Without a well-developed and formalized technique of qualitative, holistic comparison, social and political science researchers encounter considerable frustrations and difficulties in terms of undergoing comparative work. In cases of cross-national data sets, which are relatively small in size, conventional quantitative techniques, such as multivariate statistical analysis cannot maintain patterns of statistical interaction. Moreover, if researchers want to compare different countries, statistical methods encourage them to increase sample size and ignore or at least skip other issues of comparability like historical, cultural or geographical aspects of the social phenomenon in the study.

Charles Ragin tries to move beyond qualitative and quantitative strategies in comparative social research. His first book, *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies* (1989), continues to represent the leading methodological work in comparative social science. It represents a significant attempt to step back from traditional statistical techniques, particularly in comparative social and political science, and explore alternative ways of linking theory and evidence. Ragin proposes a synthetic new strategy, based on an application of ‘Boolean Algebra’, in order to simplify complex data structures in a logical and holistic manner. The strengths of both quantitative and qualitative social science methods are, therefore, deliberately combined with some sophistication, in order to get to the task of comparing cases.

Before starting a more in-depth review of the book, it would be imperative to underline Charles Ragin’s major contribution to Qualitative Comparative Analysis (QCA). The School of Comparative Social Research had its earlier roots in substantive social research, especially Theda Skocpol’s substantial studies of comparative historical trajectories and J.S Mill’s comparative methods (the methods of agreement and difference). However, it is indisputable that Ragin’s book stands out as the most representative work on comparative social research. In the book, he tries to reveal the epistemological vigour of combining qualitative and quantitative methods in comparative research.

Charles Ragin is Professor of Sociology and Political Science at the University of Arizona; he has developed his contribution in the area of comparative methods and their role in advancing systematic cross-case analysis and small-n studies. Thus, books like the edited collections of essays *Issues and Alternatives in Comparative Social Research* (1991), *What Is a Case? Exploring the Foundations of Social Inquiry* (1992), the short introductory methodology text *Constructing Social Research. The Unity and Diversity of Method* (1994), and the edited collection *Formal Methods of Qualitative Analysis* (1994), deal with issues such as the balancing emphasis on cases and on variables in good comparative social science; ‘configurational’ comparative research as a middle path between the very small-n and the very large-n approaches; the nature of the case and the...
ways in which a different understanding of what a case is affects the conduct and the results of research; and the possibility of blending three major traditions by asserting their different goals: (1) qualitative research (many variables, few cases) studies commonalities, (2) comparative research (some cases, some variables) studies diversity, and (3) quantitative research (many cases, few variables) examines relationships among variables.

Coming back to Ragin’s first book *The Comparative Method*, I want to emphasize its main aim, that of identifying the distinctive strengths of case-oriented methods (qualitative strategies), in relation to variable-oriented methods (quantitative tools), and formalizing them as a general method of qualitative comparison using ‘Boolean Algebra’ — the algebra of logic and set theory. This analytical strategy is called Qualitative Comparative Method (QCA) and may be applied to a few cases or to hundreds.

Ragin considers that the essential characteristics of the qualitative/quantitative split in the social sciences are clearly noticeable in comparative social science. Cross-national studies that use quantitative tools, even though they can analyse many cases, tend to overlook important research questions or to distort them; they are variable-oriented (as opposed to case-oriented) and abstractly causal (as opposed to historical). Moreover, they are likely to become vague and abstract by trying to broaden the scope of a study so they can lead to general conclusions. On the other side, comparative case studies, while they can examine just a few cases, are case-oriented, sensitive to complexity and historical specificity, and holistic — they treat cases as whole entities and not as collections of parts and capable of generating new conceptual schemes. Furthermore, case-oriented methods perceive causation as being ‘conjunctural and complex’ — any of several combinations of conditions might produce a certain outcome and, thus, they ingeniously intermingle theory and data.

Ragin’s main enquiry deals with how to avoid the shortcomings of the two approaches: the limited range of cases by using case-oriented methods and the simplifying assumptions in the case of variable-oriented methods. The qualitative comparative method comes to link together the two approaches, providing an alternative to multivariate statistical analysis that is both holistic or historically interpretative — the cases are treated as whole entities — and causal-analytical — more than a few cases can be examined and modest generalization is possible. Nevertheless, it does not supersede traditional statistical analysis, but rather complement it. The data matrix of multivariate analysis is replaced by truth tables of ‘Boolean Algebra’ in order to logically minimize data’s complexity. Subsequently, two advanced methods of ‘Boolean Algebra’ are introduced: one that addresses the limited diversity of social phenomena and so the difficulty of manipulating them experimentally, and the second one, which concerns the use of set theory to contrast empirical configurations with theoretically constructed models.

The last innovative approach of Ragin to the practice of social science is encompassed in his book *Fuzzy-Set Social Science* (2000). This new book goes beyond Boolean analysis — binary scores (0 — “out”, 1 — “in”) and explores the use of fuzzy-sets — an approach originated in the mid-1960s — in bridging the gap-line between quantitative and qualitative methods. Fuzzy-sets refers to planning a labelling scheme that is numeric but ordinal like, for example:

—0 refers to “fully out” of the set
—lower numbers below 0.5 refers to “barely more out than in”
—0.5 represents neither “more in” nor “more out” of the set
—higher numbers than 0.5 represent “almost fully in” the set
—1.0 refers to “fully in” the set

Cases are not seen as combinations of variables as in the quantitative approach, but rather as configurations of set memberships or combinations of aspects and conditions. Ragin gives the example of poor countries, which are only a sub-set of the low-income countries. He argues that fuzzy-sets permit a far richer inter-connection between theory and empirical evidence in social research than previously possible. They not only allow quantitative researchers to abandon “homogenizing assumptions” about cases and causes but broaden diversity-orient-ed research strategies and provide a strong connection between theory and data analysis. More importantly, fuzzy sets can be cautiously adapted to fit evolving theoretical concepts, sharpening quantitative tools with in-depth knowledge gained through qualitative, case-orient-ed inquiry.

This approach is potentially a great advancement in research methods not only in sociology, political science, and anthropology, but also in whatever field of inquiry dealing with complex patterns of causation. The traditional dichoto-mous categories like old versus new, poor versus rich, left versus right, open versus closed economies, proportionality versus majority, democracy versus dic-tatorship, etc., are more and more blurred by the complexity of social reality. The integration of (or interdepen-dence between) various aspects of social life gives rise in the end to a mix of ele-ments that originally follow from differ-ent ideal types. Thus, fuzzy-set social science comes to explain and examine the fuzziness, vagueness or ambiguity of social reality.

Ragin’s contribution to comparative social science is undeniable and major. QCA and fuzzy QCA approaches move beyond standard social science analyt-ic techniques and promote two new methods of comparison in social sci-ence that surpass in an innovative way the well-known problems of both case-oriented and variable-oriented meth-ods: case complexity and analytic causality are thus peacefully reconciled. Hence, the traditional gap between qualitative and quantitative methods in social sciences becomes thinner if not obsolete. Nevertheless, social scientists using ‘configuralional’ methods may criticize Ragin for his total dismissal of cluster analysis or scaling when seeking data patterns, while statisticians would remain unconvinced about the sound justification of fuzzy-sets instead of probability tests, or by the limited exploration of the potential application of fuzzy logic in social sciences - only to qualitative comparative analysis (QCA).

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