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# Quantifying in international conflict: the linkage approach

## Abstract

HumaineS

The evolution of international relations has introduced a development in the subject and in the method itself. For instance, the use of quantitative method could improve the international relations science, especially in the study of international conflict.

However, many writers still use the qualitative method. In this debate, the author gives an alternative method in the study of the relations between internal and external conflict behaviour.

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For centuries scholars in international relations have discussed the relationships between domestic conflict and foreign conflict behaviour, without recourse to sophisticated mathematical techniques for testing their hypotheses (1). In his study of war Wright (1942: 254) has stated "that wars or the preparations for them have often been used by governments as instruments for dealing with internal disorders" (2) in addition, research on linkage between internal and external conflict while it does not answer definitely why they occur, it could present empirical evidence which bears directly important theoretical considerations such as these (3).

However, in the early sixties the study of conflict has become one complex and sophisticated study, because of the use of quantitative methods and the introduction of computers in the behavioural sciences. This article discusses two main points: (a) the methodological debate between those who support the quantitative method and who criticise it, (b) it gives an alternative method to the study of domestic and international conflict.

The proponents of the quantitative method argue that, " only with the use of quantitative methods

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## ملخص

يتناول هذا الموضوع مشكل من المشاكل المنهجية في العلاقات الدولية المتمثل في إستعمال الطرق الكمية في دراسة النزاعات الدولية. على أساس أن الأرقام لها دلالة أكثر و أنها تساهم بصورة فعالة في الإستنتاجات النظرية في فهم النزاعات الدولية. كما يطرح حل للمناقشات الدائرة بين أولئك الذين يؤيدون هذه الطريقة في البحث و من يتمسكون بالطريقة الكيفية لفهم العلاقات بين النزاعات الداخلية و العروية. and hard data can definitive answers be found for questions that have perplexed scholars using less "scientific" and more "impressionistic" methods (4) they believe that their method is more scientific, and more accurate (5) however in examining these studies, as Mack put it (1975), "We sometimes have the impression that they were performed by intelligent Martians whose only knowledge of the world was based on the data banks culled from such sources as the New-york time index, and whose theoretical, techniques for data manipulation and correlation testing" (6).

For more than two decades now scholars of conflict linkages have been using the same method and similar studies, to arrive nowhere in developing a linkage theory yet. In fact, some of the critics of their method have focused on the judgement that macro – quantitative analysis is essentially a theorist approach to the development of theory (7). As Gurr noted, (1968) quantitative comparative research cannot flourish in a theoretical vacuum, even if it makes use of an armamentarium of techniques of a causal inference" (8). In fact critics of quantitative method range from different levels, including, shortcomings in data collection, measurement, methodology and concept, and the use of different analytical techniques.

## The Data Banks

Among the critics facing these studies is the data gathering problems. Because they draw heavily on the use of events data analysis, their sources of coverage rely fundamentally on newspapers, and deadline data as well as facts on life and Kessings' contemporary archives. However a number of conditions have caused reports of conflict to have been either distorted or omitted entirely from the newspapers (9).

Therefore, they are non reliable sources for new events. In addition, very often newspapers have an editorial policy, and result in increases and decreases in the amount printed about various kinds of events, or even the disappearance of reports of some types of events Jerusen (1969:194). So if a researcher using a single news paper as a data source and he is unaware of the changes, he will fail to recognise that changes in his data overtime reflect different editorial policies rather than changes in actual conflict (10). Furthermore, one should mention the difficulty encountered by some reporters in reporting events concerning domestic conflict from some nations (especially third world countries or totalitarian regimes), because of censorship, either because they may not have access to information or they are not allowed by the host government to cover events considered to be sensitive. The change of reporters could also have an important impact on what is reported, and sometimes they are hindered by the lack of knowledge of country, let alone if they are influenced by their ideologies or beliefs which may reflect the subjectivity of the events reported in the newspapers. Finally, some editors do not give space to events of small importance, occurring in small countries .

In this context some argue that "no one should expect any source or combination of sources to provide a complete, fully trust- worthy the picture of conflict acts" (11).

The second critic to this method is in the use of concept and method, one notable feature of these studies is their strong basic similarity probably due to influence of Rummel's study (1963). Because of their strong similarity, it is easier to generalize about their particular problems than it would be to generalise about the problems of all types of event data studies (12). A fundamental problem of all cross- national research

is the question of the comparability of nominally identical events in different nations. For example is a "demonstration" in the united states really the same kind of events as a demonstration in communist china ? is a "threat" from a nation which issues large numbers of threats each year actually an event comparable to a " threat" from a nation which issues one prior to taking action ? If events such as these are not truly comparable across nations, then conflict scores for nations based on the number of events in each will fail to describe the relative extent of their conflict" (13). Although this is true in the case of those studies, what one should focus on however, is the effect of the " demonstrations" on a particular state; of course the size of the demonstration is important but what is more important is for what purpose this demonstration was and how far a government can deal with it. In this context it is more likely that it is going to be different from one state to another (14), and so is the perception of the threat.

Therefore until future research has determined the extent of the problem, it might be wise to concentrate on events in relatively similar countries. By concentrating on a relatively few, carefully chosen states, a writer would be able to study their conflicts more fully in context (15).

In addition, although it may be highly misleading to count all events as equal, no study of the linkage between internal and external conflict has yet taken into account situational or event properties in aggregating events (16), the reason is these studies had failed to take the "social area" of domestic conflict into consideration. It is therefore fundamental for the study of linkage, to give serious consideration to the advantages of using events properties as indicators of the magnitude of conflict rather than continuing to rely solely on events (17).

Furthermore, although a wide variety of techniques has been employed to reach some sort of answer to the propositions or questions raised, such answers are never definitive, and cannot be regarded as "scientific" (18). For instance, Mack, in his criticism of Burrowes work on Syria, found that "the constraints imposed by the methodology, the total failure to examine issues, the absence of discussion of perceptions of events and so forth, are quite unnecessary, for the problems Burrowes attempts to analyse can be better dealt with by an analysis based on more conventional analytical techniques", these studies according to Mack, "unfortunately show a mechanist methodology which obstructs explanation rather than contributes to it" (19). Burrowes as well noted, that the underdeveloped state of concepts and theory in much cross-national research is one cause of the apparent failure of this style of analysis to live up to expectations. Although one cannot relate the absence of theoretical refinement only to the effect of deficiencies in data collection (20).

The third problem faced by these studies is the time lag problem. The use of time lag is different from one study to another, which raises some questions. Winkenfield, for example (1971), one year; Collins (1969), one two and three years; Rummel (1963), three years, and Feierabend (1972), six years.

"What is never explicitly discussed", as Scolnick argues, "in any of these writing is a justification for analysing data in the particular time units chosen, why should we think that one, two or three year time period is an appropriate one for testing hypotheses about the relationship between internal and external conflict? what is there, for example, about a calendar year which makes it an appropriate time unit in which to aggregate data ? (21).

The last, but not the least, problem is the problem of lack of theory; an outstanding omission of studies dealing with the linkage between internal and external conflict is their lack of a theoretical framework which generates testable hypotheses. Most of the studies present only a group of comments which suggest how and why the two types of conflict may be related (22). In his criticism of theses works on linkage between internal and external conflict, Scolnick concluded that "they are theoretical works which attempted to produce intelligible patterns of relationships by statistically manipulating event data in a variety of ways" (23).

More than twenty years now of intensive research in the quantitative study of external- internal conflict behaviour linkages have yielded so little that the constantly reiterated demands for further research efforts should be treated with considerable scepticism. It is about time that this should move towards a more analytical longitudinal approach, otherwise it will be a real "waste of time" as Andrew Mack has put it (24).

# Value of Case Study Approach

As the critics show, the quantitative method has failed to produce "scientific" answers to the questions raised about the relationship between domestic and external conflict. They have proved that the use of mathematics and statistics cannot be always accurate and sufficient for theory development.

However, the fact that this method is not suitable does not mean that the study of linkage between domestic and external conflict behaviour should disappear. On the contrary one should look for an alternative method to carry on the research on different bases and different strategies.

This method is based on the use of case studies, which although itself subject to criticism is nevertheless regarded as more fruitful than the quantitative method.

The main criticism faced by the traditional method of inquiry, was that case studies rely on history, (i.e. cases that can only take place in a particular place within a particular time), and if history does not repeat itself, it is therefore difficult to reach generalisations from historical case studies since each case posses unique features (25). This and many other arguments hindered the use of the case study method in the sixties when the introduction of quantitative methods took over.

However a reappraisal of the relevance of the historical method for theory construction has been encouraged by other developments in modern behaviourally oriented political science research. The effort to develop explanatory generalizations via statistical analysis of a large number of cases of a given type or phenomenon has proved to be more difficult than expected (26). As a consequence, this has led the investigators to rediscover and to respect the importance of unique features of each case.

As Sidney Verba has put it, "To be comparative, we are told, we must look for generalizations or covering laws that apply to all cases of a particular type. But where are the general laws? Generalizations fade when we look at particular cases. We add intervening variable after intervening variable since the cases are few in number, we end up with an explanation tailored to each case. The result begins to sound quite ideographs or configurative... in a sense we have come full circle... As we bring more and more variables back into our analysis in order to arrive at any generalizations that

hold up across a series of political systems, we bring back so much that we have a " unique" case in its configurative whole" (27).

This problem led the political scientist to formulate the idiosyncratic aspects of the explanation for each case in terms of general variables, and shift from the reliance on atheoritical, purely idiographic single case studies. "In this way the "uniqueness" of the explanation, is recognised but it is described in more general terms, that is as a particular value of a general variable that is part of a theoritical framework of independent, intervening and dependent variables.

The unique historical event cannot be ignored, but it must be considered as one of a class of such events if it happened only once (28). This contribution of the case study method to theory development, increased the relationship between history and political science; moreover, what is important, scholars have now identified ways of making more effective use of case studies for this purpose. Even among behaviourally oriented political scientists, the single case study and the method of "controlled comparison" of a few cases has become a respectable, legitimate research strategy that can contribute to theory development besides the other two basic methods, the experimental and the statistical (29).

In fact what minimised the importance of single case studies before, was the difficulty they encounter in contributing to theory development.

Although the case studies were often well done and instructive, they did not lend themselves readily to strict comparison and to orderly cumulation. As a result, the initial enthusiasm for case studies gradually faded, and the case study as a strategy for theory development fell into disrepute (30).

However case study approach can have great advantage, because by focusing on a single case, that case can be intensively examined even when the research resources at the investigator's disposal are relatively limited. The scientific status of the case study method might be ambiguous, because science is a generalising activity. And a single case can constitute neither the basis for a valid generalisation. However, it can indirectly make an important contribution to the establishment of general propositions and thus to theory building (31).

In many research methods nowadays, scholars have moved towards the case study comparative method. In the controlled comparison method, contrary to the statistical one, the investigator is not interested in many variables but has only a few cases to work with. This, while it is regarded as a weakness by the proponents of quantitative method, is seen as an advantage by their opponents ( the author included ).

As Lijphart notes "... intensive analysis of few cases may be more rewarding than a more superficial statistical analysis of many cases" (32). In addition, "in general, the problems of reliability and validity may be smaller for the investigator working with the comparable-cases approach. He can analyse his smaller number of cases thoroughly, and he is less dependent on data that he cannot properly evaluate" (33) .Furthermore, one can make sure that concepts are not stretched, that the cases are really independent. These are enormous advantages, which may well offset the relative weakness of the comparative method in handling the problem of control (34).

Finally the advantage of the controlled comparative method is regarded as a weakness in the statistical method. Probably the most serious weakness that faces the employment of the statistical method at the macro – level in the field of comparative

politics is that it cannot or will not live up to its own aspiration of leading to valid and carefully controlled empirical generalisations. The logic of the statistical method requires that the entire universe of cases be taken into account in order to maximise control (35).

From the argument mentioned above it seems that the controlled comparison method is not only more suitable for theory building than the statistical quantitative method, but also offers many advantages that facilitate the investigator's task- whether this concerns data control, data reliability, through analysis ,theory construction, or the ability to move with the reality of dynamic factors. Given the "richness and flexibility of analysis available in case studies, in terms of technical tools, the approach can integrate existing historical studies, secondary sources, aggregate quantitative data, participant interviews and sample surveys" (36).

For the above mentioned reasons we have opted for the use of case study method in our investigation of the relationship between domestic and foreign conflict behaviour.

#### Conclusion

Choosing between two methods of research is not really a complex problem. The researcher should be able to distinguish between what is advantageous for his research. Although both quantitative and case study methods are important, and whatever the criticism of one or another, it is not likely that one method will take over completely, and the two could in fact complement each other, thus in the end it is the researcher's choice to see what is more suitable for his research.

The reason why we choose a method of inquiry is sometimes relevant to the number of countries we are dealing with. If we are dealing with a limited number of nations such as the North African states which are similar in many ways and using a long period of time, then it is preferable to follow a qualitative method. Because the period of research is too long to permit the use of quantitative methods, therefore it is wiser to opt for a longitudinal research, in order to trace the various phases of the conflict and co-operation spiral.

## NOTES

- 1. Wright, A Study of War, Chicago, univ. of Chicago press (1942), p. 254, and for a more elaborate point of view on "linkage theory" see James Rosenau; political science in a Shrinking world (an introduction) in linkage politics essays on the convergence of national and intra-national systems), ed. J. Rosenau, the Free Press, New York (1969).
- 2. Ibid.
- **3.** Among scholars who have discussed such relationships without recourse to sophisticated mathematical techniques for testing them are George Simmel, conflict and the web of inter group affiliations (New York, 1955). Lewis Coser; the functions of Social conflict (New York, 1962); Ernest B. Haas and Allens, Whiting, the dynamics of international relations, (New York, 1956) Richard Rosecrance, Action and Reactions in World Politics; International Systems in perspective (Boston, 1963); and Samuel P. Huntington; "Patterns of Violence in World Politics", in Huntington, ed. Changing Patterns of Military Politics (New York, 1962).

4. See, Robert Burrowes and Jose Garriga – Pico, "The Road to the six day War, Relational Analysis of Conflict and co-operation", in Peace science society (International), papers 22 (1974); Burrowes and Gerald de Maio "Domestic / external linkages; Syria, 1961- 67" in Jonathan Wilkenfield, ed. Conflict behaviour and linkage politics (New York, 1973), chap. 10.

Rudolf Rumel "Dimensions of Foreign and Domestic conflict behaviour" in Dean C. Pruitt and Richard Synder, eds. Theory and Research on the causes of war (Princeton, 1969); Rummel, "Dimensions of conflict behaviour within and between nations", in Wilkenfeld, conflict behaviour, chap.3 (1963). Raymond Tanter, Dimensions of conflict behaviour within and between nations, 1958-60, journal of conflict resolution, v-x (March, 1966) 41-64. Wilkenfield, "Domestic and Foreign conflict behaviour of nations" journal of peace research (1968) 58-69- and others....

- 5. Joseph M. Scolinck, Jr. "An appraisal of studies of the linkage between domestic and international conflict" Comparative political studies, January (1974), vol.6, n° 4.
- **6.** See Robert Burrowes, "theory si, data no. A decade of cross- national political research" world politics, v. 25, n°1, Oct. (1972), pp. 120-144.
- Andrew Mack, numbers are not enough: "a critique of international/ external conflict behaviour research". comparative politics, vol.7, n° 4 (July 1975), p. 599.
- **8.** Ted Gurr, "A causal model of civil strif: a comparative analysis, using new indice" the American political science review, v. 62 (1986), p.123.
- **9.** Azar argues that there is a lack of systematic examination of data sources by users of events data, and that a single source is not enough and could be misleading .see Azar, E.S.H Cohen,To Jukan and James MC Cormick:international studies quarterly v.16, n°3, Aug (1972), p.373-388. See also J.M Scolinck ,"An appraisal of studies of the linkage between domestic and international conflict", comparative political studies, vol.6, n°4 (1974), pp.485-509.
- **10.** Ibid. p493
- 11. Ibid.p.493-94
- 12. Scolinck, op. cit.p486.
- **13.** This problem has been discussed by a number of writers (Azar, 1970:8, Gurr with Ruttenburg, 1971; 189, McClelland, 1968;31-33) who consider it to be potentially serious.
- 14. See for instance, Gurr, "the Neo- Alexanderians: a review essay on data handbooks in political science", American political science review v. 68 (March 1974), p.250-51.
- 15. Scolinck, op. cit., p. 494.
- 16. Ibid., p.495.
- 17. Ibid., p.496.
- **18.** For instance, Rummel and Tanter use factor and regression analysis; Wilkenfeld and Zina employ marker analysis, Warren Philips, Canonical analysis; Leo Hazelwood, Canonical and path analysis; and so forth. While each of these techniques has certain advantages claimed for it each in turn generates its own problems.
- 19. A. Mack, Numbers are not enough, op. cit., p. 616.
- 20. Burrowes, "theory si data no", op. cit., p. 133.
- 21. Scolinck, op. cit., p.495-96.
- **22.** Only Collins work on Black Afica (1969) tried to provide a genuine theoritical framework , but he also fails to test operationalized hypotheses which stem from

it . While Tanter (1966) and the other researchers are occupied by a broad search for relationships rather than testing theoretically based specific hypothses. It seems evident that Tanter was primarily interested in replicating Rummel's study rather than analysing or testing the particulr relationships proposed by the authors he cited. His and other researchers " theory" sections do not develop or contain any theory at all.

- 23. Scolinck, op. cit., p.502.
- 24. A. Mack, op. cit., p.618.
- **25.** See Alexander L. George, "case studies and theory developments. The method of structured, focused comparison", p. 43-68, in Paul Gordon Lauren (ed) Diplomacy, Newyork Approaches in history, theory and policy, the Free Press, Mc Millan, New York (1973).
- 26. Ibid., p.46.
- **27.** Siddney Verba, "some dilemma in comparative research", world politics, V.20 (Oct.1967), p. 113.
- **28.** Ibid., p.113.
- **29.** For a comparison and lucid discussion of the three basic scientific methods, see for example Arrend Lijphart's two articles: "comparative politics and the comparative method" American political science review v.65, (Sept.1971), p. 682-693, and the comparable case strategy in comparative research", comparative political studies, v.8, (July 1975), p.158-177.
- 30. Alexander L. George, op. cit., p.50.
- **31.** A. Lijphart, "comparative politics and the comparative method", op. cit., p.691.
- 32. Ibid., p.691.
- 33. Lijphart, "the comparative case strategy", op.cit., p. 171.
- **34.** Ibid., p.171.
- **35.** Ibid., p.166-167.
- 36. H. Heclo, Review article: policy analysis, British journal of political science 2, (January 1972), pp. 83-108. □