

# The Survey Research Design Some Practical Problems

By FRANCES HENRY

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## RÉSUMÉ

Après avoir souligné que les méthodes de recherches traditionnelles ne s'emploient que difficilement dans le contexte d'une société en développement, l'auteur présente le "Survey Research Design" qui a été utilisé dans sa recherche sur l'engagement politique à Trinidad.

The research topics that are of growing interest to anthropologists call for an increased sophistication of research techniques and methodology.<sup>1</sup> Anthropologists conducting research within the context of emerging nations concentrate on such topics as national integration, the rise of political consciousness among rural or peasant peoples, the changing structure of urban areas as a result of migration from rural areas and many other socio-political problems related to the developing countries. It has become steadily apparent that reliance on traditional techniques of data collection — participant observation and intensive interviewing among others — cannot adequately cope with research topics which involve the study of large segments of a population or indeed of entire nations. In studying the reorganization of rural peoples in a city, or the rise of political consciousness, for example, intensive analysis of one community, or even of several, may not be sufficient. Sometimes community delineation in a sprawling metropolis may be virtually impossible.

The sample survey — an instrument devised by sociologists and used by them for many years — can be of immense value in gathering data on problems associated with a national state or

<sup>1</sup> The research upon which these observations are based was a study of political commitment and the communication process in Trinidad. Fieldwork was carried out in January-May 1965 and supported by a grant from the Centre for Developing Area Studies, McGill University.

any topic in which a representative sample of a large population is required (see Parten 1950; Kish 1965; Lerner 1958). Some anthropologists have become interested in this technique and political scientists, particularly those who work in developing areas, are also making use of the survey (Bonilla 1964).<sup>2</sup>

The survey technique is not without its problems however. I would like to call attention to some of these problems which emerged from a study of political commitment which I conducted in Trinidad recently. The following research design was constructed prior to the commencement of fieldwork. The study used the survey technique and a total of 350 interviews were collected by seven local interviewers. The sample was selected by means of the Trinidad and Tobago Census of 1960 which is conveniently divided into enumeration districts. The districts vary somewhat in size although the average is about 100 households per district. Twenty districts were selected by using a table of random numbers. A questionnaire of 182 items was constructed before fieldwork began and this was pre-tested in Trinidad and revised accordingly. Each district was surveyed and a number of streets or roads (in country areas) were randomly selected. Interviewers were then sent and instructed to approach each second house on the selected streets or roads until the total quota of interviews (usually 15-25 depending on the total size of the district) was reached. Certain modifications in this design took place within the field and these are noted below. On the whole, this random approach to the selection of the sample proved successful in that a fairly representative sample of the country, on the basis of age, sex, race and occupation was attained.

It is important to stress at the outset however, that the overall research design — and particularly the sampling procedure — must be sufficiently flexible to permit changes in the field. In also stressing this point, Bonilla (1964:145) says "What may appear in the abstract to be a clear-cut and vigorous plan can prove a nightmare to apply."

### 1. SELECTING A SAMPLE

The sample can be selected in various ways. Stratified or random sampling are the two most commonly used means of sample

<sup>2</sup> A good discussion of research design in modernizing areas can be found in Hyman 1964.

selection. Stratified sampling implies a relatively intensive knowledge of the variables which will be relevant to a particular topic and the sample is selected on the basis of such known criteria. In field situations in contemporary anthropology, knowledge of relevant variables may not be thorough enough to permit usage of this method and the matching of informants on selected criteria may be difficult to carry out. In my study of political commitment, therefore, the random method was employed. Because of the availability of the minute divisions in the census, I was able to draw a random sample of districts which was representative of the population. While the random technique worked well in this situation, it may present problems in others. In drawing a random sample from a larger universe than the population of Trinidad which is under 1 million, the sample may become excessively large and problems of time, money, availability of interviewers, etc. may make it impossible to interview a sample of say 1,000 or more unless the research undertaking is large in itself. Small one or two man field teams with limited funds may find the stratified method — which usually involves a smaller sample — more practical. But, as noted above, more intensive knowledge of the total area is required.

The units which are to be sampled may present another area of difficulty. The researcher must decide on the kinds of sampling units to be used and these may depend upon the country in which the research is to be carried out. Units can be villages, communities, neighbourhood blocks, households, heads of households, etc. In countries which are not as developed as Trinidad, census units may not be available and even units such as households or roads may present greater problems of delineation (Wilson 1958: 230). Even census divisions are not completely reliable due to the lapse of time between enumeration and the time of research. Changes in population or even in boundaries may seriously affect the sample. In this case, many enumeration districts were bounded by imaginary lines which were difficult to retrace so that some substitutions had to be made during the course of fieldwork. One district could not even be located during the first survey and a substitution was made rather than spend excessive periods of time in locating the missing district.

## 2. SELECTING INTERVIEWERS

One of the advantages of the survey technique is that a large number of respondents can be reached. This usually means that a team of interviewers is employed to gather the data. One of the most obvious difficulties lies in finding trained local interviewers, since it is usually too expensive to bring an interview team into the field. In most countries, university students have some degree of training but they may not be available during the research period. Summer research has an advantage in this respect. Occasionally, a local market research or similar organization can supply reasonably trained interviewers. In Trinidad such facilities were fortunately available but again several problems emerged. In the first instance, the natural biases of local interviewers must be controlled. Since this study focused on politics, the interviewers themselves had strong opinions with respect to the political scene and a great deal of supervision was required to make sure that they were not leading or influencing the answers of the respondents. Despite this supervision, complete neutrality was probably not attained. Secondly, because of the racial heterogeneity in Trinidad, the interviewers and the respondents had to be matched with respect to race, insofar as this was possible. It was assumed, for example, that a Negro interviewer would not be able to establish sufficient rapport with an Indian respondent. In other countries, variables other than race — sex, for example — might have to be controlled (Ralis *et al.* 1958: 247). Another problem is created by the fact that several interviewers are employed and inconsistencies or differences between them may affect the overall results. Interviewer reliability can usually be increased by careful and prolonged training but often the exigencies of fieldwork do not allow for such extensive training periods.

## 3. THE VALIDITY OF THE DATA

One of the major weaknesses of the survey technique is that it relies upon the voluntary cooperation of the respondents. This is not an insurmountable weakness particularly as respondents can be substituted as long as the substitutions are made in keeping with the research design. In a limited field situation, however, such substitutions may not be feasible and they may, in fact, become

excessively time consuming. Usually the interviewer is instructed to convince the respondent of the importance of the research in order to enlist his cooperation (Bonilla 1964: 139). Even so this aspect of the survey technique may be most foreign to the anthropologist accustomed to the sometimes lengthy period of time necessary to establish rapport within a community. In this case, however, an interviewer comes into an area in which he is not known and asks for 1-2 hours of a respondent's time. The interviewer is, of course, instructed to present his role and that of the research in a convincing and reasonable manner. Nevertheless, the time involved may be too short to really convince a potential respondent. Will people respond at all and if they do, how valid are their responses? In this research project, again perhaps because it involved politics, many respondents tended to associate the interviewer with the government, despite assurances to the contrary. It could be seen that some respondents gave answers which they thought would not endanger them and they were particularly loathe to express any negative sentiment against the government. These respondents tended to give vent to their true feelings after the formal interview was finished. They said, for example, "You have no more questions, ma'm? Now the way I see it is this..." Others tended to give the type of answers which they thought the interviewer expected. Some interesting rural-urban differences emerged in this respect. Urbanites tended to be far more suspicious; they asked many more questions but tended to give richer answers. Rural people, on the other hand, were more accepting but gave briefer answers and many more "I don't know" answers. This may, of course, reflect their lower level of information and political involvement. Although rapport may present difficulties in some cases, the validity of the answers can, to some extent, be controlled by means of sensitive questionnaire construction.

Another problem which relates to the entire data gathering process has to do with the need for government clearance of research in many areas of the world today. Government scrutiny may be necessary for many research projects regardless of the research design employed. Since the survey uses a questionnaire, the government official may wish to see the questionnaire and examine it carefully. There is a subtle psychological difference between showing a research proposal or discussing the research verbally and showing a question-

naire which lists a very specific set of questions. The chances are that an official will examine a questionnaire more closely and raise more objections when an itemized list is presented. The questionnaire used in this study was scrutinized carefully and changes were requested. Fortunately they were not of a kind to seriously jeopardize the project — usually a rephrasing was sufficient. In other countries, major modifications might have to be made to satisfy a government official and this is particularly the case when a questionnaire or other type of measuring instrument is employed.

Finally, the usage of quantitative techniques such as the survey implies a problem of a somewhat different order. Many anthropologists are not trained in the sophisticated mechanics of questionnaire construction or statistical data analysis using computer programmes. At the moment, this lack can be solved by reliance on sociological colleagues but if quantitative techniques gain a more widespread acceptance among anthropologists, specific training, perhaps at the graduate level, may become necessary — some graduate programmes already include this type of training. It seems apparent that anthropology would have much to gain by a more sophisticated methodology where the research topics require it. In the final analysis, however, the ideal research design would consist of a combination of the intensive and qualitative analysis of the traditional anthropologist with the more quantitative approach of other disciplines.

McGill University

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