The Coordination and Integration of Public

Policies: A Systematic Comparative Review

Philipp Trein (ptrein@berkeley.edu)

Iris Meyer (iris.meyer@unil.ch)

Martino Maggetti (martino.maggetti@unil.ch)

Contact address:

University of California, Berkeley

Institute of European Studies

Moses Hall

94720 Berkeley, CA

Philipp Trein is a Postdoctoral Researcher at the Institute of Political, Historical, and International Studies (IEPHI) of the University of Lausanne, Switzerland, and a Visiting Scholar at the University of California, Berkeley. His research interests cover comparative public policy, federalism and multilevel governance, and comparative politics. More information is available at: www.philipptrein.com.

Iris Meyer is PhD candidate at the Institute of Political, Historical and International Studies (IEPHI) of the University of Lausanne. She holds degrees in political science and public administration from the IEP Aix-en-Provence and the Universities of Freiburg and Speyer. Her current research focuses on the coordination and integration of public policies, with an empirical focus on housing policy in OECD countries.

Martino Maggetti is associate professor at the Institute of Political, Historical, and International Studies (IEPHI) of the University of Lausanne, Switzerland. His research interests are mainly oriented towards regulatory governance and comparative public policy. More information is available at: www.maggetti.org.

The Coordination and Integration of Public

Policies: A Systematic Comparative Review

May 2018

Abstract

This article undertakes a systematic comparative review of research on policy coordination and integration. Specifically, we compare studies focusing on "policy integration" with those using "joined-up-government" or "whole-of-government" as key analytical concepts. We discuss differences and similarities between the two groups of articles in terms of empirical and theoretical focus as well as research design. We conclude by suggesting that the existence of different strands of literature makes sense but more exchanges across them are both possible and welcome, so as to align organizational and policy related factors for the analysis of the relations between policy sectors.

Keywords: Policy integration, joined-up government, whole-of-government, comparative review, multiple correspondence analysis

1. Introduction

This paper undertakes a systematic comparative review of research on the coordination and integration of public policies. Specifically, we compare studies that refer to "policy integration" (PI) with those using "joined-up-government" (JUG) or "whole-of-government" (WOG) as key analytical concepts. Thereby, we examine the following research question: How do PI and JOG/WOG studies differ or resemble one another regarding the building blocks of their research approaches? In addition, we also discuss how researchers can deal with the similarities and differences between these concepts.

The coordination and integration of policies across sectors is of growing importance for both scholars and policymakers. New policy challenges that require to rearrange the boundaries of policy sectors emerge rapidly but public policies are embedded in institutions and organizational structures that adapt slowly and gradually to policy demands. Researchers use many different terms to refer to the issue of coordination and integration. Tosun and Lang (2017) point to as much as ten different analytical concepts used in the literature. For example, the concept of "policy integration" entails policy measures that bring together different policy goals or develop "encompassing common visions for the future" in different policy sectors (Braun 2008, 231). In the environmental policy literature, scholars use policy integration typically with reference to measures that integrate environmental concerns in existing policies, such as energy policy (Jordan and Lenschow 2010). Different examples are those concerning the integration of social policy or homeland security policy (Cejudo and Cynthia 2017). Other analytical concepts are applied to examine the institutional and organizational relations between various policy sectors, namely "joined-up-government" (6, 2004) and "whole-of-government" (Christensen and Lægreid 2007) among others.

The backdrop of such conceptual variety comes along with some problems, such as the fragmentation of empirical findings, their redundancy, and, more generally, a lack of cross-fertilization between different strands of research. Therefore, it is important and increasingly common in political science and public policy research to take stock and synthesize existing studies (e.g. Graham et al. 2013). Such an endeavor enables researchers to assemble and compare findings about the relationship between policy sectors that the different literature strands have generated independently from one another. In addition, it

promotes a dialogue between researchers and helps to move the field forward by enhancing the accumulation of knowledge over time and across different groups of studies (Maggetti 2015).

To achieve this goal, our contribution undertakes a systematic review¹ of two groups of studies. For this purpose, we selected a sample of peer-reviewed articles belonging to two sub-strands of the literature on policy coordination and integration: articles adopting PI as a conceptual framework, and articles that use the concepts of JUG/WOG. These two groups of papers represent important and distinct sub-fields within the broader literature on policy coordination and integration. In other words, we consider that PI and JUG/WOG can be seen as umbrella terms that largely subsume similar concepts used in other studies. At the same time, they differ in two crucial aspects. On the one hand, PI articles typically focus on the policy dimension whereas JUG/WOG articles mostly emphasize the organizational dimension of the relations between policy sectors (Tosun and Lang 2017).

Our systematic review examines and compares the building blocks (cf. Maggetti and Gilardi 2016) of research in the two groups, i.e., PI and JUG/WOG articles. For our purposes, building blocks of research are each paper's epistemology, policy research design, country research design, method of analysis, country focus, policy focus, and theoretical focus. We selected these building blocks as they correspond to basic dimensions of comparative policy analysis (Knoepfel et al. 2011; Tosun and Workman 2017). For each building block, we coded one or more variables to measure the concept. For example, we created one categorical variable for the method building block and several binary variables for the theoretical focus building block (cf. Section 3 of the paper and Table A1 in supplementary material document for more details). To assess the variance within and between the two article groups along these variables, we use multiple correspondence analysis (MCA)—a version of factor analysis designed for categorical variables—to detect similarities and differences, in a statistically inductive manner. Exadaktylos and Radaelli (2009) used a similar comparative strategy to review research design issues in the literature on Europeanization as compared to the larger field of European studies. This strategy allows us to explore systematic patterns and

⁻

¹ For the differences between meta-analysis, research synthesis and systematic review, and their respective objectives, read Cooper, Hedges, and Valentine 2009.

variations between these two streams of literature, which are interested in distinctive facets and manifestations of a larger underlying fundamental issue, namely the rearrangement of the boundaries of policy sectors, from the perspective of the integration and, respectively, the coordination of policies and public sector organizations.

Our results point to some systematic commonalities and differences between the two groups of articles. The findings display similarities between the article groups regarding an overall dominance of empirical articles, as well as a common theoretical core across groups, that is, a similar theoretical focus that is prevalent in both groups. However, the two groups of articles are overall very different concerning the choice of policy fields and countries that are examined. What are the implications of these results for research on policy coordination and integration? In the conclusion, we point out that there is room for further for combination, interaction and cross-fertilization between these two sub-strands of literature. At the same time, we conclude that it is also crucial to recognize the distinctive contribution of each of these approaches. Furthermore, our method could be used for systematic reviews in other subject areas of comparative public policy analysis.

2. Conceptual background

Against the background of the fragmentation of political authority and delegation to subnational and supranational as well as private actors, a new strand of research has emerged arguing that the governance of policy sectors is becoming more integrated and/or coordinated—or that it needs to become so. This composite literature points to the growing inter-sectoralization of policy-making and public policy instruments, and, correspondingly, to the increased integration and coordination across—or even merger of—different policy instruments and public sector organizations. Interestingly, this research builds on a variety of concepts that can be distinguished broadly in governance- and government-centered approaches (Tosun and Lang 2017, 4).

Amongst the governance-centered approaches, public policy scholars, who focus on policy processes and implementation, tend to look at these phenomena through the lenses of a "policy integration" perspective (cf. for instance Lafferty and Hovden 2003, Lenschow 2002, Nilsson 2005, Nilsson and Eckerberg 2007, Pierson and Leibfried 1995). For instance, policy

integration is considered essential to involve all actors in an integrated approach to develop and implement appropriate policy solutions to tackle the issue of environmental sustainability, such as those actors concerned with agriculture, energy or transport policies (Jordan and Lenschow 2010, Eckerberg and Nilsson 2013). In other words, policy integration typically aims at creating new instruments to connect existing sectors and create more effective and/or more legitimate policy solutions (Hou and Brewer 2010; Schaffrin et al. 2015, 263). Other examples for governance-centered approaches to the coordination and integration of policies are boundary-spanning policy regimes (Laffan and O'Mahoney 2007, Jochim and May 2010, May, Jochim, and Sapotichne 2011) and functional regulatory spaces (Varone et al. 2013).

Government-centered approaches to the study of the coordination and integration of policies have pointed to the institutional and organizational dimension. Organizational reforms to create or re-create an integrated branch of government were initially labeled "joined-up government" (6 2004, Bogdanor 2005, Cabinet Office 1999) and later known as "whole-of-government" (Chow, Humphrey, and Moll 2007, Christensen and Lægreid 2007). Other examples for government-centered approaches are comprehensive planning (Andrews et al. 2009, Roberts and Wargo 1994, Sanchirico et al. 2009), policy coherence (Keiser and Meier 1996, May et al. 2005, May, Sapotichne, and Workman 2006), and holistic government (6 2013, Dunleavy et al. 2006, Mawson and Hall 2013).

In the remainder of this article, we explore how these concepts display systematic similarities and differences in several dimensions (i.e. building blocks) of empirically-oriented analytical research. Therefore, we selected two groups of articles from this literature, one that focuses on policy (or governance-centered) approaches and a second one targeting organizational (or government-centered) approaches to the analysis of policy integration and/or coordination. We create two groups of articles from this literature, — policy integration (PI) on the one hand, and joined-up-government and whole-of-government on the other (JUG/WOG).

Before moving forward, it is worth reminding that we refer to the coordination and integration of public policies as two dimensions of the rearrangement of the boundaries of policy sectors, which are typically examined by the two above-mentioned streams of

literature. More specifically, the two terms embody a conceptual distinction as integration refers to the incorporation of some elements into a larger entity or a unified whole (as it the case for policy goals and instruments), whereas coordination is about the reorganization of previously separate processes or units to make them work together properly (it refers typically to administrative units). Coordination entails 'ideas about joint and holistic working' between sectors. Integration contains, in addition, 'integrated structures [and policies] to create common organizational elements and to merge professional practices and interventions' (6 et al. 2002, 33–34; Trein 2017, 747). Thus, integration captures the actual integration of policies, notably policy goals and policy instruments, which are the essence of the PI literature. Conversely, the relation between public sector organizations tends to be one of coordination. Indeed, mergers of organizations are expected to be rarer as substantial integration might come along with a reduction of personnel and other elements that are contested politically. Thus, the concept of coordination conveys what scholars of the JUG/WOG literature typically focus on.

3. Review protocol and analytical strategy

3.1 Sampling procedure

To determine the two groups of articles forming the basis of this systematic review, we followed an empirical as well as a theoretical approach. Firstly, we performed a search³ in the online database Web of Science, for all the concepts mentioned by Tosun and Lang (2017)⁴ in the topic or title of the articles, limited to articles in peer-reviewed journals published since 1985. Secondly, we decided to keep papers referring to "policy integration" on the one hand and "whole-of-government", or "joined-up government" on the other, as the articles in these groups appear mostly in the categories "political science" and "public administration" in the Web of Science database. Articles referring to other concepts, such as comprehensive planning and policy coherence, are distributed more evenly amongst the

² This distinction between coordination and integration differs from the one recently put forward by Cejudo and Michel (2017), but it is compatible with it. Indeed, coordination is similarly located at organizational level, while integration refers to policies oriented towards a "broader goal".

³ We carried out the search for articles on March 7, 2016.

⁴ These are: comprehensive planning, policy coherence, holistic government, joined-up government, whole of government, horizontal governance, holistic governance, policy integration, policy mainstreaming, and boundary-spanning policy regimes (Tosun and Lang 2017).

various article categories, such as "environmental studies" or "planning development." In doing so, we make sure that the journals from which we selected the articles operate against a public policy and political science background, and can plausibly assume that the selected papers are potentially similar regarding their empirical focus, research design, and theory. In contrast, had we compared papers from very different categories in the Web of Science database we would have run the risk of self-selecting articles that are very different from one another, and thus would bias our analysis towards an overemphasis of differences between the groups of papers. Thirdly, we took into consideration theoretical reasons for article selection. Notably, we made sure that the article groups corresponded to governance-centered approaches on the one hand (PI) and to government-centered approaches on the other (JUG/WOG) (Tosun and Lang 2017).

INSERT FIGURE 1 HERE

Our search yielded 592 results (360 on "policy integration" vs. 151 on "whole-of-government" and 81 on "joined-up government"). Over time, the number of articles published has increased continuously, in both groups. Our analysis does not identify any published journal articles referring to these keywords prior to 1990. Then, the introduction of joined-up government by the British government in 1997 prompted publications on the matter. In the following decade, both strands of literature have grown evenly. From 2009 onwards, the "policy integration" literature has gained momentum, while the number of publications per year on "joined-up government" and "whole-of-government" has relatively stagnated (Figure 1).

For the type of comparative analysis performed in this paper, we had to further limit the number of articles. We restricted the sample to a maximum of 120 articles, which we selected according to their thematic relevance⁵ and impact. We set this limit to keep the amount of papers manageable while focusing on the most relevant pieces. Similar to other review articles (e.g. Exadaktylos and Radaelli 2009), we included especially the most-cited articles. However, to reduce the sample bias towards older papers, we also took into

⁵ We excluded articles that draw on related yet different literature strands, such as science-policy integration, vertical policy integration (i.e., papers that only focus on the integration of policies between levels but not between sectors), or literature on donor coordination in international development cooperation.

account that articles published later in the observed time span were naturally less frequently cited than articles that came out earlier. Therefore, we included the same number of most-frequently-cited articles published before 2010 and after that year. Our final sample contains 76 PI articles and 44 JUG/WOG papers.

3.2 Dataset and method

In order to analyze our sample of articles, we coded a selection of variables that measure the different building blocks of each piece of research (cf. Maggetti and Gilardi 2016). For the purposes of this article, we define the following research building blocks: epistemology, policy research design, country research design, method of analysis, country focus, policy focus, and theoretical focus (Knoepfel et al. 2011; Tosun and Workman 2017). We coded either several binary or one categorical variables to operationalize each building block (Table 1; the decision between a binary or categorical variable is based on practical reasons; cf. our supplementary material concerning the details regarding the coding procedure and the summary statistics for each variable (Table A1)).

The binary variables measuring the theoretical focus of the articles reflect whether a paper employs a theory relevant to the political science or the public administration literature. We determined the theoretical elements by means of a thematic coding procedure (Thomas and Harden 2008, Krippendorff 2013). First, we developed themes – that are related to theories of the policy process and policy change (Weible and Sabatier 2017) – inductively to form the analytical categories for the theoretical focus, which we then used to code the other papers. Through iterative refinement (Wilson 2009), we coded the other articles according to these categories – and refined the categories, which implied recoding the first article group. We retained the following variables for the theoretical focus building block: *socio-economic factors, negative effects of domestic institutional and organizational factors, policy diffusion, learning, policy ideas, for the theoretical factors, policy diffusion, learning, policy ideas, policy ideas, policy diffusion, learning, policy ideas,*

_

⁶ Primarily, one of the authors coded the articles. A second author recoded a subsample of the papers to verify inter-coder reliability. Consequently, we adapted our coding procedure to make it more coherent and recoded the entire sample of articles for the variables affected by any change. We implemented the test for inter-coder reliability using Stata. A second author recoded 39 randomly selected articles (37,5% of the sample). Average agreement between coders across the variables was 88.45% (Min. 72.5%; Max. 98.08%), which is an acceptable level of agreement. Although this strategy does not necessarily help to increase validity, it improves the transparence and congruence of the coded variables (Exadaktylos and Radaelli 2009, 517, Krippendorff 2013).

actors/networks, politics, implementation, policy instruments and policy capacity. Two caveats are important to keep in mind. The variables do not measure the relationship between the various theoretical perspectives and the binary coding of the variables does not imply that the absence of a category measures its negation; that is, for example, policy capacity being "0" implies only that the article does not refer to policy capacity as an important theoretical focus, and not that the article discusses the negative effect of a lack of policy capacity for PI or JUG/WOG. The institutional variables are an exception because this is the only instance where we were able to code the directional effect of institutions on PI or JUG/WOG (cf. our supplementary material for more information).

To analyze our dataset, we use descriptive statistics and perform a multiple correspondence analysis (MCA). This is a technique similar to factor analysis for nominal categorical data, whose aim is to find groups according to a number of attributes (Greenacre and Blasius 2006). Pierre Bourdieu notably popularized this method in the book *The Distinction: A Social Critique of the Judgements of Taste* (Bourdieu 1984). The main goal is to detect (and represent) the underlying patterns and structures in a dataset (Le Roux and Rouanet 2010). The result is a symmetric matrix of all two-way cross tabulations between the categorical variables, which can be represented graphically as a map of a multi-dimensional space. This map offers the representation of general patterns of relationships among the categorical variables, allowing the researcher to identify those categories that cluster together (van Schendelen 2002). We implement an MCA using the statistical software Stata, notably its command "mca." This method suits particularly to the analysis in this article as it allows to detect regularities amongst the different building blocks of the research in PI and JUG/WOG articles that we are interested in.

4. Results

A first look at the descriptive statistics regarding the distribution of the variables for the various research building blocks across both groups of articles (PI vs. JUG/WOG) in our sample reveals both distinctive patterns and relevant overlaps (Table 1). Notably, there are disparities regarding the country focus, research design and, to some extent, the theoretical focus of the articles. To the contrary, the two groups display similar patterns regarding

methodological choices and, above all, their theoretical core (that is, key common elements of their theoretical focus).

INSERT TABLE 1 HERE

In the following subsections, we discuss in detail our main findings based on descriptive statistics and the results of the multiple correspondence analysis. A comment on the model fit, tables with the precise results of the MCA, and a discussion of the specification of the multiple correspondence analysis can be found in the supplementary material to this article. Table 1 shows how the variables are linked to each building block.

4.1 Conceptual studies vs. different types of empirical articles

Our findings show that there is no difference between PI and JUG/WOG articles regarding the prevalence of conceptual articles versus more empirically-oriented ones (Table 2, Figure 2). On the one hand, our sample comprises conceptual articles that have no reference to method, refer to a country in the "other" countries group, and do not contain any empirical analysis. Contrariwise, empirical contributions that correspond either to single case studies or to comparative country studies and use mostly qualitative methods are located between the two groups. In other words, as we would have expected intuitively, each group of articles contains some conceptual papers that define either PI or JUG/WOG from a general point of view. An example for such a paper in the JUG/WOG group is the article by Christensen and Lægreid (2007) that develops the concept of whole-of-government. Concerning PI, the most cited conceptual articles concern environmental policy integration, which frame the concept of policy integration from the perspective of a specific policy problem, namely environmental protection, such as the paper by Oberthür (2009). Only more recently have contributions extended the discussion on policy integration to public policy analysis more generally (Candel and Biesbroek 2016). The presence of a distinctive group of conceptual papers is not surprising in a relatively young research area. On the other hand, empirical studies mostly use a case study approach. They open an opportunity for further research that synthesizes existing studies and develops encompassing theoretical insights from the case study material.

INSERT FIGURE 2 HERE

In addition, the results of the MCA suggest that among the empirical studies in the sample, JUG/WOG articles tend to focus on administrative reforms only, whereas PI papers also include policy-related elements (Figure 2, Table A4 in the supplementary material document). For instance, the study on the limits of joined-up-government by Davies (2008) or the comparative work by Sang et al. concerning rural data infrastructure (2005) mainly deal with administrative reforms. Conversely, PI papers have a tendency to analyze the policy dimension more explicitly when looking at the horizontal relations between policy fields. For instance, the comparative research on climate policy integration by Casado-Asensio and Steurer (2016) focuses explicitly on the adoption of policy programs instead of administrative reforms. This finding underlines the point made by previous review articles (e.g. Tosun and Lang 2017) that JUG/WOG and PI have a different focus on the analysis of a wider research problem, i.e. the relationship between policy sectors. Particularly, our results empirically confirm that JUG/WOG research focuses on the administrative and organizational dimension of public sector reforms, whereas PI articles focus on the policy dimension and give less importance to the organizational aspect.

4.2 Regulative vs. (re)distributive policies

Concerning the types of policies referred to by the articles under investigation, our results indicate that PI papers and JUG/WOG papers tend to focus on different types of policy instruments. On the one hand, PI papers rather deal with sectors in which regulative instruments play an important role for the integration of different sectors and subsystems, such as environmental, climate, or energy policies (Figure 3, Table A4 in the supplementary material document). As an example, Hull's study (2008) analyses sustainable solutions in transport policy, focusing on the integration of environmental protection, public transport, walking and cycling, air quality, land use, and public health.

INSERT FIGURE 3 HERE

On the other hand, we find that JUG/WOG articles tend to focus on policy sectors that have a strong (re)distributive component. These analyses concern for instance different subfields of social policy, which includes predominantly employment-related policy integration, but also health and education policy (Figure 3, Table A4 in the supplementary material

document) as well as policies designed to target specific groups. For instance, Signoretta and Craglia (2002) analyze a joined-up government strategy for addressing the needs of children in the city of Sheffield, UK. The authors show how the elaboration of a children's plan included a wide range of administrative units, among which the Police, the Departments of Social Services, Education, the Young Children's Service, Community Health Sheffield, Sheffield Health, Authority, Central Policy Unit, and the Department of Housing. The Department of Social Services took the leadership in this reform of administrative coordination (Signoretta and Craglia 2002, 66).

This difference in the policy focus of the two groups of articles leads us to suggest that the nature of the policy instruments under investigation determines a specific form of integration. In the case of regulative policies, bridging different policy sectors can be done effectively by using policy instruments only, such as legal frameworks and policy strategies. On the other hand, in case of redistributive policies, the relationship between policy sectors entails a strong bureaucratic component because funds and their use need to be coordinated by public sector organizations. In regulative policies, the financial aspect is less important. Further empirical analysis is needed to test this hypothesis about the different forms of integration and coordination that regulative and distributive policy instruments call for respectively.

4.3 Continental Europe and EU vs. Anglo-Saxon and Southern European countries

The results further reveal systematic similarities and differences between the samples of countries examined in the PI and the JUG/WOG groups of articles. Notably, PI papers tend to focus on continental European countries and on the political system of the EU, while also mostly taking a cross-country comparative approach (Figure 2, Table A4 in the supplementary material document). For instance, Schout and Jordan's (2005) empirical study of environmental policy integration at the European level reveals the weaknesses of network governance for achieving good coordination. On the other hand, JUG/WOG articles tend to deal with different country samples, among which Anglo-Saxon and Southern European countries figure most prominently (Figure 2, Table A4 in the supplementary material document). For instance, Ross et al. (2011) analyze the introduction of a whole-of-government approach for a strategy to prevent family violence in the Australian state of

Victoria, focusing on the establishment of administrative structures at different levels of government. The article by Lewis (2011) on the *Central Policy Review Staff* provides us with a more historic example of administrative coordination in the UK.

Some clusters of countries, however, are equally important for both PI and JUG/WOG articles. Scandinavian countries, for instance, are located in between the groups, according to the multiple correspondence analysis. Indeed, there is no substantial difference regarding their operationalization in either PI or JUG/WOG papers (Figure 2, Table A4 in the supplementary material document). For instance, Christensen and colleagues (2007) analyze coordination in the Norwegian welfare and employment administration from a whole-of-government perspective. On the other hand, Nilsson (2005) analyzes the horizontal coordination regarding environmental policy integration in Sweden from the perspective of policy integration.

These differences between the two groups on that dimension can be explained as follows. The prominence of EU studies in the PI group may derive from the fact that the European Union engages above all in regulatory policymaking, which is typically examined with a policy integration approach, as mentioned above. The finding that JUG/WOG articles rather study Anglo-Saxon, Southern European or Scandinavian countries is potentially related to the structure of the state. These countries (except for Canada and the U.S.) tend to build on strong central states and national governments should therefore possess stronger steering capacities to coordinate public sector organizations, which could explain that administrative forms of coordination prevail in these countries. National governments in Scandinavian and Southern European countries have large discretion over the public sector in combination with developed and tax-financed welfare states, which leaves room for JUG/WOG reforms. Also, NPM reforms were implemented early and extensively in Anglo-Saxon countries and later created a high demand for "post-NPM" coordination.

4.4 Theoretical focus: commonalities and differences between groups

Concerning the theoretical focus applied in the reviewed articles, our findings are particularly interesting. They show that there is, on the one hand, a common theoretical

core of PI and JUG/WOG research, while, on the other, there are also systematic theoretical differences between the two groups.

INSERT FIGURE 4 HERE

The two groups of articles share a common theoretical core in such as they build on theories about the role of institutions, actors and politics, policy implementation, and policy capacity (Figure 4). Concerning the institutional dimension, articles in the sample refer to positive or negative impacts of institutions on coordination arrangements in both the PI and the JUG/WOG literature (Table 1).⁷ For instance, even in a centralized government, such as in the UK, pre-existing institutional differences between various departments complicate successful implementation of joined-up government arrangements (Kavanagh and Richards 2001, 17). A very similar argument is put forward in PI papers. For instance, Giessen and Krott's analysis of PI in the forestry sector shows that integrative programs designed at higher levels of government are often incompatible with the actual policy implementation units and the subnational and local levels of government (Giessen and Krott 2008, 97). Respectively, in both groups we find papers that point out that institutional factors can have positive effects. For instance, the presence of an institutional core is important to establish policy integration successfully, such as in the food policy sector (Ugland and Veggeland 2006, 613).

Next to institutional elements, PI and JUG/WOG articles share additional theoretically relevant elements, for example regarding politics, implementation, and policy capacity. The above-cited article by Kavanagh and Richards does not only refer to institutional elements regarding joined-up government but also to the effect of politics. The paper points out that considerable differences exist in how joined-up government worked under New Labor and the Conservative Major governments due to political conflicts within political parties (Kavanagh and Richards 2001, 16-17). Furthermore, theoretical approaches concerned with policy implementation and policy capacity appear approximately with the same frequency across groups. For instance, a paper by Weber and Driessen provides us with an analysis of

⁷ Table reports the count for the different variables in both groups without the weight that we applied in Figure 4. Thus, the share of references to negative institutional factors is higher in the PI group.

the implementation of noise and spatial planning in the Dutch context (Weber and Driessen 2010, 1121). Hughes et al. illustrate the link of policy capacity, implementation and whole-of-government in Australia (Hughes et al. 2015).

In addition to these similarities, we find systematic differences concerning the theoretical focus used in the two groups of articles. Particularly, our results reveal that PI articles tend to concentrate more on the role of diffusion, learning, and policy ideas, while also adopting a policy instruments perspective, whereas this is not the case of JUG/WOG papers (Figure 4). For instance, the paper by Lafferty and Hovden, which defined environmental policy integration as a conceptual framework, implicitly refers to the role of the United Nations Conference for Environment and Development and the EU for the diffusion of the ideas of environmental policy integration (Lafferty and Hovden 2003, 4). Similar to diffusion and related theoretical frameworks, researchers have used the notion of policy instruments especially in articles on policy integration. As an example, the research by Urwin and Jordan on public support for climate change adaptation refers explicitly to policy instruments as a distinct analytical category for policy integration (Urwin and Jordan 2008, 183). Contrariwise, JUG/WOG papers tend to refer relatively less to diffusion, learning, ideas, and policy instruments. The theoretical focus of these papers privilege institutional elements, politics, implementation, and policy capacity. For instance, Lægreid and Rykkja (2015) highlight the importance of an organizational culture that favors the finding of joint solutions and coordination in a joined-up organizational setting. From an implementation perspective, Carey et al. (2015) show that a "supportive architecture" and consistency of instruments, processes and goals are decisive for achieving joined-up government.

The differences and similarities between the two groups of articles regarding their theoretical focus uphold the assumption that PI articles mainly address the policy dimension whereas JUG/WOG papers point (also) to the administrative and organizational dimension of policy sector rearrangement. Indeed, PI studies use theories and concepts that are particularly well-suited to examine policy instruments, such as learning, ideas, diffusion, and instrumental design, whereas approaches suitable for organizational analysis are more frequent in the JUG/WOG group. On the other hand, it is remarkable to observe that both groups share a theoretical core that reveals the institutional foundations of the analyses

centered on the reconfiguration of the boundaries of policy sectors. As a consequence, further research on the relations between policy sectors should regard at both dimensions as important and at the same time could use a more explicit institutional perspective to connect and articulate these two dimensions.

5. Conclusions

This article undertakes a systematic review of the literature on the coordination and integration of public policies by comparing articles referring to policy integration (PI) with papers looking at joined-up government and/or whole-of-government (JUG/WOG). Precisely, we tackled the following research question: How do PI and JOG/WOG studies differ or resemble one another regarding the building blocks of their research approaches? In the following, we will summarize the results and discuss how researchers can deal with the similarities and differences between these concepts.

Taken together, our results point to some systematic commonalities and differences between the two groups of articles. Regarding similarities, we find that most of the papers correspond to single policy and/or country studies using qualitative methods. In both samples, there is a clear difference between a set of conceptual papers without an explicit focus on methods, as opposed to the larger group of empirical articles. Furthermore - and importantly, both groups have a common theoretical core, i.e. similar theoretical focuses, that refers to institutional aspects, actor-level and politics-related elements, the question of policy implementation, and policy capacity. Nevertheless, there are some important dissimilarities in the focus of PI and JUG/WOG articles: the concept of policy integration is mostly used for analyzing environmental and climate policy and is rather applied in studies on continental European countries and the EU as a whole; JUG/WOG articles, however, tend to examine social, health, and education policies, as well as general reforms of the administration and organizational coordination, mostly in Anglo-Saxon and Southern European countries. What is more, there are some differences regarding the theoretical focus of the papers. PI articles mainly focus on diffusion, ideational approaches, and policy learning as well as policy instruments, whereas these approaches are much less prominent in the JUG/WOG group.

Overall, our analysis shows that, in the last ten years, we witness a considerable increase in the academic attention towards the coordination and integration of policies, mostly under the PI label but also framed in JUG/WOG terms, although to a lesser extent (Figure 1). This trend goes along with heterogeneity in theories, designs, and empirical focus between the two strands of research. This heterogeneity is probably related to historical and contingent factors, such as specific country-related scientific trajectories and research group programs. This is not surprising in comparative political science (Maggetti 2015), especially for a field that is still in its infancy, and similar situations can be found in more mature fields of research, such as policy diffusion studies (Maggetti and Gilardi 2016). At the same time, there are some systematic similarities between the two groups of articles, which suggest that there is potential for cross-fertilization and tighter connection between the two approaches.

What are the main implications of our systematic review and how do we move on from here? Firstly, since both groups - PI and JUG/WOG - share a common theoretical core, specifically related to their institutionalist foundations, there is potential for researchers to consider both policy and administrative/organizational elements for the analysis of the relations between policy sectors. However, since there are also significant differences, we suggest to articulate these the two dimensions and to explore their relationships by keeping them analytically separated, instead of conflating them in a single measure that ranks them according to the degree of coordination/integration (Braun 2008). Such a strategy would allow researchers to raise a coherent set of research questions that span over the policy and organizational dimensions. Therefore, it would be possible to combine policy-oriented and administration/organization-oriented approaches, for instance by analyzing in-depth the interplay between policy learning and organizational dynamics with respect to the diffusion of policy/administrative instruments. This would imply, for example, to formulate research questions that address explicitly the policy and strategical as well as the organizational dimensions of the interplay between policy sectors (e.g. Cejudo and Michel 2017), or the coevolution (Trein 2017) of policy integration and organizational coordination, which allows to explore the temporality and hierarchy of the two dimensions along reforms that rearranged the relationship of policy sectors. Such a research strategy would combine

insights from the different sub-strands of research and relate to concerns of design and implementation of integrated policies.

Secondly, there is room for the systematic comparison and even the aggregation of the findings from case studies – not necessarily into new analytical concepts – but regarding the drivers and consequences of the coordination and integration of policy sectors. This could be done by the means of meta-analyses or comparative research projects that bridge different countries and policy fields. More specifically, to promote the accumulation of knowledge, future research could take over meta-analytic techniques to adjoin, synthesize and distill the findings from the large wealth of case studies that have been and hopefully continue to be produced in this literature. At the same time, there is room for comparative empirical research on the relationship between policy sectors (e.g. Trein 2015, 2017). In addition, future research should resort to statistical analysis to complement qualitative research as it would aim at testing different explanatory factors emerging from case studies; in turn, subsequent case studies would help improving the interpretation of statistical findings. For instance, future research could compare integration and coordination of policies within larger policy fields, such as environmental and employment policy, across a sample of comparable countries from different geographical areas and political traditions, for example OECD members. Such an approach would build on and complement existing case studies with cross-sector and cross-country comparative research to advance our understanding of the integration and coordination of policies and produce more generalizable knowledge. This macro-comparative research strategy would build on existing work and feed its findings back to more specific and case-oriented analyses.

These two suggestions to move forward the research agenda on policy integration and coordination would allow the different strands of literature – and the scholarly communities related to them – to learn from one another. In other words, these considerations could enable a potentially fruitful exchange between PI and JUG/WOG approaches, while at the same time making the case for the importance of keeping them distinct and pointing to their respective contributions. Hopefully, this common endeavor could foster an even more productive analysis of "new" complex or wicked policy problems, such as the migration crisis, from a broader perspective articulating policy and organizational elements for the

analysis of the reconfiguration of policy sectors. Clarifying the connection between the policy and organizational elements of cross-sectoral policymaking is not only interesting from a research-oriented perspective but has also very practical implications. The elaboration of integrated policy strategies necessarily requires their implementation through the coordination of public sector organizations. This further step might prove to be complicated, as the implementation literature has since long shown (McLaughlin 1987; Matland 1995). More systematic cross-fertilization between policy and administrative research could facilitate this endeavor, representing thus a crucial milestone towards the development of a better policy practice.

6. References

- 6, Perri. 2004. "Joined-Up Government in the Western World in Comparative Perspective: A Preliminary Literature Review and Exploration." *Journal of Public Administration Research and Theory* 14 (1):103-138. doi: 10.1093/jopart/muh006.
- 6, Perri. 2013. "Housing Policy in the Risk Archipelago: Toward Anticipatory and Holistic Government." *Housing Studies* 13 (3):347-375. doi: doi: 10.1080/02673039883326.
- Andrews, Rhys, George A. Boyne, Jennifer Law, and Richard M. Walker. 2009. "Centralization, Organizational Strategy, and Public Service Performance." *Journal of Public Administration Research and Theory* 19 (1):57-80.
- Bogdanor, Vernor, ed. 2005. *Joined-Up Government*. Oxford, New York: Oxford University Press.
- Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgement of Tast*. Cambridge: Harvard University Press.
- Braun, Dietmar. 2008. "Organising the Political Coordination of Knowledge and Innovation Policies." *Science and Public Policy* 35 (4):227-39.
- Cabinet Office. 1999. Modernising government. Vol. Cm 4310. London: HMSO.
- Candel, Jeroen JL, and Robbert Biesbroek. 2016. "Toward a Processual Understanding of Policy Integration." *Policy Sciences*: 49 (3):211-231.
- Casado-Asensio, Juan, and Reinhard Steurer. 2016. "Bookkeeping rather than Climate Policy Making: National Mitigation Strategies in Western Europe." *Climate Policy* 16 (1):88-108.
- Cejudo, Guillermo M, and Cynthia L Michel. 2017. "Addressing fragmented government action: Coordination, coherence, and integration." *Policy Sciences* 50:745–67.
- Chow, Danny S. L., Christopher Humphrey, and Jodie Moll. 2007. "Developing Whole of Government Accounting in the UK: Grand Claims, Practical Complexities and suggested future Research Agenda." *Financial Accountability & Management* 23 (1):27-54.
- Christensen, Tom, Anne Lise Fimreite, and Per Lægreid. 2007. "Reform of the Employment and Welfare Administrations the Challenges of Co-coordinating Diverse Public Organizations." *International Review of Administrative Sciences* 73 (3):389-408.
- Christensen, Tom, and Per Lægreid. 2007. "The Whole-of-Government Approach to Public Sector Reform." *Public Administration Review* 67 (6):1059-1066.
- Cooper, Harris, Larry V Hedges, and Jeffrey C Valentine. 2009. *The Handbook of Research Synthesis and Meta-analysis*. New York: Russell Sage Foundation.
- Davies, Jonathan S. 2009. "The Limits of Joined-Up-Government: Towards a Political Analysis." *Public Administration* 87 (1):80-96.
- Dunleavy, Patrick, Helen Margetts, Simon Bastow, and Jane Tinkler. 2006. "New Public Management is Dead—Long Live Digital-era Governance." *Journal of Public Administration Research and Theory* 16 (3):467-494.
- Eckerberg, Katarina, and Mans Nilsson. 2013. *Environmental Policy Integration in Practice:*Shaping Institutions for Learning. London: Routledge.
- Exadaktylos, Theofanis, and Claudio M Radaelli. 2009. "Research Design in European Studies: The Case of Europeanization." *JCMS: Journal of Common Market Studies* 47 (3):507-530.

- Fabbri, Daniele, and Chiara Monfardini. 2009. "Rationing the public provision of healthcare in the presence of private supplements: Evidence from the Italian NHS." *Journal of Health Economics* 28 (2):290-304.
- Giessen, Lukas, and Max Krott. 2009. "Forestry Joining Integrated Programmes? A Question of Willingness, Ability and Opportunities." *Allgemeine Forst- und Jagdzeitung* 180 (5-6):94-100.
- Greenacre, Michael, and Jörg Blasius. 2006. *Multiple Correspondence Analysis and Related Methods*. Boca Raton: CRC Press.
- Graham, Erin R, Charles R Shipan, and Craig Volden. 2013. "The diffusion of policy diffusion research in political science." *British Journal of Political Science* 43 (3):673-701.
- Hou, Yilin, and Gene A Brewer. 2010. "Substitution and Supplementation Between Co-Functional Policy Instruments: Evidence from State Budget Stabilization Practices." Public Administration Review 70 (6):914-24.
- Hughes, A, D Gleeson, D Legge, and V Lin. 2015. "Governance and Policy Capacity in Health Development and implementation in Australia." *Policy and Society* 34 (3):229-45.
- Hull, Angela. 2008. "Policy Integration: What will it take to achieve more Sustainable Transport Solutions in Cities?" *Transport Policy* 15 (2):94-103.
- Jochim, Ashley E., and Peter J. May. 2010. "Beyond Subsystems: Policy Regimes and Governance." *Policy Studies Journal* 38 (2):303-326.
- Jordan, Andrew, and Andrea Lenschow. 2010. "Environmental policy integration: a state of the art review." *Environmental Policy and Governance* 20 (3):147-158.
- Kavanagh, Dennis, and David Richards. 2001. "Departmentalism and Joined-up Government." *Parliamentary Affairs* 54 (1):1-18.
- Keiser, Lael R, and Kenneth J Meier. 1996. "Policy Design, Bureaucratic Incentives, and Public Management: The Case of Child Support Enforcement." *Journal of Public Administration Research and Theory* 6 (3):337-364.
- Knoepfel, Peter, Corinne Larrue, and Frédéric Varone. 2011. *Public Policy Analysis*. Bristol: The University of Bristol: The Policy Press.
- Krippendorff, Klaus. 2013. *Content Analysis: An Introduction to its Methodology*. Los Angeles, London, New Dehli, Singapur, Washingto D.C.: Sage.
- Laffan, Brigid, and Jane O'Mahony. 2007. "Managing Europe from an Irish Perspective: Critical Junctures and the increasing Formalization of the Core Executive in Ireland." *Public Administration* 85 (1):167-188.
- Lafferty, William, and Eivind Hovden. 2003. "Environmental Policy Integration: Towards an Analytical Framework." *Environmental politics* 12 (3):1-22.
- Lægreid, Per, and Lise H. Rykkja. 'Hybrid Collaborative Arrangements: The Welfare Administration in Norway between Hierarchy and Network'. *Public Management Review* 17, no. 7 (2015): 960–80. doi:10.1080/14719037.2015.1029349.
- Le Roux, Brigitte, and Henry Rouanet. 2010. *Multiple Correspondence Analysis*. Los Angeles: Sage.
- Lenschow, Andrea. 2002. Environmental Policy Integration: Greening Sectoral Policies in Europe. London: Earthscan.
- Lewis, Jane. 2011. "The Search for Coordination: The Case of the Central Policy Review Staff and Social Policy Planning, 1971-77." *Social Policy & Administration* 45 (7):770-87.
- Maggetti, Martino. 2015. "Knowledge Progress in Comparative Political Science." In *Comparative Politics: Theoretical and Methodological Challenges*, edited by Dietmar Braun and Martino Maggetti, 154-185. Cheltenham: Edward Elgar.

- Maggetti, Martino, and Fabrizio Gilardi. 2016. "Problems (and Solutions) in the Measurement of Policy Diffusion Mechanisms." *Journal of Public Policy* 36 (1):87-107.
- Matland, Richard E. 1995. "Synthesizing the Implementation Literature: The Ambiguity-conflict Model of Policy Implementation." Journal of Public Administration Research and Theory 5 (2):145-74.
- Mawson, John, and Stephen Hall. 2013. "Joining It Up Locally? Area Regeneration and Holistic Government in England." *Regional Studies* 34 (1):67-74.
- May, Peter J., Joshua Sapotichne, and Samuel Workman. 2006. "Policy Coherence and Policy Domains." *Policy Studies Journal* 34 (3):381-403.
- May, Peter J., Ashley E. Jochim, and Joshua Sapotichne. 2011. "Constructing Homeland Security: An Anemic Policy Regime." *Policy Studies Journal* 39 (2):285-307.
- May, Peter J., Bryan D. Jones, Betsi E. Beem, Emily A. Neff-Sharum, and Melissa K. Poague. 2005. "Policy Coherence and Component-Driven Policymaking: Arctic Policy in Canada and the United States." *Policy Studies Journal* 33 (1):37-63.
- McLaughlin, Milbrey W. 1987. "Learning from Experience: Lessons from Policy Implementation." *Educational Evaluation and Policy Analysis* 9 (2):171-8.
- Nilsson, Måns. 2005. "Learning, Frames, and Environmental Policy Integration: The Case of Swedish Energy Policy." *Environment and Planning C: Government and Policy* 23 (2):207-226.
- Nilsson, Måns, and Katarina Eckerberg. 2007. *Environmental Policy Integration in Practice:*Shaping Institutions for Learning. London: Earthscan.
- Oberthür, Sebastian. 2009. "Interplay Management: Enhancing Environmental Policy Integration among International Institutions." *International Environmental Agreements: Politics, Law and Economics* 9 (4):371-91.
- Pierson, Paul, and Stephan Leibfried. 1995. "The Dynamics of Social Policy Integration." European Social Policy:432-465.
- Roberts, Nancy C, and Linda Wargo. 1994. "The Dilemma of Planning in Large-Scale Public Organizations: The Case of the United States Navy." *Journal of Public Administration Research and Theory* 4 (4):469-491.
- Ross, Stuart, Marion Frere, Lucy Healey, and Cathy Humphreys. 2011. "A Whole of Government Strategy for Family Violence Reform." *Australian Journal of Public Administration* 70 (2):131-42.
- Sanchirico, James N, Josh Eagle, Steve Palumbi, and Jr Thompson, Barton H. 2009. "Comprehensive planning, dominant-use zones, and user rights: a new area in ocean governance." *Bulletin of Marine Sciences* (2):273-285.
- Sang, N, RV Birnie, A Geddes, NG Bayfield, JL Midgley, DM Shucksmith, and D Elston. 2005. "Improving the Rural Data Infrastructure: the Problem of Addressable Spatial Units in a Rural Context." *Land Use Policy* 22 (2):175-86.
- Schaffrin, André, Sebastian Sewerin, and Sibylle Seubert. 2015. "Toward a comparative measure of climate policy output." *Policy Studies Journal* 43 (2):257-82.
- Schout, Adriaan, and Andrew Jordan. 2005. "Coordinated European Governance: Self-Organizing or Centrally Steered?" *Public Administration* 83 (1): 201–20.
- Signoretta, Paola, and Massimo Craglia. 2002. "Joined-up Government in Practice: A Case Study of Children's Needs in Sheffield." *Local Government Studies* 28 (1):59-76.
- Thomas, James, and Angela Harden. 2008. "Methods for the Thematic Synthesis of Qualitative Research in Systematic Reviews." *BMC Medical Research Methodology* 8 (1):1.

- Tosun, Jale, and Achim Lang. 2017. "Policy Integration: Mapping the Different Concepts." *Policy Studies* 38 (6):553-70.
- Tosun, Jale, and Samuel Workman. 2017. "Struggle and Triumph in fusing Policy Process and Comparative Research." In *Theories of the policy process*, ed. C. M. Weible and P. Sabatier. Boulder, CO: Westview Press, 329-62.
- Trein, Philipp. 2017. "Coevolution of Policy Sectors: A Comparative Analysis of Health Care and Public Health." *Public Administration* 95 (3): 744-58.
- Trein, Philipp. 2015. "Co-evolution of Policy Sectors: Health Care and Public Health in Five Countries." Ph.D., Department of Political, Historical and International Studies, University of Lausanne.
- Tufféry, Stéphane. 2011. *Data Mining and Statistics for Decision Making*. Chichester: John Wiley & Sons.
- Ugland, Trygve, and Frode Veggeland. 2006. "Experiments in Food Safety Policy Integration in the European Union." *JCMS: Journal of Common Market Studies* 44 (3):607-24.
- van Schendelen, Rinus. 2002. *Machiavelli in Brussels: The Art of Lobbying the EU*. Amsterdam: Amsterdam University Press.
- Varone, Frédéric, Stéphane Nahrath, David Aubin, and Jean-David Gerber. 2013. "Functional Regulatory Spaces." *Policy Sciences* 46 (4):311-33.
- Weber, Miriam, and Peter PJ Driessen. 2010. "Environmental Policy Integration: the Role of Policy Windows in the Integration of Noise and Spatial Planning." *Environment and Planning C: Government and Policy* 28 (6):1120-34.
- Weible, Christopher M., and Paul Sabatier, eds. 2017. *Theories of the Policy Process*. Boulder, CO: Westview Press.
- Urwin, Kate, and Andrew Jordan. 2008. "Does Public Policy Support or Undermine Climate Change Adaptation? Exploring Policy Interplay across Different Scales of Governance." *Global Environmental Change* 18 (1):180-91.

Graphs and tables

Figure 1: Publications of articles per year

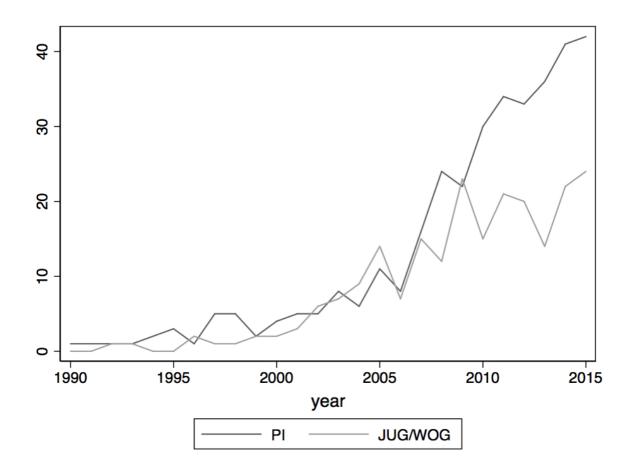


Table 1: Distribution of variables across groups (in per cent of items in article group (PI or JUG/WOG))⁸

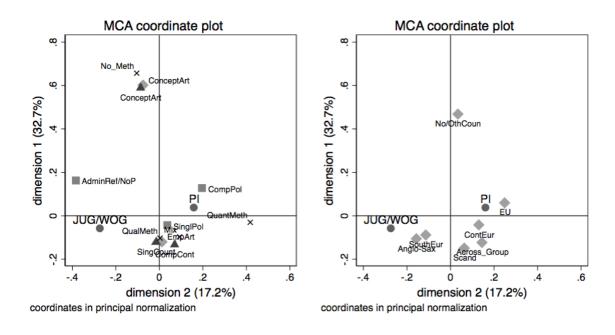
	PI	JUG/WOG		PI	JUG/WOG
Country focus			Policy focus		
Anglo-Sax.	22.4	65.9	Econ. /Fin. Pol.	6.6	15.9
Scand.	11.8	13.6	Soc./Heal. /Ed. Pol.	15.8	52.3
Cont. Eur.	10.5	4.5	Env. Pol.	69.7	9.1
South. Eur.	2.6	2.3	Clim. Pol.	23.7	2.3
EU	11.8	0	Energy Pol.	10.5	4.5
No/Other	22.3	9.1	Infra./Land. Pol.	47.4	11.4
Across Groups	18.4	4.5	Food/Agri. Pol.	11.8	9.1

 $^{^{\}rm 8}$ The sample consists of 76 PI and 44 JUG/WOG articles.

_

Policy research design			Techn. Pol.	5.3	2.3
Admin. Ref./No. Pol.	0	36.3	Theoretical focus		
Single Pol.	82.9	63.6	SocEcon.	6.6	6.8
Comp. Pol.	17.1	0	Neg. Eff. Inst.	88.2	79.5
Country research design			Pos. Eff. Inst.	11.8	20.5
Sing. Count.	43.4	61.4	Diffusion	13.2	2.3
Comp. Count.	38.1	20.5	Learning	15.8	11.4
Concept. Art.	18.4	18.1	Pol. Ideas	14.5	9.1
Method			Actor	22.4	27.3
Qual. Meth.	76.3	81.8	Politics	9.2	18.2
Quant. Meth.	1.3	0	Implem.	23.7	36.4
Mixed Meth.	7.9	4.5	Pol. Instrum.	14.5	4.5
No Meth.	14.4	13.6	Pol. Capac.	10.5	18.2

Figure 2: Dimensions 1 and 2 of the MCA showing methods, research design, and countries⁹



⁹ To continue with the analysis, in the following we focus only on the variables that contribute at least 1% to the explanation of the inertia within the respective dimension.

Figure 3: Dimensions 1 and 2 of the MCA showing policy fields, countries, and theoretical approaches

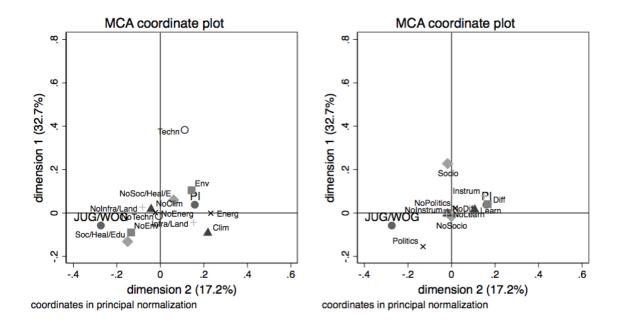
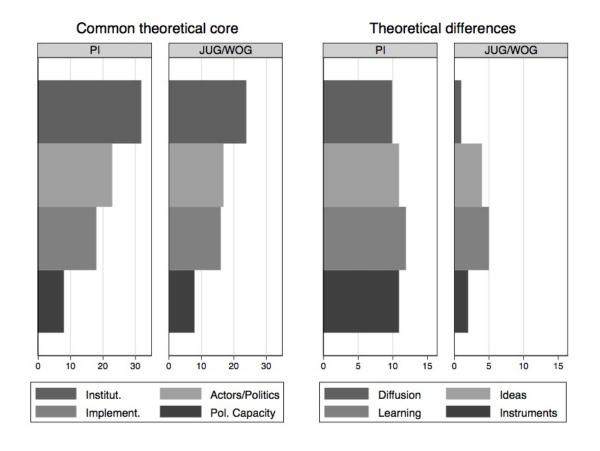


Figure 4: Theoretical similarities and differences between groups (summary statistics)¹⁰



¹⁰ The graphs show the count for each of the theoretical categories per article group. To take into consideration the different sample sizes for PI and JUG/WOG articles we inserted a weight when creating Figure 4. Notably, we weighed the articles in the second group (JUG/WOG) by 1.73, which reflects the relationship of 76 PI to 44 JUG/WOG articles in the sample.