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Comparative Methodology and Statistics in Political Science

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1.1 Introduction

Almost everyone watches daily TV, regularly reads a daily newspaper and often discusses what goes on in the world. These activities shape our views on society and, in particular, influence our views on and perspective of the role and impact of politics on societal developments.

In this era of easy access to electronic to communication (Internet), worldwide TV-coverage of events (e.g. CNN) and rapid changes in the political mapping of the world (globalization), one is not only confronted with a multitude of bits and pieces of information, but also with various and often conflicting opinionated views what events may mean and what consequences they may have for our lives and the society we are part of and live in.

Although we do not realize it all the time (or not at all) we use this information in its multifarious forms in a comparative way. Both the ‘messengers’ (e.g. journalists, political spokesmen and so-called opinion leaders) and the ‘receivers’ (readers, TV-watchers, person-to-person communicators) are, more or less consciously using the ‘art’ of comparing in order to come to a, more or less, well founded interpretation of what goes on in public life.

The *first* point of departure of this book is therefore that not only students of social and political sciences are in fact comparing information to form an opinion, but that everyone is doing this in assessing the facts of life around him or her. For instance, how often do you use yourself the words ‘more’ and ‘less’ or ‘bigger’ and ‘smaller’, and this is ‘different’ or ‘similar’ to that, and so on and so forth. All these expressions used by everyone in their daily conversation basically imply that you (seem to) have a comparative idea about what occurs in reality. And not only that -- most of the time if not always -- you do deliver a statement about, for instance, politics and society that is, more or less, implicitly of an evaluating nature. To give an example: in New Zealand in 1996 the first elections were held under a new system (it used to be ‘First-Past-the-Post’ and it is now a variation of a Proportional Representation electoral system). The electoral

outcome necessitated the formation of a coalition government instead of a one-party government. Apart from the fact that this type of government and the related procedure of government formation were new to both the public and the politicians, everyone could now compare the actual result of changing the electoral system and what it implies in reality. Hence, one could now evaluate what goes on by means of comparing the old with the new situation.

The ‘art of comparing’ is thus one of the most important cornerstones to develop knowledge about society and politics and insights of what is going on, how things develop and, more often than not, to make statements why this is the case and what it may mean to all of us. Another example in this respect is, for instance: in a number of West European democracies one can witness recently a rise of so-called ‘populist’ parties (e.g. in Austria, Belgium, France, Italy, and the Netherlands; see Mair, 2002). The problem that emerged was *how* to define “populism” as such in order to indicate which party was more (or less) populist, or – for instance - extreme right-wing or not, and therefore a threat to the existing party system (Mény and Surel, 2002). Hence, the problem was *less* to observe the phenomenon, but more *how* to measure it properly from a comparative point of view.

Yet, and this is our *second* point of departure, the use and application of the *comparative method* is more often than not done systematically, nor applied rigorously in most cases. This may not only result into unfounded opinions or flawed conclusions, but also to biased views of reality as well as to inappropriate generalizations about what goes on in society. In this book we wish to introduce you to the comparative method and related statistical tools in order to help you to reduce these hazards and to develop

standards for you and others to gain a more sustainable view on the world. In addition we shall provide you with a clear schedule to develop an adequate research design that helps to avoid the mistakes and biases. This is the assignment of Part I.

In this chapter we shall therefore introduce a systematically how to do research in ‘comparative politics’. This means that the focus is on the development of a proper research design that enables one to translate questions about real world events into observations, which allow for drawing systematically conclusions that can be generalized. For instance: is there a relationship between the (electoral) rise of populist parties and a growing dissatisfaction of the public with the working of parliamentary democracy? This type of Research Question (RQ) can and should be elaborated in a proper Research Design (RD). This crucial step in doing research in political science is the subject of the next chapter. It requires the *elaboration* of the phenomenon under review (e.g. what is populism, and which parties can be viewed as ‘populist’ or ‘right wing’), the *mode of analysis* that makes a comparison useful and meaningful (e.g. relating the emergence of populist parties to subsequent events like elections and stable government), and – in addition – the *empirical* investigation of *all* relevant cases (in comparing political systems that allow for corroborating hypotheses). Hence, instead of focussing on ‘events’ or isolated developments the point of departure of our approach is

- developing systematic knowledge that transcends mere description and allows for generalizations (i.e. external validity).
- deriving answers to questions on the basis of existing *theory* or, if possible, plausible hypotheses (i.e. theory guidance).

- striving for exact information and comparable indicators that are *reliable* and open for replication (i.e. internal validity).

In summary: without a proper research question and research design, the ‘art of comparing’ becomes meaningless and -- which is worse -- may lead to dubious evidence and conclusions that affect many in society. Already Max Weber -- the famous German sociologist -- warned against these practices in his major work *Economy and Society* (1918) by discussing value free science *vis-à-vis* ideologically driven analysis, which would not only harm scientific progress, but also jeopardize the correct use and application of social scientific results in practice (see: Bendix, 1977; Giddens, 1971).

From this follows, as the *third* point of our presentation, that it is crucial to know from the beginning *what, when and how* to compare. Seemingly this triad goes almost without saying. Yet, it is vital for any comparative analysis to ask him or she whether or not there is indeed a proper answer to these methodological questions. If not, the chances to come up with valid and reliable answers will be reduced and the quality of knowledge advanced will be less. Hence, you must know beforehand what the phenomenon is which you wish to research, when -- or at what point of time or period under review - the phenomenon can be best studied, and how to do this.

This highlights perhaps the most important message we wish to get across the board. We view the ‘art of comparing’ or what is generally called: the comparative approach to political and social science *not* as an ‘art’ in itself (or: a method *per se*), but as one of the most adequate ways to connect ideas (theory) about society and politics with what is actually going on in the world we live in (i.e. empirically founded facts). In short, we wish to introduce you to the comparative approach in such a way that one can

explain convincingly and in a plausible way is going on in the real world of politics and society.

BOX 1 – *Comparing as a basic tool of the social sciences*

The British poet Rudyard Kipling (1865-1936) wrote: “And what should they know of England who only England know?” He meant to say that without comparing there is little to gain from a description only. Therefore the ‘art of comparing’ is a basic tool for linking ideas, and eventually, theory to evidence. Conversely, without theory a comparison remains meaningless. Our view is thus that ‘doing research’ in the social sciences always implies – be it implicit or explicit – the application of the comparative approach to gain knowledge on politics and society and to assess its plausibility.

1.2. The comparative approach to political and social science: Theory and Method

We contend that the comparative approach and its methodological application must be conducted by means of theory-driven research questions. This is to say: a research question must be formulated as a point of departure of comparative investigation, which enables the student to reflect on what, when and how to compare and to what purpose. If not, the comparison becomes a recording instrument only. This, however, is not our goal, nor is it in our view scientific. Scientific activities always imply the quest for explanations, which are not only empirically based and yield systematic results, but also lead to results, which are plausible. It is vital to realize that throughout this book we shall contend that empirical-analytical analysis is an instrument to develop social and political knowledge that is both scientifically valid and plausible for a wider audience.

Valid means here not only whether or not it is devoid of mistakes of the ‘Third Order’ (Blalock, 1972), i.e. avoiding wrong operationalizations, incorrect indicators and inadequate levels of measurement and inferring false causal conclusions -- these matters will be dealt with in Part II of this book -- but primarily whether or not the Research Design is indeed adequately derived from the Research Question which underlies the comparative research. Validity in comparative (and other types of) research is a very central concept. However, more often than not, it is used in different ways and its use may well confuse the student. Throughout this book we shall employ the concept as follows:

- *internal validity* concerns the question whether or not the measurements used in a given research are properly, i.e. correctly operationalized in view of the theoretical concept as intended. For instance: can in a research project on political parties *all* the parties under review be considered to be identical in terms of their properties (e.g. participating in elections by putting forward candidates for office) as well as and can they be seen as unique entities and not be confused with other types of social and political movements (like interest groups or new social movements). Hence research results are internally valid if and when they are *truly* comparative, i.e. yield the *same* results for all cases under review (if not, then a case is ‘deviant’);
- *external validity* presupposes that the concepts used in a given research and the related outcomes apply not only to the cases under review but to *all similar* cases that satisfy the conditions set out in the Research Question and related Research Design. Similarity implies here comparable through space or time. For example,

the factors found to explain the variations in government formation in terms of the resulting types of government (e.g. majority or minority and one-party versus multiparty governments) should also apply to those cases that were not included or in periods that were not covered in the original analysis. Another example would be the study of populism, right-wing parties and party system development (see, for instance, Kitschelt, 2002; Pennings and Keman, 2003). Obviously this requires or careful and qualified arguments and spills over into the quality of operationalization and measurement (i.e. internal validity!). Hence research results are viewed externally valid if they yield *truly* comparable results for *similar* cases that have not yet been under review. This implies that one would expect that a replication of such a research should produce more or less the same results.

It should be realized that the concepts of internal and external validity are of an *ideal-typical* nature: in a perfect world with complete information the standards of validity may well be met, but in practice this is not a realistic goal. Yet, and this is what we put forward, one should try to get as close as feasible to these standards (see Mayer, 1989: 55; King et al., 1994). Only by keeping these standards it is possible to strive for *positive* theory development, that is: systematically relating extant theory to evidence and is conducive to improving theory.

To enhance this process of theory development we argue throughout this book that one needs to formulate a Research Question (*RQ*) first, in order to be able to decide what, how and when to compare. This leads in turn to the development of a Research

Design (*RD*) in which these matters are addressed and elaborated in such a way that the research results will be valid, reliable and plausible. Important to note is also that the comparative approach allows for two types of analysis: one is the explorative type that aims at identifying relationships, which may be conducive to theory *formation*; the other is driven by theory and aims at *testing* causal relationships, which is necessary to corroborate extant theory and to develop these further. And only then it is possible to decide which data must be collected to carry out the empirical and statistical analysis for a meaningful comparison that may produce substantial explanations of *why* societal and political events and developments have taken place. In short: *substance comes before method, questions come before answers, and theory always precedes comparative analysis.*

The issue at stake is therefore what, when and how to compare. As the relation between politics and society is not only dynamic, but also obviously a process we need a clear and systemic *model* that can be applied to various situations and related questions that cry out for explanatory analysis by means of the ‘art of comparing’ (see, for example, Lane and Ersson, 1994; Keman 1993c; Schmidt, 1995). Hence, how to make consciously and correct choices to allow for proper answers to the question(s) asked in a systematic fashion and is conducive to furthering theory as well as valid answers and plausible results. We shall demonstrate that on the basis of a Research Question it is possible and some times inevitable to develop a Research Design that allows for different answers, which can be considered as equally plausible. We shall elaborate on this by introducing central concepts of any political analysis, namely: actors, institutions and performances in Chapter 3 that will figure eventually in Part III of this book (see for this

kind of approach to the political process: Hague and Harrop, 2004; Almond et al., 1993). However, before jumping to matters of measuring and modelling politics in relation to society and discussing related matters like the use of statistics, we must and shall discuss how to organize matters related to collecting data. Data, in general, concerns the information we wish to gather in view of supplying a research answer. This can be quantitative or qualitative information (i.e. numbers or descriptions related to various events). These terms are often considered as mutually exclusive. We do not think this to be the case: all information used in social science, if used comparatively, needs to be subject to the rule of reliability, validity and replicability (see also: King et al., 1994; Burnham et al., 2004: 140). Hence, data – quantitative and qualitative – can be considered as equivalent, if – and only if – they are correctly organized. We need therefore to develop a data collection (or: bank) in order to compare systematically. To this we now turn.

1.3 Comparing Data: Selecting Cases and Variables

The term ‘cases’ is again often used in the comparative literature in various ways. On the one hand are cases simply the units of observation in a data-matrix. This is the general meaning of the term and is used in most course-books on methodology. On the other hand, the comparative approach generally also refers to the term cases, the combination of the level of measurement employed (e.g. individuals, parties, or government) and the Units of Variation or variables employed (e.g. electoral attitudes, party programs, or government policies). The problem, which arises from this kind of formulations, boils

down to the difference in seeing cases as an *empirical* entity (fixed in time and space; see: Ragin and Becker, 1992: 4--5 and Lijphart, 1975: 160) or as a *theoretical* construct or convention. An example of the first kind are representatives of any type of system, like countries, parties, voters, years, decades, etc. This type of case defines the boundaries of investigation. The second type refers to theoretical properties from which the researcher derives the units of observation, i.e. cases. Welfare states, left-wing parties or coalition governments are examples. Whatever way one argues, however, we feel that cases are should always be defined as empirical entities in relation to the Research Question asked. We shall therefore define cases as those *units of observation* that are:

- identically defined by time and place
- logically connected to the Research Question under review.

Cases are then 'carriers of information' which must and can be collected by means of translating concepts into empirical indicators, such as having a written constitution or not, having a certain type of multi-party system, the size of the electorate et cetera.

In a comparative research the term cases is reserved for the units of observation that are compared, be it voters in different countries or regions, parties in various political systems, or welfare states across nations. The information in each *row* of data matrix is two-dimensional: it concerns the voter in country A, B or C or it refers to a party family X, Y or Z (if we wish to compare differences between party families and/or within party families). Or, for example, the row displays information on welfare states as a whole (equals one country). In the same vein variables may well represent conceptual information *over time* (e.g. years), and the number of cases remains *Variables * Units of Observation* (N). Hence the term case basically refers to the units of observation that are

compared. The following rule of thumb may be of help to the reader: if the Research Question is elaborated in terms of an *international* comparison, the number of cases is identical to the number of nations included; if the Research Question is said to be *cross-national* the number of cases is defined by the units of observation, like parties or governments regardless the number of nations or systems; finally, if the Research Question focuses on change over time (i.e. *inter-temporal*) then the time-units included indicate the number of cases. In summary: what is compared determines the number of cases rather than the total number of cells in a data matrix. In other words: a ‘case’ carries vital information that varies according to a theoretical concept (e.g. type of welfare state) and this concept is usually operationalized by means of quantified indicators (e.g. public expenditures on Social Security in % of GDP). Together this leads to unique information that is comparable between cases and variables across cases (*N. of variables * N. of values*). That outcome (= N) is used in the statistical procedures, in particular for tests of significance, and refers to the total number of observations or *values* under scrutiny (see Figure 1.1).

Units of Variation

Variables = Columns of Data Matrix indicating the *variation* across the Units of Observation according to empirical features derived from theoretical concepts.

Units of Observation

Cases = Objects of Comparison with *separate* values for each variable along the Row of Matrix representing the universe of discourse.

Units of Measurement

Values = Operational *features* (i.e. scores) of each separate case on each variable presented in the cells in Matrix. The total number of values or the cells represents the statistical N.

Another important matter with regard to the number of cases is thus the question to what extent the cases under review indeed represent the so-called '*universe of discourse*'. As we shall elaborate in Chapter 2 there is a quite some variation in various research designs as to how many relevant cases can or should be involved. This depends not only on the Research Question under review, but also on the mode of analysis, which is considered to be proper for answering it.

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For example, if we study the development of welfare states, we may opt for comparing them all, or a number of them. This choice, i.e. of the number of (relevant) cases involved is related to the dichotomy -- proposed by Przeworski and Teune (1970) -- between a 'most similar' and a 'most different' design. In the former instance we seek to analyze a causal relationship by collecting data for all the cases that can be assumed to be similar in terms of their contextual features. In the latter case it is assumed that the causal relation under review remains identical notwithstanding systemic differences. Francis Castles has put the difference between the two approaches succinctly as follows:

‘A most similar approach implies that the more circumstances the selected cases have in common, the easier it is to locate the variables that do differ and which may thus be considered as the first candidates for investigation as causal or explanatory variables. A most different approach involves a comparison on the basis of dissimilarity in as many respects as possible in the hope that after all the differing circumstances have been discounted as explanations, there will remain one alone in which all the instances agree’ (quoted in Keman, 1995: 137).

Hence, the issue is how to control for contextual or exogenous variation given the Research Question. For instance, if we wish to analyze the role of parties in government with regard to welfare statism, we could decide -- on the basis of the Research Question - - to restrict ourselves to a certain type of party or government. In this case not the system as such, or its features are decisive with respect to the Research Design, but the actual unit of variation that is central in the theory underlying the Research Question (i.e. Do Parties Matter in or out Government?).

Another issue is then that the Research Question -- that forms the starting point for the Research Design -- informs us on the implicit or explicit causality by means of a controlled comparison. In the example we use in this section the comparative issue is the explanation of the degree of ‘welfare statism’ as a result of the behaviour and actions of parties in government (see: Castles, 1982; Keman, 1988; Janoski, 1994; Swank 2002). Hence, it is expected that party *differences matter* with respect to the level and type of welfare services_organized and supplied in a country. Obviously, political parties are

considered to be effect-producing for welfare statism. The latter is then the *dependent* variable whereas parties in government are seen as the *independent* variable [or: $X \rightarrow Y$]. This distinction is not only crucial as regards the organization of the units of variation – observation – measurement (see: Figure 1.1), but also with respect to the determination of the ‘universe of discourse’ and whether we must employ a ‘most similar’ or ‘most different’ research design. Obviously, in this example, we must exclude political systems without parties (the effect-producing variable). Secondly, we can opt for three systems where either welfare state development is (more or less) comparable or include all systems with an established practice of party government. The first option allows exploring variation that is truly comparative and enables the researcher to include many variables. The second option makes it possible to include all relevant systems (i.e. democracies) in order to test the hypothesized causality of the argument. Whatever the options, it is clear that the choices made on the basis of the Research Question will direct the Research Design and the problems (and caveats) that must be overcome. These have been listed in Table 1.1.

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The four clusters in Table 1.1 represent choices as regards relating the Research Question to an adequate Research Design. Secondly, the clusters are steps the researcher must take in order to establish a comprehensive and feasible Research Design.

So, the first step is to assess whether or not we try to find answers to a specific question or a general one. For instance, Lijpharts analysis of the Dutch system (Lijphart,

1975) was based on the explanation of a *deviant* case (i.e. Consociationalism) within a general theory (of stable democracy). The problem he was confronted with was whether or not his comparative case study allowed for external valid conclusions. Later on he has remedied this problem by using more comparable cases to corroborate his ideas (Lijphart, 1977). Hence, although the Research Question remained the same, a different Research Design was developed to improve the generalizing capacity of his conclusions regarding the occurrence and working of consociationalism as a sub-type of stable democracy. This example of Lijphart's work also can serve to illustrate the second step: from a descriptive study the Research Design was changed into the direction of consciously selecting a number of cases to explore the original explanation in a explorative fashion in order to explore its occurrence and working elsewhere. The problem was, however, for Lijphart to enhance the comparability, since the cases selected had less in common than seems admissible. This example on the basis of Lijphart's work (see also: Lijphart, 1999) only shows how important these steps are. For critics of Lijphart were pointing out that the internal validity was insufficient due to the fact that the indicators used as units of measurement were not comparable for the cases involved. In fact, the critics claimed that a qualitative approach should have been pursued rather than a quantitative one.

Step four rests on this choice. For some time a debate is raging around this topic as has been mentioned earlier. It is difficult to say which direction, qualitative or quantitative, should be preferred. In fact, this again is a choice the researcher ought to make him/herself depending on the Research Question. Yet, each direction has its hazards and the problem of data availability *and* its comparability should not be underestimated regardless what direction is chosen. Hence, regardless of the purpose of

the study, it is not only crucial to establish a proper relation between the Research Question and Research Design, but also to employ the correct methodology, the proper data, and the adequate statistical tools. And that is what this book is about.

BOX 2 – *Comparing without theory and method is useless*

Lord Bryce was one of the first political scientists who attempted to compare systematically political systems. In his two volumes on “Modern Democracies” (1921) he compared the institutional organisation of democracy. His point of departure was that what was needed is “Facts, facts, facts”: If you knew how political systems are institutionalised, you would know how they operated. Yet, as history has proven, pure description was not good enough to understand the actual working of many a democracy before the Second World War. In fact, a theory of the democratic process, including its pitfalls and vulnerabilities, was absent. The lesson that was derived from this has been that without theory guided research the comparative method cannot provide adequate answers neither is capable to explain properly actual developments.

1.4 Developing empirical-analytical comparative analysis

In Part II of the book we shall introduce and elaborate the tools of comparative *statistical* analysis. Also, in Chapter 4 the issue of organizing data is taken up in conjunction to problems of measurement. In other words, how to transform the proposed theoretical relations as derives from the Research Question into testable propositions. ‘Testable’ meaning first of all the elaboration of the Research Question in terms of relations between independent (X) and dependent (Y) variables. This important step means the transformation of the Research Question into an empirical investigation by means of the process of operationalization and by means of developing empirical indicators which

allows us to start the -- often difficult and seemingly tedious -- task of collecting the proper data for analysis.

In Part III of this book we shall demonstrate that there is more than one way to develop variables and indicators of politics. To give an example: political parties perform various functions at the same time and thus the study of their behaviour should be analyzed according to these functions or roles. On the one hand a party is, for instance, striving for maximum influence by acquiring as many offices (like representatives in parliament or ministers in a coalition-government). On the other hand, a party is more often than not the bearer of an ideology by means of a program, which is conducive to its policy-making behaviour. In this way it is possible not only to compare parties in performing their different functions, but also analyze to what extent parties *per se* do behave differently within a system as well as across systems. Other examples can be given (and will be elaborated in Part III) of party behaviour in differently organized democratic systems, such as has been, for instance, distinguished by Lijphart (1999) or the behaviour of organized interests, as Siaroff (1999) has done.

Another type of comparative investigation in which the importance of a proper operationalization of the Research Question will be highlighted is by showing how existing variables representing public policies and related performances can be developed into proxies and composite indicators (examples of this practice are the Misery Index and Fiscal and Monetary policy instruments as well as Functional Expenditures by state agencies; Keman, 2000; Lane and Errson, 1999; Swank, 2002). These procedures are vital in order to be able to construct a proper data-set on the basis of the empirical model representing the relation between Research Question and Research Design. In the

chapters of Part II will present the statistical techniques available to describe the model in empirical terms (Chapter 5) and how to find out which answers appear statistically valid to the Research Question posed (in Chapter 6).

Finally, we shall discuss in Part III the topic of a ‘truly’ comparative analysis: instead of endeavoring the explanation of the ‘universe of discourse’ *per se* the mode of explanation is directed to test the theoretical relations as such. In other words: how to develop and to test a theory empirically rather than to confirm or falsify a theory as applied to reality. Przeworski and Teune (1970) attempt to make this difference clear by putting forward that ‘variables replace proper names’ and are meant to explain empirical phenomenon’s by concepts independent from their empirical origins.

Yet, one should be aware of the caveats present and the pitfalls lurking as we are dealing with social reality and related political action. This implies that the relationship between theory (Research Question) and empirical analysis (Research Design) is not only dynamic, but also that it can only produce ‘middle-range’ theories. The term *middle-range* indicates here the situation that only in a perfect world the results of the comparative inquiry could be considered as an absolute truth for all times and situations. Of course, this cannot be the case. However, one should always aim at comprehensive analyzed results, which allow for valid and plausible answers.

In Part III of this book we also turn to what partially could be labeled as the manual to do your own research. We shall then be applying what has been put forward in Part I and II. To this end we take as a point of departure one of the most well known (and often disputed on various grounds) comparative models used in political science: the

input-throughout-output model, or the empirical elaboration of the political systems approach (Bingham Powell, 1982; Almond, 1993; Lane and Errson, 1994; Keman, 1997).

This general model, introduced by Easton (1965) places the *polity* (the political-institutional framework of any society) in a dynamic context. The political system receives 'inputs' from its environment (i.e. society) in the form of demands (e.g. issues and conditions that are considered to influence societal development) or support (e.g. allegiance to the leaders, and acceptance of the existing rules of the game by the population). These inputs are subsequently handled by means of the conversion process of the system (e.g. decision-making by means of democratic procedures or binding regulation through a political elite or bureaucracy), resulting in 'outputs' (public actions and expenditures). Eventually, so the argument goes, the *performances* or, effects of the outputs, is monitored back by an information feedback loop, affecting the ensuing societal demands and support for the political system. It is obvious that this model of politics and society can be formulated in terms of *politics* (issue competition and choosing preferences for action = input), *polity* (relating inputs to outputs by means of rules that direct_decision-making = throughout) and *policy* (= public action by means of regulation and provisions = output).

In Part III of this book we focus explicitly on comparing democratic systems, by means of the 'democratic chain of popular control and political command' (Keman, 1997). Yet, it should be noted that the principal aim of these exercises is not to confirm or to disprove the empirical quality of systems theory, but rather to make the student familiar with doing comparative research in practice. This means that a world that must be decomposed first, before we can start -- on the basis of valid and plausible findings --

to *integrate* the various answers to Research Questions posed into genuine models that are based on “truly” comparative knowledge. A knowledge that can be acquired by any student of social and political sciences and can be applied by her or him if, and only if, he or she is conscious of the steps to be taken in the process of developing the relationship between question and answer on the basis of an adequate Research Design and employing the correct statistical tools and methodology.

1.5 How you can use the book

This book consists of three parts which represent in our view the basic stages of any empirical-analytically research driven by theory in political and social sciences. As the book is written with the purpose to serve as a course-book, we feel that students should go through the whole text, chapter by chapter. In each chapter there is an introduction of its contents, whereas at the end there is a glossary of the core terms used, which may help both teacher and student to find information she or he needs (for instance, whilst doing research him or herself). In addition, each chapter contains examples, which are taken from existing comparative research that has been published elsewhere and is partially based on data that is accessible (made by us, or we specify where to get hold of it). Finally, some texts are mentioned for further reading on the topics discussed in the chapter.

In Part I we present our own arguments concerning the comparative approach. Namely that any empirical research needs to be theory-driven and must be formulated in a well-elaborated Research Design. Chapter 6 is essential reading for understanding the

use of advanced statistics in order to be able to conduct explanatory analysis (including its caveats and pitfalls!).

The final part can be seen as our attempt to pull together the threads of our way of doing comparative research and will be interesting for any reader, either being a freshman or an advanced student of comparative politics and sociology.

Part II can also be used independently for anyone who wishes to “catch up” with the statistical techniques whilst conducting research. Part III may also be used separately and can be quite useful for those who are investigating the dynamic and interactive processes of politics and society. Without claiming that this approach and its elaboration is the one and only way to do it, we feel that it offers a valuable “springplank” to judge comparative information you are confronted with or to shape your own theory inspired research design in such a way that it leads to positive theory development. This is the subject of chapter 2.

Glossary

- The “art of comparing” as a theory driven method for empirical analytical research;
- The types of explanation that can be developed from Research Questions into Research Designs;
- The meaning of cases, variables and measurement in comparative empirical research;
- System theory as a descriptive analytical model of politics in society;
- How to use this book for different types of students.

Questions

- Why is the ‘art of comparing’ not only useful but also *necessary* part of the toolkit of any social scientist? Give an example.
- Try to elaborate whether or not the rules of *internal* or *external* validity are violated in the following statements:
 1. Political parties and social movements are functional equivalents and can therefore be compared throughout the whole world
 2. the development of Welfare States must be researched cross-nationally
 3. party government in whatever political system is proper for analyzing government formation.
- Is there a difference between a theoretical proposition and posing a Research Question? Whatever your answer is, give an example of a proposition and a question to support your view.

Exercises

If you look up Volume 31: 1--2 (1997) of the *European Journal of Political Research* in your library, you can try to answer the following questions:

- a. Reproduce by means of a ‘diagram’ the Research Design as described by Geoffrey Roberts on p. 100-101. Ask yourself: what are the *Units of Variation* and what are the

Units of Observation (for this see also: Castles and McKinley: p. 102--106 in the same volume).

b. Ask the same question by using pp. 159--166 of the same volume in EJPR. However, focus now on the *Units of Measurement*.

c. Now turn to pp. 83--93 of the same volume and describe the *Unit of Observation*, which is central here and is related to a crucial *Unit of Variation*. To what is it crucial? (explain!).

Further Reading

- Todd Landman (2003): *Issues and Methods in Comparative Politics. An introduction* - 2nd edition. Oxford: Oxford University Press.

This is an excellent introduction to the field assessing many topics raised in Part I of this book. The book contains many examples taken from existing research, confronting systematically single country studies with few and many cases analyses.

- B. Guy Peters (1998): *Comparative Politics: Theory and Methods*. London: MacMillan & New York University Press.

A useful overview of the 'state of the art' in comparative politics as it has developed in the last 25 years.

- Ruth Lane (1997): *The Art of Comparative Politics*. Boston etc.: Allyn & Bacon.

A more philosophical introduction to comparative politics describing its longterm development and relations with political science at large.

Advanced texts

- Mehran Kamrava (1996): *Understanding Comparative Politics*. A framework for analysis. London & New York: Routledge.

A concise treatment of applying the comparative approach to the study of the state and its social and cultural environment from a global perspective.

- Alfred Stepan (2001): *Arguing Comparative Politics*. Oxford: Oxford University Press.

A thorough treatise of analyzing the role of institutions and the democratic state from a comparative perspective.

- Mark I. Lichbach & Alan S. Zuckerman (1997). *Comparative Politics. Rationality, culture and structure*. Cambridge: Cambridge University Press.

A collection of essays that focuses on contemporary issues and debates regarding the ontology, epistemology and theory development in comparative politics. Interesting for students who wish to dig deeper.