5. Methodological pluralism

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5.1 INTRODUCTION

This chapter addresses the challenge of implementing methodological pluralism in comparative political science. As we will see, in the contemporary literature methodological pluralism is usually presented as an important contribution to the overcoming of inherited methodological rifts and to the strengthening of research results in the social sciences. In most disciplines of the social sciences, the methodological reflexion about the ways to apply different methods in order to achieve more accurate and robust results has experienced an important acceleration since the 1990s. This period was marked by two important events: first, the 1990s witnessed the relative moderation of direct and occasionally violent theoretical confrontations between analytical paradigms and models that perceived themselves as 'ideological' enemies (Sartori 1993). Second, social scientists became more and more aware of the methodological relevance of globalization for the advancement of their research. In an important article, Arjun Appadurai (2000) developed a consistent point of view about at least two important challenges that globalization had imposed on the social sciences. One, the raising disconnection between global social processes and local dynamics questions the political positioning of the social sciences. Two, the development of numerous theoretical frames in the various disciplines of the social sciences added to the inclusion of new areas and new ways of conceiving those areas. This questions traditional relations to values and cultures. Both those transformations reinforce, in Appadurai's view, the need for stronger and more pluralistic methods in the social sciences.

The field of comparative analysis in political science is directly concerned by all of those challenges. Traditionally, one extreme

position regarding comparative methodology in political science is that quantitative and qualitative methods are irreconcilable, as they have very different ontological foundations and epistemological goals. In this case, the researcher would have to make a binary choice to belong to one of the two scientific 'cultures'. The other extreme position is that 'anything goes', meaning that methodological choices are entirely pragmatic, no method is superior to others and, even more extreme, the concern for methodology itself is nonsensical. Recent theoretical work and empirical applications in comparative politics however have made use of methodological pluralism as a fertile middle ground between these two extremes.

First, qualitative and quantitative researchers started talking to each other. As a result case study research became increasingly systematic and sophisticated, which had been advocated by Brady, Collier and Gerring (Brady and Collier 2004; Gerring 2007). Moreover macro-statistical researchers recognized the contribution of qualitative studies in theory development and for the close inspection of outliers and other special cases.

Second, mixed methods became increasingly widespread to reinforce other research traditions and even combined together in a unified framework of inference both in fundamental and in applied research (Fielding 2010). A mixed-method approach has forcefully emerged over the last two decades in comparative political science, too (Munck and Snyder 2007). Social scientists appear increasingly willing to embrace mixed methods in several different forms and, consequently, a new field has emerged to promote mixed-methods research, together with new journals, textbooks, conferences and professional associations (Small 2011). As an illustration, no fewer than 300 manuscripts were submitted to the newly founded *Journal of Mixed Methods Research* in its first three years, from 2007 to 2009 (Creswell 2009).

Third, new methods were developed to go beyond the qualitative–quantitative dualism, as for example Qualitative Comparative Analysis (QCA), which was launched by Charles Ragin almost three decades ago but became mainstream in the mid 2000s (2008). This state of affairs raises additional challenges to comparative politics, namely regarding the choices at hand, the intersubjective criteria of quality and the analytical trade-offs related to the different methods that are available. As a consequence, the researcher must make informed choices when studying, for

instance, the impact of time-related factors on political phenomena, and be aware of the advantages and limitations of time-series analysis, historical case studies or, respectively, sequence analysis. It is tricky for scholars to manage this growing complexity, and at the same time it is crucial to pay an increased attention to the design of comparative research (Maggetti, Gilardi and Radaelli 2013). The goal of this chapter is to discuss the main contributions, implications, potential developments and limitations of methodological pluralism for improving comparative political science.

The remainder of this chapter is structured as follows. First, we will present the distinctive advantages and disadvantages of quantitative and qualitative research. Second, we will discuss various types of mixed-method research. Third, we will show how to go beyond the distinction of qualitative versus quantitative research.

5.2 THE DISTINCTIVE CONTRIBUTION OF QUALITATIVE AND QUANTITATIVE RESEARCH

An intense debate is taking place about the usefulness and compatibility of different research traditions in political science. On the one hand, Brady, Collier and Seawright (2006) suggest that so-called 'data-set' (or quantitative) and 'causal-process' (or qualitative) observations are both important for causal analysis with the purpose of hypothesis testing, and can complement one another to improve causal inference. The former are typically represented by numerical values arranged on a ''rectangular data set'' of variables and cases that provide the basis of correlational and regression analysis. The latter are defined as insights or pieces of evidence that convey information about the context, process or mechanism of a given phenomenon. On the other hand, Beck (2010) considers this integrative endeavour as either banal or unfeasible, because the two types of data could just be marginally accommodated but not 'adjoined' in a meaningful way. From Beck's perspective, only statistical analysis based on 'rectangular datasets' and, to a lesser extent, qualitative research that adopts quantitative standards, are useful for proper causal analysis. We disagree with this dismissive

position and we share the first point of view, with some qualifications. Qualitative and quantitative research designs should neither be opposed nor seen as mutually exclusive, but rather located along a continuum punctuated by a number of trade-offs. What is crucial is the requirement to make informed choices about the advantages and limitations of each type of research design. The failure to recognize this pluralism, from both the quantitative and qualitative sides, is harmful.

Against the statement according to which both the qualitative and quantitative research methods rely on the same basic assumptions or one 'inferential machinery' (King, Keohane and Verba 1994), which as a matter of fact is inspired by the econometric methodology, recent works have systematically confronted and mapped out not only the differences but also the bridges across qualitative and quantitative comparative approaches and their distinctive explanatory capacity (for instance Goertz and Mahoney 2012; Goertz and Mahoney 2013; Mahoney and Goertz 2006). In particular, Brady, Collier and Seawright (2006) defend the benefits of qualitative and quantitative research, showing not only how quantitative and qualitative tools can complement one another, but also why and how each may be more powerful when used in conjunction with the other. Taking methodological pluralism seriously means going beyond the idea that only qualitative or, respectively, quantitative research is a legitimate approach for precise, accurate and reliable social inquiry. Instead, the researcher should choose the most suitable method according to the characteristics of the phenomena being studied, and if possible combine both research traditions (Payne 2006). For instance, comparative studies of macro-phenomena based on long-established, well-defined concepts and indicators that are relatively easily measurable, such as political attitudes and partisanship affiliation, are suitable for large-scale surveys to be treated with statistics. Conversely, research on complex or unclear phenomena, where details matter, is more feasible when one uses semi-structured interviews or direct observation, such as in the case of the study of decision-making in new governance arenas. Of course, not every researcher is expected to use every method in the course of her career. Methodological pluralism should be achieved as a collective enterprise in the total research output of a discipline as a whole (Bell and Roberts 1984).

This ideal situation is far from being achieved, however (Payne 2006). Quite early in their careers, researchers tend to acquire a set of specific technical skills; a philosophical view of the social world; and, above all, a set of personal preferences on how political phenomena can be analysed, which derive from powerful socialization processes in academic communities that shape one's own identity as a researcher. At the same time, competition among institutions and individuals for acquiring academic resources, such as positions, grants and prestige, may spill over methodological struggles and make the latter even harsher. Another kind of obstacle to methodological pluralism is what Ian Shapiro calls the 'flight from reality' in the social sciences (2005). In short, his argument illustrates the tendency of developing method-driven, technically sophisticated research projects which, in order to optimally apply a given methodological framework, deal with nearly irrelevant topics and lead academics to lose sight of what they claim is their object of study. This tendency echoes the risk of over-specialization and compartmentalization of political science, whereby the application of methods is mistakenly considered to be the goal of a research project instead of using methods as research tools at the service of a societal problem (Rothstein 2005). However, this argument applies not only to formal modeling and highly sophisticated quantitative research that adopt as a scientific role model a stylized version of physics research, but also to hermeneutic, post-modern and deconstructionist studies that embrace an inaccessible jargon and see their interpretative endeavour as fundamentally disjoined from any chance of explaining social phenomena. Schram, Flyvbjerg and Landman (2013) made a similar point when they advocated for a political science based on problem-driven, mixed-methods research, which should address real-world problems more directly. Methodological pluralism offers an analytical advantage that comes from the cross-fertilization between positivistic and interpretative insights, which is grounded on a reasonable amount of analytical eclecticism. This allows researchers to strengthen their findings by triangulating several different types of data and involves the use of plural, alternative methodologies that could be more suitable to address the concerns of research subjects. At the end of the day, methodological pluralism implies the critical engagement of competing research traditions so that they can learn from each other.

In line with the above-mentioned concerns, much contemporary empirical research in the social sciences has already gone beyond the 'cultural' divide between 'qualitativists' and 'quantitativists' so that this distinction makes less and less sense. More or less implicitly or explicitly, even more social scientists tend to think in an integrated way about data analysis. Qualitative and quantitative techniques are increasingly considered as pragmatic alternatives depending on the kind of research question and the data at hand. They are also frequently combined. What is more, the methodological boundaries are becoming indistinct. Last but not least, some recent analytical techniques aim to transcend this divide and cannot be classified as 'qualitative' or 'quantitative' once and for all: examples are comparative configurational methods such as qualitative comparative analysis and social network analysis.

The existing differences between quantitative and qualitative research should probably not be exaggerated, though. Following Caporaso (2009: 67), the concepts of quantitative and qualitative are mutually implicated categories, instead of alternatives to one another. Indeed, a quality refers to a property itself, such as democracy, partisanship or decentralization, while a quantity concerns a measurable variation of this property. Some properties only exist in type (e.g. partisanship), but many others vary in degrees (there can be more or less democracy, more or less territorial decentralization). Since they hardly exist in isolation, it is usually important to account for both the qualitative and the quantitative dimension of concepts, for instance by asking what distinguishes a democracy from a dictatorship (a qualitative difference) and, respectively, whether country A is more or less democratic than country B (a quantitative difference). In that regard, Dietmar Braun (Chapter 4 in this volume) differentiates between root concepts that refer to singular but encompassing coherent forms and subclasses that vary by only one or a few variables.

However, the first step towards developing an integrated approach is to understand the distinctive contributions of quantitative and qualitative research and their respective approaches to data analysis (cf. Goertz and Mahoney 2012 for an extensive discussion of this point).

To begin with, qualitative research typically relies on verbal reasoning and narratives. It is case-oriented: that is, it aims at rich descriptions and explanations of individual cases or of a few

instances of a given phenomenon or class of phenomena. In doing so, it usually adopts a 'causes-of-effects' approach: it proceeds by asking what causes the explanandum. In other words, it is 'Y-centered'. Examples of this type of research question are: What causes the breakdown of rich democracies? Why did the Mexican banking system collapse in 1994? How to explain the election of Margaret Thatcher in 1979? In this type of analysis, concept formation is crucial. What is more, the qualitative researcher pays substantial attention to individual observations, nonconforming cases and equifinality, that is, the possibility that different sets of explanations hold for the same class of phenomena. Causes are seen as complex combinations of explanatory factors that should be historically situated and can be conceived, implicitly or explicitly, as necessary and/or sufficient causes for the phenomenon of interest. Causal mechanisms – the paths through which an effect is produced – are given special attention. The scope of qualitative analysis is purposely narrow to provide a context-sensitive explanation.

Quantitative research is based on a variety of statistical tools, essentially rooted in regression analysis and econometrics. It is variable-oriented, while cases are less important for themselves. It aims at estimating the net average effect of one or more independent variables on the dependent variable. Therefore, it adopts an 'effects-of-causes' approach that 'looks forward' at the impact of the variable of interest. In other words, it is 'X-centered'. In this sense, it is closer to the logic of experimental manipulation, even though it is usually based on observational data. Examples of this type of research questions are: What are the consequences of economic growth on the stability of democracy? What are the effects of the use of financial derivatives on the collapse of banking systems? What is the effect of economic crisis on the rise of conservative parties? In this analytical framework, measurement and indicators are central and the possibility of error is explicitly modeled. Causality is understood in probabilistic terms and is typically derived from correlation matrixes. It is also symmetrical, that is, causal relations are framed in the form 'the more or the less X, then the more or the less Y'. Explanatory factors are usually conceived as additive terms with occasional interactions. The final goal of this type of analysis is to maximize statistical leverage and generalize findings.

5.3 COMBINING METHODS

Methodological pluralism, multi-method approaches or mixed-methods research have developed in the perspective of overcoming the deadlock of strict monist approaches and the unproductive direct confrontation of qualitative and quantitative methods. Since the turn of the century, there has been both a steady growth and a huge diversification in the literature, both theorizing about multi-method research designs and applying these approaches.

There are several ways of making sense of the diversity of multi-method approaches. For instance Johnson, Onwuegbuzie and Turner (2007) differentiate the various types of mixed methods according to their degree of openness to other paradigms than their central point of reference, or according to the way they weight the diverse explanatory paradigms. In an analogous perspective, Elman (2009) distinguishes 'monist' approaches, centred on one paradigm, from 'eclectic' ones in which the use of various methods is not really related to specific research paradigms, and finally to 'pluralist' approaches for which various methods mobilizing specific forms of epistemological paradigms can be combined in a controlled way in order to produce complementary types of knowledge. Harrits (2011) proposes to classify the various mixed methods not primarily on the basis of the analytical techniques used but on the basis of their epistemological and ontological core.

Tashakkori and Creswell (2007) list the various modes of classifying and consequently understanding the logic of methodological pluralism. They distinguish a view on multi-methods approaches strictly based on the diversity of data collecting methods (the *method* perspective); the approaches stating that methods should be considered only in the context of the whole research process, including the epistemological assumptions (the *methodological* perspective); the approaches belonging to the *paradigm* perspective being the ones that mostly focus on philosophical, ontological discussions to think about and organize multi-method approaches, and finally, the *practice* perspective is one 'bottom-up' view on multi-method that shows how researchers tend to make use of various research tools in a rather spontaneous and not always explicitly justified way from a methodological perspective in order to establish more solid and complete research

results. This taxonomy of multi-method research is important as it clearly demonstrates that this new orientation in comparative research strategies in political science is much more than a mere ceasefire agreement and an attempt at durably disarming the warriors of both the quantitativist's and the qualitativist's camp. The vast plurality of available ways to make sense of, theorize about and practise methodological pluralism indicates that this rising approach is an opportunity to displace and reframe the motives and the finalities of scientific debates in comparative politics.

Collier and Elman (2008) propose a more comprehensive classification of multi-method research approaches in political science that appears to be a mix of the two perspectives presented by Creswell and Tashakkori: the methodological classificatory perspective for some of the categories developed and the practice perspective for others. Collier and Elman distinguish three main families of multi-method approaches:

(1) In the first place, they evoke approaches that make use of multiple methodologies that all belong to the qualitative explanatory paradigm. Belonging to that cluster are the renewed methods in terms of controlled comparison (Slater and Ziblatt 2013) as well as structured focused comparison (George and Bennett 2005), new forms of case studies methodologies, such as paired comparisons (Tarrow 2010) or comparative analysis in context (Yin 2013). As for the study of within-case analysis, Collier and Elman (ibid.) mention pattern-matching (Hak and Dul 2010) and process-tracing or counterfactuals (Bennett and Elman 2006; Collier 2011). Key to most of these approaches is that 'the relevant set of qualitative tools is now sufficiently diverse, and the choices about evaluating and linking these tools sufficiently complex, that the idea of multi-method can certainly be applied to the standard domain of qualitative work' (Collier and Elman 2008: 782).

In terms of a research paradigm, most of the methods listed here aim at unveiling causal mechanisms. The increased number of analytical methods enables the triangulation of results within the universe of qualitative methods (Tarrow 2010). The authors also quote the diversification in the choices of data collection (interviews, archives, participant observations, etc.) on which most authors of qualitative comparative analysis already rely when working on case studies. The combination of various forms of

within-case and cross-case analysis intended to reach at each step a different and specific form of knowledge is a convincing example of productive methodological pluralism.

Other disciplines of the social sciences like sociology and ethnography which work on research objects very similar to those of political science – power relations, power dimension of social structures, policy processes, etc. – also increasingly engage frequently and explicitly in methodological pluralism. Sociologists Lamont and Swidler (2014) for instance recommended that scholars foster methodological innovation in order to meet contemporary challenges raised by contemporary comparative studies. They evoke the advantages of longitudinal interviews enabling the integration of historical context related to life-course perspective (ibid.: 164), the combination of interviews and observations and ethnographic methods, in order 'to add depth to our understanding of how class, culture and personality interact' and shape socially and politically relevant behaviour (ibid.).

In a similar vein, the comparative socio-historical analysis of the 'varieties of feminisms' by Ferree (2012) combines interviews, ethnography and archival analysis. And there is a growing number of scholars working on comparative policy analysis with a focus on the cultural embeddedness of the policy process (Strassheim and Kettunen 2014). Sometimes this type of study examines the different stages of a policy process from the decision-making to implementation and even beyond, that is, the broader outcomes on target groups (Yanow 2014). This great variety of objects and approaches induces an even greater number of analytical methods.

(2) The second family in multi-method approaches is made up of research designs explicitly combining quantitative and qualitative methods, for example the use of statistical data with qualitative methodologies of information-gathering such as interviews, documents, observation, etc. The most representative approach that has been developed recently in this perspective is the 'nested design' (Lieberman 2005; Rohlfing 2008). It combines the insights of quantitative and qualitative epistemological research designs at various stages of the research process. At a first stage, statistical data is used in order to identify a first correlation and, eventually, to test some first possible explanations. At a later stage, qualitative research is used to look for the variation that could not be explained by the quantitative analysis (Rohlfing 2008) or to check the validity

of a statistical inference by other means. The quantitative and qualitative analytical tools sequenced in a nested design are targeted at the same research objects and test similar causal inferences. In the words of Harrits (2011: 155):

> When mixing methods in the fashion of nested analysis, we are observing the same reality from different levels of analysis. This argument, however, is only reasonable because of the implicit acceptance of the realist ontological model, where a basic continuity between the actual domain (events) and the real domain (mechanisms) exists.

Sequencing qualitative and quantitative methods in order to elucidate the same social phenomenon – and not different social phenomena forming together a broader macro-phenomenon – implies that the same social mechanisms operate in similar ways either when applied to only one or a few cases, and also in the context of studies covering a large number of cases.

Aiming to improve the quality of research results, specialists of comparative history have developed tools that allow testing the validity of necessary and sufficient causes by relaying to *probabilistic analysis* (Mahoney 2004: 82). From the comparative historical perspective we have also learned how to overcome the 'snap-shot regression' according to which dependent and independent variables are captured at a specific time. However, most social dynamics happen along more or less complex and long chains of consequences – social dynamics X triggers economical development Y that enables country C to develop institution Z. Those sequences of events ought to be tested in order to provide for meaningful results. Such tools for the measurement of temporal processes are now available thanks to the combination of time-series analysis and careful qualitative screening of social causal or probable causal chains of events (ibid: 88). The cumulative and international development of time-series databases has already opened up important new possibilities for sociologists and political scientists to test explanatory mechanisms from a comparative perspective. This is likely to be even more so in the future (Lieberman 2010).

Another increasingly important multi-method design combining quantitative and qualitative data is the use of *local case studies* aimed at *analysing ecological inference* (Meng and Palmer-Rubin 2012). Those methods are used in situations where aggregated data

does not provide any information about specific groups at a local level such as ethnic, religious or professional groups. The results of those case studies are useful not only to confirm assumptions derived from statistical data – the Hispanic minority in the USA votes predominantly for the Democrats – but also to provide information about the precise mechanisms at stake in the relation between the independent variable and the specific population of interest (ibid.: 23).

Beyond the noted unity in the explanatory paradigm, the multi-method approaches combining quantitative and qualitative data should be understood less as a way of building linear, sequential designs in which every research operation and hence every type of data directly influences the next operation. If understood in this way, multi-method sequences would be at risk of reproducing initial errors all along the research design. Those combinations might better be conceived as 'parallel' operations, which might control the validity of results produced at a previous stage. There is therefore no real linearity in the combination of methods which induces dependence between the various research operations but a parallel and competitive check of analytical hypotheses.

(3) The third and last family of multi-method research is made up of approaches combining what the authors call 'conventional qualitative methods' including interpretativist or constructivist approaches as well as the specific research methods they make use of. For both these forms, objectivizing methods of data collection are combined with methods aiming to gather data documenting subjective views on social interactions in a specific domain.

Most views expressed about methodological pluralism would rather not include this qualitative research tradition because it is located outside the positivist frame which works solely with methods based on either regression-oriented analysis or on set-theory (Mahoney 2010). However, there are some approaches that take up the challenge of methodological pluralism across the boundaries of these opposed paradigms of social sciences.

Within the approaches dealing with the role of *language* in comparative politics, there is usually a sharp contrast between the positivist, quantitative research tradition in terms of *content analysis* and the constructivist/interpretativist, qualitative tradition of *discourse analysis*. Content analysis is considered realist as it takes words and texts 'as they are' and as signs of specific social

interactions. Content analysis makes use of quantitative methods and can be understood as an 'implicit form of statistical inference' (Lowe 2004: 27). By contrast, discourse analysis reflects primarily on the way texts or other forms of discourse – social practices are in most cases assimilated with discourses – inform about the way social reality is constructed. It relates texts to their contexts of emergence, and acknowledges a part of autonomy to social discourses. In spite of these important divergences, both content and discourse analysis are recognized as productive tools for comparative analysis in the social sciences.

Neundorf (2004) listed some ways of combining both content and discourse analysis. First of all, *triangulation* of research results is a helpful application. Second, the deeper and broader analytical spectrum of discourse analysis also considering as many contextual elements as possible is aimed at revealing both networks of meanings and mechanisms relating various forms of discourse. Those elements would then feed further analysis by way of content analysis. Conversely, systematic content analysis is efficient at discovering unattended and puzzling relations between specific images and constructions in public, political or cultural discourses that would need deeper elucidation by in-depth and context-related discourse analysis.

One additional example of a multi-method approach relating both inter-subjectivist and the objectivist paradigm is the work done by Laitin. This scholar has dedicated most of his work to the comparative analysis of ethnicity in power relations. Over time, he has combined in various ways the objectivizing perspective of rational choice analysis and ethnographic analysis of the complex meanings of relations between local actors. To give one example: in his book of 1986 where he examines the type of identity mobilized by Nigerian ethnic groups for political action, he first uses ethnographic enquiries to understand the meanings that specific groups associate with religion or politics, considering explicit discourses as well as social practices. This dimension corresponds in his view to a first 'face of culture' (Laitin 1986: 12). The second face of culture is made of symbolic formations that often become symbolic resources, which can be manipulated by political entrepreneurs. This second face of culture is best analysed via the tools of rational choice theory adapted to the cultural context at stake. At a later stage of his work, Laitin has systematized this combined use of

inter-subjective and objective analysis in proposing a 'tripartite method' for comparative analysis (Laitin 2002). He proposes to systematically combine a theoretical analysis based on relationships among abstract variables with validation tests applied on a large number of cases, and finally an in-depth and internal investigation, which aims to consolidate the validity of the initial theoretical assumption.

5.4 BEYOND THE QUALITATIVE–QUANTITATIVE DIVIDE

Probably the most far-reaching attempt so far to transcend (not only combine) the quantitative–qualitative divide comes from the application of *set-theoretic methods*, namely qualitative comparative analysis (QCA) developed by Ragin and, later, other colleagues (Rihoux and Ragin 2008; Schneider and Wagemann 2012; Thiem and Dusa 2013 etc.). In a nutshell, QCA assumes that the connections between variables that unfold in the rich environment of the social sciences are better described in terms of multiple and conjunctural causation (Ragin 2000). Causation may be multiple, involving the possibility of equifinal solutions, that is, the manifestation of causal heterogeneity through different causal paths that lead to the same outcome (Bennett and Elman 2006). For instance, transitions to democracy in the so-called third wave of democratization (Diamond 1996) could be the product of modernization and socio-economic development for a certain number of countries, while they may derive from foreign intervention for another group of countries. Causation can also be conjunctural: each causal path can comprise a combination of causal factors to be considered as a whole. For instance, the occurrence of peasant revolts taken together with the breakdown of state structures can explain social revolutions under certain scope conditions (Skocpol 1979). Conjunctural causation rejects the traditional principle of causal 'additivity', assuming instead that several causes can and should be combined for the expected outcome to occur. So conditions are no longer considered as 'independent' variables with an unconditional 'net' effect on the 'dependent' variable. This approach is particularly helpful (but not limited to) when dealing with a small-to-medium number of cases, balancing intensive and extensive

investigation (Ragin 2000). This way, QCA aims at combining the advantages of case-oriented qualitative studies in terms of in-depth knowledge of cases and attention to multiple, singular, or deviant patterns of causation with the precision, transparency and systematic accuracy of a variable-oriented quantitative approach (Rihoux 2006).

More precisely, on the one hand, QCA is a qualitative approach, insofar as it is grounded on a holistic understanding of cases as configurations of conditions. In addition, the role of single explanatory conditions depends on the context; they may have a very different impact on the outcome according to the way they combine in a specific configuration. Finally, QCA enables a complex conception of causality that highlights connections that would be invisible or irrelevant in a variable-oriented framework. On the other hand, QCA includes some quantitative features. It allows medium-scale comparative inquiry with a formalized, systematic methodology to detect patterns and regularities in the data. The analytical procedure that produces the 'minimal formula' expressing the solution of a QCA analysis – based on Boolean algebra and set logic – is transparent, reproducible and parsimonious. This way, QCA aims at providing some, however limited, generalizations of findings.

Following Ragin (2008), QCA makes it possible to unpack causal arguments from the 'symmetrical' character they display in traditional co-variational analysis, where information is pooled and conflated in a two-way relationship. Instead, an asymmetric view of causation facilitates an interpretation of causal relationships in which causes may be necessary (but not sufficient) or sufficient (but not necessary) for the investigated outcome. Actually, much research is based on this type of claim, even if this is not always recognized explicitly. For instance, the structure of the famous 'Kantian peace' argument – democracies do not go to war against each other – is not co-variational, but based on the notion of sufficiency, that is, it can be reformulated as follows: the presence of a dyad of democratic countries is a sufficient condition to predict a peaceful coexistence. To make these insights operational, QCA relies on the analysis of set-theoretic relations. Necessity exists when the outcome is a subset of the causal conditions, while sufficiency exists when the causal condition is a subset of the outcome. It is also possible to study more complex patterns, as

those determined by so-called INUS conditions – causal conditions that are insufficient but necessary parts of causal recipes which are themselves unnecessary but sufficient – related to specific combinations of causal conditions that form a subset of the cases with the outcome. Following Ragin (2000), this complex form of causation is very common in so-called case-oriented research, as it refers to a frequent state of affairs in the 'real world'. These combinations of causal conditions are substantially relevant both for 'case-oriented' and 'variable-oriented' research, because independent variables that exert partial mean effects in well-specified statistical models could in fact be INUS causes (Mahoney 2008).

Examples of QCA applications are numerous, especially in the field of comparative political science (Rihoux et al. 2013). As Rihoux and colleagues rightly pointed out, many objects of political research are naturally limited to small- to medium-N populations, such as democracies, EU members, public policies, policy instruments, policy outputs, policy sectors, etc. What is more, the epistemological goals of comparative political science are close to the characteristics of the QCA approach, that is, grasping the complexity of empirical cases while also trying to achieve cross-case insights and partially generalizable theoretical knowledge. For instance, Emmenegger (2011) used fuzzy-set qualitative comparative analysis to examine the determinants of job security regulations in Western democracies. By exploiting the opportunity of analysing equifinal causal paths, he highlighted three different explanations for the outcome of high levels of job security regulations. What is more, each of his explanations involves a combination of causal factors, a feature that epitomizes the advantages of an analytical framework that enables the study of complex causality for the study of cross-national differences. Namely, the first path corresponds to Southern European state capitalist countries, where job security regulations were enacted relatively early and have remained one of the most important pillars of the social protection regime. The second path coincides with continental European managed capitalist countries with high levels of statism, which developed an encompassing and generous welfare state after the Second Word War. The third path is that of Nordic managed capitalist countries characterized by a high degree of non-market coordination, where strong labour movements successfully pushed for increased job security in the 1960s.

Interestingly, also social network analysts (SNA) can be considered as an approach that goes beyond the qualitative and quantitative distinction, even though less explicitly than QCA. Indeed, as noted by Hanneman and Riddle (2005), SNA has been developed from the joint effort of anthropologists and sociologists that were interested in interactions in small groups and of mathematicians working on graph theory. Therefore, most social network methodology deals with relatively small networks and adopts a heuristic, descriptive perspective on networks, their substructures and their members, focusing on the structure of interaction and the interdependencies across individuals, groups and organizations. This is still the case, especially regarding comparative political science, even though recent research on SNA is increasingly focusing on large networks, network dynamics and inferential statistics. In terms of research design, the first step is to define what constitutes the relation among actors, that is, the 'tie' between the 'nodes' of the network. A relation is a specific kind of contact, connection, or association between a given pair of actors (Knoke and Yang 2008): institutional linkages, reputational data or various types of interaction proxies. These ties include social type relations, such as social proximity, communication, collaboration, information exchange, conflict, etc., but they can also be exchanged resources, such as trade between countries, or joint membership in boards and organizations (Wasserman and Faust 1995). The unit of analysis may be an individual but also a collective actor such as an organization or a country. The crucial point at this stage is the determination of the boundaries of the social setting to be studied. Afterwards, the researcher must decide on which specific relations to collect data.

Next, the researcher has to create a matrix of relationships based on these pieces of information to draw a topographical representation of the network. Then it is possible to use network characteristics and data on the relative positions of actors to see how they affect or are affected by governance structures and arrangements. It is also possible to compare networks with simulative models or combine them with other analytical techniques (Carrington, Scott and Wasserman 2005). In that regard, two main analytical perspectives are applied to social networks: holistic analysis, based on the properties of the networks, and individual-based analysis, based on actor-level measures. Therefore, one distinguishes two main forms

of SNA: global network analysis and, respectively, the ego-network analysis. The former concentrates on the structural properties of one or more networks (Tindall and Wellman 2001). An advanced procedure for the analysis of large and complex networks is available, that is, *blockmodeling*. It permits discerning the structures present in the data and identify, in a given network, clusters of actors that share structural characteristics in terms of some relation(s). The actors within a cluster should have the same (or similar) pattern of ties, and actors in different clusters should also be connected through specific patterns of ties. Generalized blockmodeling can be seen as the process of selecting block types, assembling them into a blockmodel, and then fitting the resulting blockmodel to network data (Doreian, Batagelj and Ferligoj 2005).

On the other hand, ego networks analysis directly addresses the different roles of actors involved in various types of social relations (Wasserman and Faust 1995). Graph theory defines a set of calculations on a relational matrix that provides a way of looking at the importance of individuals, the nature of the relationship between individuals, or the status or rank of an individual actor. These measures include: distance, degree, centrality, structural equivalence, cliques, etc. (Scott 2000). In particular, different measures of an actor's centrality exist, which are relevant to identify the abovementioned 'most important' actors (or subgroups of actors) for specific areas or arenas of EU governance: 'degree centrality', 'closeness centrality' and 'betweenness centrality'. Degree centrality represents the number of relational ties between the actor and other actors in the network. Often this measure is normalized to the total number of ties available in the network so that centrality measures can be compared across networks of differing size. Closeness centrality assesses how close an actor is to all the other actors in the network: the more prominent members of the network will exhibit the minimum distance from the other actors in the network. This measure is calculated as the inverse of the sum of all the distances, or number of relational ties, between an actor and all other actors in the network. Thirdly, betweenness centrality attempts to determine which actors have a 'mediating' role when evaluating the relational ties in the network. Actors are assigned values based on their probability of being a part of all communication paths (Carrington, Scott and Wasserman 2005).

Paterson et al. (2013) offer an example of social network analysis applied to the study of comparative political science, which combines an encompassing topographic study of the patterns of collaboration with a fine-grained analysis of the mechanisms through which ideas are transferred within these channels. The authors of this piece studied the diffusion of greenhouse gas emissions trading (ET) policies outside of the UN climate governance process. Their results challenge traditional accounts based on US coercion and explanations in terms of rationalist learning and emulation facilitated by international governmental organizations (IGOs). Instead, the process was largely driven by distinct epistemic networks with weak ties that emerged in the early phases of international decision-making, whereby the diffusion of ET can be described as a case of polycentric diffusion, that is, emerging from different triggering points. What is more, these authors were able to show that this diffusion process was driven by transnational actors such as corporate and NGO actors, while governments and government agencies did not participate significantly in the transnational discussions about the architecture of this system.

5.5 THE WIDE APPLICABILITY OF METHODOLOGICAL PLURALISM

So far we have made the case for methodological pluralism and we have reviewed a number of quite straightforward ways of combining methods, as well as the possibility of transcending the qualitative–quantitative divide. To sum up, multi-methods can be subsumed into three broad categories that comprise:

- the use of multiple methodologies that belong to a specific explanatory paradigm, i.e. different variety of qualitative research;
- the application of research designs combining statistical analysis with case studies and qualitative methodologies of information-gathering such as interviews, documents, observation;
- approaches combining conventional qualitative methods with either interpretativist or constructivist approaches and the specific research methods that are usually related to them.

Furthermore, we have reviewed some research perspectives, such as those applied by tenants of QCA and SNA, which aim at going beyond the distinction between qualitative and quantitative approaches, because they seek to incorporate qualitative and quantitative elements in a single, unified analytical framework – even though their practical applications can actually come closer to one or another side of the qualitative–quantitative continuum. In this section, we would like to point to the potential complementarity of different methods even in more 'counterintuitive' cases, that is, when methodological pluralism seems hard to implement due to the apparent irreconcilability of the research traditions and procedures at stake. In this case, it is still possible, and even desirable, to combine methods in a way that Brady, Collier and Seawright (2006) call 'integrative', that is, whereby the most appropriate method is used to produce the final inference, while another method is applied to reduce the weaknesses of the former method and more specifically to design, test, refine or strengthen the analysis producing that inference. We will illustrate this point with two extensive examples, the first about the combination of game theory and formal modeling with historical narratives, and the second concerning the conduct of experiments.

To begin with, a very fertile approach that is most forcefully put forward by the *analytic narrative project* involves the combination of game theory and formal modeling with historical narratives (Bates et al. 1998). In other words: abstract mathematical representations of political institutions and social choices are associated with historically grounded causal stories regarding crucial facts and events as methodological tools to grasp key logics and causal mechanisms in complex political processes. This project endeavours to surpass the traditional '*Methodenstreit*' between rationalists and historicists, by extending rational-choice sophisticated methodology to more qualitatively-oriented institutional historical research. The purpose of this approach is to explain crucial events by adopting a combination of deductive formal modeling and inductive case studies of historical processes, in order to generate hypotheses applicable to a larger set of cases and generalize conclusions to some extent. Following Levi's chapter in Bates et al. (1998), this means, first, extrapolating information on the key actors, their goals and preferences from the narratives, and then deriving rules that influence actors' behaviours in a given context. Second, the analyst

should identify the main strategic interactions that produce an equilibrium constraining some actions and facilitating other ones. It is particularly important to find out the reasons for any shift from an institutional equilibrium at one point in time to a different institutional equilibrium at a different point in time. To do so, it is important to adopt a pluralist research strategy that embraces both a 'thick analysis' of substantial events and a 'thin model' of complex interaction among actors. For example, Greif (in Bates et al. 1998) analysed the functioning of the political institutions of the Italian commune of Genoa in the twelfth century. His main concern was to deal with the puzzle of the creation of such a peculiar institution as the so-called *podesteria*, whereby the *podestà*, a foreign (non-Genovese) ruler with little military power that was hired by the city to be its short-term administrator, was nonetheless able to solve clan conflicts and promote economic prosperity. By combining formal theory and historical narratives, Greif demonstrated that the *podesteria* resolved the drawbacks of factionalism because each faction had an interest in maintaining its integrity to acquire further possessions, and at the same time the existence of the *podesteria* itself was directly dependent on the very existence of the factions. This situation favoured institutional stability, which was in turn part of the explanation for economic prosperity. In this context, the formal model developed by Greif was helpful in systematizing the incentives for cooperation and to illustrate the self-enforcing nature of this political system. At the same time, the historical narrative was essential to understand the fundamental role of contextual elements, including learning processes and path-dependent dynamics, namely the fact that the *podesteria* was a viable political organization because it was built on the existing factional structure.

Second, experimental approaches can be fruitfully combined with qualitative methods. In a study of cleavages and ethnic voting in Mali, based on an experimental design and a number of face-to-face interviews, Dunning and Harrison (2010) demonstrated that ethnicity has a relatively minor political role in this heterogeneous sub-Saharan African country, showing not only that ethnic identity is a poor predictor of vote choice and parties do not form along ethnic lines, but also why this happens. To begin with, cross-cutting ties provided by an informal institution called 'cousinage' (i.e. historical alliances based on shared surnames) help explain the weak association between ethnicity and individual vote choice. In

particular, the quantitative analysis revealed that subjects' evaluations of candidates who are 'cousins' from a different ethnic group are statistically indistinguishable from their evaluations of candidates who are 'noncousins' from their own ethnic group. The experimental setting that was built up by the authors aimed at isolating the effects of different dimensions of candidate identity on voter preferences. It consisted of exposing randomized experimental subjects in Bamako to videotaped political speeches and then asking them to evaluate various attributes of the candidate giving the speech. The experimental manipulation was brought in by varying the fictional politician's last name, while the content of each speech was kept identical. This treatment allowed Dunning and Harrison to control for two dimensions – ethnicity and 'cousinage' – as the surname conveys information about both these dimensions. Nonetheless, face-to-face interviews were critical in many regards. On the one hand, ex-ante qualitative interviews in the field were used to define the population to be tested and refine the details of the experimental setting. On the other hand, ex-post interviews were used to validate, interpret and extend the reach of experimental results. Subjects indeed expressed a special regard for candidates who shared their own surname, in terms of attributes such as likeability, competence, intelligence and trustworthiness. Even more importantly, subjects offered several motivations for their propensity to support 'cousins'. The ability of 'cousins' to warn and sanction one another appeared to play a particularly important role in reinforcing mutual confidence. In this way, it was possible to understand the causal mechanisms at work, which could not be observed with the experimental strategy alone, no matter how sophisticated.

In the end, these two examples confirm that methodological pluralism offers an important contribution in reinforcing research designs even in 'difficult' cases, and provide tools to improve the dialogue between the study of particular phenomena (such as the First World War, the Russian Revolution, the New Deal or the Arab Spring) and the need for more general theorizing.

5.6 CONCLUSION

Nowadays there are few doubts about the helpfulness of methodological pluralism for the social sciences in general and for comparative politics more specifically. A plural vision of methodology emerged in the historical context of the 1990s that was strongly shaped by globalization. This confronted the social sciences with the need for reconnecting global social processes and local dynamics questions while they were simultaneously becoming more heterogeneous. Comparative politics, insofar as it is notably transformed by globalization (see Chapter 2 by Jahn and Stephan and Chapter 3 by Kübler in this volume), is particularly concerned with these issues. The adoption of methodological pluralism could help comparative scientists to adopt the research strategy that is the most adequate for tackling a given research question in a given context, without 'ideological' limitations. What is more, the application of diverse tools and methods is critical to strengthen, validate, reinforce and increase findings in a scientific environment where the use of recognized and sophisticated methods is more and more commonplace.

However, some challenges remain. On the one hand, the type of pluralism that is appropriate for research in comparative political science remains to be determined. More precisely, it is probably impossible to establish it a priori. Methodological pluralism does not limit itself to 'triangulation' (anymore) but consists of systematically combining different research traditions and even tries to go beyond methodological boundaries. But then how to choose among the virtually unlimited possibilities of combining various methods?

A first observation to be considered is that research design choices should be whenever possible 'problem-driven' (see Chapter 6 by Maggetti in this volume). Instead, method-driven research risks 'lead[ing] to self-serving construction of problems, misuse of data in various ways, and related pathologies summed up in the old adage that if the only tool you have is a hammer everything around you starts to look like a nail' (Shapiro 2005: 19). Second, one should consider that it is not recommended to juxtapose every possible existing method. Conversely, our choices should be ontologically compatible (Hall 2003). In other words, the different methodological tools implemented in a given research project,

however plural, must share or at least accommodate similar basic assumptions about the causal structures that compose the social world, which are implicitly present in the 'middle-range' foundations of comparative political science theories. This point leads to the second main challenge, which relates to the question of the degree of pluralism that can be handled in comparative research. As said before, researchers tend to agree that a certain degree of pluralism is often beneficial. Yet, what type of design is truly pluralistic, and which one is the most desirable? Should a research design that incorporates an equal amount of qualitative and quantitative research be considered intrinsically superior to one with an asymmetrical application of methodological pluralism?

In this chapter we have proposed an analysis of recent methodological discussions in comparative politics that have led to the development and theoretical strengthening of methodological pluralism. We have proposed an assessment of the various strategies implying the use of mixed methods in comparative politics and we have examined the various approaches related to those strategies. In our view, the quality of a pluralist research method does not depend on the sheer degree of pluralism, but rather on a few complementary criteria. First, as we have seen in this chapter, the various ways of mixing methods imply specific epistemological assumptions, for instance about the nature of the social mechanisms at stake. The scholars willing to make use of those methods should be aware of those assumptions and share them. Second, there should be a match between the mixed-method design itself, its degree of sophistication and the tangible added value it provides in terms of scientific knowledge. Third, as this is the case for other comparative methodologies, approaches which mix methods provide specific research results. They are not a methodological panacea in comparative politics. It seems to us however, that mixed-research strategies are able to integrate the analytical advantages of varied research traditions. As such they are highly valuable as they enable comparative politics researchers to strengthen their research designs and to better compare, test and validate research results.

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