# The Comparative Method and Comparative Public Policy

B. Guy Peters Department of Political Science University of Pittsburgh

In this paper I will be exploring the utility of the comparative method can be especially useful for comparative policy analysis. The comparative study of public policy is crucial for the advance of policy studies. Although learning about policy in any of our individual countries can provide some understanding of the dynamics of policy, on that basis it is difficult to develop general theoretical and analytic models of public policy. The world in essence provides a natural laboratory for the study of policy (and any other social or political phenomenon) that enables researchers to build theory and to understand the conditions under which certain factors can influence outcomes with a greater chance for valid generalizations.

The comparative study of public policy is also crucial for the more practical aspects of policy analysis. One of the contemporary mantras about policy is "evidence-based policymaking", with a good deal of the evidence being used coming from other political and policy systems. If, however, the evidence that is being used is faulty, or those attempting to use it do not understand the context within which the findings were developed, then any implicit advice that may be derived from the findings has an increased probability of being faulty. Although comparative analysis is sometimes thought to be an arcane academic exercise, it can provide major practical benefits for policymakers.

While the general idea of comparative policy analysis is appealing, that type of analysis is also very difficult to do well. Too often the countries (or provinces, or cities, or whatever) that are selected are done so on the basis of familiarity or proximity rather than for analytic reasons. And, on the other hand, comparisons that are undertaken on mor analytic grounds my not contain utilize understanding of the nature of the political systems involved, or of more subtle differences among the cases that in the end will have a significant influence on the policy choices being made. Navigating between this Scylla and Charybdis for comparison is a difficult task for any researcher.

To this point I have been discussing comparative policy analysis in rather general terms, meaning basically any study that examines policies in two or more settings, and/or over time. Much of the comparative policy analysis has been, and continues to be done, using large-N studies and statistical methods, attempting to find the correlates of policy choices, or perhaps the correlates of success or failure of policies. While those studies do provide a broad brush picture of the influences on policy choice, for public policy perhaps more than other areas of social research it is important to understand the internal dynamics of the process as well as the rather generalized picture derived from the correlational analysis. For policy studies it may be more

useful to get into the specific cases in some detail rather than just examining relationships among often simply defined variables.

## Modes of Analysis in Comparative Policy Studies

In his seminal article on comparative analysis Arend Lijphart (1971) argued that there are four basic research designs and methodologies for the social sciences–experimentation, statistical analysis, case studies and the comparative method. All of these basic research methods have been used to provide insights into public policy in a variety of settings. As noted above, the statistical method is the most commonly used in the social sciences (see Scruggs and Allan, 2006) but for policy studies there continue to be a large number of case studies. There is an almost endless stream of studies discussing in great detail policy x in countries y and z, all of which contribute to our collective knowledge but which do not often provide for rigorous comparative analysis.

For all of these four methods of analysis there is a fundamental litany for research design that should be addressed in the design (see Peters, 2013). This litany is:

# *Maximize experimental variance, minimize error variance, and control for extraneous variance*

This statement is based on the measurement of the dependent variable. Any observation will have three components. The first is the "true" relationship between the (presumed) independent variable and that dependent variable. There is also some possibility of error entering into the observation. This element may be especially high in qualitative research that depends heavily on the observations of an individual researcher, or a limited number of researchers, but also can be present in quantitative research.<sup>1</sup>

The third element of this litany is the most important for thinking about comparative research designs. Although we may observe a strong relationship between some variable x and some variable y, how do we know that this occurs only because they are both related to some z? That extraneous variance can confound any findings we have, whether developed through quantitative or qualitative methods. Coping with extraneous variance and spurious relationships is relatively easy for quantitative work–all one need do is to introduce control variables into the model and determine if the relationship between the independent and dependent relationship maintains its strength.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>This is usually assumed away in quantitative research by assuming that across all observations the mean of error is zero.

<sup>&</sup>lt;sup>2</sup>Even then, however, there can be other variables lurking that have not been introduced that are the real cause of the relationship. However, with quantitative research it is relatively easy to rerun the model with a new variable introduced. Indeed, much of the quantitative research published seems to be rather simplistic additions of one or more variables to familiar models.

In the experimental method the problems of extraneous variance are assumed to be handled through random assignment to test and control groups<sup>3</sup>. In the case method there is little real protection against extraneous variance, other than the researcher being open to alternative explanations of his or her findings, and as much peer advice as possible, It is the comparative method, the focus of this paper, where some of the more interesting questions about coping with extraneous variance arise.

For the comparative method, the selection of cases is the means through which extraneous variance is controlled, and indeed also the means through which the experimental variance is built into the analysis. The logic of the comparative method is that if the research selects the appropriate "sample" of cases—be they countries or sub-national units or time periods—then he or she can test hypotheses by ascertaining the way in which the relationship among variables operates within the several cases. (See Seawright and Gerring, 2008).

The use of selected cases to test hypotheses is important for theory testing because it enables the researcher to bring in the role of context (Faletti and Lynch, 2009)). The classic work by Teune and Przeworski (see below) argued that one of the purposes of good comparative analysis is to eliminate the names of countries and replace those with variables. I would argue that this to some extent defeats the purpose of comparative analysis. We are interested in the names of countries not just for geographical reasons but because they reflect the context within which the processes in which we are interested function.

That role of context and contingency in comparative analysis moves away from the dominant logic of variable based research to more case based research. There are still variables operating within those cases, of course, but the context of the case tends to affect the manner in which the variables interact. Thus, to some extent, as well as controlling for extraneous variance the comparative method tends to build in that extraneous variance as a major component of the analysis. But that, in turn, presents significant difficulties in untangling the relevant and the less relevant elements of context.

When using the comparative method, the principal challenge for researchers is to select the cases for inclusion in the "sample" of countries. The comparative method is a small-N approach that seeks to use case selection to control a number of variables in the cases selected. This control is analogue of inserting control variables into a regression equation, and is intended to isolate the effects of a presumed independent variable, or perhaps several independent variables, on the dependent variable--usually a policy choice (see van den Heijden, 2014). Unlike other methods, the selection of cases is not random, but rather is designed to demonstrate something about policies in the several cases.

Having said the above, the obvious question becomes which cases to select? And that question involves several subsidiary questions, each of which is important for the analysis and the valdity

<sup>&</sup>lt;sup>3</sup>The contemporary fad of natural experiments tends to violate this assumption and hence raises significant questions of internal validity, along with the questions of external validity that bedevil experimental work. See Sekhorn and Titunik (2012).

of the findings. The first question is a general research design question about the nature of the "sample" to be analyzed. Most comparative policy papers tend to adopt a "most similar systems" design, selecting cases that are as similar as possible, but yet vary on some key feature or features. This selection may not be done explicitly by the individual doing the research, but may simply be the product of the range of knowledge or language skills of the researcher. The logic here is that the selection of similar cases is a means of controlling for extraneous variance that may confound the relationship among variables,

The logic of "most different systems" design is very different. By choosing cases (whether national or sub-national) that are extremely different on a range of variables, the assumption is that if a relationship is found between some independent and some dependent variable then it is more likely to be "true" than if the same relationship were found in a more constrained set of cases. The use of most-different systems designs, however, tends to depend upon having very clearly defined hypotheses about behavior, and generally works better with large-N studies. Indeed, the original logic of most-different systems was for it to be used on individual level data, rather than the macro or meso level data more common for comparative policy studies, Hence, the most different systems strategy tends to be less useful for comparative policy analysis than for other aspects of the social sciences. (Yom, 2016) .

The most different systems design also poses problems of conceptualization and measurement to a much greater extent than does the most-similar design. Giovanni Sarotri's identification (1970; see also ) of the "traveling problem" in comparative research remains important, and is especially relevant for most-different designs, Concepts that are familiar and meaningful in some settings may not be in others, especially when research is conducted in different cultural and political environments. Even policy terms that appear to travel across countries may have different connotations in different settings.

To this point I have been discussing comparative analysis as analysis based on geographical units. This is certainly the most common form of comparative analysis, but we should also think about comparisons across policy areas. As Gary Freeman (198x) argued the differences across policy areas may be more significant than the differences across countries, and certainly may be more different than differences across sub-national units within a particular country. By examining policy differences researchers can ascertain to what extent the policy process within a geographical unit is consistent across policy areas, as well as understanding the consequences of particular policy problems for that process.<sup>4</sup>

The sociologist Erik Allardt provides an interesting analysis of how to think about the comparative research process, based in part on the Teune and Prezworski differentiation between most similar and most different designs. Allardt raises the fundamental point (see Table 1) of what the intention of the comparative research might be. Much of the discussion coming from Teune and Prezworki and many other scholars in comparative politics and socoology is that the purpose of the research may be to test theory and to demonstrate universals. As shown in the

<sup>&</sup>lt;sup>4</sup>In this case it is important to think about the nature of policy and policy problems in more analytic terms as well as the usual functional categories such as "health" or "defense". See Peters and Hoornbeek (2017).

Table this is but one of four possible uses of comparative analysis, and for comparative policy studies may not even be the most important.

For comparative policy studies two of the other cells in the Table may be particular relevance. One of these is the identification of universals. If, as noted above, one of the important uses of comparative policy research is to facilitate policy transfer and "evidence based policymaking" then identifying the universals in policy systems is crucial. Without understanding the commonalities in policymaking, and in the success and failure of policy, then that trans-national diffusion is mor likely to fail.

The second useful aspect of comparative analysis other than testing general propositions, is to develop proposition that are more limited in time and space. As argued above, an understanding of context is crucial for comparative analysis, and without that understanding again any capacity to use the results of comparative analysis either for theory or for more practical concerns is limited. This need to understand context, and integrate context into the analysis may be especially relevant for comparative policy studies, given that policy often has a significant cultural and social element without which the researcher may well not understand the true import of the findings

#### Sampling on the Dependent Variable

Another issue which arises in comparative research that is based on selecting cases purposefully is the possible selection on the dependent variable. This is perhaps a natural tendency. We want to know why a particular type of policy works, so we look at successful cases. But Barbara Geddes (2003) refers to this as an "inferential felony", given that if there is no variance of the dependent variable we have no way of knowing what factors are associated with success or failure. That said, however, sampling on the dependent variable does permit us to eliminate some potential factors from consideration5, and can provide some initial understandings of the political patterns associated with success or failure.

The capacity to eliminate possible necessary conditions through selectoion of the dependent varuable may be especially important for comparative policy analysis. Given that success in policy may depend upon a large number of factors, some of which may be beyond the control of government, understanding what factors to emphasize in making an intervention becomes especially important. Likewise, for understanding policy choices and outcomes from an academic perspective, eliminating necessary conditions permits the researcher to make more precise specifications of the relationships.

It is important to note here that although I have been speaking in terms of variables, the same logic applies for qualitative as well as quantitative research (Coppedge, 2008). A variable is

<sup>&</sup>lt;sup>5</sup>If a variable is present in one case of success and absent in another it can not be a necessary condition for the success. It may still be sufficient in some situations, but again there is the need to contextualize any findings.

simply an attribute that varies, whether it is measured quantitatively or qualitatively. The same basic rules of research design apply in all these cases (see Peters, 2014). While the qualitative measures may lack the *apparent* precision of the quantitative research, if done properly the qualitative measures can be as valid as the quantitative. The same standard for research--that the means of performing the measures be reproducible and intersubjectively transmissible– applies to both forms of measurement.

While quantitative methods may appear to provide more powerful means to understand comparative policy phenomena, qualitative methods provide powerful, if very different, mechanisms for explanation. While statistical methods are probabilistic and additive, qualitative methods tend to be more deterministic and to rely on the configurations of variables (Berg-Schlosser et al., 2009). Thus, qualitative methods tend to focus on the existence of necessary and sufficient conditions, and configurations of variables rather than the relative contributions of variable to the explanation. That naturally leads on to the utilization of methods such as Qualitative Comparative Analysis (QCA) that help to identify the existence of such conditions (Thomann, 2016).

#### The Comparative Method and Case Studies

From the above discussion it should be clear that doing good comparative research, whether on public policy or anything else, involves a great deal of knowledge even before the more formal parts of the research process begin. Selecting cases requires the researcher to know a good deal about them in advance, so that which every strategy is being followed can be effective. And even then surprises are likely to occur, given the complexity of the political, social and economic circumstances of almost all countries. The comparative method may therefore in use require a good deal of trial and error, while the reconstructed logic may make the research appear well designed from the beginning.

This brings us to the point that having said that the comparative method depends upon case selection, what do we do after we have selected the cases? Much of the application of the comparative method involves doing case studies within cases that have been carefully selected as either most-different, or most-similar, cases, or perhaps simply because they are interesting. Especially for comparative policy analysis the comparative method may involve using methods such as process-tracing to understand how policies are being made (Blatter and Haverland, 2014; see also Blatter and Blume, 2008).

Just saying that then the researcher does several comparable case studies to ascertain the relationship among variables is perhaps easier said than done. Making the comparison will involved detailed research in the two cases and with that a significant depth of understanding of those cases. And, as with any case studies there is the danger that the commitment of a researcher to a particular theory will determine, if unwittingly, the outcomes, Despite the richness of case studies, especially when several are done utilizing the same set of propositions, there are always important questions of internal validity.

### The Possibility of Hybrid Designs

I have been discussing the four methods proposed by Lijphart, and especially the comparative method, individually. Each of the methods does indeed have its utility and can reveal important aspects about public policy in a variety of settings. But we should also consider ways of combining these methods, and especially linking the more quantitative methods–experimentation and statistics–with the more qualitative methods–comparative and case studies. This is hardly a novel idea (see Leiberman, 2005; Abadie, Diamond and Hainmueller, 2015) but it needs to be considered specifically for the analysis of public policies. Further, much of the discussion of moving iteratively between large-N and small-N analysis has dealt with those manners of research in rather general ways, rather than addressing specifically the place of the comparative method in these hybrid research designs.

For our purposes in this paper perhaps the most promising form of interaction among research designs may be between experimental and comparative designs. Take, for example, the widespread introduction of programs of public management reforms since the 1980s. These interventions can be seen as experiments in which the "treatment" is initiating a reform such as agencification (Verhoest et al., 2012). We know well that this reform has had varying effects across the numerous countries in which it has been tried, but why? There are numerous case studies of success and failure, as well as a limited number of more comparative analyses, but if these were conceptualized more as a set of naturall experiments the findings could be made more powerful. That is, they could be more powerful provided that the effects of context could be integrated effectively.

One standard question which arises in these attempts to integrate quantitative and qualitative methods is whether the role of the qualitative analysis is to generate hypotheses or to test hypotheses. Given the dominance of quantitative analysis in the contemporary social sciences, the usual answer to that question is that while qualitative analysis is adequate for generating hypotheses the heavy lifting of testing hypotheses should be left to quantitative analysis (see ). Even with the development of stronger qualitative methodologies such as the numerous variants of QCA, the assumption is that only quantitative analysis can provide a true test of relationships among variables, especially one that is generalizable.

We could, however, make an alternative argument that while quantitative analysis provides identification of broad patterns of relationship among variables, qualitative analysis can provide more definitive testing of relationships. The quantitative analysis is, of course, stochastic and probabilities of a true relationship. Careful qualitative analysis , on the other hand, can be deterministic. Even if one does not accept the logic of the crucial case (Gerring, 2007) attempting to find cases in which a particular hypothesis is less likely to be supported can be a powerful means of testing hypotheses and theory.

In Lieberman's s often discussed model of nested analysis (2005) the assumption is that the researcher should begin with a quantitative analysis, determining the general strength of the relationship among the variables. The quantitative analysis will also permit identifying the

deviant cases (the large residuals from the regression line). Doing case analysis of those deviant cases will then allow the researcher to understand why those cases were deviant and also give insights into the relationships among variables. Based upon that qualitative analysis the quantitative analysis can be refined and tested again.<sup>6</sup>

If we move away from the familiar quantitative versus qualitative divide in the social sciences, we must confront the relationship between comparative analysis and case studies. In most of the discussion above these approaches to research have been treated separately, but in the actual practice of research they can be, and perhaps should be, closely linked. It may be possible to link the comparative method with other modes of research such as experimentation (see ) but for most comparative scholars (and perhaps especially for those in comparative policy studies) the more natural linkage is with case studies.

#### **Conclusion: What, if Anything, is Special About Comparative Policy Studies**

This paper has been discussing the comparative method and comparative research in somewhat general terms, albeit with some allusions to comparative policy research. I have been arguing that in general the comparative method s a powerful mechanism for organizing research on a range of social phenomena, given that it can avoid some of over-generalization of large-N statistical studies and the over-specificity of case studies. Likewise, the comparative method can avoid many of the problems of external validity that are inherent in experimental research designs.

Given those general virtues of the comparative method, are there specific benefits that it can bring to the study of public policy. Without making excessive claims, I would argue that there are. Much of the public policy literature, especially that based in political science, focuses on the processes of making policy (see Peters and Zittoun, 2016). Understanding process well involves more detailed tracking of events in something like case analysis (see above). Therefore, if the researcher wants to understand variations among processes and the consequences of those variations then the comparative method may be preferred.

The comparative method also attempts to bring context more directly into an analysis than do quantitative and experimental methods. Indeed, the experimental method attempts to exclude context as extraneous noise in the relationships being observed. For the study of public policy in many situations context is crucial for understanding the dynamics involved. Policymaking is not taking place in some sterile laboratory environment but rather in complex institutions which have values and routines (March and Olsen, 1989) that influence the outcomes of the process as much or more than individual preferences.

<sup>&</sup>lt;sup>6</sup>Several iterations of this process are possible, with Lieberman providing some advice about when to terminate the analysis. Not also that this version of the linkage between quantitative and qualitative analysis assumes that the goal is to have a better quantitative model, not to have the understanding of dynamics that can come from the case, or comparative, analysis.

Following from the importance of recognizing the importance of context in the comparative method, this approach to comparative policy requires some justification of case selection. That sounds rather fundamental to any research, but it is remarkable how many studies either take all available cases with little concern for their relevance (see Della Porta and Keating, 2008), or select cases on the basis of convenience. The comparative method requires some prior knowledge and some logical justification for the inclusion of a case in the analysis<sup>7</sup>. The logic therefore is very different from that of statistical analysis, in which a larger sample improves, *ceteris paribus*, the possibilities of generalization.

The comparative method, as outlined by Lijphart, provides many opportunities for scholars of public policy to enhance out collective understanding of policies and the policy process. Using this method may not be, however, as easy as to apply as other methods commonly used in the social sciences. Utilizing the comparative method requires substantial knowledge of the cases that are available for selection before making the selection. The comparative method also requires detailed understanding of the cases that are selected, especially if methods such as process-tracing are employed in the analysis of the cases. However, if those conditions can be met then these comparisons can yield very rich insights into the causes of policy choices, as well as their consequences.

#### References:

Abadie, A., A., Diamond and J. Hainmueller (2015) Comparative Politics and the Synthetic Control Method, *American Journal of Political Science* 59. 495-510. Allardt, E. (1990) Challenges for Comparative Social Research, *Acta Sociologica* 33, 183-93.

Beach, D. and R. B. Pedersen (2016) 'Selecting Appropriate Cases when Tracing Causal Mechanisms.', *Sociological Methods and Research.*, First Online

Blatter, J. K. And M. Haverland (2014) Case Studies and (Causal) Process-tracing, in I. Engeli and C. R. Allison, eds., *Comparative Policy Studies: Conceptual and Methodological Challenges* (Basingstoke: Macmillan).

Blatter, J. K. and T. Blume, "In Search of Co-variance, Causal Mechanisms or Congruence: Towards a Plural Understanding of Case Studies, **Swiss Political Science Review** 14 (2008), 315-54.

<sup>&</sup>lt;sup>7</sup>This does not mean that the justification for the selection of most similar cases will necessarily be correct. How many studies are there that conceptualize the United State and the United Kingdom as most similar when in reality they are fundamentally different in most important respects.

Coppedge, Michael. 2008. "Making the Most of Complementarity: Qualitative and Quantitative Methods." In *The Oxford Handbook of Political Methodology*, ed. J. M. Box-Steffensmeier, H. E.Brady and D. Collier. Oxford: Oxford University Press.

Della Porta, D. And M. Keating (2008) How Many Approaches in the Social Sciences?, In Della Porta and Keating, eds., *Approaches and Methodologies in the Social Sciences* (Cambridge: Cambridge University Press).

Ebbinghaus, B. (2005) When Less is More: Selection Problems in Large-N and Small-N Cross-National Comparisons, *International Sociology* 20, 133-52.

T. G. Falleti and J. F. Lynch (2009) Context and Causal Mechanisms in Political Analysis, *Comparative Political Studies* 

Freeman, G. P. (1985). National Styles and Policy Sectors: Explaining Structured Variation. *Journal of Public Policy* 5 (4): 467–496.

Geddes, B. (2003) *Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics* (Ann Arbor: University of Michigan Press).

Geering, J. (2007) Is There a (Viable) Crucial Case Method?, **Comparative Political Studies** 40, 231-53.

Lieberman, Evan S. 2005. Nested Analysis as a Mixed-Method Strategy for Comparative Research. *American Political Science Review* 99 (3): 435-452.

A. Lijphart, Comparative Politics and the Comparative Method, *American Political Science Review* 65 (1971), 682-93.

March, J. G. And J. P. Olsen (1989) *Rediscovering Institutions: The Organizational Basis of Political Life* (New York: The Free Press).

Peters, B. G. (2013) *Strategies for Comparative Research in Political Science* (Basingstoke: Macmillan).

Peters, B. G. And P. Zittoun (2016) Contemporary Approaches to Public Policy (London: Macmillan)

Rihoux, B., and C. C. Ragin, (2009). *Configurational Comparative Methods.* (Los Angeles: Sage).

Sartori, G. (1970) Concept Misformation in Comparative Politics, American Political Science Review

Scruggs, L. And J. Allan (2006) Welfare-State Decommodification in 19 OECD Countries, *Journal of European Social Policy*, 15, 55-72

Seawright, J. And J. Gerring (2008) Case Selection Techniques in Case Study Research: A Menu of Quantitative and Qualitative Options, *Political Research Quarterly*, 61. 294-308.,

Sekhorn, J. S/ and R. Titunik (2012). When Natural Experiments Are Neither Natural nor Experiments. *American Political Science Review*, 106, 35-57.

Teune, H. and A. Prezworski, **The Logic of Comparative Social Inquiry** (New York: John Wiley).

van den Heijden, J. (2014) Selecting Cases and Inferential Types in Comparative Public Policy Research, in I. Engeli and C. R. Allison, eds., *Comparative Policy Studies: Conceptual and Methodological Challenges* (Basingstoke: Macmillan).

Verhoest, K., S. van Thiel, G. Bouckaert and P. Laegreid (eds.) (2012), *Government Agencies: Practices and Lessons from 30 Countries* (Basingstoke: Palgrave).

Yom, S. (2014) From Methodology to Practice: Inductive Iteration in Comparative Research, *Comparative Political Studies* 48,

# Table 1

# **Purposes of Comparative Research**

Treatment of Societies

Purpose of Comparison

Society as an <u>Entity</u> Society as a Set Of Conditions

To Show Similarities To Identify Universals To Prove General Propositions

To Show Differences To Describe Why Societies are Different To Specify Time-Space Coordinates of Propositions

Source: Allardt (1990)