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Boekbespreking van: Fuzzy-set Social Science

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probably contributed to the disappointment and ambivalence that remained after reading the book. The disappointment arises from the fact that so little progress has been made since Lukes' *Power: A Radical View* (1974) and Clegg's *Frameworks of Power* (1989). Although I realize that my judgement is biased, because my primary interest lies in empirical research into power and influence, it is more than clear that a lot of work remains to be done on conceptual, theoretical and methodological clarification. On the other hand, this reaction is not entirely fair. Instead of pointing a finger at the few who are bringing progress in our understanding of power and influence, it seems much more appropriate to be grateful for the work the research committee does on power and to criticize the rest of the academic world of political science and public administration. We are ignoring the questions that should be dominating the discipline.

Leo Huberts

Charles C. Ragin, *Fuzzy-Set Social Science*. Chicago and London: The University of Chicago Press, 2000, 353 p., ISBN 0-226-70277-4, USD 20.00.

Charles Ragin has become well known for his plea to move beyond qualitative and quantitative strategies in comparative social research. The main objective against the case-oriented qualitative comparative method is that it is too particularizing in identifying invariate patterns common to one case or a small set of cases. The weakness of the variable-oriented approach is its tendency toward generalizations, which makes it case-blind. In his earlier work, Ragin proposed a synthetic comparative strategy, the Boolean method, which is based on the use of binary data on causal conditions and one outcome. It is used as an instrument to identify patterns of multiple-conjunctural causation by means of Boolean statements.

In his newest book, Charles Ragin makes an interesting step that goes beyond Boolean analysis. Instead of binary scores, fuzzy membership scores are assigned to cases. A fuzzy-set includes cases that are 'fully in' the set (fuzzy membership = 1.0), some that are 'almost fully in' the set, some that are neither 'more in' nor 'more out' of the set (membership = .5, the so-called cross-over point) some that are 'barely more out than in' and so on down to those that are 'fully out' the set (membership=0). Cases are not viewed as collections of distinct variables, as in the quantitative approach, but as configurations of set memberships, being combinations of aspects and conditions.

The focus of the book is on the specification of the necessary and sufficient conditions for an outcome that cannot be identified with conventional quantitative or qualitative techniques, but which are, at the same time, indispensable for social research that aims to explain variations in a dependent variable. In case of necessity, every instance of an outcome should involve the presence of a causal factor X_i , however, this does not always hold the other way around, as X_i can be necessary without being sufficient. Whenever a causal condition is necessary but not sufficient for an outcome,

instances of the outcome will form a subset of instances of the causal condition (the 'subset principle'). In that case, the value of the outcome will be less than, or equal to, the value of the cause. Sufficiency means, when a combination of causal conditions is present, there are a number of cases with the outcome, but there are mostly also cases with the same outcome when this combination is absent, meaning that other combinations are relevant too. The situation may become even more complex when different combinations of conditions are linked to the presence of the outcome (the so-called multiple conjunctural causation).

Ragin adds an important element to fuzzy-sets, which strengthens its relevance for social science. Because the measurement of membership scores can be imprecise, these imprecisions are taken into account by incorporating an 'adjustment factor'. In order to constitute a violation, a case's membership in the outcome must exceed its membership in the causal condition by more than a fixed number of fuzzy-membership points as specified by the researcher. In doing so, the assessment of causal combinations often involves quasi-sufficiency and quasi-necessity. In addition, statistical tests are used that use benchmark proportions. As it is plausible that there are exceptions to the rule, a benchmark of (for example) .80 means that a causal combination is claimed to be 'almost always' sufficient when 80 % of the cases where the causal combination applies the outcome is observed. The lower the benchmark, the greater the analytical distance to the concepts of necessity and sufficiency. With an adjustment of .17 fuzzy-membership unit, a causal condition can be interpreted as a necessary condition for an outcome if $Y_i \leq X_i + .17$. In case of a sufficient condition this equation is $X_i - .17 \leq Y_i$.

What is the significance of this new approach? In my opinion, the fuzzy-set approach is potentially a major step forward in the social sciences, but only if this step is actually taken. Many theories in the social sciences are still explicitly or implicitly based on dichotomies like old versus new, rich versus poor, majoritarian versus consensual, proportional versus majoritarian, national versus international, open versus closed economies, left versus right, state versus market, etcetera. But more and more entities, groups and systems are becoming integrated and interdependent and are – in the long run – becoming a mix of elements that originally stemmed from different ideal types. Fuzzy-set social science is useful because social reality itself is becoming fuzzy or 'post-modern'. Fuzzy realities are difficult to fathom and the fuzzy-set approach offers a valuable tool to trace the causal conditions of complex phenomena.

The value of the fuzzy-set logic depends not so much on its potential (i.e., what it could possibly mean for the social sciences), but how (much) it is actually used and with what results. Although the fuzzy-set approach originated in the mid-1960s, it took a long time before it was introduced into the social sciences and even today very few applications have been made. One possible reason why there is not much eagerness to apply this new logic is that most social researchers are trained in either qualitative or quantitative techniques. To make a shift from quantitative or qualitative to fuzzy-

sets is a large, uneasy jump into the frontiers of social science. However, I think that Ragin has shown convincingly that the fuzzy approach has enough potential to be adopted in the social sciences.

This does not mean, of course, that the fuzzy-logic can replace other approaches. Qualitative case studies remain necessary, for example, to account for deviant cases. Quantitative studies are needed in order to arrive at generalizations and hypotheses. Evidently, the fuzzy-set logic is not always the best way to study causal conditions. It is only applicable to a not-so-large number of countries for which no time series are available and for which only a small number of causal conditions are relevant. For complex research designs, the fuzzy-logic is simply too parsimonious.

Paul Pennings

Amy Verdun, *European Responses to Globalization and Financial Market Integration. Perceptions of Economic and Monetary Union in Britain, France and Germany*. Basingstoke: MacMillan Press, 2000, 260 p., ISBN 0-31222-913-5, £ 55.00

Most analyses of the establishment of the European Economic and Monetary Union (EMU) have focussed on the economic rationale for its establishment, or on the characteristics of the international bargaining process that led to the 1991 Treaty of Maastricht. Amy Verdun's analysis of the financial elite's and the social partners' perceptions of the establishment of the EMU adds a different perspective to the literature on this European monetary arrangement.

The most valuable part of *European Responses to Globalization* is the empirical research Verdun has conducted. Her study is triggered by the 'puzzling observation' that an apparent consensus in favour of EMU existed following the publication of the Delors report, despite the fact that these plans implied a significant transfer of national sovereignty to the European Central Bank (p. 1). In order to solve this puzzle the book sets out to study how national actors perceive the establishment of the EMU. More specifically, it focuses on the question why actors in Great Britain, France and Germany favoured these plans.

Verdun has tried to find an answer to this question by conducting 75 semi-structured interviews with the officials of these countries' central banks, ministries of finance, employers' organizations and trade unions who were charged with European monetary integration. Most interviews were conducted in the mother tongue of the interviewee and were held during two periods: the first between February and May 1991, when most major reports on the EMU were available; the second from late October 1992 until January 1993, by which time the Treaty of Maastricht had been signed and was under ratification. The officials were asked to express the formal view of the institutions they represented on questions like: What was your attitude towards

the plans to establish a monetary union in the 1970s, and in the 1990s? Did the various plans to establish a monetary union serve your interests? What are your expectations concerning the results and consequences of the plans? Why, or under which conditions, are/were these plans desirable to you?

Verdun's first main finding confirms her initial observation that there was no substantial opposition amongst the national actors in the three large member states to the plans to establish a monetary union. All monetary authorities, employers' organizations and trade unions perceived the EMU to be desirable, with the exception of the French trade union confederation (CGT). Furthermore, all actors saw the EMU as an answer to changes in the global economy; to compensate for the loss of national autonomy, and to facilitate the achievement of certain domestic aims (p. 203). However, these results do not warrant the conclusion that there was a common interest in the EMU, for the actors differed in their perceptions of the conditions under which they thought the EMU was desirable. Furthermore, the research shows that the aims that actors expected the EMU to serve differed significantly.

Verdun shows, for instance, that prior to the signing of the Maastricht Treaty all monetary authorities endorsed the establishment of a monetary union with a single authority whose primary aim would be to guard price stability. However, the conditions under which these monetary elite considered the establishment of this kind of monetary union to be desirable differed significantly. The British did not want any formal limits on fiscal freedom; the French wanted an additional transfer of economic policy-making to the Community level; the German authorities, on the other hand, envisaged having more guidelines on budgetary policy.

In contrast, all employers' organizations considered the establishment of the EMU desirable under any condition, and their perception of the aims that the EMU would serve differed significantly from that of the monetary authorities. In the employers' view, the EMU was a necessary addition to the Internal Market: together these arrangements would ensure economic efficiency and the strengthening of Europe in the global economy.

Finally, the research shows that the national trade unions had, again, very different reasons to support the EMU: they decided to endorse the plans because they considered themselves unable to block them. Amending the blueprints seemed to be the most fruitful method to have some of their objectives realized. Their support for the establishment of a monetary union was thus purely strategic, and did not reflect their true feelings about the plans to establish the EMU. Their true preferences can be described, more adequately, as a concern that the EMU would have negative consequences for workers and lead to a less regulated market.

In the book, a theoretical chapter and the obligatory overview of the history of European monetary integration precede this empirical study. The theoretical chapter discusses every economic and political theory that can possibly shine a light on the establishment of the EMU (Optimum Currency Areas, (neo-)functionalism, federalism, supranationalism and intergovernmentalism). It also offers a