Introduction
Hans Keman and Jaap J. Woldendorp

Political science – as many of the social science disciplines – is a multifarious discipline in terms of types of theoretical approaches and related diversity of methods. Political science analysis is therefore characterized by its variety and is often contested across the discipline. This is largely owing to the nature and radius of its core substance, that is, the role of politics in society and its systemic properties. Political processes involve individuals (the political actors, such as political leaders, Members of Parliament, electors, victims, party members and citizens), organizations (for example, parties, governments, movements, trade unions and businesses) and institutions (be they formal or informal rules, conventions, traditions or temporary measures; see, for example, Keman 1998; Lijphart 2012). Hence, analytical tools are discussed in terms of units and their occurrence at different levels and of analysis.

Originally nation-states were considered to be the main organizing tenet of political processes, but this is no longer the case. States were often organized as multi-layered entities of governing bodies, but we notice increasingly the emergence of transnational and international regimes (such as international governmental organizations – IGOs). Hence, political processes cannot and should not be studied by focusing on the nation-state per se. Instead the focus ought to be on a ‘systemic multi-level’ meta-approach to understanding the dynamics of politics in the contemporary world (Braun and Magetti 2015). That is, we need to consider the political world as a more or less organized system that is characterized by systemic (or within-system) features that can be discerned at various levels or layers (Hooghe and Marks 2009). In the real world this may involve a federation and its constituent parts or sub-national units within a centralized state (for example, municipalities), or the members of an international governing body, such as the United Nations Organization (UNO) or the European Union (EU). Hence, both theory and method in political science are characterized by complex interactions between political actors (like-minded parties or organized interests) operating at different levels of the polity, which vary in space and time and are in need of different methods and approaches to capture the political process both descriptively and analytically (for example, Pennings et al. 2006).

If this contention holds, then it follows that researching political
processes and their ramifications is a challenging and complex assignment for any political scientist. In this handbook we deliver an overview of the basic principles of political science research based on a systemic view organizing a meta-theoretical ‘approach’ to introduce and discuss the various aspects of epistemology in relation to methodology as used throughout the discipline. It should be made clear immediately that our ‘systemic’ view is not to be considered as a ‘paradigm’ nor as a ‘unique selling point’. Rather we consider this view to be a useful heuristic device to show how and when different approaches, methods and related applications can be best used to analyze political activities at different systemic levels of a polity (whether local, regional, federalized or united national, supra-national or transnational).

As in most disciplines, we proceed from a basic point of departure and related assumptions (as is explained in Chapter 1). First, political actors and institutions are the starting point of any research. Their interactions and relations are essential to understand any type of political system, be it a democracy, an autocracy or a dictatorship. Political processes and their outcomes (like elections, policy-making, conflict management or regime change) should therefore be analyzed within their relevant systemic framework. Hence, before we start collecting data and information, let alone analyzing them, it is paramount to elaborate the underlying or guiding theory and formulate a clear and meaningful set of research questions (or hypotheses). These preliminary activities define the type of research design, the analytical tools and the empirical information needed (qualitative or quantitative), not the other way around (Brady and Collier 2004).

Secondly, studying processes implies that both change and continuity have to be taken into account as well as the patterned variation in terms of space and time (for example, Bartolini 2000). This means that the approach to politics implies that inter alia the comparative method and its logic is seen as a central asset to political analysis. However, we do not claim that this is the only way to go (although we do consider it to be the ‘royal’ way; Keman 1993). We can make a valid distinction between ‘implicit’ and ‘explicit’ modes of comparison (Mair 1996). Implicit comparison is almost always used intuitively by researchers in the social sciences when assessing situations, developments and outcomes. For example, ‘benchmarks’ are quite often used to observe and judge events. Conversely, explicit comparisons are often used intentionally by academic researchers to explain horizontal political processes (such as, relations between parties and government) and vertical political processes (such as, a state vis-à-vis its citizens) controlling for their systemic differences over time and space (for example, Flora et al. 1999; Pierson 2000; Budge et al. 2012).

Thirdly, different approaches exist which are (sometimes strongly)
contested, and this also applies to the mode of analysis and related types of empirical information. Our point of departure is that any type of political research should be open to replication, reliable in terms of the sources and data used, and valid as regards measurements (in relation to the concepts used; see Chapters 2 and 4). This statement appears to be almost superfluous, but it is not. A major divide within social sciences and political science in particular concerns qualitative versus quantitative types of data and analysis. Yet, as Brady and Collier (2004) put forward, it is not whether or not the method and related techniques are more or less superior but, rather, whether or not the academic-cum-scientific standards to be used are honored. We share this view and maintain that empirical information must be solid and responsibly reported. This applies to the historical approach and method as well as to constructivist types of research or quantitative data analysis (King et al. 1994; Pennings et al. 2006).

In sum, this handbook assumes that political processes can be studied and analyzed by using a systemic and multi-layered approach as a heuristic and organizing device, and postulates that politics is manifested at various levels of governance and by various societal activities. Political actors and institutions are central to any type of ‘politics’ and ought to be studied in spatial terms and across time (depending on the research question). This means that, in our view, both implicit and explicit types of comparison underlie most types of political research and that analytical inferences should be based on empirical information, be it qualitative or quantitative. Hence, the idea is that the standards of empirical-analytical social science are shared and applied. These ideas guide and structure this handbook. The contents of this book have been organized around five themes that make the ‘story line’.

Part I, ‘Political science: range, scope and contested methodologies’, occupies the broad theme of how political science not only developed over time and in multifarious ways, but also what it has in common as a discipline with the social sciences in general (Chapter 1). Apart from the obvious commonality that all social sciences study human interactions in relation to their contexts, the range and scope of explanation is an essential and contested topic. Therefore two chapters are devoted to the underlying logics (causality and argumentation) inherent in social science as well as the various ontologies and epistemology that are discussed (and often contested) among political scientists (Chapters 2 and 3). Other chapters concern comprehensive dimensions that are prevalent in any type of political scientific research; that is, the meaning and importance of conceptualization and measurement (Chapter 4), and the role of time (change) and spatial dimensions (areas or specific systemic features) are introduced in Chapter 5. Finally, Chapter 6 concludes this part by elaborating the
A seminal attempt to develop a universal and comprehensive theory of political processes by means of Easton’s systems theory, which represents the origins of the systemic multi-level approach that governs this handbook.

Part II, ‘Approaches: exploring political interactions’, consists of critical overviews of prevalent approaches within contemporary political science. As Verba (1996) once stated, the development of political science can be characterized as having basically the same menu, however, it is consumed at different tables. This becomes visible in Part II (and extends Chapter 1). On the one hand, broad overviews are presented that deal with the study of horizontal and vertical interdependencies such as multi-level governance (Chapter 7), political regimes (Chapter 8), the pros and cons of institutional analysis (Chapter 9) and of international and transnational politics (Chapter 12). On the other hand, the role and position of (horizontal) political action is treated by focusing on political parties, party government, interest groups and social movements, in Chapters 10 and 11. The remaining chapters of Part II introduce two important branches of political science: political economy as a problem-solving approach of politics and public policy performance (Chapter 13), and the relationship between political theory and normative methods to discuss ‘real-world’ problems (Chapter 14). The chapters of this part show both the dilemmas and the related conundrums in respect of developing theory and method that allow for solving ‘puzzles’.

Part III, ‘Analyzing politics: data–concepts–techniques’, is the ‘hands-on’ part of this handbook, presenting and discussing the dos and don’ts of various ways of collecting empirical information and how to organize different types of data (Chapter 15). This basic information is further developed by chapters on institutional analysis (Chapter 16), analyzing voting behavior (Chapter 17) and survey techniques (Chapter 18). Chapters 20 and 22 introduce the reader to advanced types of data analysis: modelling political processes and the secrets of multi-level regression analysis linking micro-data to macro-variation. Finally, two chapters are devoted to the specific features of quantitative (Chapter 19) and qualitative approaches (Chapter 21) illustrating that the so-called qualitative–quantitative division is less deep than often is suggested; both approaches can be fruitfully employed especially within the context of systemic multi-level analysis.

In Part IV, ‘Research tools: quantitative and qualitative applications’, the micro-level and macro-level division and how to bridge it is discussed and elaborated in more detail (Chapter 23). Chapter 24 introduces the political science student to the mainstream quantitative technique, regression analysis, widely used in political science. Chapter 25 introduces configurational comparative methods, such as qualitative comparative
analysis (QCA) and fuzzy-sets, and Chapter 26 discusses different types of discourse analysis, illustrated by various concrete examples. We continue this part with diverse types of research tools that are often ignored or badly understood. Chapter 27 focuses on case studies, while Chapter 28 shows the uses and misuses of cluster analysis. Finally, Chapter 29 introduces a recent form of policy analysis using process tracing. This part is intended to make the student of political science familiar with often-used techniques and to show when and how to apply these – doing research yourself.

Finally, Part V, ‘Evaluation and relevance of research output’, consists of elements in academia that are often not discussed and simply discarded. For example, in Chapter 30 the question of the political relevance of political science research is raised. The same issue, differently directed, is discussed in Chapter 31, namely, how to assess the actual performance of existing types of policy research. In another way Chapter 32 deals with the comparable problem of evaluating by replication to what extent existing and accepted findings hold up in view of new data or techniques. The final chapter (Chapter 33) is a service to advanced researchers, namely, how to publish your results depending on the readership (for example, academics, non-academics, policy-makers, opinion makers or the general public). Different publics require different types of publication strategy.

To conclude, this handbook covers a wide range of topics, issues, approaches and techniques that have in common that they are not only discussed but also used in political science analysis. We contend that you cannot operate as a political scientist without taking into account the wide and diverse spectrum of political science theory – be it encompassing, middle range or specific. Likewise, we are convinced that any type of theorizing cannot ignore the ontological and epistemological issues that are prevalent in social sciences as a whole. Furthermore, we believe that empirical political science needs to elaborate its theoretical development in close conjunction with the available techniques of data analysis, whether qualitative or quantitative. This handbook intends, therefore, to be a helpful tool for the political scientist to explore the relationship between theory, method and data, and to develop a proper research design that comes up with a valid and reliable answer to the research question under scrutiny. If the handbook serves this purpose, it will, in our view, contribute positively to the status of political science as a useful and advanced discipline within the social sciences and beyond.
REFERENCES


