
- Ginsburgh, Victor and Shlomo Weber (2011) *How many languages do we need? The economics of linguistic diversity*. Princeton: Princeton University Press.
- Grin, François and François Vaillancourt (1999) *The cost-effectiveness evaluation of minority language policies: Case studies on Wales, Ireland and the Basque Country, ECMI Monograph n. 2.* Flensburg: European Centre for Minority Issues.
- Hasnain, Zahid, Nick Manning, and Jan Henryk Pierskalla (2012) *Performance-related pay in the public sector. A review of theory and evidence*, Policy Research Working Paper 6043. Washington: World Bank.
- Hood, Christopher (1986) The Tools of Government. Chatham: Chatman House.
- Hornberger, Nancy H. (2006) "Frameworks and models in language policy and planning", in Ricento, Thomas (ed.) *An Introduction to language policy. Theory and methods*, pp. 24-41. Oxford: Blackwell.
- Hornberger, Nancy and David Cassels Johnson (2011) "The ethnography of language policy", in L. McCarty, Teresa (ed.) *Ethnography and language policy*, pp. 273-289.
- Howlett, Michael (2011) *Designing public policies. Principles and instruments*. Abingdon: Routledge.
- Howlett, Michael, M. Ramesh, and Anthony Perl (2009) *Studying public policy. Policy cycles & policy subsystems*. Oxford: Oxford University Press.
- Hudon, Marie-Ève (2017) *Official languages in the federal public service*. Ottawa: Library of the Parliament.
- Jernudd, Björn and Jiří Nekvapil (2012) "History of the field: a sketch", in Spolsky, Bernard (ed.) *The Cambridge handbook of language policy*, pp. 16-36. Cambridge: Cambridge University Press.
- Johnson, David Cassels (2013) Language policy. Basingstoke: Palgrave Macmillan.
- Kaplan, Robert B. and Richard B. Baldauf (1997) *Language planning. From practice to theory.*Clevedon: Multilingual Matters.
- Knoepfel, Peter, Corinne Larrue, Frédéric Varone, and Jean-François Savard (2015) *Analyse et pilotage des politiques publiques. France, Suisse, Canada.* Québec: Presses de l'Université du Québec.
- Kraus, Peter A. (2008) *A Union of diversity: Language, identity and polity-building in Europe.*Cambridge: Cambridge University Press.
- Kübler, Daniel, Émilienne Kobelt, and Stéphanie Andrey (2011) "Vers une bureaucratie représentative. La promotion de la représentation et de la diversité linguistiques dans l'administration fédérale en Suisse et au Canada", *Canadian Journal of Political Science / Revue canadienne de science politique*, 44 (4), pp. 903–927.
- Kübler, Daniel, Emilienne Kobelt, and Roman Zwicky (2020) *Les langues du pouvoir. Le plurilinguisme dans l'administration fédérale.* Lausanne: Presses polytechniques et universitaires romandes.
- Kübler, Daniel, Ioannis Papadopoulos, and Oscar Mazzoleni (2009) *Le plurilinguisme de la Confédération : Représentation et pratiques linguistiques dans l'administration fédérale*, Programme de recherche national 56 "Diversité des langues et compétences linguistiques en Suisse". Berne: Fonds National Suisse de la Recherche Scientifique (FNS).
- Kübler, Daniel and Roman Zwicky (2018) *Topkader und Mehrsprachigkeit in der Bundesverwaltung*, Studienberichte des Zentrums für Demokratie Aarau, Nr. 13. Aarau: Zentrums für Demokratie Aarau.
- Kymlicka, Will (1995) *Multicultural citizenship: A new theory of minority rights*. Oxford: Oxford University Press.
- Kymlicka, Will and Alan Patten (eds.) (2003) *Language rights and political theory*. Oxford: Oxford University Press.
- Landry, Réjean and Frédéric Varone (2005) "The choice of policy instruments: Confronting the deductive and the interactive approaches", in Eliadis, Pearl, Margaret M. Hill, and Michael

- Howlett (eds.) *Designing government. From instruments to governance*. Montreal-Kingston: McGill-Queen's University Press.
- Laponce, Jean (2006) *Loi de Babel et autres régularités des rapports entre langue et politique*. Quebec: Presses de l'Université Laval.
- Lascoumes, Pierre and Patrick Le Galès (2007) "Introduction: Understanding public policy through its instruments. From the nature of instruments to the sociology of public policy instrumentation", *Governance*, 20 (1), pp. 1-21.
- Lecomte, Lucie (2018) *The federal public service bilingualism bonus*. Ottawa: Library of the Parliament.
- Léger, Rémi and Huw Lewis (eds.) (2017) *Normative political theory's contribution to language policy research*. Special issue of Journal or Multilingual and Multicultural Development, vol 38 (7).
- Lo Bianco, Joe (2004) "Language planning as applied linguistics", in Davies, Alan and Catherine Elder (eds.) *The Handbook of Applied Linguistics*, pp. 738-762. Oxford: Blackwell.
- Lo Bianco, Joe (2010) "Language policy and planning", in Hornberger, Nancy H. and Sandra Lee McKay (eds.) *Sociolinguistics and language education*, pp. 146-176. Clevedon: Multilingual Matters
- Lo Bianco, Joe (2015) "Exploring language problems through Q-sorting", in Hult, Francis M. and David Cassels Johnson (eds.) *Research Methods in Language Policy and Planning: A Practical Guide*, pp. 69-80. Hoboken: Wiley-Blackwell.
- Lüdi, Georges and Iwar Werlen (eds.) (2005) *Sprachenlandschaft in der Schweiz*. Neuchâtel: Office fédéral de la statistique.
- Maltais, Cathy Florence (2018) "Bilingualism in the Canadian public service: The value of bilingualism bonus", University of Liverpool, PhD Thesis. Liverpool.
- May, Stephen (2011) Language and Minority Rights: Ethnicity, Nationalism and the Politics of Language (2nd). London: Routledge.
- Mintrom, Michael and Claire Williams (2013) "Public policy debate and the rise of policy analysis", in Araral, Eduardo Jr., Scott Fritzen, Michael Howlett, M. Ramesh, and Xun Wu (eds.) *The Routledge handbook of public policy*, pp. 3-16. Abingdon: Routledge.
- Office of the Commissioner of Official Languages (2019) *Modernizing the Official Languages Act: The Commissioner of Official Languages' Recommendations for an Act that is Relevant, Dynamic and Strong.* Ottawa: Minister of Public Services and Procurement.
- Pandolfi, Elena Maria, Matteo Casoni, and Danilo Bruno (2016) *Le lingue in Svizzera*. Bellinzona: Osservatorio linguistico della Svizzera italiana.
- Patten, Alain (2009) "Survey article: The justification of minority language rights", *Journal of Political Philosophy*, 17 (1), pp. 102-128.
- Peled, Yael, Peter Ives, and Thomas Ricento (eds.) (2015) *Language policy and political theory. Building bridges, assessing breaches.* New York: Springer.
- Pennycook, Alastair (2006) "Postmodernism in language policy", *An Introduction to Language Policy. Theory and Methods*, pp. 60-77. Oxford: Blackwell.
- Perry, James L., Trent A. Engbers, and So Yun Jun (2009) "Back to the future? Performance-related pay, empirical reserach, and the perils of persistance", *Public Administration Review*, 69 (1), pp. 39-51.
- Peters, B. Guy and Frans K.M. van Nispen (eds.) (1998) *Public policy Instruments: Evaluating the tools of public administration*. Cheltenham: Edward Elgar.
- Phillipson, Robert (1992) Linguistic Imperialism. Oxford: Oxford Univ. Press.
- Pool, Jonathan (1991) "The official language problem", *American Political Science Review*, 25 (2), pp. 485 514.
- Réaume, Denise (1991) "The constitutional protection of language: Security or survival?", in Schneiderman, David (ed.) *Language and the State: The Law and Politics of Identity*, pp. 37–57. Cowansville: Éditions Yvon Blais.
- Ricento, Thomas (2000) "Historical and theoretical perspectives in language policy and planning", Journal of Sociolinguistics, 4 (2), pp. 196-213.
- Ricento, Thomas (2006) "Language policy: Theory and practice An introduction", in Ricento, Thomas (ed.) *An Introduction to Language Policy. Theory and Method*, pp. 10-23. Oxford: Blackwell.

- Robichaud, David and Helder De Schutter (2012) "Language is just a tool! On the instrumentalist approach to language", in Spolsky, Bernard (ed.) *The Cambridge Handbook of Language Policy*, pp. 124-145. Cambridge: Cambridge University Press.
- Rubin, Joan (1971) "Evaluation and language planning", in Rubin, Joan and Björn H. Jernudd (eds.) Can language be planned? Sociolinguistic theory and practice for developing nations, pp. 217-252. Honolulu: The University Press of Hawaii.
- Rubin, Joan and Björn H. Jernudd (1971) "Introduction: language planning as an element in modernisation", in Rubin, Joan and Björn H. Jernudd (eds.) *Can language be planned? Sociolinguistic theory and practice for developing nations*, pp. xiii-xxiv. Honolulu: The University Press of Hawaii.
- Safran, William (2015) "Reflections on States and the use of language policy", in Cardinal, Linda and Selma K. Sonntag (eds.) *State Traditions and Language Regimes*, pp. 253-268. Montreal: McGill-Queen's University Press.
- Safran, William and Jean Laponce (eds.) (2005) *Language, ethnic identity and the state*. Abington: Routledge.
- Schneider, Anne and Helen Ingram (1990) "Behavioral assumptions of policy tools", *The Journal of Politics*, 52 (2), pp. 510-529.
- Shorten, Andrew (2016) "Four conceptions of linguistic disadvantage", *Journal of Multilingual and Multicultural Development*.
- Sonntag, Selma K. (2003) *The local policy of global English. Case studies in linguistic globalisation*. Oxford: Lexington Books.
- Sonntag, Selma K. and Linda Cardinal (2015) "State traditions and language regimes: conceptualizing language policy choices", in Cardinal, Linda and Selma K. Sonntag (eds.) *State Traditions and Language Regimes*, pp. 3-28. Montreal: McGill-Queen's University Press.
- Spolsky, Bernard (ed.) (2012) *The Cambridge handbook of language policy*. Cambridge (UK): Cambridge University Press.
- Strassoldo, Marzio (2016) *Economia delle minoranze linguistiche. La tutela della diversità come valore.* Roma: Carocci.
- Thorburn, Thomas (1971) "Cost-benefit analysis in language planning", in Rubin, Joan and Björn H. Jernudd (eds.) *Can language be planned?*, pp. 253-262. Honolulu: The University Press of Hawaii.
- Tollefson, James W. (1991) *Planning languag. Planning inequality*. New York: Longman.
- Tollefson, James W. (2008) "Language planning in education", in May, Stephen and Nancy H. Hornberger (eds.) *Language Policy and Political Issues in Education*, pp. 3-14. New York: Springer.
- Tollefson, James William and Miguel Pérez Milans (2018) "Research and practice in language policy and planning", in Tollefson, James William and Miguel Pérez Milans (eds.) *The Oxford handbook of language policy and planning*. Oxford: Oxford University Press.
- Turgeon, Luc and Alain-G. Gagnon (2015) "Bureaucratic language regimes in multilingual states: Comparing Belgium and Canada", in Cardinal, Linda and Selma K. Sonntag (eds.) *State Traditions and Language Regimes*, pp. 119-136. Montreal: McGill-Queen's University Press.
- Turgeon, Luc and Alain G. Gagnon (2013) "The Politics of Representative Bureaucracy in Multilingual States: A Comparison of Belgium, Canada and Switzerland", *Regional & Federal Studies*, 23 (4), pp. 407-425.
- Van Parijs, Philippe (2011) *Linguistic justice for Europe and for the World*. Oxford: Oxford University Press.
- Weibel, Antoinette, Katja Rost, and Margit Osterloh (2010) "Pay for performance in the public sector—benefits and (hidden) costs", *Journal of Public Administration Research and Theory*, 20 (2), pp. 387–412.
- Wickström, Bengt-Arne (2016) "Language rights: A welfare-economics approach", in Ginsburgh, Victor and Shlomo Weber (eds.) *The Palgrave Handbook of Economics and Language*, pp. 659-688. Basingstoke: Palgrave.
- Wodak, Ruth (2006) "Linguistic analyses in language policies", in Ricento, Thomas (ed.) *An Introduction to Language Policy. Theory and Methods*, pp. 170-193. Oxford: Blackwell.

Appendix

Figure 1 Language policy instruments for promoting multilingualism in the Canadian Federal Administration

 Exhortation and moral suasion Information campaigns and brochures (e.g. "Linguistic Duality Day", "Effective practices for chairing bilingual meetings") Public Service Employee Survey Periodical reports and (self-)evaluations (e.g. Annual report of the Commissioner of Official Languages, Departmental performance report audits, Report cards, Maturity Model) 	Designation of bilingual regions Linguistic designation of positions (mandatory bilingual only under certain circumstances) Centralised language tests
 Bilingualism bonus Subsidising language courses for staff Subsidising professional training and development for staff in their language 	 Direct provision of language courses for staff Direct provision of professional training and development for staff in their language Bilingual IT tools Translation and interpreting Bilingual personal and central services (e.g. career counselling services) Definition of official Languages Governance (Treasury Board Secretariat, Official Languages Unit, Person responsible for Official Languages, Official Languages Champions and their Network, Office of the Commissioner of Official Languages)
Treasury	Organisation

Note: Procedural instruments in italics, substantive instruments in plain font. In bold, instruments that do not exist in Switzerland

Figure 2 Language policy instruments for promoting multilingualism in the Swiss Federal Administration

Nodality Switzerland Authority				
 Informative workshops BV PLUS (Data set on the staff of the federal administration) Systematic evaluation of staff's language skills (Ist-Zustand vs Soll-Zustand) Periodical reports and evaluations 	 Target ranges (including for management positions): German (68.5 - 70.5%), French (21.5 - 23.5%), Italian (6.5 - 8.5%), Romansh (0.5 - 1.0%) Priority to candidate from underrepresented linguistic community Universal language requirements 			
 Subsidising language courses/training/exchanges for staff Work discharge for language learning 	 Provision of language courses for staff Provision of professional training and development in different languages Trilingual IT tools Translation and interpreting Definition of official Languages Governance (e.g., Federal delegate for plurilingualism, Centre de formation de l'administration fédérale, Responsible for the promotion of multilingualism in the administrative units) 			
Treasury	Organisation			

Note: Procedural instruments in italics, substantive instruments in plain font. In bold, instruments that do not exist in Canada