Putting Philosophy of Political Science on the Map

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Abstract:

Contrary to economics or history, for example, there does not exist an organized field dedicated to the philosophy of political science. Given that the philosophical issues raised by political science research are just as pressing and vibrant as those raised in these more organized fields, fostering a field that labels itself *Philosophy of Political Science (PoPS)* is important. PoPS is advanced here as a fruitful meeting place where both philosophers and practicing political scientists contribute and discuss—with philosophical discussions that are close to and informed by actual developments in political science, making philosophy of science continuous with the sciences in line with contemporary naturalist philosophy of science. The topics scrutinized in the different chapters of the Handbook will figure prominently in PoPS, as we lay out in this chapter.

Keywords:

political science, philosophy of science, philosophy of political science, PoPS, philosophy of science in practice, naturalist philosophy, political methodology

1. Why Philosophy of Political Science?

Over the last several decades, research in political science has expanded enormously, leading to much improved statistical testing (abetted by vast increases in computational technologies), innovative methods for dealing with small-N data, sophisticated formal models, experimental work on political behavior, biological and psychological perspectives on voting behavior, identification of exposed biases in political analysis, and much more.

This rich body of research raises numerous philosophical issues. However, these philosophy of science issues raised by political science have only gotten scattered and little organized attention; there is no field that labels itself *Philosophy of Political Science*. This is in contrast to, for example, economics which has two journals (*Journal of Economic Methodology* and *Economics & Philosophy*) and an international organization (*International Network for Economic Methodology*). The general philosophy

of social science also has a solid institutional embedding with the journal *Philosophy of the Social Sciences* (Sage) and several formal groups (like the *Philosophy of Social Science Roundtable*, the *European Network for the Philosophy of the Social Sciences*, and the *Asian Network for Philosophy of the Social Sciences*). Sociology and anthropology are addressed in Turner and Risjord (2006) *Philosophy of Anthropology and Sociology: A Volume in the Handbook of the Philosophy of Science Series*, and history has its own journals such as the *Journal of the Philosophy of History* and *History & Theory*.

The philosophical issues raised by political science research are just as pressing and vibrant as those raised in these more organized fields; some of the issues are unique to political science, and others are general philosophy of social science issues that have not been much considered in relation to political science research. To give those issues the attention they deserve, this volume seeks to increase the currently scarce interaction between philosophers of science and political scientists and aims at fostering a field that labels itself *Philosophy of Political Science*, creating a fruitful meeting place for further development of ideas in philosophy of science and political science.¹

2. How Does This Volume Approach Philosophy of Political Science?

In this volume an intellectually diverse group of philosophers of science and political scientists takes on a set of these Philosophy of Political Science (PoPS) issues. When we started compiling this volume we made a decision to focus on empirical political science and not on normative political theory. Normative political theory has of course received much philosophical attention. Thus, we decided rather to stick to issues that are traditionally covered by philosophy of science and not venture into political philosophy.² The list of topics included reflects in part the interests of those willing and able to contribute (with COVID-19 hitting the world when the final versions of the manuscripts were being written and reviewed). However, we are confident that the volume addresses key issues in PoPS and that it will increase the interaction between philosophers of science and political scientists—it has already done so in the organizing of the volume.³

¹ That a *Philosophy of Political Science* field is missing was discussed before by Verbeek and McIntyre (2017) and Herfeld (2017). There are, however, some publications that use the label of the field; see, for example, Dowding (2016) and Lock (1987).

² This is just a pragmatic choice. We do not want to suggest that there is no overlap or cross-fertilization between empirical political science and political theory. There certainly is, but analyzing that would require a second handbook.

³ A major subset of the papers were presented at a workshop around the volume held at Washington State University in 2019. Also, most contributors to the volume have been reviewers on other chapters. So organizing the volume intentionally involved making for interactions between political scientists and philosophers of science.

Our emphasis on the increased interaction between political scientists and philosophers of science flows from the perspective that motivates and structures this volume, namely a naturalist philosophy of science. Naturalism means here that philosophy of science is continuous with and part of science, and, therefore, close to and informed by actual scientific practice. It denies that there is something special about the social world that would make it unamenable to scientific investigation. Neither is there something special about philosophy that would make it independent or prior to the sciences, including social sciences.

Following this naturalist approach, we consider PoPS to be a meeting place. On the one hand, it helps to increase philosophy of science sophistication in political science. The many political scientists interested in methodology (broadly conceived) might advance their research by being more cognizant of developments in philosophy of science. On the other hand, our naturalist approach says that philosophers of science must look carefully at actual political science research and learn from it to further develop their own ideas (for example think about the use of "diversity," "representation," "democratic," and so on, in discussions of scientific practice). Furthermore, political scientists have also been quite innovative in thinking about methodology, and philosophy of science has not generally built on these advancements to its detriment. For example, the application of Boolean and fuzzy set analysis to complex causality and classification (Ragin 1987) has not found its way into philosophical discussions of these issues.

We have asked contributors to use examples from and stick closely to the actual practice of political science, a test against which the philosophy of the discipline can be developed and evaluated. Moreover, many of the contributors are practicing political scientists, and several chapters have been written by combined forces of political scientists and philosophers. Furthermore, by getting the contributors to comment upon each other's work, we ensured that the political scientists got feedback in developing the philosophy of science issues and that the philosophers' take on the political science is on track, thus strengthening the emerging community of philosophers of political science. Finally, in line with our approach, we emphasize that philosophy of science is something scientists themselves sometimes do, just as science is something that philosophers of science may do. This makes for PoPS to be part of ongoing scientific controversies and part of the process of settling those issues.

3. What are the issues in *Philosophy of Political Science*?

What are the issues that PoPS might address? From the *Political Science* side, there are many aspects one can focus on. Political science is a complex system that involves a community of scientists engaged in research using scientific methods in order to produce new knowledge. As a label, "political science" may refer to a social institution, the research process, the (community of) researchers, the method of inquiry, the end product, i.e., political science knowledge, and other aspects.

That multilayered system has itself gone through a historical development, from the statism at the time of the discipline's early professionalization, via the pluralism of the 1920s and the behavioralism of the 1950s, to the Caucus for a New Political Science of the late 1960s and the Perestroika of the early 2000s with their challenges to primacy of value-free quantitative and formal modeling (cf. Dryzek 2006). Political science also crystallized into various subdisciplines like comparative politics, international relations, domestic politics, political theory, public administration, political economy, and so on. These are some key transformations in the internal history of the discipline. In addition, there is also the boundary work that goes on, and the conflicts and opportunities that arise in interacting with other disciplines that study the social world, such as sociology, economics, history, or anthropology, a much discussed issue for the social sciences more generally (Wallerstein 1996). Given that political scientists have been venturing both into the more so-called *nomothetic* approaches (for example, in political economy) as well as into more ideographic ones (for example, in diplomatic history or ethnographic studies more generally), and combinations thereof, intersections with adjacent disciplines have been many. The details of the history of the political science discipline and the internal and external demarcation from its neighboring disciplines is beyond our purview here, but the point is that there are many aspects of the practice of political science that deserve a philosophical analysis—both in political science's historical development as well as in its contemporary formations.

From the *Philosophy of Science* side, we can build on work by philosophers of science with the goal of helping political scientists to address philosophical and methodological issues that arise in the practice of research. Recent philosophy of science as a discipline has mainly focused on the quality of scientific knowledge, but has also paid attention to the processes and conditions of the production and application of that knowledge. Analyzing those processes and conditions may involve looking at particular research methods, the social-epistemic make-up of a discipline, the relations between different scientific fields, the aims or requirements steering the scientific research, and the use of

scientific knowledge, not only its efficacy but also its legitimacy. Legitimacy questions concerning the application of scientific knowledge might concern, for example, possible harmful side-effect of applying specific findings, comparison with alternative methods for reaching similar aims, or the fair sharing of the benefits of scientific research. Typical topics in contemporary philosophy of science are the process and value of experimentation, evidence amalgamation, evidence-based deliberation, the transferability of case-based knowledge, mechanisms, causal pluralism, the accuracy and adequacy of scientific models, expertise and lay citizen's input, values in science and policy making, and so on (cf. Humphreys 2016).

We favor a naturalist approach in line with most of contemporary philosophy of science. It is more productive to directly engage with the study of human behavior, institutions, and society, rather than rely on philosophical intuitions and ponder a priori—autonomously from scientific investigation—how to study the social world and wonder whether the social sciences can become "real" sciences. Contemporary philosophy of science supports an approach that studies scientific practices and remains informed about and participates in developments in the sciences. This approach requires more constructive interactions between philosophers and scientists, which may include joint research, peer review, and mutual criticism.

What would such constructive interactions look like in the case of political science? What would the dialogue between them—the typical *Philosophy of Political Science* issues—be like? Let us start with a (obviously nonexhaustive) list of possible issues:

- What should be the aims of political science?
- What are and should be the most important topics of political science research?
- What are the characteristics of good political science knowledge?
- Can political science knowledge be objective?
- How do we establish facts about the political world?
- What methods are most appropriate for political science research?
- What steps should the research process take in order to get to the best knowledge possible?
- How should we measure progress in political science research?
- Should there be restrictions in the application of political science knowledge?
- How should the community of political scientists be organized in order to obtain the best political science knowledge possible?
- What kind of interdisciplinarity is most beneficial for political science research?

- What is the role of values in political science?
- Is political science biased? If so, where and how?
- What is the best route to fruitfully involve other scientific disciplines, researchers or citizens?
- How could the epistemic benefits of political science research best be shared?

If we structure these possible issues and understandings of PoPS in relation to different stages of the research process, we can distinguish (at least) five questions:

- (a) Where to look (from)?
- (b) What to study?
- (c) Why study?
- (d) How to study?
- (e) Who to involve in studying?

Question (a), where to look (from), is linked to the different frameworks, lenses, perspectives, approaches, research traditions, and vantage points we encounter in the study of politics, including the meaning and use of concepts in political science, the choice of the unit and level of analysis, the theoretical characterization (philosophical anthropology) of the agent, and the understanding of agency-structure relations among other things. These topics are central in part 1 of the volume, "Analyzing Basic Frameworks in Political Science."

Question (b), what to study, asks what the important research questions in political science should be as well as how to make those decisions, who decides what research questions should (not) be prioritized, how a particular object of study is to be delineated, and what the scope of inquiry should be? The selection of research questions is, *inter alia*, discussed in part 4.

Question (c), why study, concerns what the purposes/aims/goals of research are. The answer(s) to that question could be, for example, to explain political phenomena, to predict, to give policy advice, to understand the limits on (possible) political change, to preserve or to criticize the status quo, to create new forms of political community, and so on. Robert Cox (1981, 128) emphasized that "theory is always for someone and for some purpose," where he saw a clear divide between political science research with a "problem-solving" purpose—ensuring existing political arrangement to function smoothly—and research with a broader, "critical" purpose reflecting on how the political order came

into being, changed over time and may change again in desired ways in the future. Another researcher considering different aims of political science research is Steve Smith (1996, 13): "Theories do not simply explain or predict, they tell us what possibilities exist for human action and intervention; they define not merely our explanatory possibilities, but also our ethical and practical horizons." Therefore, making the epistemic and other interests underlying the research questions explicit might help us understand the dynamics of political science as a discipline. Some of these kinds of topics will be discussed in part 3, "Purposes and Uses of Political Science."

Question (d), how to study, asks what is the appropriate method to answer research questions (also taking into account the purposes of researching those specific questions)? There are obviously some links between (b) "what to study" and (d) "how to study." For example, some specialists working with a specific method are driven to apply the method to as many as questions as possible (and select topics to study accordingly), and others have urgent questions but are lacking an appropriate or a well-developed method to answer them and have to rely on unsatisfying existing methods. We think a broad agreement could be found that having a toolkit containing a lot of well-developed methods would be best in order to answer as many questions as possible in the best way possible, but once you get to the details of what that implies, a lot of trade-offs have to be made. This as well as other related topics are discussed in part 2, "Methods in Political Science, Debates, and Reconciliations."

Question (e) concerns who to involve in the study, who participates in the research and how is the community of political science researchers best organized in order to best answer the research questions at hand? When addressing a research question, do you stick to the institutionalized discipline of political science or do you include other disciplines, other social scientists? Are there sharply defined boundaries of the political science discipline, do you involve lay citizens, whose values should be prioritized, how to foster constructive criticism, how to discuss the applications of the research results, and so on? These type of questions, closely related to the field of social epistemology, have received a lot of attention recently and are some of the topics discussed in part 4, "Political Science in Society: Values, Expertise and Progress."

We believe that a systematic reflection on questions (a) to (e) will help us to understand what is involved in providing successful accounts of political phenomena.

4. The Structure of the Volume

Let us now sketch briefly how this volume contributes to that systematic reflection by giving a short introduction to its different parts.

Part 1: Analyzing Basic Frameworks in Political Science

Part 1 discusses various broad frameworks used in the study of political phenomena. By frameworks we mean things such as perspectives that help organize inquiry by providing categorizations and identifying the main causes to be studied. Frameworks can be all-encompassing, determining vocabulary, theoretical relations, legitimate questions, scientific standards, appropriate methods and so on, or can be as simple as just an unordered list of variables to focus on. The different frameworks represented in this section generally fall somewhere in the middle of this continuum. They identify variables to be studied and potential relations among them. The chapters of Part 1 critically discuss some such frameworks in political science, analyzing their commitments and potential evidence. Sociobiological approaches, explanation via norms and game theory, rational choice, institutional analysis, collective action, and notions of mechanisms are the main topics.

Kaplan (Chapter 2) and Henderson and Schneider (Chapter 3) discuss biological approaches to political behavior. Kaplan, a major contributor to debates in philosophy of biology over genetic explanations (Kaplan 2000), focuses on biological explanations of political attitudes. He sorts out various differences in claims by proponents of "genopolitics" and then relates them to the general problem recognized in biology and philosophy of biology of explaining complex, environmentally dependent traits in genetic terms. Henderson and Schneider likewise consider biological (not necessarily genetic) explanations of political attitudes. They do so by using ideas from the large literature on the role of mechanisms in explanation, largely developed in the philosophy of biology. Surveying a substantial body of political science research focusing on biological and psychological underpinnings of political attitudes, they outline the implicit mechanistic models that are being proposed. The result is a hopefully clearer understanding of the debates and potential explanatory virtues and weaknesses.

Explanations of political phenomena via the behavior of maximizing individuals are the frameworks taken up by Herfeld and Marx (Chapter 4) and Ross, Stirling and Tummolini (Chapter 5). Herfeld and Marx look at a multiple interpretations of rational choice theory in political science and different explanatory purposes it might fill. Assessments of rational choice theory need to in particular consider whether rational choice accounts are supposed to be psychologically realistic theories and

whether they are accounts of individual or group behavior. The differences matter. Ross et al. discuss norms from a game theory perspective, particularly a conditional game theory perspective where norms are produced as preferences of individuals that are influenced by their interaction with others. Those preferences need not be strictly self-interested ones and are the traits of networks, not individuals alone. These chapters show how explicitly and rigorously analyzing the characteristics of the agent making rational choices matters greatly and small differences in philosophical anthropology might lead to very different findings in political science.

Aydinonat and Ylikoski and in Chapter 7 by Zamora-Bonilla. Aydinonat and Ylikoski discuss the problem of accounting for endogenous institutional change, looking particularly at broad equilibrium game theory perspectives. Game theory accounts of endogenous change have clear difficulties, and explaining institutional change is in general an open challenge for political science. Zamora-Bonilla finishes the section with a historical survey of analytic approaches to collective choice, insightful in grasping how political scientists can conceive of necessarily collective decisions in very different ways as seen from different formal theoretical frameworks.

Thus, Part I moves from frameworks focusing on the most individual factors, namely, genetic makeup and other biological characteristics to increasingly social and collective approaches to political behavior. The general thrust is that all the approaches are partial and at best incomplete, with concrete assessments depending on specific details according to varying contexts. In the closing chapter of Part 1, Bennett and Mishkin (Chapter 8) address the plethora of viable alternative frameworks to explain political phenomena by introducing a taxonomy organizing nineteen kinds of theories about causal mechanisms. Reviewing within-agent, agent-agent, agent-structure, structure-agent, and structure-structure theories on ideas, material power, and institutions, they present the reader with a helpful guide to ensure no sensible alternative explanatory framework is being left out in researching political phenomena.

Part 2: Methods in Political Science, Debates, and Reconciliations

Part 2 considers a variety of issues in political science methodology. There has been an explosion of interesting methodological work in political science in the past two decades. Over the same time, there has been a general convergence in philosophy of science that is both postpositivist and post-Kuhnian, rejecting both simple-minded science as logic assumptions and pictures of science as nothing but rhetorical narratives. The chapters in Part 2 are largely about tying these two trends together in useful ways.

Debates over concept delineation and measurement is part of any methodological debate. Crasnow in Chapter 9 takes up explicating and measuring one of the most fundamental concepts of political science—democracy. She carefully lays out the multiple decisions that have to be made, the role that values seem inevitably to play, and routes to objectivity. Pragmatic validation of measures in terms of robust generalizations is one appealing route.

Zahle in Chapter 10 takes ups the project of clarifying the idea of qualitative research in political science. Using ethnography process tracing, and qualitative comparative analysis as test cases, she identifies four different senses of qualitative research and shows that they do not agree on which of the test cases is or is not qualitative research. This need not be a criticism, but it does suggest that many debates in political science over qualitative versus quantitative research may be misformulated or misguided.

The quantitative versus qualitative debate is also addressed by Lawler and Waldner in Chapter 11, but in the more general form of the interpretivism or positivism debate. They reject traditional notions of "positivism" as outdated and put in its place inferentialism, the idea that a main goal of science, especially political science, is causal inference, not the universal laws of the positivists. Causal inference as now done by political science relies often on "thick" descriptions and multiple interpretation via models; Lawler and Waldner show through several nice empirical examples that interpretivist studies do make causal claims. The positivist–interpretivist divide may not be such a divide after all in current political science research.

The next three chapters in Part 2 are mainly about using mixed evidence, both qualitative and quantitative, case study and large-N. Using the notion of "foliated pluralism" (Ruphy 2011) from philosophy of science, Russo and Rihoux argue in Chapter 12 that Qualitative Comparative Analysis (QCA) goes beyond the qualitative—quantitative divide, provides a successful case of using mixed methods, and provides numerous epistemic benefits in political science research. In Chapter 13, Kuorikoski and Marchionni focus specifically on mixed methods. They first identify three different epistemic virtues (triangulation, integration, and security) that supposedly come from having a variety of evidence and analyze three different mixed methods approaches in political science (nested analysis, set-theoretic multimethod research, and Bayesian approaches), assessing how well they embody the three virtues of evidential variety. They show how to dissolve some worries about incommensurability of evidence sources in political science and identify an ongoing problem from ignoring internal validity questions.

Goertz and Haggard in Chapter 14 look at new developments where case studies are done in large numbers, thus producing what they call large-N qualitative analysis (LNQA). The methodology behind such approaches has not previously be outlined explicitly. Using the famous study by Acemoglu and Robinson (2006) on the economic origins of dictatorship and democracy and two more recent books that employ LNQA, they show how this approach can begin to be fruitfully analyzed and explained using the mechanistic explanation perspective in recent philosophy of science. They give clear ideas about when LNQA might succeed or fail, but conclude much more analysis needs to be done.

The discussions by Clarke and by Dowding in Chapters 15 and 16 drill in on process tracing specifically. Clarke runs through a variety of different elements that get associated with process tracing, but seldom in a fully clear and explicit way. Some proposed criteria for process tracing are too weak, some too restrictive, and others plausible but vacuous. Clarke lays these out with care. Though that taxonomy is progress, Clarke grants that how process tracing is supposed to confirm causal claims without using standard regression assumptions like unit homogeneity remains very much an open question. Dowding likewise argues that process tracing has to be more carefully specified to be assessed. Process tracing evidence is not a competitor to large-N analysis but rather operates at a different level of detail—mechanistic processes. The case studies of process tracing can show that particular mechanisms are operative, but cannot establish generalizations.

Part 2 ends with the most "positivist" trend in political science research—experiments. John discusses experiments in the field in Chapter 17, particularly randomized controlled trials (RCTs), and Hofmeyr and Kincaid discuss lab experiments in political science in Chapter 18. John, a longtime user of RCTs in political science, traces the obvious advantages and the extent of RCTs in political science research. He then looks at criticisms—some old, some new—about the usefulness of RCTs in the social sciences. John argues convincingly on our view that the kinds of problems raised are instances of problems that face all social science evidence, not just RCTs. He grants that there are currently some zealots, now known as *randomistas*, who may overlook the real complexities that face inference from RCTs and in that sense the critics have a point. However, the point should be not to abandon RCTs in political science but instead to be aware of their potential difficulties and address them.

Finally, Hofmeyr and Kincaid look at lab experiments in political science. They provide a taxonomy of kinds of lab experiments in political science and provide a table classifying all the papers in the *Journal of Experimental Political Science* since its inception. Their focus is on political science experiments in what they call the experimental economics tradition that always provide incentivized choices. Hofmeyr and Kincaid then outline in considerable detail the latest best thinking about how economic experiments ought to be done. Experiments involve a number of independent parts, but Hofmeyr and Kincaid point out the resulting holistic nature of testing does not mean those individual

parts cannot be given independent evidence. They then assess all the economic type experiments in their table for the extent to which they meet the ideal standards. As in experimental economics itself, there is likely room for improvement in the practice of experimental political science.

Part 3: Purposes and Uses of Political Science

As discussed above, there are many purposes for studying political phenomena. In a general way, one can distinguish, for example, seeking explanation, prediction, understanding, policy advice, critique, and so on. This might be all too obvious an observation, but it is important to scrutinize how it impacts actual political science research. All too often we think in terms of knowledge as ultimately an accurate and complete representation of the topic we want to study, and that we should evaluate knowledge accordingly. However, there seems to be a growing recognition that knowledge (be it models, explanations, etc.) is selected (and evaluated) on its ability to answer questions of interest, on its adequacy for purpose, more than merely on accuracy, on some overall fit with observational data or conformity with the world. Models are not only representations, but also tools used for particular epistemic and practical purposes, as Parker (2020, 459) writes: "It readily accounts for some prima facie puzzling features of modeling practice, including the fact that modelers sometimes misrepresent a target, even when they could avoid doing so; judicious misrepresentation can promote the achievement of some epistemic and practical aims." Similarly, scientific explanation and understanding bear a relation to both the world and to the explainees and understandees which implies that scientists have to trade-off between accuracy and adequacy (see, for example, Van Bouwel 2009). Clarifying how objects of study in political science are being delineated in light of purposes and uses seems to be a pursuit PoPS can contribute to.

Thus, specific purposes play a role in identifying, selecting, and deselecting (making abstraction of) aspects of the phenomenon that will be investigated. This is nicely illustrated in Chapter 19 on clientelism. Kincaid, Pellicer, and Wegner spell out how different perspectives and definitions of clientelism separate researchers in that area. These differences in perspectives and definitions reflect the underlying diversity of phenomena as well as the different purposes researchers have, which are often linked to specific empirical projects and are context specific. Although the plurality of definitions is often considered a shortcoming that requires a solution, this plurality—picking out different aspects of the phenomenon—is not necessarily contradictory or incompatible, and rather useful for different purposes. The chapter illustrates how applying a philosophy of science perspective might help with explicating the diversity and give structure to the plurality in the study of

clientelism. It also urges researchers to become more explicit about their own purposes and how a specific setup of research is linked to a specific aim.

The contextuality and plurality we find in clientelism research—and across political science research more broadly—raises questions about the extent to which the results of specific studies can be extrapolated to other contexts and inform, for instance, policy making. One way in which scientists and philosophers have been addressing this question is by distinguishing between *internal* and *external validity*, where the former refers to the validity of the results of one's own particular experiment or study, while the latter stipulates the extent to which results from one's experiment or study can be generalized to other groups or situations. In Chapter 20, Jiménez-Buedo carefully analyzes the notion of *external validity* in philosophy and political science: first, the historical changes in its use; second, the philosophical issues in relation to the difficulties of extrapolation, in particular, the difficulties of extrapolating the results of RCTs; and, third, some conceptual unclarities and ambiguities surrounding *external validity*, which calls for using the notion cautiously.

Assessing external validity is a challenge, but hard to avoid when making policy claims and giving policy advice; one has to assess the efficacy of a policy intervention. In Chapter 21, Ruzzene studies the interplay between what she calls the policy mechanisms—explicated by *process tracing*—bringing about the outcome of interest, and the context in which the mechanism is situated—explicated by *process embedding*. Context matters in assessing whether the original and target context are equivalent enough for the mechanism to be portable from original to target, for case-based knowledge to be transferable. If they are not equivalent enough, having contextual knowledge might enable us to find effective ways to modify and adapt the policy mechanism to the characteristics of the target setting. This is nicely illustrated with examples of political science research on civil wars.

Political scientist might not only help policy makers by imparting apt interventions, they also might inform policy by making predictions. In Chapter 22, Northcott discusses the difficulty of prediction. In political science, the focus is often on contextual historical work, rather than prediction due to the ubiquity of causal fragility, underdetermination, and noise. If prediction is our purpose, we should expect warranted forward-looking predictions and interventions for policy to be narrow-scope (rather than wide-scope), because they require confirmed causal knowledge (local knowledge might be detailed enough to establish that there are few significant unmodeled causes, that there is sufficient causal stability, and that outcomes are predictable at all in the sense of not being too sensitive to unknowable details). These philosophical points are brought out by a discussion of Donatella della Porta's work on political violence.

Aspects of causality, prediction, and extrapolation have received a lot of attention in philosophy of science in exploring the best ways for science to inform policy makers. Political scientists

may benefit from this philosophy of science literature to articulate the opportunities and limitations of different tools for the attainment of our various goals, trading-off between accuracy and adequacy

Part 4: Political Science in Society: Values, Expertise, and Progress

The dynamics of political science research are arguably greatly influenced by its social environment. This might show itself in the selection of research problems and in deciding what is significant or important enough to study according to various groups in society. It might also impact the preference for or "success" of certain theories or methods, for example, the post–World War II development of rational choice theory in the West in a Cold War setting (cf. Amadae 2003). This does not necessarily imply that a preferred theory, like rational choice theory in this case, would not have some inherent epistemic qualities that could explain its success, but it does tell us something about the distribution of attention, i.e., which approaches get more attention (and funding) than others (being ignored) and how that is related to dominant forces in society.

Being more aware of this social embeddedness of political science makes us pay more attention to issues such as who, or what procedure, decides what the important research questions are. Next, taking into account the social dynamics of scientific disciplines also requires scrutiny of the availability of theories and methods; are different approaches getting equal chances to being developed rigorously, being taught to students, or obtain funding? Much of the philosophy of science literature discussing these issues finds its roots in feminism. In chapter 23, Hoard, Hubbard-Mattix, Mazur, and Noll present the epistemological diversity of feminist approaches, with all of them bringing attention to research questions that had been long ignored. The authors deplore the lack of uptake of this rich feminist political science by the nonfeminist world of political science and, sensitive to both the underlying power structures and intersectional biases reified in feminist as well as nonfeminist research, argue for taking feminist approaches in political science more seriously.

The next chapter by Van Bouwel has a similar focus on the epistemic importance of social interaction among different approaches and research communities. Philosophers of science and social epistemologist have shown how the quality of scientific knowledge depends on more than individual genius, pointing to the role social-epistemic processes and conditions play. This work aims to provide directions for the improvement of our collective epistemic practices and institutions, identifying the conditions for optimizing the productivity of science. Along those lines, Van Bouwel reviews different strategies philosophers have developed in order to deal with values in science, while defending strategies that go beyond the individual researcher focusing on social-epistemic practices in Chapter 24. He discusses transparency, representativeness, and citizen engagement as strategies, using

examples taken from contemporary political science debates in order to examine how dealing with values plays out in practice. Engaging political scientists to question how best to deal with value influences in science might help us to further develop these strategies as well as the science and values debate in general, which would benefit from more political analysis.

In Chapter 25, Kincaid also scrutinizes debates about values. He argues for tackling value issues as local, contingent, and empirical questions, rather than as a general, grand epistemological question. Moreover, he shows how many of the debates concerning values and value freedom have been muddled and often involved caricatures, in particular in relation to *positivism*. By carefully considering the critiques of positivism formulated by anti-positivists in political science, he shows how these critiques have little to do with what real *positivists* claimed. Subsequently, he presents a contemporary philosophy of science which avoids these caricatures and illustrates how it can be helpful in political science research.

In Chapter 26, Reiss considers how value judgments are deeply entangled with more purely scientific questions in technical-evaluative decisions—those decisions that do not merely depend on technical considerations concerning causality and efficacy but also on evaluative considerations concerning efficiency, the weighting of costs and benefits, the handling of risk and uncertainty, and the desirability of policy ends. When scientists are being called upon as experts by policy makers to give advice, the advice mostly concerns issues of such a technical-evaluative nature. This raises some questions about the role of scientific experts in a democratic society, for example, if expert opinions are given any weight in technical-evaluative decision-making, experts might wield illegitimate power (i.e., they would contribute twice to political outcomes: first, as voters, and second, as advisors, while in a liberal democracy citizens should participate equally in political matters). Furthermore, giving special weight to expert opinions might infringe on the idea of state neutrality in liberal democracies. How to address these questions and what should be the exact division of labor between experts and policy makers?

Given the role of value judgments in political science highlighted in the earlier chapters as well as the plurality and contextuality, one might wonder whether there has been, or can be, progress made in political science and, if so, how would we measure that? In Chapter 27, Chernoff addresses these questions by examining the democratic peace debate in International Relations. He lays out key elements of the debate between liberalism and realism over the connection between democracy and peace and progress therein, and, next, considers constructivist worries that cast doubt on whether there is legitimate progress in political science akin to that in the natural sciences. The chapter seeks to show how some of the constructivist criticisms capture something of real importance, but that a proper perspective on their claims does not necessarily show a divergence with the natural sciences,

thereby explicating how pragmatist contextualism deepens researchers' understanding of questions at issue and holds potential for cumulation and approach-to-consensus, what could be a measure for progress.

5. Conclusion

Doing science always implies making philosophical choices and assumptions—ontological, conceptual, methodological, purposive, value-based, and so on. Some of these choices and assumptions are made explicitly and deliberately, others are implicit or unwitting—acquired via education, professional practice, or disciplinary traditions. PoPS might help to explicate, critically examine, challenge, in some cases replace, the choices and assumptions made, in order to avoid doctrinaire positions, reveal competing perspectives, ensure scientific advancement, or, just be aware of how assumptions play a role in evaluating science.

One cannot expect the reflection on these philosophical choices and assumptions in political science research to be the task of the individual scientists alone. Instead, we can create a meeting place where scientific communities critically discuss these issues and philosophers of science contribute to this process engaging with researchers in discussions about the philosophical foundations of their practice, frameworks, methods, purposes, and values. Thus PoPS can help to increase focus, pool expertise, bundle efforts, and bring fresh ideas to questions concerning political science. Social scientists in general should profit from this, for example, for economists, political science is often the place to go when looking for alternatives to the dominant quantitative methods and frameworks in their field.

As the volume will illustrate, some of the PoPS topics have been discussed by political scientists before, but here we have applied a consistent philosophy of science point of view aiming to contribute to political science in (1) the clarification of political science's concepts and frameworks; (2) the critical assessment and systematic comparison of political science's methods; (3) exploring how specific purposes play a role in identifying, selecting, and deselecting aspects of the phenomena investigated as well as the opportunities and limitations this implies for using political science knowledge; (4) analyzing the interactions between political science and society scrutinizing the social dimensions of scientific practice as well as the value judgments present in political science. In short, the volume offers good examples of the direction that we would like to see: philosophically informed scientists and scientifically informed philosophers of science who are prepared to debate with each other on topics that are highly relevant to both.

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