# Conducting Qualitative Research on Demographic Issues

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#### INTRODUCTION

This session was organized to explore the range of qualitative methods that can contribute to basic research in demography with a focus on methods not derived from anthropology. Examples mentioned of such methods are focus group discussions (FGD), semi-structured interviews, and content analysis. These methods contrast somewhat with methods from anthropology, which I assume refers to ethnography and participant-observation. These latter methods have caught the attention of numerous demographers who do observations or community studies as well as demographic surveys.

Stating at the outset that we will discuss the use of non-ethnographic methods in demographic research seems like a good starting point, but it raises the question of what these methods might have in common to qualify as qualitative research. How and why are they considered as qualitative methods? Are they part of the qualitative family because of their data collection techniques, the kinds of analyses conducted, or the way evidence is presented and evaluated? In addition to analysing words rather than distributions, what attributes do they share?

My main interest in this session stems from a concern to conduct and report on qualitative research in ways that make the findings accessible and convincing to specialists in population studies, since so many of my colleagues at Macro International are demographers. As an anthropologist I was first known as a specialist in ethnomedical systems in Africa, then as a specialist in the evaluation of health communication projects, and now I am expected to know about qualitative research. My training as a social anthropologist did not include any talk of qualitative research. I have had to adjust my image of what I was doing as well as the sources of methodological orientation to accommodate this new label.

Qualitative research is often a residual category in public health and in demography, a category that might provide explanations for patterns that are otherwise bewildering (Hammel 1990). But what constitutes qualitative research? Should the contrastive term be quantitative research, or something else? Perhaps it would be better to speak of qualitative methods, as does Carla Obermeyer (1997) in her introduction to several papers on qualitative research published in the Population and Development Review. She places qualitative and quantitative methods at opposite poles on a continuum, but does not elucidate what constitute the thread between the two. Placing qualitative and quantitative methods on a continuum may well be useful, but what is the thread that joins them?

Most researchers have become accustomed to thinking of "qualitative" in opposition to "quantitative," but the meaning of this contrast is rarely specified in a clear fashion. As an adjective, what can it modify? Can we speak of *qualitative questions, qualitative answers, qualitative data, qualitative analysis, qualitative findings,* or above all, *qualitative research*? Does any of this matter? It matters only in that for some scholars, the lack of precision often associated with the concept may be taken as an indicator of looseness or uncertainty of method. I find it useful to think of the term qualitative as an adjective that describes an activity: data collection, analysis, or drawing of conclusions. In sociology we find numerous methods to collect data that can be described as qualitative: interviews, observations, content analysis, conversation analysis, transcripts. Thus we can always speak of *qualitative methods*. It may also refer to a strategy, to a research design that uses qualitative methods to collect data, to analyse it, and to draw conclusions from the findings.

This paper discusses the following issues: 1) the image of qualitative research in some domains; 2) attributes common to most of qualitative research; 3) qualitative methods available from sociology; 4) ways to design a qualitative research project that will be transparent, and thus understandable, by those outside the field. The paper concludes with comments on the thread that might place qualitative and quantitative methods on the poles of a continuum.

# THE NATURE OF QUALITATIVE RESEARCH

Formulating a single definition for the term "qualitative research" does not seem feasible or productive, since the meaning of the concept depends on the context of its usage (sociology, psychology, education, public health, health communication, demography). We can, however, examine how the term is used in various contexts. We can also elucidate certain principles characteristic of good qualitative research.

#### Usage of the term 'qualitative research'

In the arena of public health and health communication, qualitative research acquires significance and meaning most often in contrast to studies that use questionnaires for large sample surveys or pre-coded forms for checking records or evaluating performance. Public health studies rely on case control studies and social science surveys to estimate the prevalence of disease and the risks of exposure to disease. In these circles the concept of qualitative research evokes images of local beliefs and attitudes assumed to determine behavior. Information about beliefs and attitudes is collected through group discussions and individual interviews. This kind of research seeks to understand behavior by examination of beliefs and attitudes among groups identified by ethnicity, language, residence, age, and gender. Specialists in the areas of operations research also consider rapid assessment procedures and participatory rural appraisals as tools in the qualitative research tool kit.

For sociologists as well as some anthropologists, the concept of qualitative research includes a number of approaches that examine the meaning of actions for the actors through a combination of observation, interviews and informal conversations, narratives and life histories, and textual analysis. These approaches include ethnography, symbolic interactionism, and ethnomethodology, among others. Such labels need not concern us here

except to note that in American sociology, these approaches are identified as part of qualitative research. After receiving some attention in the 1940s, various methods of qualitative research came into vogue in the 1970s as specialists evaluating educational systems, health care delivery, the structure of organizations, and health communication efforts became interested in examining local perceptions and personal experience relating to specific social contexts. Several sociological journals (e.g., the *Journal of Contemporary Ethnography, Qualitative Health Research*) specialize in qualitative research studies. Thus for sociologists, the qualitative approach to research constitutes a small but an increasingly important part of the discipline.

The term qualitative research has little meaning for social or cultural anthropologists trained to conduct ethnographic research. An ethnographer seeks to understand local knowledge and practices relating to daily life by participating in that life, by observing daily interactions, and by formal and informal conversations with groups and individuals. It is assumed, though not always the case, that the ethnographer speaks the local language and thus can eventually participate to a large degree as a member of that society, and that fieldwork will last a year or two The product of traditional ethnographic research is a book-length manuscript describing certain practices as a way of life of the society in question.

The traditional mode of doing ethnographies, with the author absent from the text and the text filled with normative descriptions of "how things are done here" has been criticized since the mid 1980s by many scholars working from the perspective of textual analysis and literary criticism (Clifford and Marcus 1986; Marcus and Fisher 1986; Mannen 1988). These scholars have pointed out that any ethnography written is the result of a person's interaction with a population, that the life of the societies described is not static or ahistorical, and that societies are not isolated and homogeneous entities. Ethnographies today are often written with the ethnographer very present in the text (Jackson 1995), situating the population in an historical context (Lambek 1993) or about Western populations (Steward 1998)

Over the past 15 years demographers and sociologists have become interested in the anthropological methods of ethnography and participantobservation. That interest is exemplified in the establishment of the Committee on Anthropological Demography within the IUSSP, and the publication of edited volumes such as Anthropological Demography (1997) and The Methods and Uses of Anthropological Demography (1998). Many of the demographers who use anthropological methods in their study of fertility and mortality have done research in a specific community, a population residing in the same region over time. As Susan Greenhalgh describes it (1990), this also involves months or years of fieldwork in the same area. David Kertzer's work in Italy serves as a prime example of such research. John and Pat Caldwell and their many colleagues are perhaps the best known scholars who have used micro studies of communities to collect demographic information. The issues these scholars deal with take us outside the focus of this session devoted to other types of qualitative methods. However, whether we choose methods of data collection from anthropology or sociology, we must still struggle with drawing our conclusions in ways that population specialists accustomed to proof through the strength of statistical associations find convincing, and with our assumptions about "culture." Hammel and Friou define culture as "a set of norms or values that influence behavior" (1997). Seeing culture as a set of norms is useful in demography, they say, because it gives meaning to causal models of demographic behavior. From such a definition it takes only a slight shift to think of norms as determining behavior. And whether we do research that derives from anthropology (community studies, studies of local knowledge, narratives, etc.), or from sociology or another social science, we are faced with the issue of how to present our analysis and our conclusions to demographers. I return to both of these issues.

# Features of a qualitative strategy

A qualitative research strategy is a road map for formulating research questions, collecting data, discovering patterns in that data (analysis), and drawing conclusions from the analysis. Most of the methods available to such a strategy share certain attributes that allow us to characterize methods as likely to examine the following:

- naturally-occurring phenomena, or events in their social setting
- the use and display of local knowledge and understandings the consideration of events (social interaction) within a social context
- · data collection and analysis that takes place at a micro level
- the data collected and the patterns identified are considered as part of a process of discovery; the results are not separated from their construction
- an analysis that presents both local knowledge and understandings about a phenomenon and those derived from social science, being careful to distinguish between the two
- the discovery of the common sense understandings of individuals as they accomplish certain tasks.

Each of these elements deserves a brief comment. The last attribute on the list applies mainly to research guided by principles of ethnomethodology.

# Naturally-occurring phenomena

In his review of the writings of qualitative researchers in sociology, David Silverman (1993) summarizes how five well-known scholars characterize qualitative research. One element common to them all was the importance of studying everyday events as they occur in the social world, referred to as

"naturally-occurring phenomena." Being able to examine everyday routine events, rather than an event or occasion created for research purposes, is an ideal for qualitative research. Of course, much of qualitative research in communication, public health, and reproductive health does not examine everyday events. We rely instead on individual reports of events or on group discussions of related issues.

### Local knowledge and understandings

The study of local knowledge refers to the identification of the terms, concepts, and logic that individuals use in talking about specific subjects. For example, we know that every society has its own system for recognizing and classifying illnesses in its own language even though individuals may use medicine or treatments from outside systems. If we were interested in understanding why men in central Malawi do not use STD services, we might do a study in Chichewa (one of the main languages) to discover how men go about the process of recognizing signs of illness, making a diagnosis, and choosing a treatment (or not) in their own language. Such a study would involve not only interviews about men's knowledge of the signs of illness. The results would provide us with an image of how these men use terms and concepts relevant to illness as well as the treatment options at their disposal. The latter information could be used to suggest changes in services offered to those suffering from STDs.

This focus on local concepts and understandings is one of the features of qualitative research in general. It would be safe to say that all qualitative strategies for research pay close attention to local concepts and local knowledge; they explore the meaning of events for the participants. It often allows the researcher to interpret the meaning of quantitative data (cf. Knodel 1992).

#### Consideration of events within a social context

Placing a topic within its social context has two dimensions. First, it means that we assume that all issues have a social as well as an individual component. When we examine how parents choose treatment for fevers in their children, we assume that over time, the mother consults with other members of the household in deciding what action to take. The actions are not always, perhaps not often, taken alone. It means that when we study household resources, we realize that all members are involved, not just the person answering the questions. Second, it means that the meanings of events are constructed by the participants through their social interactions. This recognition implies that in order to understand the meaning of a phenomenon such as how money is spent or how people care for the sick, we are best off examining events as they occur or have just occurred rather than asking individuals to describe how they do things normally (normatively, hypothetically).

#### Micro level data collection and analysis

It may be considered a truism to state that qualitative research works at the micro level of interaction in data collection and analysis, though that is not always the case. Certainly methods that involve observations and studies of local terms and concepts must operate at a local and a micro level. Micro implies a recognition of the details of the context of social interaction.

### The construction of data

We recognize that information about events and about knowledge are produced in a certain context through a collaboration by individuals, and that the nature of this collaboration influences the data produced. The results of a group discussion are shaped by the relationships among the participants and the dynamic between them and the moderator. The skill of an interviewer plays a large role in stimulating people to talk about themselves. Survey research does not consider the production of responses to questions asked because interviewers are (supposedly) trained to ask the questions in the same manner.

# Distinguishing between local knowledge and understandings and those derived from social science

Using a qualitative approach affects the formulation of research questions, the way the relevance of evidence is determined, the way data are collected and analysed, and the way arguments about evidence are constructed. This approach also recognizes the relevance of two systems of meaning, two frames of reference, in operation: the frame of the researcher, and the one of the population group being studied. Both systems are regarded as significant; good quality research involves a thorough understanding of both. Movement from one to the other should be made explicitly and clearly documented.

An example taken from research on health problems illustrates the operation of the two systems of meaning. Anthropological research has amply demonstrated that each society has its own ways of recognizing and diagnosing illness. As populations have gained access to biomedical health care, those ideas and concepts are modified to account for new treatment options. The basic ethnomedical system of knowledge changes and adapts over time, but those changes occur slowly. Using qualitative research to formulate questions for a large sample survey, I once conducted a study of how mothers speaking Swahili in Lubumbashi, Zaire, recognized and diagnosed diarrheal disorders. The study found that mothers knew of five different illnesses that public health specialists would gloss as diarrhea, that the treatments recommended for those five illnesses differed widely, and that mothers were far more likely to give fluids for what we would call ordinary diarrhea than for what we would call dehydration or dysentery. The qualitative phase of this research used mothers' own concepts to frame the research, and then made the transition to biomedical concepts in the analysis phase of the project (Yoder 1995).

# Common sense understandings of individuals as they accomplish certain tasks

This attribute is part of the qualitative research conducted by ethnomethodologists who seek to discover the common sense understandings of individuals largely by observation. What understandings does an individual have to act appropriately in a social situation? What does it mean to be a "good father," how is it done, and how can it be recognized? What is the social code that members of a half-way house live by to get along with supervisors? Such questions underlie ethnomethodological research.

# **Qualitative methods**

Data collection activities commonly associated with qualitative research range from the observation of naturally occurring events such as weddings or funerals to the detailed study of transcripts of recorded conversations. There may be dozens of methods of collecting information that operate to discover and preserve local concepts and understandings, and that interpret them on the basis of their social context. Most of them stress the importance of examining "naturally occurring events," a concern for "micro" features of social life, and a concern for the meaning of social action for participants.

David Silverman (1993), a British sociologist who has written extensively about the use of qualitative research in medical contexts, wrote a book some ten years ago about how qualitative data is produced and interpreted. He mentions four major categories of methods used by qualitative researchers:

- observations
- interviews
- textual analysis
- transcripts of conversations.

This list is not exhaustive, for it does not include specialized techniques used for limited goals such as rapid assessment procedures. Yet Silverman's list covers the main types of activities derived from sociology and may be pursued separately or with others. For instance, case studies may combine observation and interviewing. Each method has distinct uses and offers specific advantages.

# Observation

Qualitative research ideally includes the observation of events that form part of everyday social interaction, but often must be satisfied with reports about recent events. Since one of the goals of qualitative research is to understand daily life, watching it unfold provides a rich source of information. Examples of events we might observe are: consultations in a health center, a family wedding, a church service, a meal, the selling of a car. In other words, we may want to observe any event that we can identify as related to the subject of our investigation. Or we may simply choose a period of time and follow events throughout that period. For example, in studies of the complementary feeding of infants in Ghana, the interviewers observed a small number of young children for an entire day noting what was going on around the child every five minutes. Some of the rapid appraisal techniques used in environmental studies would also fall into this category of observation. According to James Beebe, "The goal is to construct a model of the local system consistent with the way local people understand it" (Beebe 1995:45). If one is studying local knowledge of the layout of fields or the structure of a village, a researcher may get a group of people together and stroll through the fields or the village, asking them to draw what they see. The resulting drawings stem both from observation and the peoples' own knowledge of their environment.

# Interviews

There is an enormous literature in the social sciences concerning individual and group interviewing that runs the gamut from casual conversation to focus group discussions (FGD) which are organized according to clear criteria and directed rather tightly for specific aims.

Individual interviews may be classified according to how directive the interviewer chooses to be in asking questions: structured, semi-structured, and non-structured. In all of these cases the interviewer persuades the respondent to answer a series of questions or to discuss a series of suggested issues. In the structured approach, the interviewer decides ahead of time what is relevant and uses that information to formulate the questions; in the non-structured approach the interviewer finds ways to persuade the respondent to talk about his/her life or experiences or knowledge in whatever ways he/she wishes. This allows the person interviewed to draw on concepts that have personal meaning, thus producing information closer to what is locally relevant.

One often sees the term "in-depth interview" in relation to qualitative research referring to a particular way of pursuing the process of questioning or getting a respondent to speak at length about a subject. Interviewing is quite unlike ordinary conversations, since the interviewer directs the respondent to certain issues. In the in-depth interview approach the interviewer pursues a particular theme further in detail and elicits more extensive comments about the issue of interest. The major advantage of this approach over a structured interview is that it allows the person interviewed to participate in choosing what to discuss, and thus influence what elements are considered relevant to the situation. In fact, for research that seeks to identify local knowledge and local perspectives on a subject, some in-depth interviewing or informal group discussions are essential. A researcher or analyst is unlikely to be able to determine what is important in a society without direct guidance from those participating.

Local knowledge and the content of common sense understandings can often be seen in the study of personal experience, in accounts of events of particular significance to individuals. Although asking people to talk about their lives produces accounts that are in bits and pieces, they can be assembled into a more chronological sequence. The use of personal narratives as a research tool became quite popular in sociology and anthropology circles in the 1990s (Atkinson 1997). A number of medical anthropologists have written books presenting narratives of illness in order to show how individuals experience having a certain type of illness (cf. Kleinman 1988).

In some cases a research project seeks to understand the logic between elements that make up events and the decision-making process that a group has been using to respond to specific situations. For instance, suppose we were trying to understand how mothers in Peru or Malawi respond when their young child has a diarrheal disorder. One way to collect information would be to obtain accounts of what happened during recent bouts of diarrhea (within the past two weeks), asking questions about how the illness started, various things that were done to treat the illness, and how the child responded to treatments. Such accounts can then be put into chronological order to form a narrative depicting what happened and who participated in what fashion. These illness narratives can then be examined for patterns of response to similar signs and symptoms of illness.

In the field of public health and family planning, group discussions and individual interviews are usually called focus groups and in-depth interviews. Both methods collect information about past experiences in some domain, about how people talk about a subject, or how they express their own opinions individually or in a group. In many cases the term 'focus group' is used for group discussions even though the discussions do not follow the common rules for conducting focus groups. In some cases researchers even do group interviews, asking participants the same question in turn.

Focus group discussions (FGD) are an excellent tool for exploring differences in opinion between segments of a population. Through the stimulation and encouragement of a moderator, FGD participants discuss one or several themes or topics in ways that, hopefully, reveal their experiences with that topic. By choosing participants who are relatively homogeneous with regard to factors of interest for one series of FGDs, and then selecting a set of participants for a second series different from the first series in one specific way (age, residence, distance to a health center, etc.), it is sometimes possible to discover differences in how people talk about a subject or how they express a preference for a particular brand of soap or a color of condom according to one variable.

For example, one might want to explore the differences in perceptions and experiences between mothers who are still exclusively breast-feeding their infant of 3-4 months, and those of mothers who give supplemental foods to their child of the same age. We could make this comparison by holding five or six group discussions with mothers who are exclusively breast-feeding, and another five or six groups of mothers who are supplementing their breastmilk with other food. With the use of a discussion guide (several possible topics for discussion), a moderator can stimulate discussion of chosen topics among each group of mothers. If systematic differences are found in the perspectives or experiences of the mothers in the two categories, those differences are invoked as explanations for why the mothers are exclusively breast-feeding or giving supplemental foods.

Although the stated objectives of research using group discussions vary substantially, the research is most often conducted to discover what terms individuals use to describe phenomena, what opinions they hold about certain subjects, or to determine the range of opinion or knowledge within a particular group.

#### **Textual Analysis**

Perhaps the most common method of textual analysis is content analysis, which often combines both a qualitative and a quantitative approach. It is common to study a text or a series of documents to identify concepts or themes as used by those who produced the texts, and then code the concepts of interest to the researcher. For instance, it would be possible to analyse the political speeches of a president to discover how he speaks of crime and its punishment, or of educational programs. We might also want to do word counts to estimate the frequencies of certain terms, thus combining our interpretation of the content of the text with observation of patterns in their language.

It is also instructive to consider files, statistical records, and records of official proceedings as the outcome of a process, and find ways to examine that process. If records (files, forms, statistics) are regarded as an outcome of a process rather than (merely) as representative of a certain reality, that process can be productively examined. Two examples illustrate this process.

Suppose we are examining the records of a health center that describe the diagnoses made by the nurses who treat young children. We see a number of illnesses or diseases mentioned such as malaria, pneumonia, meningitis, and bronchitis, summarized on a monthly basis. We might choose to look at such statistics to discover seasonal variation in how these diseases occur, or to estimate the relative disease burden on the population of the catchment area. But we could also consider these records as an outcome of a process, seeking to understand how these diagnoses were made at different times by different persons in order to compare the diagnostic process followed by each nurse. Through a combination of observations and interviews with nurses, we should be able to understand how nurses reached their diagnoses, and can then evaluate the consistency of the process among nurses.

A second example comes from Prior (1987) who studied statistics about the cause of death among adults from coroners' records in the U.K. In examining the records of cases for which an autopsy was ordered, he found that "men are more likely to have their deaths investigated, and to have their deaths regarded as 'unnatural,' than are women. The same is true of the middle class as against the working class, the married as against the unmarried, widowed or single, and the economically active as against the inactive." (quoted in Silverman 1993:66). Prior also found that for a "violent death," the pattern goes in the opposite direction: violent deaths among manual laborers, the single, the widowed, and

the divorced are more likely to be officially investigated than such death among the middle class and married individuals.

So we ask ourselves: how do coroners or judges make these decisions to investigate a death? What assumptions about the social status of these individuals have they made? The statistics from the records do not help us answer the question. Prior suggests that coroners have their own "common sense knowledge" about the world that tells them to treat violent deaths among certain categories of people as suspicious. By viewing statistical tables about the cause of death as an outcome of a process, we get a series of research subjects that merit investigation to better understand the criteria coroners use when making decisions.

In short, we may want to examine statistics relating to morbidity or mortality as outcomes of the process of medical agents doing their routine tasks. In the context of surveys such as the Demographic and Health Surveys (DHS) or health facility surveys, it is the records of health centers that lend themselves most readily to such analyses.

Silverman takes note of research conducted by Gubrium and Buckholdt in a U.S. hospital that suggests that "a concern to assemble credible files may be a common feature of organisational activities" (1993:68). He speaks of his own experience in creating files about job applications, noting that while it is tempting to look at completed forms as causing the selection of candidates, file contents can better be considered as providing the rationale for a decision taken. The office personnel who produce files have a vested interest in assuring that file contents present a certain image of events. Files do not speak for themselves, they must be made to speak for us.

#### Transcripts

The domain of conversation analysis has become important in sociology in the past twenty years. Numerous studies in medical sociology have examined in great detail the conversations between doctors and patients, or doctors and interns, in order to understand what was communication and who was directing the conversation. Studies of conversations between health service agents and their clients as they are being served can reveal not only what kinds of information are transmitted by health agents, but also the degree to which clients are allowed to participate in the process of being served.

Transcripts of interviews are often part of qualitative research. Transcripts are texts produced from listening to tape recorded interviews, the written version of exactly what was said. In situations where the interview is conducted in a language other than English, French, Spanish, or Portuguese, however, most often the researcher is dealing with a translation rather than a transcription. Translations are obtained in two ways: a translation of a written text that was produced by transcription of an oral text, or the writing of a text in one language from listening to a tape in another language. For example, in the research conducted by Macro on female circumcision in Guinea, the interviews were transcribed into one of the four languages of the research project in hand writing. These transcriptions were then translated into French for analysis. Sometimes an interviewer will listen to a tape in one (local) language and write a translation into French, or English, or Portuguese of what s/he heard on the tape. In a research project directed by Macro International on infant feeding in the Mopti region of Mali, interviewers wrote in French their translations of what they heard in Fulani.

Once the transcripts or translations are available in print, the researcher codes the text either by hand or with a computer program to look for patterns in answers to questions. Software programs such as Ethnograph or Nud\*ist allow the researcher to search electronically for recurring terms and themes after the coding has been completed. Another advantage of these software programs is that they allow for coding changes as the analysis proceeds.

# Levels of data

A great deal of qualitative research focuses on social processes, on how people go about getting things done. Ideally this involves observation and sometimes participation in daily life, but observation is not always possible. Let's assume for the moment that the most valid and reliable data possible is direct evidence from observations and the flow of conversation during events, that this sort of data contains the richest information about social interaction and how people accomplish tasks. If we grant that assumption, then we can usefully reflect on other levels of data that are nearer or farther from such evidence. We find ourselves with four types of evidence:

- direct evidence form observations and taking note of the events
- Individual narrative accounts of recent events
- · reports of recent events with a structured questionnaire
- group discussion of knowledge about issues with a group of people who share a common sense understandings of how things should be done, and how they have been done.

Each of these methods has been used a multitude of times with excellent results. They all form part of our common arsenal and come with well-known advantages and limitations. Evidence from observations and recordings of events usually form the most challenging analyses, since there has been no pre-sorting of the elements except for those from the observer. Though that pre-sorting is significant, we have access to information about that sorting from the observer. Such data is the most chaotic for a researcher as well as being the richest in detail. With individual narratives of recent events, the respondent sorts the elements according to her own criteria, ones the interviewer may not know beforehand. For reports of recent events (the birth of a child, a case of fever), it is the analyst who has selected the elements that will be considered relevant. For group discussions such as focus groups, both the moderator and the participants share in shaping the themes for discussion. This is all common sense to researchers in social science. Nothing new. We also understand that sometimes the best strategy is to use two or three of these methods to study the same phenomena. Triangulation does reassure. However, by taking note of the differences between the levels provides us with two opportunities sometimes neglected: 1) to consider the impact of the sorting process in the production of data, and 2) to be sure that the method chosen fits perfectly with the research questions asked. Most importantly, does the evidence to be collected provide the information necessary about local events or understandings to answer the questions of the research?

Researchers formulate questions about how individuals and groups accomplish certain tasks and seek to identify individual personal experience relating to certain types of events. In the domain of health and population, common questions guiding the research might be:

- How do parents of sick children go about caring for them and helping them recover?
- How do women go about choosing a method of contraception?
- How do couples discuss family size?
- How do men or women recognize the signs of illness related to an STD and then choose whether or not to seek treatment?

Such questions reveal our overall objective, which is to establish how a certain process typically occurs within a specific population. These questions are research questions, obviously not ones to be asked of anyone directly. The goal is not to establish a series of rules for behavior, since rules do not determine behavior, but rather to understand how local knowledge is used to get things done in specific social contexts.

In some circles a qualitative research strategy is thought to be able to answer the "why" questions, i.e., to gather information about why people behave as they do. I prefer to think of qualitative research as asking and answering "*how questions,*" that is, as explaining how individuals and groups accomplish certain tasks. This entails a study not only of local knowledge, as articulated or demonstrated through conversations or interviews, but also common sense knowledge as seen through events. Since most researchers lack the time and resources to spend time in participation, we rely largely on observations and accounts of past events to understand how events occur.

#### **DESIGNING TRANSPARENT RESEARCH**

The key to good quality research of any kind lies in the proper formulation of research questions and the use of methods of data collection and analysis appropriate to those questions. In population studies, qualitative research often is used to interpret survey data (cf. Hill 1997; Knodel 1998) or to improve the formulation of survey questions. In the design and the reporting of a project using a qualitative strategy, skeptical readers may be reassured if the various elements fit together like the pieces of a puzzle so the internal logic of the

planning, data collection, and analysis become clear r. The process of planning often includes the following steps:

- 1) Defining the overall research question;
- 2) Examining the research of other specialists working in the same domain;
- 3) Writing out assumptions about the phenomena;
- 4) Formulating a series of hypotheses for testing;
- 5) Transforming the overall research question into a series of more detailed questions to guide the research;
- 6) Choosing the methods of data collection and analysis appropriate to the research questions;
- 7) Finding a formula for reporting on results that makes visible the process of design, data collection, analysis, and drawing conclusions.

Several of these steps form part of our common sense knowledge of designing research (formulating the main question clearly, examining the research of others, devising specific research questions) and thus need no further comment, while others are often neglected. Comments are made on several of these steps.

# Assumptions

The process of writing out the assumptions of the authors is an aspect of research design often neglected. Researchers make assumptions about the data they want to collect based on their own theoretical orientation as well as assumptions about what happens in daily life. Often such assumptions are left implicit and not acknowledged. What do we assume about the relationship between theory and method? Between the cultural and the social? What do we assume about the nature of "culture?" What relationship do we expect to find between knowledge and practice? How are our assumptions, even implicit, revealed in the formulation of research questions? All assumptions, whether articulated or not, do influence the research design.

Consider the example of a study of antenatal care services in one region of a country. The researcher wants to discover what women think of the services offered and why some use the services and others do not. Is it a question of physical access? Of how women are treated once they arrive? Could current use be somehow a derivation of women's cumulative experience with the services? This kind of phrasing reveals two assumptions: 1) the experience of using the service will influence future use, and 2) some women are users of antenatal care while others are not. Those assumptions may or may not be valid. If they are both valid, we are justified in examining the experience of women using these services, seeking to understand how they characterize the contact with health care services. We are also justified in trying to discern differences between women who use the services and those who do not. Most researchers would say the first assumption is valid, since it forms part of our common sense understanding of health care services. That is, we assume that being satisfied with a service makes it more likely that a person will return for additional services. The second assumption is less likely to be valid. How can we accurately classify women into two categories, users and nonusers, when some women use antenatal care for one pregnancy but not another?

We might want to rephrase the proposition to read something like: women use antenatal care for some pregnancies but not for others. We would then study not only the characteristics of women, but the process by which women seek antenatal care or not, including the circumstances and other contextual elements that the women themselves deem relevant. If the assumption were valid, we would try to categorize women into two groups according to the criteria to developed to understand their differences. If it were not valid, we would examine the elements in the decision-making process that do have relevance for the women.

# Hypotheses

Once our assumptions are articulated, we are ready to formulate several hypotheses. The data collected will serve to judge whether or not the hypotheses are supported. The main difference between assumptions and hypotheses is our degree of certainty about their validity, and the amount of information available on the issue. In cases where the research design is a group effort, discussions may lead the group to move an assumption into the hypothesis column or vice versa. The design will allow for the formulation of new hypotheses during the data collection if the results suggest new elements or relationships to be explored. The study results will state whether the hypotheses were supported or not based on the data collected.

Being able to formulate hypotheses supposes a certain level of knowledge about the phenomena under scrutiny. In fact, not all qualitative strategies will find formulating hypotheses useful. Studies that begin with very little information about the research subject, such as exploratory studies to discover local concepts and categories relating to ideal family size or the diagnosis of childhood illness, do not begin with sufficient knowledge for formulating hypotheses.

#### Appropriate methods

Since the methods of data collection and analysis depend directly on the objectives, the assumptions, and the research questions formulated, it is possible to make summary statements about this process only in the most general way. Sampling in qualitative research is usually guided by the range of contexts or interactions that the research is examining. That is, the sample chosen should cover the range of interactions that occur, including those that occur rarely.

Suppose that we are designing a study of how mothers and fathers respond to signs of acute respiratory illnesses in their young children. In our assumptions we state what we think the options for action in the household are, and the factors we expect will influence what parents have been doing recently. In the choice of our sample, then, we seek to have a number of examples of each of the common responses such as waiting for improvement, making teas, rubbing the body with herbs, taking the child to a health center, and buying drugs at the pharmacy, etc. We look for indicators of the range of actions, and then try to draw a sample from the entire range.

At some level all qualitative research collects data in the form of images, observations, or text, and these data eventually end up as text and are analysed as such. Direct observations may be slightly different, but the researcher produces notes about what has been observed, and these notes turn into text. All types of individual and group interviews produce some sort of text. Thus, in the process of research design, we need to be aware of several general questions:

- > What type of text are we going to produce?
- > What is the role of the researcher in producing the text?
- > How will we analyse the text obtained?

The decision whether to tape record interviews or to simply take notes during interviews, or to write from memory after an event, is one of the most important considerations. The decision depends on the nature of the research questions and the type of analyses planned. The decisions about method and analysis build on preceding choices in a cumulative fashion.

#### THE THREAD OF THE CONTINUUM

Much has been made in the literature in the social sciences of the complementary nature of qualitative and quantitative approaches to population studies (cf. Van Der Geest 1998). Studies of family planning and fertility using focus group data routinely compare their results with survey data. It is generally recognized that qualitative strategies can provide innovative ways to interpret survey data and to elucidate the social context of events described in survey results. Does this imply that the two approaches can be situated at opposite poles of a continuum? To answer in the affirmative, we would need to be able to describe the nature of that continuum.

Discussions of this issue in the recent demographic literature has compared approaches from social anthropology, rather than of qualitative research per se, to approaches of demography. In his contribution to a volume on anthropological demography, Allan Hill (Hill 1997) compares the approaches of social anthropology with demography in a study of fertility patterns in the Gambia. He concludes that the two approaches are epistemologically different, that their way of framing arguments and reaching conclusions keep them separate. In the same volume Tom Fricke argues that demography can benefit from including culture as another context to consider (Fricke 1997). The arguments about the similarities and differences between anthropology and demographers, or sociologists who do quantitative studies of populations, would seem to apply also to qualitative research. The two approaches differ dramatically in their way of framing research questions, their treatment of the social context, in the way local knowledge and meaning are treated, and in the way local concepts are addressed in relation to concepts from the social sciences. We would be hard pressed to situate the two approaches on the same continuum, though their results often prove complementary.

The challenge for specialists in population studies interested in exploring qualitative methods lies in learning how to treat both culture and social relations in ways that reflect current understandings in qualitative sociology and social anthropology. The temptation to treat culture as norms that influence individual behavior is strong (cf. Hammel and Friou 1998). Anthropologists and sociologists have come to understand that norms do not dictate behavior (Deutscher et al. 1993; Bledsoe and Hill 1998), that there is no close relation between knowledge and practice (Rubel and Hass 1990), and that meaning is construction in social interaction. Qualitative strategies are the appropriate ways to explore this construction of meaning in daily interactions.

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