THE CASE STUDY METHOD

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1. Introductory Remarks

The case study is a detailed examination of the characteristics of single objects or events. When it concerns development it is a case history of life history. It may be contrasted with that other major method of observational study, the survey, which starts from an enumeration of the characteristics of all, or a representative sample of all of a given class of objects or events.

The importance of the case study method in the social sciences can probably be attributed to two things. (1) There is the overwhelming practical consideration that our scientific generalizations are called upon to help or explain the problems of individual persons, families, work group etc. These individual cases have to be studied in all their uniqueness if we are to decide what generalizations are applicable and what action is to be taken in view of the particular conditions of their existence.

(2) There is also the dilemma in our research methods that the more the reliability of a survey is increased by taking more cases the fewer the variables that can be studied for the same expenditure of research funds and time. Thus, as a research procedure, the case study method has been used by many investigators to obtain detailed qualitative descriptions to tease out the significant variables in fields as complex in their determinants as psychopathology, delinquency, family adjustment, cultural change, consumer behaviour.

However, the importance of the case study method in practice is only matched by the confusion that exists as to its methodological status. Despite the obvious fruitfulness of this method in the hands of such persons as Freud, Sutherland and Whyte there is still strong support for the contention that the case study approach is without scientific foundation because the individual object or event is so unique, its characteristics so fortuitous, that we can make no reliable generalization from our observations of it to other objects or events (4,7) Sarbin goes as to suggest that nothing of scientific value can be said about an individual event unless it is first ordered to some statistical class of events of which we posses some knowledge. From the point of view represented by Sarbin the issue is simply one of scientific rigour as manifested in modern sample survey techniques versus the case study approach with its 'deductions from plausible but untested hypotheses and so-called intuitions' (7.p.318). Sarbin's viewpoint stems from a narrow conception of science that would limit scientific knowledge to statistical generalizations and exclude, or turn a blind eye, to *conditional principles*.

More generally, it is a conception of science that stems from Bacon and from Kant's dictum that science is only concerned with measurements (a view popularized by Karl Pearson, *Grammar of Science* and reiterated by Guilford without drastic modification. A qualitative statement of the form 'this person is neurotic' may be as true *and as significant* (depending only on the nature of the problem) as a quantitative statement specifying the degree of neuroticism. It is characteristics of the early stages of all the sciences that the significant problems are more dependent on answers of a qualitative type (whether it be a matter of developing suitable classificatory systems, making the qualitative distinctions of 'velocity' and 'acceleration' or satiation and fatigue, or of perceiving continuity, evolution, in the temporal succession of qualities). Hence, so long as psychological research continues to pose problems requiring qualitative answers there will be a need for methods such as the case study that centre largely, although not exclusively, on qualitative data. Nor does the need for qualitative analysis disappear with the growth of measurement; rather do finer qualitative distinctions become possible and necessary.

The important element in the contributions of Sarbin, Gordon *et al* is accounted for if it is borne n mind that the contribution of a single case will not (under any but

perhaps experimental conditions) clinch an hypothesis; it will only add to its probability.

"No psychologist will claim that a prediction can be made on the basis of data from a single case without reference to anything else. Sarbin contends that this reference has to be to other cases or else that the prognosticator is engaged in non-scientific guesswork. The reference, however, is to *conditional principles* arrived at from the study of other cases, to be sure, but study directed, not at the discovery of empirical frequency tabulations, but at the manipulation of circumstance ("conceptually or actually" p. 175)to elucidate the determining conditions." (2, p. 176). Thus the value of the case method is not to be found in the process of adding but one more 'fairly typical' case to our statistical tables but rather in the selection of cases where we have reason to believe that the necessary and sufficient conditions for events may be most easily discovered or most easily verified. In the field of personality study we find that studies of the mentally ill predominate as a source of evidence because they fulfill these conditions both by the extremity of their behaviour and their willingness to cooperate in providing information and in effecting change; in return for help.

New cases should, where possible, provide critical tests of conditions *assumed* to be operative in earlier cases and thus contribute cumulatively to our knowledge.

The difference in approach of the statistical and the case study methods may be formally depicted in the type of statements they lead to:

> The former leads to generalizations such as 'delinquency is correlated with the occurrence of broken homes'.
>
> The latter, the case study, leads to a statement of the determining conditions such as 'delinquent behaviour occurs when the individual accepts certain socially approved goals but only the criminal means to those goals are available to him'.

Both refer to conditions of behaviour; only the second seeks to derive these conditions in a principled fashion from a conceptual model and thus by the same process, tend to create a conceptual model. It will be understood that the comparison here is between the common usage of these methods. It by no means follows that the survey cannot be used for conceptual ends.

2. **Materials Used in Case Studies.**

There is not a priori reason why any of the many techniques used to gather psychological information from individuals cannot be used to gather material for case studies. However, the detailed sort of information that is provided by

autobiographies, cumulative records, participant observation are repeated interviews are most appropriate to the case study method.

A useful classification of these materials is one that recognizes the different problems of interpretation and validation that are associated with differences in the standpoint of the informant with respect to the case being studied. Such a classification in the following:

a. *Personal documents*: letters, autobiographies, diaries, interviews records.

   Examples:
   Sutherland, R.L., *The Professional Thief*, Chicago, University of Chicago 1937, guided autobiography; Blos, P., *The Adolescent Personality*, New York, Appleton Century, 1941.

b. *Participant Observer Records:* used especially for the study of group or group events.

   Example:
   Whyte, W.F., *Street Corner Society*, Chicago, University of Chicago Press, 1943.

c. *Third Person Reports*: biographies, newspaper reports, reports of other investigators.

   Example:
   Lee, A.M., *Race Riot*, New York, Dryden, 1943.

When suitable autobiographical materials are not available they may be made to order. Thus Sutherland and Shaw prevailed on their respective cases to write autobiographies under their guidance. Similarly, participants in the life of a person or an event under study may later be prevailed to give an "inside story".

3. **The Use of Case Studies**

As with any other method case studies may be used to serve many different purposes. The most common useages are as illustration, to develop new hypotheses and concepts, to refine existing generalizations and to test hypotheses.

(a) Illustration. There is a strong temptation to liven up reports of survey findings, which after all are usually only reports of averages and class frequencies, with some typical statements by typical respondents. Thus in a study of comic reading by children we find the following:

> ‘To the 90 per cent of the children who completely disregard their parents’ objections, it seems wholly natural that their parents would object to comic book reading and equally natural that they should continue to read them. “They don’t like it when I read Superman, Batman and murder stories. *But I like to read them*. Mother thinks I should do better with my geography. She says they are a waste of time. I read them anyway” (girl –12 years)’ (9.p.38).

Because these case materials do stand out as figures against the perceptual ground of statistical tables it is necessary to be extremely cautious in using them. Invariably they go beyond the survey findings in suggesting casual relations where only concomitance has been proved and in imputing a casual role to variables that have not even been considered in the survey and thus are not even known to be concomitant with, let alone causally related to, the phenomena in question. Thus the above illustrative use of case material might suggest to the reader that this study has thrown light on the relation between the attitude of the parents to comics and their attitudes to school performance of their children – in fact the study contributes no more evidence than appears in this quote. It is unrealistic to simply preface such illustrations with a warning about their unrepresentative nature and expect that this will offset any false impressions they might give. The wisest course is to seek other ways of enlivening a report; like thinking through what is implied in the tables.

Case studies may also be used to illustrate theoretical typologies. This use is most commonly met with in psychopathology textbooks where they are used to illustrate the dynamics and some of the symptoms of common mental disorders. In this instance the use of case studies is warranted. Care must be taken, however, to ensure that the case selected for illustration actually possesses those characteristics that define the type it is supposed to illustrate and that these features are prominently displayed by the case in question.

(b) Initial Development of Concepts and Hypotheses. The case study is probably the most suitable method for opening a new field of study or for breaking new ground in a field wherein existing theories appear to have reached an impasse.

By focussing the collection of information on a single or small number of cases each piece of information will throw light on or be illuminated by each other piece. The inter-connections between the data that usually come up in case studies enable two kinds of statements to be made; (i) from observations of relations of inclusiveness and of contiguity in space and time it is possible to state that ‘object a has properties *mno*…’ i.e. to define concepts. (ii) from observations of relations of temporal succession between qualities with identical or contiguous spatial locii and relations of temporal coexistence between

qualities with different but connected spatial locii it is possible to postulate causal connections.

The consequent of wastage of time, effort and opportunities is thus negligible compared with what might be expected from survey under such conditions. Of such a survey it can be fairly said that it would be collecting discrete pieces of information about discrete variables, whose interrelationships can only be guessed at, in order to test hypotheses that are probably irrelevant. In attempting to get a full and detailed knowledge of a single case the study method makes fewer assumptions (or requires less pre knowledge) than the survey method and thus allows existing interconnections to show more easily through the wrap and woof of the research operations.

It has, for these reasons, become general practice to precede surveys with qualitative pilot studies that are based on case study method. *That this combination of methods has arisen in practical research operations stresses their complementary nature.* The case study method is applied to gain knowledge of the qualitative attributes of what is being studied and to suggest hypotheses about the relations between these attributes and the conditions under which they are observed to occur. On the basis of this information a survey can be designed to ascertain the degree to which these attributes are possessed by a given population and the strength of the relationships as observed under a wider range of conditions.

Shaw's study of 'The Jack Roller' revealed that whenever strict work supervision was placed on Stanley he reacted with considerable resentment and attempted to destroy the relationship, or move out. Form these observations Shaw inferred a causal connection and put forward the hypothesis that satisfactory vocational adjustment would only be achieved in a job which involved a minimum of supervision.

Even more striking in this connection is Dembo's study of the effects of visible injuries on social behaviour (1947, 1948). Possessing a body of theory that was adequate to her task she was able to analysis a number of individual cases in such a way as to throw up a large number of consistent hypotheses on the role of visible injuries as necessary or sufficient conditions of various kinds of behaviour and also to make important contributions to the clarifications of such concepts as 'sympathy' and 'help'. This study illustrates not only the fruitfulness of the case study method in opening up new and complex fields of study but also the fact that the successful use of this method, like that of any other method, depends upon having an adequate set of concepts and theories to handle general psychological problems.

(c) Refining and Clarifying Hypotheses – Deviant Case Analysis. A further and valuable way in which the case study method complements the survey method is the analysis of deviant cases. Very few of the statistical generalizations arrived at through a survey hold without exception (indeed it would be most suspicious if they did). These exceptions may be regarded as an embarrassment in that they show up the deficiencies of the generalization or they may be regarded as valuable in that they locate the points at which the generalization breaks down. Regarded in the latter sense the deviant cases are the starting point for further development of our theories. By a detailed analysis of these cases it may be possible to show why the generalization fails and to suggest modifications in it which may then be subjected to the test of a further survey.

The two main reasons for a valid generalization failing to explain all of the cases are that the generalization is *over*-simplified and thus fails to take into consideration all of the variables that have a determining influence; or that the classifications and indices used to relate the theoretical concepts to the data (the coordinating definitions) are *too imprecise*. Thus the use of the deviant cases should serve one or both of the two functions of elaborating the hypotheses and refining the measuring and classification procedures (i.e. developing better coordinating definitions for our hypotheses).

An example of the conscious use of deviant case analysis for these purposes is the Kendall and Wolf study of reactions to anti prejudice cartoons (9. Chapter 6). Unprejudiced persons tended to recognize the anti-prejudice intent of the cartoons but prejudiced persons tended not to see it. Thus, initially degree of prejudice and awareness of prejudice were the only variables taken into account. These variables explained most of the reactions to the cartoons but left some unexplained. Analysis of the deviant cases showed that a few prejudiced persons acted like unprejudiced persons in that they acknowledged the anti-prejudice intent of the cartoons because they *felt secure* enough to openly admit their prejudice (the first function of revealing new variables). The analysis also showed that some of those exceptional persons who were initially classified as unprejudiced and yet showed the same lack of awareness as the majority of those classified as prejudiced did actually hold prejudiced views that they had previously managed to conceal (The second function of refining the measures used for classification).

(e) *Hypothesis Testing.* That this is a function of the case study method is less generally granted even insofar as it applies to so-called idiographic generalization i.e. to generalizations pertaining only to the case studied, such as that quoted about Stanley's vocational adjustment.

As indicated earlier this difficulty appears to be associated with the belief that the only scientifically acceptable nomothetic generalizations about classes of objects that are historically and geographically defined. Certainly the case study method cannot yield valid statistical generalizations unless sufficient cases are taken to meet the criteria of representative sampling that hold for the survey method.

But then neither is the experimental method a very economical method of establishing statistical generalizations of this kind.

One suspects of the statistical purist that their strategic objective is not that of science but of commerce: statistical generalizations about historico-geographical classes of objects, e.g. 'married woman with children alive on 9th June, 1954' are of considerable importance in determining current markets and aiding current administrative and commercial decision making but are trivialities insofar as scientific progress is concerned, and the mere collection of a large number of cases, however representative of all the cases, merely serves to make clearer what is 'already fully contained in the establishment of any individual case. The mere accumulation of elements cannot entirely change their conceptual meaning; it can only render more distinct the determinations already contained in the elements'. (1.p. 264-7). The experimental method, starting from the same point, the lawfulness of the individual case, proceeds differently. Whereas the survey method coordinates the observed variations in the empirical values of specified variables to an ideal model of the variations for an actual class of objects the experimental method proceeds by actually manipulating the values of the specified variables to conform to an ideal class of objects theoretically conceived. 'Strictly speaking, the experiment never concerns the real case, as it lies before us here and now in all the wealth of its particular determinations, but the experiment rather concerns an ideal case which we substitute for it (1.p.254).

The case study method differs from the experimental in that the manipulations is rarely actual but usually conceptual. This fact more than any other indicates the limitations of the case study method as a means of making scientific advances. From this is follows that the case study method, dependent as it is upon well developed systems of concepts and the technical means to establish sound coordinating definitions, can play only an exploratory role (common useage (b) and (c) above) in the early stage of the development of social science. In the more advanced stages when the necessary prerequisites are available the case study method becomes the most helpful method of assuring a rapid increase in the tempo of scientific development.

1. See C.W. Mills "Two Styles of Research in Current Social Studies" *Philos in Science* 1953, 20, 266-275 on the present dilemma of the prohibitive costs of survey and experimental work that restrict the participation of social scientists in the development of their field of knowledge and exert a powerful influence in directing social science to areas of administrative rather than scientific importance.

2. Note the extent to which modern economic science has depended upon the conceptual manipulation of case materials.

A final methodological point: the fact that case studies can at the best provide a partial confirmation of a hypothesis is a quality it shares with any other scientific method – 'Each result established has thus only the relative value of a preliminary determination; and as such only holds what is gained in order to use it as a starting point for new determinations' (Cassirer p. 254).

Several examples should show how the case study method has been used not only to develop hypotheses but also to partially verify them.

Sutherland, in *The Professional Thief,* uses the sociological concepts developed by the Chicago School of E. Faris, Park & Burgess to analyze Chic Conwell's autobiographical description of his chosen profession. Having subjected the material to a series of validation checks he inferred that it gave substantial support to a number of hypotheses. Thus the hypothesis that 'The profession of theft is more than isolated acts of theft frequently and skillfully performed. It is a group way of lie and a social institution. It has techniques, codes, status traditions, consensus, and organization' (p. ix, x) is supported by the evidence of the extent to which Conwell participated in and observed such as group way of life. More importantly, as the day to day life of the professional thief emerges from Conwell's report it becomes obvious why this must be so and why an individual seeking to make his own way would quickly be apprehended and convicted. Similarly, the thesis of the active alliance between professional thieves and "machine politicians" in contemporary U.S.A. is supported not only by the instances of such cooperation reported by Conwell but more importantly by the light that is thrown on the sociological necessity of this behaviour on the part of both parties.

4. Criteria for Judging the Adequacy of Case Materials

There are good and bad case studies. From a comparative analysis of the existing uses of this method Foreman has attempted to devise a set of criteria that if followed, should avoid the most serious defects. Essentially these are an attempt to state how the normal scientific criteria of relevance, validity, reliability and comparability apply to case study materials.

(a) *Relevance* – the investigator must clearly specify the relation between the intended case study and his research interests. In the absence of clearly stated hypotheses and categories of observation derived from the underlying theory there is little to ensure that a useful case study can be selected, or once selected the necessary observations made, that will be relevant to the research purpose.

(b) *Validity* – 'Materials must exhibit true occurrences; this criterion may, however, be satisfied in instances by depiction of situations experienced by subjects or functionaries as true'. (Foreman p. 413). The main techniques of validation used for case study materials and for interpretations of this material, have been: (i) *cross check with independent investigators. (ii) check against outside sources.* Statements in the case study are checked against institutional records and the views of other persons who participated in the same or similar events. To quote Sutherland's comment on the validity of Conwell's statements, "this document is a description of the profession of theft as experienced by one professional thief. His experiences were necessarily limited and his point of view may have been biased. In order to supplement his experiences and to correct a possible bias, I submitted the manuscript to four other professional thieves and to two former detectives. Without submitting the manuscript, I discussed the ideas and problems with several other professional thieves, with several other representatives of municipal and private police systems, and with clerks in stores. From all these sources I secured oral or written comments. Furthermore, I have brought to bear on these problems all the available published literature regarding professional thieves. In general, these supplementary sources did not even hint at disagreement with the manuscript on fundamental issues" (vii-viii). (iii) *Review by subjects or functionaries*. In *The Professional Thief* "the thief read the manuscript as organized and suggested corrections, which have in all cases been made."(p. vii). In a case study of an institution it is the functionaries who must play the part of reviewers. Thus in the case study of worker-management relations published as *The Changing Culture of a Factory* considerable efforts were made to have every part of the document reviewed by the subjects concerned. This type of review not only helps to validate the case materials but also to determine what can be used as public data. (iv) *internal consistency.* Allport has argued that "a document that hangs together, that represents a structured configuration of human life and harbours no impossible contradictions has at least a prima facie validity…dda's document seems utterly convincing

even though objective validation is not possible, and in this case the reader has no personal experience upon which he can call. Why is it convincing? In the first place, *the self-confrontation is perfect*; the story bizarre though it is consequent and unified." (v) *prediction*. Successful prediction depends on adequate generalization and valid evidence and hence the success of predictions gives some operational validation for the generalizations and ultimately to the information it is based on. Care must be taken, of course, to prove that the prediction is fulfilled under the conditions specified by the theory. Thus in Stanley's case it is conceivable that the prediction of good vocational adjustment if the job entailed little supervision might appear to be successfully fulfilled when in fact closer examination might show the key determinant to be the kind of work-mates he had. In this case his vocational adjustment would suggest a new or modified hypothesis, not validate the original.

(c) *Reliability*. All of the above techniques for validating case materials also test their reliability. In addition two important techniques have been developed. Lazarsfeld and Komarovsky have developed the technique of *discernment* by which contradictions in the data are sought out and then investigated to determine their significance. The present Chinese administration have adopted the technique of *repeated life histories* as a means of testing the reliability of the case record and by the same process detect persons attempting to enter the administration under false colours. A long detailed autobiography submitted as a condition of entry and another at the end of the training period provide the data necessary for a test of reliability.

(d) *Categorization*. If the interpretation of the case study is to be linked with existing theory or if the data from several case studies are to be used in conjunction (as in Dembo's and Greco's studies) it is necessary that considerable care be paid to categorization. The categories must not only be theoretically relevant but also mutually exclusive and exhaustive if subjective selection is to be minimized and if subsequent ratings of degree are desired.

(e) *Presentation.* The studies of Polansky, Cartwright and French have stressed the importance of mode of presentation. Public agreement is far more at the concrete than the conceptual level and hence it is desirable to segregate interpretation from description.

5 Canons for Judging the Adequacy and Generalizations Drawn from Case Histories

The most satisfactory set of canons are those brought together by Paul Foreman from those he found implicit or explicit in the sociological use of case studies. These are as follows:

1. Generalizations must be fully supported by available evidence, if generalizations are made that go beyond the data they must be clearly stated in a tentative form. Thus Blumer found that some of the generalizations made in *The Polish Peasant* had no support in the data and hence were unwarranted.

2. Generalizations must be defined with consideration of all available, relevant evidence with due weight to major, minor, and contradictory facts or trends. By such consideration it is possible to specify the conditions under which the generalizations may be expected to hold. Some consistent theoretical standpoint is obviously necessary if this is to be done systematically.

3. The cumulative or configurational interrelationships of factors reputed to be causal must be shown. Evidence of mere presence is insufficient.

4. A nomothetic generalization cannot be considered substantiated until due measurement has been applied to a representative sample of the class in which cases are subsumed and, perhaps, to a distinguishing control sample. In view of the preceding discussion of validity one should add to this canon "or until the case has been located with certainty in a theoretically defined class for which such a generalization has been proven".

5. No factor can be assumed to be causal in nomothetic generalization if there is general evidence in the series of the given effect occurring in its absence.

6. An idiographic generalization cannot be considered substantiated until the operation of the factors is specifically shown for the case in question. This canon is a caution against the practice of seizing upon some factor such as 'broken home' or 'early separation' as the cause without examining the actual development of the person.[1]

[1] Certain of Foreman's canons have been omitted. His second canon referring to the rule of parsimony is omitted as an unsatisfactory epistemological criteria; if of two theories one is less simple than the other, then, either it explains more or it carries unnecessary assumptions or concepts. In the latter case no special canon is needed to drop them into disuse. Canon 8 is subsumed under canon 7 as simply one technique for establishing that a factor does operate.

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