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PARADIGMS FOR THINKING ABOUT ETHNOGRAPHIC RESEARCH

WHAT ARE RESEARCH PARADIGMS?

All research is informed by particular worldviews or perspectives held by the researcher and scholars within his or her discipline. These perspectives are called paradigms. A paradigm constitutes a way of looking at the world; interpreting what is seen; and deciding which of the things seen by researchers are real, valid, and important to document. The most common paradigms in social science research and evaluation are positivism (the oldest); critical theory; interpretive, phenomenological, or constructivist theory; ecological theory; and social network theory. Many researchers make use of each of these approaches, depending on their research questions, their own personal preferences, and the constraints and needs of the research setting. Sometimes, an ethnographer’s perspective on culture—how he or she thinks and writes about culture and with whom—is situated in a synthesis of several paradigms. In the pages that follow, we will review the way in which people understand culture in the context of each of these approaches. We will
also consider the position likely to be taken by researchers as they consider

- The types of questions they wish to ask
- The cultural and social domains important in the research
- The communities they plan to study
- How and with whom the process of interpretation of data is likely to occur
- How and with whom uses of research results are likely to be negotiated

THE POSITIVISTIC PARADIGM

Positivistic research represents an effort to duplicate the rules and assumptions of the biological sciences in the social sciences. It has been an especially important influence in experimental psychology, medicine, mental health, education, clinical studies, and the growing domain of prevention research. The positivist approach argues that reality is observable and understandable, and that if the research is conducted with a properly representative sample of participants, the findings that a researcher obtains are true or probably true for everyone in the study site—that is, they can be generalized to the study population as a whole.

The aim of positivistic research is explanation leading to prediction of causal relationships. For example, researchers interested in whether or not medical interventions or innovative educational programs are effective would think as a positivist does and set up an experiment or quasi-experiment to test the relationship between the intervention and what the experimenters think (or hope) its outcome will be.

Positivistic research methods can be both qualitative and quantitative. In both cases, positivists assume a distinct conceptual and social separation between the researcher's influence and the object or events being studied. This is
what is meant by the term objectivity in positivist research. In practice, objectivity requires the researcher to withhold his or her own biases and prejudices about the research and the people involved in it and to try to control any outside influences (including his or her own hopes about the outcomes) on the research results. The researcher tries to avoid influencing or “manipulating” the setting as much as possible, even when the data are generated through face-to-face interaction in the field site. In Chapter 4 of this book, you will find a more extended discussion of experimentation that, along with the use of standardized survey instruments and some kinds of field observations, is informed by positivistic principles that enforce the separation or detachment between the researcher and the study respondents or other subject matter.

Positivists believe that the research methods they use can and should be neutral and value free, although they understand that the researchers’ own values play a role in the selection of the research question. They also realize that values or priorities influence how research results are used. But positivist researchers themselves feel that they should remain disinterested in the actual conduct and outcomes of the research—at least for the duration of the project—so that their own strong interests or passionate commitments cannot become a source of bias in the conduct of the study or the interpretation of the results. They are also committed to using research methods and techniques that maintain this objectivity.

Because they believe that control of researcher biases is, for the most part, a matter of both technical rigor or finesse and researcher self-discipline, positivists tend to believe that class, social race, ethnicity, gender, age, individual and group history, or other characteristics of the researcher should not influence the hypothetical causal models that drive or initiate a research project without theoretical jus-
tification. This does not mean that there cannot be a match between the views and priorities of the researcher and the researched, or that these variables should not be included in the development of research models. It does require that the priorities and personal interests of the researcher alone must not influence the actual execution of the study and (especially) the interpretation of research results.

Positivists may become quite active as advocates for or with the people or problems they study once the research project is complete. However, positivists would seldom, if ever, get involved in discussing research results with participants or introducing or conducting any nonresearch-related programs or interventions in the research site while the actual research is under way—especially if they believed that such activity would influence the outcome of the research. If the researcher were to intervene in the setting, it would violate positivist requirements that researchers maintain an affective neutrality with regard to study outcomes and the researcher's own influence on conduct of the investigation. One important exception to this position is experimental research design, where the point of the research is to evaluate the impact of an intervention or experimental program. Here, the research project calls for the investigator/researcher to guide the conduct of the program so that it can be evaluated rigorously by the research team. In such instances, the researchers would avoid exercising direct influence on the evaluation, during both the program and the evaluation.

To the extent that they do collaborate with nonresearchers on a project, positivists discuss the conduct of their studies with research partners—those nonresearcher/collaborators joining in the design and execution of research projects. Such partners, who can include institutional administrators, heads of community organizations and institutions, and directors of funding agencies, can play a variety of roles in the research and can even modify or
not be a match to the researcher and the researcher alone will be included. This does require that the study and the results.

Advocates for the research would seldom, if ever, nonresearch-arche site while they believed one of the research settings, it is important to study outcomes of the research results. This position is not of the research team. On or outside the program, the role of their institutions, can play the program on research. The critical paradigm guides investigation into the sources and dimensions of inequality in such systems. In the critical paradigm, scientists are expected to function as intellectual advocates and activists. Researchers are expected to use the tools of research to discover inequities and to find ways—whether through research, dialogue, intervention, political action, or policy change—to bring about change in inequitable distributions of power, cultural assets, and other resources.
Critical theorists, like positivists, believe that researchers can capture reality accurately in the specific historical and geographical contexts they study. However, they also assume that the interpretation of the cultural products (words and text, norms, behaviors, symbols, physical objects, etc.) they examine is influenced by the context in which they are produced and reproduced. Because critical theorists view cultural behavior and beliefs as situated within a specific historical era, they believe that these behaviors and beliefs can change over time. They also note that much of what may appear to be cultural practice among oppressed people is a response to their subordinate status. In the United States, for example, many educators believe that the poor hygiene and unhealthy eating habits of many low-income children represent cultural preferences when, in fact, they are the result of inadequate plumbing or water supplies and insufficient family income to purchase nutritious meals.

For some critical theorists, capitalist institutions and their cultural products are targets for research that identifies flaws in their structure and promotes their abolition. Other critical theorists define restrictive or inequitable structures and cultural institutions more broadly, arguing that research and transformation can be planned and carried out in any restrictive setting in both incremental and large-scale ways. In other words, they believe that institutions can be transformed, and they seek ways of using research to serve the transformation process. Action research, which brings participants into the research and reflection process, is one such approach to change, although it is not always informed by the critical paradigm.

Critical theory calls for a focus on the ways in which gender, class, culture, race, ethnicity, and power intersect to shape inequities. Included in this focus is the requirement that researchers themselves be aware of how their own class status; racial, ethnic, and gender orientation; and power
researchers and they also ass-ducts (words objects, etc.) on a specific and beliefs of what may be people in a United States, poor hygiene, the children they are the and insuf- ficials. solutions and that identi- cal abolition. inequitable fully, arguing and car- namental and that institu- tions of using Action re- search and although in which intersect to require- ment of own class and power relationships vis-à-vis research participants affect what and how phenomena are studied and how data are interpreted.

Because the final aim of critical research is to call attention to the inequitable actions and policies of the dominant social paradigm or institution and to engage in selected activities or actions—guided by the findings of critical research—in order to bring about change, the critical approach requires congruence among the aims, objectives, and values of the researcher and those of the group(s) involved in the study. To bring about such congruence, all participants, including researchers, should be involved in the research process, because the research is intended to be empowering—that is, to demonstrate how and in what ways participants are in positions of subordination or domination (or, in some cases, both), and how they can act to change both their own situation and that of others. Values play an important role in the critical paradigm and should be identified and shared early in the negotiation of the research process. Critical theory also asks researchers to assist in enhancing research participants’ individual and group potential for accessing important social and economic resources, for entering the political arena, for engaging in self-expression, and for becoming activists in shaping their own futures.

Although critical theorists, like positivists—or any re- searchers, for that matter—are bound by ethical consider- ations to do no harm to research participants, they may be caught in a dilemma when their commitments to the well-being of the oppressed conflict with the interests of the groups or people acting as oppressors. Both may be participants in the research, but the latter may consider their interests to be in peril if the former act in ways designed to improve their situation or reduce the degree to which they are oppressed. The researcher’s dilemma in such cases is that he or she must choose among the following:
THE INTERPRETIVE, PHENOMENOLOGICAL, OR CONSTRUCTIVIST PARADIGM

Interpretivists, phenomenologists, and constructivists all base their approach on a cognitive or mentalist view of reality. Although the terms are often used interchangeably, and in fact mean quite similar things, they do have their origins in different disciplines. The term phenomenology comes from philosophy. Constructivism comes from and is used most by educational researchers, sociologists, and psychologists, and interpretivism or interactionism tends to be used by sociologists and anthropologists. In this book, we will use the term interpretive to refer to all three.

Crucial to interpretivists, constructivists, and phenomenologists is the “social construction of reality.” This means that, unlike positivists—who assume that reality has some tangible referent and that agreement can be achieved on its nature given sufficient time and careful research—interpretivists believe that what people know and believe to be true about the world is constructed—or made up—as people interact with one another over time in specific social settings. This conceptualization is similar to Jacob’s notion of “patterns for behavior,” which we cited earlier. Unlike the positivists, for whom research results are “true” at least in a probabilistic sense and are empirically verifiable, these theorists believe that the social “constructions of individuals and groups are not more or less ‘true’ in an absolute sense, but simply more or less informed and/or sophisticated” (Lincoln & Guba, 1985, p. 111; see also Berger & Luckmann, 1967). Furthermore, constructs are not fixed or
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immutable; they can be altered through dialogue or over time, and the alterations can lead to new constructions or views of reality and new ways of acting (cf. Nastasi & DeZolt, 1994). A distinction between interpretive and positivist approaches is that the former are inherently relativistic because they assume that all constructs are equally valid and important.

Interpretivists view culture as both cognitive and affective, as reflected in shared meanings and as expressed in common language, symbols, and other modes of communication. They believe that culture is created in a process as many individuals share or negotiate multiple and overlapping socially based interpretations of what they do and what occurs in local situations. Culture, then, is an abstract "construct" put together or "constructed" as people interact with each other and participate in shared activities.

Another key component to the interpretive paradigm is that it always defines shared constructs and meanings as "situated"; that is, they are located in or affected by the social, political, cultural, economic, ethnic, age, gender, and other contextual characteristics of those who espouse them. These characteristics influence how individuals think, believe, and present themselves. An important element in the interpretive position, then, is first to define the sociopolitical status of each speaker or participant before his or her place in the web of meaning is articulated by the researcher. Unlike positivists or critical theorists, interpretivists stick close to local meanings and find it difficult to tell only one "story." Instead, they tend to present complex accounts as polyvocal texts, or stories told in the voices of many different people or constituencies.

Interpretive, constructivist, and phenomenological approaches are inherently participatory because meaning can be created only through interaction. For researchers, this means that they must participate in the lives of research participants in order to observe social dialogue and inter-
action—the process of creating constructs, ideas, and meanings—as it occurs. Furthermore, authentic or valid individual constructs or ideas can be elicited and refined only through interaction between and among all researchers, participants, and partners in the project. In this sense, the data and findings of interpretivists are created and recreated as the research proceeds. Important to interpretive researchers is that the constructs or meaning systems of researchers, participants, and research partners all carry equal weight, because negotiated meaning cannot occur unless the researcher is a full participant in the process. The nature of this interaction blurs the distinction between researcher and researched, subject and object, bringing all parties together as equal partners in the process of generating and interpreting data. Such blurring would never be permitted in a positivistic research project.

Interpretivists believe that cultural beliefs and meanings are

- socially constructed
- situated, and therefore relative to a specific context
- not fixed
- negotiated
- multiply-voiced
- participatory

Interpretive approaches are not activist oriented by definition. Thus, unlike critical theorists, interpretivists do not necessarily begin with, nor are they expected to produce, results that commit to action, even though many scholar activists/applied ethnographers do enter the research dialogue with change-oriented positions that then come to be negotiated. Under such conditions, the consensus that results from interactions in the research site can produce a deep sense of shared understanding of a particular social
and validated this stated system of norms as well as a set of shared norms that leads to specific directions for action (cf. Nastasi & DeZolt, 1994).

**EXAMPLE 3.1**

CONSTRUCTING SHARED NORMS ABOUT ASSESSMENT AND EVALUATION IN AN ARTS EDUCATION PROGRAM

One feature that interested Margaret LeCompte during her work with a middle school arts program was how the teachers used portfolios to assess the students’ progress, especially when the portfolios produced by students in visual arts, literary arts, theater, and instrumental music differed considerably. However, because she knew that the teachers had not had time during the initial stages of the program to work on assessment procedures, LeCompte did not want to embarrass the teachers by asking them directly for their grading criteria—which she knew probably had not been clearly articulated. Unbeknownst to LeCompte, however, the teachers were very concerned that they be consistent in their assessment procedures across the arts programs, but they did not know how to go about establishing common criteria for grading. During a staff meeting, this concern was aired by the Visual Arts teacher. When LeCompte and her assistants suggested to the teachers that they could use ethnographic interviews to elicit from them their respective criteria, and then use data from the interviews to develop a set of preliminary criteria to use as the basis for discussion, the teachers were delighted. They did not have the time to hold such a discussion themselves, and if LeCompte’s interviews could generate a preliminary common rubric, they could then do the final polishing themselves. In this way, LeCompte was able to collect data on assessment procedures, and the teachers were able to do a better job of consistent grading.

**THE ECOLOGICAL PARADIGM**

The ecological paradigm has a long history in ethnographic research stemming from the early sociologist Emile Durkheim and the early 20th-century work of structural anthropologists such as A. R. Radcliffe Brown and Bronislaw Malinowski. Researchers working with the ecological paradigm:
view individuals as functioning in a social context that influences their behaviors. Context consists of the human and physical environment in which events take place; it includes social levels (e.g., family groups, peer networks, school or work settings, community, and the wider society) and sectors (e.g., social, technical, and environmental).

- see these levels, institutions, or sectors within a community as systematically related to and affecting one another.

- believe that change should be introduced in all levels or sectors simultaneously.

- think that research that is guided by the ecological paradigm should identify those contextual elements with the greatest influence on individual or institutional behavior. Unlike the critical theorists, however, ecologists have few preconceived notions about which of these elements is most important.

Ecologically oriented research looks for continuous accommodation among individuals, institutions, and the environment (Poggie, DeWalt, & Dressler, 1992; McElroy & Townsend, 1979). In both research and results, ecologists emphasize adaptation rather than conflict, and they seek to understand how social systems persist and adapt to conflict as well as how they change. For ecologists, the direction of change emerges from localized research—it is locally specific because the perspective guides researchers to explore interactions in local settings. The primary difference between critical theorists and ecologically oriented theorists is that concepts of class, power, and equity guide the former but not necessarily the latter. Thus, for the former, directions of change are implicit from the beginning, whereas for the latter, they emerge inductively from the research itself.

**THE EMERGING SOCIAL NETWORK PARADIGM**

More properly termed an emerging paradigm than a paradigm in its own right, social network perspectives provide an important analytic framework for social science re-
search. The study of social networks has constituted an important component of the sociologist's work for many years. In anthropology, kinship networks and genealogies have been more salient. Recently, social network research has been integrated across disciplines, causing social scientists to define a new paradigm in social science research—the network paradigm. This new integration combines the work of a number of people:

- Theorists, who are concerned with the diffusion of innovations through social systems
- Communications specialists, who are concerned about the flow and exchange of information in communities, societies, and worldwide
- Resource specialists and community planners, who are interested in the ways in which community organizations relate to one another to serve clients
- Epidemiologists, who are concerned with the transmission of communicable diseases through interpersonal networks
- Prevention researchers and program specialists, who want to intervene with natural groups or become more effective in disseminating information about disease prevention through social systems

A network perspective offers a view of a community or other social setting that is very different from the view that sees the community as composed of essentially unrelated individuals. The study of social networks allows social scientists to situate individuals within their families, among their peers, and in relation to representatives of other social or cultural institutions. Investigating social networks also provides social scientists with the opportunity to observe and document important exchanges between and among individuals, explore the locations where these exchanges happen, and determine what other factors might influence them. The concept of "social network" need not apply to individuals only. It can also apply to communities that are linked together through exchanges of people, resources, and infrastructures,
or to organizations connected by users, boards of directors, or other factors. Understanding what the relationships and associations are among these institutions can provide important information about how communities or larger systems work.

The social network paradigm has evolved over the past 40 years (Galaskiewicz & Wasserman, 1993; Johnson, 1994; Wasserman & Faust, 1993). Historically, network theory has been used in studies of family systems and adaptation (Bott, 1957; Cross, 1990); in diffusion studies concerned with the flow of innovation, information, or infection in populations (Trotter, Rothenberg, & Coyle, 1995); and in studies testing the efficacy of group interventions in natural groups or networks (Nastasi et al., in press; Schensul & Berg, 1997; Schensul et al., 1996; Trotter et al., 1995).

Social network researchers are interested in natural groupings defined ethnographically or descriptively through observations in the field. They are also concerned with personal or ego-centered networks, which are defined in terms of individuals who are related to a single respondent. Some researchers concentrate on personal or ego-centered networks; others are interested in broader community networks, termed “full relational networks,” where each individual is considered in relation to all the others in the group.

Some researchers wish to understand only the way social networks work. Others are more interested in what might influence the development of particular types of social networks, such as whether age, ethnicity, or both are related to size and composition of drug-using networks. They may choose to investigate whether or not specific types of networks, defined by composition, size, density, or specific behaviors (e.g., drug use or vegetarianism) are associated with other behaviors or conditions, such as unprotected sex or cardiovascular conditioning. Social network researchers conduct research with social networks in several different ways:
Through ethnographic mapping or description (Trotter, Bowen, Baldwin, & Price, 1996; Trotter, Bowen, & Potter, 1995)

Through survey techniques in which a random sample of respondents is asked to list its contacts or close associates and to indicate what these contacts do in relation to the research topic, ego-centered network surveys (Trotter, Baldwin, & Bowen, 1995; Trotter & Schensul, 1998)

Through “snowball” or network sampling, in which respondents list their contacts, and all or a random sample of contacts are interviewed to find out about their relationships with the respondents and with others. Eventually, almost everyone in a community is interviewed (McGrady et al., 1995; Needle, Coyle, Genser, & Trotter, 1995; Trotter, Bowen, Potter, & Jiron, 1994).

Network research is one important component in an ecological approach and can be incorporated readily into the work of all others described in this chapter.

A PARADIGMATIC SYNTHESIS

We believe that all of these approaches to research are important. In our own work, we draw upon all of them in each research situation. The positivist approach is helpful in reminding us that concepts, instruments, and methods that have been developed, standardized, structured, and normed can be useful in any research setting. The methodological principles embodied in probabilistic survey research force us to identify and consider the importance of variation in study populations. The tenets of experimental design are helpful in responding to research partners’ needs for demonstrating outcomes—or whether or not a program “works”—even when the limitations of these outcomes are apparent. Computer software for coding, managing, and analyzing qualitative or text data offers much better opportunities now for establishing and maintaining interrater reliability and making it readily possible to engage in repeat analyses. Systematic data collection tech-
techniques based on prior ethnographic elicitation and data collection strategies can be quantified into categorical variables or matrices for quantitative analyses designed to demonstrate cultural consensus or patterning. These are all useful methods regardless of which conceptual approach is favored by the ethnographic researcher.

Critical approaches are consistent with our view that applied ethnographers should enter a study situation with the view that they will be expected to be instrumental in implementing change. At the same time, most important social science research nowadays is expected to consider the important dimensions of difference and such potential predictors of inequity as socioeconomic status/class, age, gender, social race, ethnicity, and ability. Most applied ethnographers discover local responses to national or even international situations once they are in the field. These responses generally involve difficulties that local residents have with interethnic or intercultural communication, or problems that communities face in lacking access to valuable resources as a consequence of income, gender, social/racial characteristics, or other “differences.” The critical approach reminds us of the influence of global systems on local settings; views of “difference,” for example, may be influenced by international media, and local inequities may stem from international economic policies and practices that influence local markets and local employment.

Like the critical approach, the ecological paradigm reinforces the idea that individuals do not function alone. Instead, they are embedded in formal and informal groups—the family, peer group, schools, community organizations—and are affected in many obvious and less obvious ways by community, state, national, and global dynamics. Power is only one of a number of important factors that influence individual and group behavior. One advantage of the ecological approach is that it directs attention to individual and group interaction with the natural environment.
and demands recognition of the effects of landscape, location, natural resources, climate, and environmental depletion on human behavior and interaction.

Finally, the emerging social network paradigm calls for considering social entities (individuals, families, organizations, and communities) as engaged in important exchanges with one another. The network paradigm forces us to recognize that none of these social entities can be seen as functioning alone. Instead, each is linked to and affects the others in ways that can be discovered. This frame of reference has implications for sampling and for data analysis. The implications are most significant for data analysis because the quantitative or numerical units that are the building blocks of network research are connected. Thus, the assumption that units are independent of one another and have an equally likely chance of being selected is not valid. Neither the principles that underlie random sampling nor the assumptions of quantitative data analysis that units of analysis are independent apply to network analysis. Its worldview that defines everything as linked, as well as its procedures for identifying, selecting, and “counting” or analyzing units, is distinct from other paradigms.

Regardless of who they are, ethnographers are likely to be situated differently in relation to their research partners, collaborators, or clients. It is possible, even probable, that they will have more education, income, status, prestige, and privilege than those with whom they work. To build trust between researchers and research participants, and to increase the potential for obtaining good information, ethnographers must always remember who they are and where they come from. While trying to establish common ground with respondents, they must also be aware of difference and how their perceived identity may influence the flow of communication in the field setting. Doing so requires reflecting on personal values and beliefs about who one is as well as why, where, and on what it is appropriate to conduct
research, and how one plans to use research results. It is also necessary to be prepared to share personal plans and views without imposing them on others.

Applied ethnomethodological research also benefits greatly from an interpretive or constructivist viewpoint—its emphasis on the generation of shared meanings and its recognition of the importance of local context and cultures in human behavior and beliefs. Interpretivism provides a strong rationale for collaboration in research; it is through establishment of research partnerships that generation of the best and most relevant questions, instruments, interpretations, and use can be ensured. To benefit from collaboration with the study community, researchers must negotiate with partners in each of these domains. It is especially important for researchers and their community partners to negotiate the interpretation and meaning of research results when the results of data analysis do not clearly point to directions for action, or when they are counterintuitive or different from what was expected. In such cases, all partners must use both their knowledge of the setting and any new information to discuss and agree on results and how to best use them. Table 3.1 compares and summarizes the concerns, foci, procedures, processes, and goals of each of the five paradigms discussed above, as well as describes the differing roles each dictates for researchers and participants in research studies.

Summary

The specific frame of reference or paradigm underpinning the research process is important to the overall structure of the ethnographic study. It is especially important in determining the goals of the research and how—and by whom—data will be interpreted and put to use. Once the researcher is aware of these issues—and it is the task of the project director to make all parties involved in the project cognizant of them—it is time to begin the process of structuring the research itself.
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<td>PROCESS</td>
<td>Achieving control of behavior by modeling its study after procedures used by scientists</td>
<td>Achieving understanding of behavior by analysis of social interaction, meaning, and</td>
<td>Achieving change in structure and behavior by exposing hidden patterns of meaning, communication, and control</td>
<td>Achieving change in structure and behavior by identifying influence of interaction among members of a social group on one another.</td>
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<td>GOALS</td>
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<td>1) Comparison of results to similar and dissimilar processes and phenomena</td>
<td>1) Analysis of results to unmask inequities in processes and phenomena</td>
<td>1. Analysis of results to identify social relationships among related individuals; 2. Development of local predictors influencing individual, group and social behaviors; 3. Inductive development of regional and larger patterns and laws</td>
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AN OVERVIEW OF RESEARCH DESIGN

WHAT IS RESEARCH DESIGN?

Every systematic activity undertaken by human beings needs a plan of action. In research, the formal plan of action for a project is called a research design. Research designs are to researchers as road maps are to vacationers or blueprints are to architects and contractors; they tell the investigator how to proceed. However, they include much more information than two-dimensional maps or blueprints. A better analogy might be the detailed schedules and lists sent to clients by a very good travel company in response to the clients' concept of the trip they wish to take, and their questions about how to proceed—including not only maps, but a set of assumptions about what the travelers want to do, time lines, descriptions of destinations, where they will stay, what activities are planned, who they can expect to meet, anticipated meals, the equipment they need to bring, the types of people who will be on the trip, and, most important, what the trip will cost if planned in that way. Without such information, travelers are likely to end up in uncomfortable hotels, lacking proper clothing or equipment, without insect repellent, taking photographs of wild animals at the local zoo instead of in the forest. They may

Definition: A research design is a detailed set of questions, hunches, and procedures, and a plan of action for the conduct of a research project.
have forgotten what they wanted to see, do, and learn in the first place; they might even run out of money.

PLANNING A RESEARCH DESIGN
AS A BLUEPRINT FOR ACTION

A good research design, like a good vacation plan, saves time, money, and headaches, and it permits the anticipated objectives of the activity to be achieved. The converse also is true. Therefore, it is wise to spend plenty of time at the beginning of the project planning and designing it—even though the time might not seem worthwhile initially. If the researcher is working as part of a collaborative team or with partner organizations, planning is not only more critical, but even more time-consuming. Planning with partners requires hammering out in advance shared ideas, responsibilities, and meanings as well as agreements regarding how to proceed. This includes deciding on the following:

- Which paradigms to use
- What the core research questions are
- Which methodological alternatives and approaches to data collection are best for the project

Regardless of the amiability of partnerships in the initial stages of research projects, the press of time and work inevitably uncovers unforeseen differences in perspective, work styles, and value systems as the project unfolds. Intercepting and preventing some of these at the beginning of the project can avoid unpleasant surprises.

Research Design as a Decision-Making Process

Researchers can choose from among many research design alternatives. Decisions about the choice of design are guided primarily by three main factors:
The questions the investigator is trying to answer
- The resources (time, trained personnel, and money) he or she has at hand
- The characteristics, including the constraints, of the research site or setting

The initial tasks involved in creating a research design (or methodology) are the following:

- Framing the initial research question
- Building a conceptual starting point, preliminary theory, and hypotheses or hunches
- Identifying characteristics of an appropriate population to study and locating that population
- Finding and obtaining access to an appropriate research site
- Identifying and establishing relationships with relevant research partners.

These issues constitute the initial areas of concern in developing a research design. Once they have been addressed, researchers can then proceed to more technical considerations, such as how to do the following:

- Develop a data collection plan
- Design appropriate data collection methods
- Establish analytic procedures
- Develop ways of protecting the identity of research participants and the confidentiality of the information they provide, and for treating them ethically
- Establish guidelines and procedures for interpretation dissemination and utilization of research results

Each of these steps should be carefully considered, outlined, and described in detail in the initial research proposal, even if the work in the field calls for changes to be made (see Figure 4.1). Consideration of these steps has the advantage of avoiding conflict over research directions that we men-
Develop the Research Base
Frame questions
Build guiding theory
Identify population
Find research site
Identify partners

(2)
Decide on Research Methods
Determine sampling procedures
Develop data collection plan
Design data collection methods and schedule data collection

(3)
Decide on Field Situation
Develop human subjects guidelines
Determine staffing plan
Define training protocols
Determine field security

(4)
Select Data Analysis Procedures
Decide on text coding system
Decide on computerization
Decide on use of software for analyzing elicitation mapping or network data
Decide on procedures for analysis of survey data
Conceptualize triangulation

(5)
Determine Procedures for Dissemination
Determine audiences
Decide on guidelines for audience involvement in interpretation of data
Select dissemination settings and timelines
Determine dissemination formats
Predict resistance in advance

Figure 4.1. Steps in the research process.

mentioned earlier. It also allows researchers to think through and prepare in advance for the problems that inevitably occur in the field.

The question of which design is best for the given research question is the first factor to be addressed. If the investigator wants to determine how a representative sample of people from a particular community feels about a problem or issue, a survey research design might be called for. Survey research usually follows certain principles of probability sampling, instrumentation, data analysis, and presentation designed to ensure that the results of the survey can be generalized to the entire population. If the researcher wants to know if Program A is more effective than Program B, then a controlled experiment is most
AN OVERVIEW OF RESEARCH DESIGN

desirable. The conventions of experimental design call for random assignment of subjects or larger units of intervention; pre- and posttesting; and "experimental integrity," or control over the conditions of the experiment.

On the other hand, if the researcher really does not know the characteristics of the population of interest, the parameters of the problem to be addressed, what should be included in a program, or even what its outcome should be, then ethnography probably is the most suitable choice. The conventions of ethnographic design call for exploratory investigation (participant observation and open-ended interviewing, described in Book 2); selective investigation of targeted topics (semistructured observations and interviews, described in Book 2); collection of data on cultural domains (described in Books 2 and 3); and generalizable survey data on individuals and networks (described in Books 2 and 4).

Of course, many projects require the use of mixed designs, where an initial design calling for a self-reported survey, for example, might be modified to include systematic observation. Or an experiment might require ethnographic research to help to describe, explain, and verify what is actually happening during the implementation phase. Finally, once exploratory ethnographic research has been completed, the final stages of ethnographic research often call for surveys based on random sampling of the study population in order to determine the distribution of specific behaviors or beliefs in that population. The challenge to the researcher is to choose the best combination of approaches for studying the research problem. In some cases, as the following example illustrates, the original approach to data collection must be modified or complemented to produce useful results.
EXAMPLE 4.1

USING ETHNOGRAPHY TO STUDY NONLOSING WEIGHT-LOSS CLIENTS

A group of weight-loss therapists collected data on their overweight clients by having them keep daily logs of what and how much they ate. The therapists could not figure out why their clients, whose daily self-reports of food consumption contained only approved low-calorie items, did not lose weight. They began to suspect that some of the clients were cheating. To check, they added a data collection strategy called “shadowing” for some of the clients, observing and taking notes on how they prepared their meals, what they ate, and how often. They found that clients did not exactly cheat, but they systematically served themselves larger portions than allowed, unable to believe just how small a 3-ounce serving of meat is. They also forgot to record small snacks and “tastes” that they consumed while preparing meals. The unreported increments almost doubled their allowable consumption of daily calories.

The self-reports were a very economical way to collect data. However, as the example above indicates, self-reports were not accurate. The original research design needed to be modified to accommodate the new data collection technique, the question that called for its use, and the analysis and integration of the new and different forms of data to be collected. The change also had an effect on the overall cost and duration of the project. This example demonstrates how a seemingly small change in sampling or data collection procedures can influence the entire research design or methodology planned for the project.

All of the design features mentioned in the first part of this chapter (from identifying the question to analyzing and preparing the data for dissemination) must be figured out in the context of logistical constraints. The most elegant research design in the world will not work if the researcher does not have enough money, time, or trained staff to carry it out. Thus, researchers always must keep in mind the need to assess the resources needed to conduct the research. The final considerations then, are the following:
Deciding how—and whether—to sample from the population as a means of reducing the size of the group one must study

Identifying logistical problems and solving them

Locating, hiring, and training staff

Determining as much as possible in advance the procedures for analyzing data, including use of computerized data management approaches to data analysis

The lists above make clear that designing a research project involves more than just choice of data collection techniques. We believe that research design really involves making a series of choices among alternative ways to proceed from start to finish in a research project. In the following pages, we discuss the variety of approaches to research available to social science researchers, outlining the strengths and limitations of each. Each approach has implications for the selection of study site, sampling, methods of data collection and analysis, cost, and duration. In Chapters 6 and 7, we discuss design considerations in greater detail, including sampling, data collection, and analysis.

The Range of Research Designs

Used in Social Science Research

To aid the reader in choosing the right design, we provide Tables 4.1 and 4.2 (quantitative designs) and 4.3 (qualitative designs), which summarize the most common research designs used in the social sciences and their purposes. We include quantitative as well as qualitative designs because both can be used in the conduct of ethnographic research. We will begin with the quantitative end of the design continuum because readers may be more familiar with research plans involving the collection of quantitative data. Then, we will describe qualitative designs most frequently used by ethnographers and other qualitative researchers. Later in the chapter, in Tables 4.4 and 4.5, we will show readers how to integrate qualitative and quantitative research in each of
TABLE 4.1 Standard Survey and Experimental Research Designs Used in the Social Sciences

<table>
<thead>
<tr>
<th>Design Type</th>
<th>Minimal Conditions of Use</th>
</tr>
</thead>
</table>
| Cross-sectional research: Population and sample surveys | - Clearly known problem and context  
- Previous identification of relevant domains or possible responses  
- A target population whose characteristics have been identified  
- Enumerated members listed by name or other discrete identifier |
| Experiments | - An hypothesis or prediction about the expected results of an experiment or controlled effort to induce change  
- Creation of a control or comparison group through random assignment of units  
- Rigorous control over conditions of treatment or implementation |
| Controlled field studies/ quasi-experiments and case-control studies | - A field setting interested in the problem  
- Treatment and comparison groups whose subjects' characteristics have been matched or clearly defined to indicate salient differences between them  
- An hypothesis or prediction about the expected results of an intervention  
- Rigorous control over conditions of implementation |

the designs. Good ethnographers know when to choose one design over another and when to combine designs in their field research.

QUANTITATIVE SURVEY AND EXPERIMENTAL DESIGNS

Table 4.1 depicts the most common quantitative and experimental designs used in the social sciences and the conditions required for their use.

Cross-Sectional Research: Population and Sample Surveys

Surveys are the most widely used form of systematic data collection. One cannot read a newspaper, conduct a political campaign, institute a marketing strategy, or engage in public policy planning without encountering the results of surveys. They are used in the needs assessments that precede program planning and implementation for a specific group
of people; in attitudinal surveys, which attempt to measure changes in attitudes or opinions; and in ethnographic projects to confirm the statements of key informants. Whether conducted by mail, telephone, electronic mail, or in person, surveys are used in any study in which the researchers need to elicit a limited amount of information from a large population whose characteristics—including the language they use, their age, location, and other demographic factors, as well as their accessibility and willingness to answer questions—already are reasonably well known.

Population surveys involve asking questions of an entire group of people; where populations are very large and resources preclude surveying everyone, sample surveys are used instead. Sample surveys involve using statistical procedures to draw from a large population a smaller group—or sample—whose characteristics are quite close to those of the larger group. Data collected from the smaller group are assumed to characterize what would have been collected from the larger group.

The term survey can be confusing, because a survey is both a research design and a method of collecting data. A study that uses statistical methods to select respondents systematically or randomly and that has a survey instrument (an interview or a questionnaire) as its only source of data is said to use a survey design. However, survey instruments can be and often are incorporated into other kinds of studies, including ethnographies.

Although surveys can be quite efficient and economical, there are real limitations to their utility and validity. They should only be used when:

- The population itself and the kinds of questions to be asked are already known
- The researchers are familiar with both the language and the vocabulary of the participants
- Researchers know whether the concepts and ideas used in the study are meaningful to the participants
Below, we describe several examples to illustrate how incomplete knowledge about the study population can result in biased or inaccurate survey results.

**EXAMPLE 4.2**

**BIAS IN CENSUS SURVEYS**

The U.S. Bureau of the Census traditionally bases its decennial headcount on members selected from household units. Despite attempts to define the term "household" as broadly as possible, certain segments of the population, including those who are homeless, go un- or undercounted because they cannot be located in standard living units.

**EXAMPLE 4.3**

**BIAS IN TELEPHONE SURVEYS**

U.S. political pollsters in 1948 seriously underestimated the strength of Harry Truman's support. Basing their estimates on a telephone poll, they predicted Dewey's victory, not realizing that the large number of people who did not have telephones, and who therefore were not polled, would vote overwhelmingly for Truman.

**EXAMPLE 4.4**

**BIAS IN THE LANGUAGE OF SURVEYS**

A team of researchers was constructing an interview to be administered to store owners about their attitudes toward what appeared to be an increasing incidence of petty theft, loitering, and panhandling at the local mall. One set of questions addressed the behavior of people under the age of 20. The researchers were surprised that even among themselves, they could not agree on a name for such individuals that did not have some kind of negative connotation. One researcher objected to the use of the term *juvenile*. "My kid isn't a juvenile; he's never been arrested." Another asserted that only when juveniles were delinquent did the term *juvenile* have a negative meaning. Others felt that *teenager* and *adolescent* also were unacceptable because they implied irresponsible or negative behavior. They compromised by using the term *young people*, explaining to survey respondents that they meant "people between the ages of 12 and 20."
Anthropologist Rosalie Wax (1971) reported how she helped sociologist David Reisman make sense of the responses of working-class women in the United States to his survey of attitudes toward participation in the political system. Reisman wanted to know if feelings of intimidation inhibited the participation of women with little education or status in civic life. Because he got very few answers to his questions, and because his respondents giggled or were silent when interviewers tried to probe further, he assumed that the women he interviewed either had little or no knowledge about political processes or had extremely limited communicative capabilities. Wax, whose background was similar to that of many women in the target population, simply went out and organized informal conversations with the women about politicians, elections, and the act of voting. One question that Reisman had asked provoked great derision among respondents: “That interviewer, he asked me if I ever felt afraid when I walked into a voting booth! Whatever in the world could make me afraid of a *voting booth*? Of course I’m not afraid, but how do you answer a question like that?”

The examples above illustrate how crucial it is that the researchers be familiar with the behavior patterns and characteristics of the population to be surveyed—as in the first two examples—and agree among themselves about the terminology to be used—as in the last two. Even more crucial is that the language and patterns of speech in the survey be couched in the same meaning system and frame of reference used by the people who are to answer the questions. When surveys lack such construct validity, survey results become nearly useless, as was the case in Reisman’s initial study of working-class women, described in Example 4.5.

A limitation of surveys is that by themselves, they assess only what people think or know at a specific time—and for this reason, they are called *cross-sectional studies*, because they cut across and examine a particular section of events excised from the flow of time. Some researchers try to
correct for this limitation by using longitudinal designs that involve repeated interviewing at standardized intervals. Survey researchers call these trend or panel studies.

**Trend studies** administer repeated surveys at specified intervals to different samples selected from the same population as the first one; their utility is limited somewhat because the samples selected for each subsequent interview contain different individuals from the initial set of respondents. Random selection at each point helps but does not fully eliminate bias in the selection of each group because the overall population may well have changed over time. **Panel designs** correct for this problem by selecting a large sample and then administering repeated interviews only to members of the original sample. However, the composition of the panel—and, consequently, the kinds of results obtained from it—can change significantly as members drop out over time. This may mean that the results obtained at the beginning of a study come from quite a different group than do those obtained at the end of the study. This can render the results somewhat questionable. Therefore, all panel designs must report on potential biases that derive from loss of respondents.

Surveys cannot provide much historical or contextual data to illuminate why people responded as they did. It is also difficult to corroborate the accuracy of survey respondents' answers if no other data are collected. However, combined with other forms of data collection, such as field observations, analysis of documents and artifacts, and informal conversations, surveys can add great strength to a study because they are the primary way that researchers determine whether or not ideas held and behaviors engaged in by a few people studied intensively are more widespread in the general population. They also can be used to determine the range of variation within a target population.
Experiments

Natural scientists, medical personnel, psychologists, educational researchers, evaluators, and funding agencies tend to be quite familiar with experimental and quasi-experimental designs. These are the primary designs used in these fields, in which research questions focus on determining whether an intervention or treatment has an effect by taking measurements before and afterward and comparing the results to a comparison or control group that did not get the intervention. Experiments always involve a comparison group. When there is no comparison group, but an intervention is assessed before and after, the design is called a “prepost design” (Campbell & Stanley, 1967).

EXAMPLE 4.6

USING EXPERIMENTAL DESIGN TO EVALUATE LANGUAGE ARTS PROGRAMS

A group of elementary teachers wanted to know which of four language arts programs was most effective for non-English-speaking immigrant children. They decided to run pilot studies to examine each of four possible series of materials. During the summer, they each underwent training in how to use one of the programs. Then, they recruited volunteer children from among the immigrant communities in the area and randomly assigned them to five different groups. Before they began the pilot program, they administered a test of English language ability to all of the volunteers. Four groups of children then received instruction in language arts, each using a different one of the four programs under discussion. The fifth group of children received no instruction at all. At the end of the summer, the teachers readministered the test of English language proficiency to all five groups and compared the results. They inferred that the program used by the group with the highest test scores was the most effective. They also assumed that the group receiving the lowest scores might be the group that received no language arts treatment at all.
EXAMPLE 4.7

USING EXPERIMENTAL DESIGN TO EVALUATE WOUND TREATMENT

A group of medical researchers was interested in determining which conditions best promoted the healing of superficial wounds: cleaned and exposed to air only; cleaned and bandaged; or cleaned, treated with antibiotic salve, and then bandaged. To determine which worked best in field conditions, patients with similar wound conditions were randomly assigned to groups, each of which was subjected to a different treatment condition. After a specified period of time, the healing rates were compared to see which worked best.

In the examples above, the intervention or treatment varied but the condition treated—lack of English proficiency and existence of wounds—remained the same. In a good experiment, the researchers try to make sure that the only difference between the subjects—or patients and students, in the examples above—is in the treatment they receive. In some experimental research, one group of subjects—the control group—will receive no treatment at all, or will receive whatever has been the standard or traditional treatment. Effectiveness of the treatment or intervention is measured by assessing differences across all groups, including the control group (which has received limited, standard, or no treatment), a specified time after the treatment or intervention has been implemented.2

Experimental researchers make every effort to be sure that both the administration of the intervention and the characteristics of participants in each of the groups are as similar as possible. In the first example above, results would not be valid if the children in one of the groups already had had some instruction in English or if one of the teachers were much more competent than the others. Similarly, the researchers’ inferences about the effectiveness of healing
treatments could be questioned if the subjects in one treat-
ment group were healthier or much younger than those in
the other groups, because rapid healing could be attributed
to health or age rather than to the experimental treatment.

Experimental researchers try to ensure comparability of
groups by assigning subjects randomly to treatment groups.
They ensure what is called "procedural validity"—or com-
parability of the treatment, innovation, or intervention—
by developing highly structured protocols for the teachers,
medical personnel (in the examples cited above), practi-
tioners, or other individuals who supervise the treatments
to use, and then training them in how to carry out the
protocols and observe the results of the interventions. One
limitation of experiments is that they usually must take
place in a laboratory, clinical, or institutional setting; the
kind of controlled and rigorous conditions required for
true experimental designs—or even quasi-experimental
designs (see Campbell & Stanley, 1963; Cook & Campbell,
1979; Reichardt & Cook, 1979)—rarely can be secured in
the field.³

Controlled Field Studies
or Quasi-Experiments

True control groups often cannot be created and differ-
ences among experimental subjects and in (or among)
treatment administration(s) can lead to differences not
legitimately produced by the intervention. Although ran-
dom assignment of subjects can reduce this problem, obli-
gations to clients in schools, social service agencies, public
health clinics, and most other real-world settings often
preclude random assignment. For example, federal laws in
the United States preclude withholding educational services
from children with special needs, so that if the pilot study
described in Example 4.6 had been carried out in public schools during the regular school year, none of the children could have been excluded from language arts instruction. Researchers would have had to establish comparison or multiple treatment groups rather than a true control group. Similarly, in AIDS research, federal guidelines preclude the use of “no-treatment control groups.” Thus, in a recent AIDS research project, “standard” and “enhanced” interventions were compared. The standard intervention was a culturally sensitive but nonethnically specific intervention for an ethnically mixed group, whereas the two enhanced interventions were specifically culturally targeted to African American injection drug users in one location and Puerto Rican injection drug users in the other (Weeks, Schensul, Williams, & Singer, 1995).

A modification of the true experiment—the controlled field study—finds great use in applied settings such as schools and clinics, where practitioners still want to know if their programs are effective or their hunches are valid but cannot maintain the kinds of control over subject characteristics and assignment found in a lab. Controlled field studies are implemented where random assignment is not possible, but considerable control over how procedures are implemented still can be obtained. They take place not in laboratories but in the natural habitat or customary environment of the participants.
EXAMPLE 4.8

A CONTROLLED FIELD STUDY OF AN ARTS EDUCATION PROGRAM

Centerfield Middle School wanted to set up an Arts Focus program that both integrated arts instruction with regular "hard" subjects and provided children with extended immersion in one of several arts disciplines. The school hired trained arts educators in Theater and Drama, Music, and Fine Arts and helped each of them to establish an integrated curriculum to be offered daily for 90 minutes throughout the year. Recognizing that some parents wanted their children to receive less intensive instruction in the arts, whereas others may prefer electives other than arts courses, the school plan was to establish three instructional streams: Arts Focus, Arts Electives, and Regular Electives. Students enrolled in Arts Focus took regular hard subjects plus a year-long, 90-minute arts class. Those in the Arts Electives stream enrolled in regular "hard" subjects plus semester-long, 55-minute elective classes in arts classes of their choice. Children in the Regular Electives stream simply enrolled in the traditional program, a mix of "hard" subjects and whatever semester-long electives they chose: arts classes or nonarts classes such as computer science, gardening, or chess club. The school wanted to compare the impact of participation in the various streams on both academic achievement and interest in school. They planned to collect regular achievement test data for all of the students before the school year starts, and to administer an attitudinal survey assessing how committed students were to their studies at the beginning of classes. They administered the survey and collected the test scores again at the end of each subsequent school year, matching the pre- and posttest scores for each of the children to assess changes over time.

Example 4.8 is a controlled field study; it takes place in the natural habitat of middle school children—a public school. It would be a very controlled study (a "true experimental study") if the children could be randomly assigned to each of the curricular streams, thus ensuring that differences among the groups would be minimized. However, because it is a public school, Centerfield must permit students—or their parents—to choose their particular elec-
Definition: Procedural validity refers to the preciseness with which a study or an intervention is implemented according to its research design.

Definition: Case control refers to the selection of cases demonstrating the presence of a problem, matched with controls that have similar characteristics but in which the problem is absent.

tives stream. Notwithstanding, the streams themselves constitute quite different "treatments," and both the training received by teachers and the existence of a curriculum and instructional materials ensure a degree of procedural validity. Pre- and posttest measures also have been established, and the school's plan to aggregate matched individual scores on these measures ensures some degree of reliability in the results. Centerfield's teachers also can examine the characteristics of students in the different streams for differences in aptitudes, ability, gender, race, socioeconomic status, and other variables to permit more valid comparisons among the groups by controlling for these factors in analysis.

Case control studies are another approach to quasi-experimental or controlled field study design. Case control studies are often done by epidemiologists interested in why disease or death occurs in one group but does not in another, presumably similar or even identical group. The term case control refers to the selection of cases fitting the study criteria in which the so-called problem is present, matched with similar controls in which the problem is absent. The objective is to determine what differences exist between these two groups that might explain the presence of the problem in the cases. The samples for case control studies are usually obtained through accrual—that is, as the instances of the problem occur in the selected population, they are included in the study sample, and a match, which does not show the presence of the problem at that time, is selected.
EXAMPLE 4.9
CASE CONTROL STUDY OF ACUTE RESPIRATORY INFECTION IN CHINA

Pneumonia is the most common killer of children between the ages of 0 and 5 in certain areas of China. The Chinese government, working with a government research center, the Capital Institute of Pediatrics in Beijing, set out to determine why. One strategy they chose was a case control study. To do this study, researcher Dai Yaohua chose a region of China in which reported deaths from pneumonia were especially high. Over the period of a year, she was able to accrue a hospital-based sample of approximately 400 households in which a child had died of pneumonia. As households with the death of a child in the target age group entered the sample, she was able to choose a matched sample in which a child of the same age with reported severe pneumonia survived. She was then able to determine, by systematically comparing households and disease history, what factors associated with the health history of the child, household demographics and economics, beliefs about the disease, and beliefs about the health care system were most likely to contribute to mortality.

Table 4.2 summarizes the main features of experimental quasi-experimental groupings.

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Comparison Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participates in intervention or experiment</td>
<td>Does not participate in intervention or experiment. May receive a traditional or customary treatment</td>
<td>Participates in the same or a variant of the intervention or experiment, or in a different kind of intervention or experiment related to the research question</td>
</tr>
<tr>
<td>Subjects randomly selected for study and randomly assigned to group</td>
<td>Subjects randomly selected for study and randomly assigned to group</td>
<td>Subjects are not randomly assigned to treatment groups. Instead, they are assigned to treatment in naturally occurring groups (e.g., classrooms, work groups). These groups may be randomly selected and sometimes are randomly assigned to treatment or comparison conditions. Population characteristics and/or treatment conditions differ from treatment group, but differences are explicitly stated</td>
</tr>
<tr>
<td>Population characteristics and treatment conditions matched to control group</td>
<td>Population characteristics and treatment conditions matched to treatment group</td>
<td></td>
</tr>
</tbody>
</table>

The een the dies in-ion, rich e, is
Limitations on Controlled Field Studies and Quasi-Experiments

Even in controlled field studies, where messiness caused by variability among the subjects themselves can be accounted for by matching participants and describing naturally occurring differences among the groups, procedures can go awry for a myriad of reasons, which leads to results not attributable to the treatment.

EXAMPLE 4.10

PROCEDURAL PROBLEMS IN A FIELD STUDY OF PLAYGROUND USE

The local Parks and Recreation Department was trying to reduce the incidence of aggressive behavior among children of different age groups who frequented the parks. A local sporting goods company offered to donate recreational equipment for use on the playgrounds if the Department would hire an aide to supervise its use. The Department staff agreed, and they planned to compare the number of police reports and parental complaints received from playgrounds with and without aides. Problems arose, however, and the program started late when a fiscal crisis prevented the aides from being hired until late July. At the end of the summer, there appeared to be no difference between the behavior observed among children at playgrounds with aides and those without. The sporting goods company deemed the program to be a failure and withdrew its support.
The number of Limited English Proficient students at Highlands Elementary School recently tripled. Sally Ames, a committed and creative teacher at the school, convinced her principal to let her establish a bilingual program that supported instruction in both Spanish and English for the students. After the first year, the principal transferred to another school, but Sally's enthusiasm had already convinced the remaining teachers in her school to learn Spanish and begin to implement a 3-year program of dual language instruction for all of the children in the school. The new principal somewhat reluctantly agreed to continue the experiment. However, while on a Caribbean scuba-diving vacation during the Christmas holidays, Sally drowned. Having lost both its inspirational leader and a supportive principal, the program faltered, and by the end of the second year, it had reverted to a more traditional program that used bilingual education for 2 or 3 years only, and only as a support to full-time instruction in English (Martinez, 1998).

Were either of these programs failures? Probably not. These kinds of crises, changes, and catastrophes are the reality of everyday life in the field. A limitation of experimental approaches or controlled field studies is that they assume that no factor other than the intervention could have produced the observed results. These approaches generally focus on measurement of outcomes. Without attention to careful documentation of the treatment process in addition to measurement of outcomes, they cannot provide any information about what factors—other than the intervention—could have influenced the results. Thus, the sporting goods company deemed the donation of its equipment to have been a failure, ignoring the fact that the program did not begin until the summer had nearly ended and before measurable differences among playgrounds could have accrued. Similarly, researchers trying to assess the effectiveness of the bilingual program after 3 years using
only a pre-post test of proficiency in English and Spanish would declare the program ineffective—ignoring the loss of key personnel and the change in program design halfway through its implementation. For these reasons, ethnographic research directed to careful description of the program context and process is a necessary complement to quantitative research designs.

QUALITATIVE DESIGNS

Often, when things go well in experimental field research, ethnographic research adds important explanatory elements to the research design—as is the case in some of the situations described above, where researchers found that their designs did not match with conditions of life as they found it in the field, or when they could not force circumstances to conform to conditions and stipulations required for good experiments or controlled studies.

However, researchers can choose a different approach, changing the research question to better match the type of program or phenomenon that they plan to study. Rather than asking "Does this program work?" "Which is the best program?" or "Is this program effective?" they can ask questions such as the following:

- "What does program resilience mean, and how can we define and operationalize it?"
- "What is actually happening in the program?"
- "How does the program's history and what is happening in it contribute to the outcomes we observe?"
- "How can we explain the events and outcomes that do occur?"
- "Why is the program successful?"

For such questions, case studies—and ethnographies are culturally informed case studies—are appropriate because they allow us to assess and describe what really is happening
### TABLE 4.3 Standard Qualitative Designs Used in the Social Sciences

<table>
<thead>
<tr>
<th>Design Type</th>
<th>Minimal Conditions of Use</th>
</tr>
</thead>
</table>
| Case studies         | - A population, process, problem, context, or phenomenon whose parameters and outcomes are unclear, unknown, or unexplored  
                       | - An identified community, target population, or other unit of study                                                                                                                                                     |
| Ethnographies        | - A population, process, problem, context, or phenomenon whose characteristics, parameters, or outcomes are unclear, unknown, or unexplored  
                       | - Use of open-ended interviews and participant observation  
                       | - A defined or operationalized group  
                       | - A concern with using cultural concepts to guide the research and to help explain or interpret data                                                                                                              |
| Narratives           | - Individual(s) willing to tell stories or life, career, or personal histories  
                       | - An interpretive framework based on the concepts and meanings used by the storyteller                                                                                                                                  |
| Compressed designs:  | - A focused intervention problem  
                       | Rapid ethnographic assessments or focused ethnography:  
                       | - Brief studies of 3 days to 6 weeks  
                       | - Use of a combination of elicitation techniques, focus groups, and key informant interviews to get information on a specific cultural domain needed for developing a culturally appropriate intervention |
| Action research      | - Ethnographic research conducted in partnership with members of the community or setting in question with the specific purpose of bringing about structural or cultural change                                              |

after all, as well as what has been happening over time rather than at one point in time, or “pre and post.” They also provide a way to document those events that impede or enhance success of participants’ efforts (see Table 4.3).

**Case Studies and Ethnographies**

Case studies and ethnographies focus on a single unit for the investigation, whether it be an individual, as in clinical studies of mental or physical illness; a group, as in Example 4.1, which describes a study of dieters attending a particular weight loss clinic; or a single institution or program. Several examples above describe case studies of innovative educational programs. Example 5.5 involves a case study of a very
complex, statewide program of competency testing for teachers. Studies of institutions might involve an entire school, corporation, or health care facility. Despite the complexity of the institutions and the number of individuals interviewed or surveyed, such studies still would be considered case studies because the “N”—or number of phenomena studied (communities or institutions)—is still just one.

Ethnographies are case studies because of their focus on a single entity, but they differ from case studies in general in that, as we have indicated in the first part of this book and in Table 4.3, they always include in their focus the culture of the group or entity under study. Other types of case studies—not ethnographies—include biographies; oral or clinical histories; and studies of innovations, group processes, organizational dynamics, or the characteristics of and interaction in any organization or group of people. Case studies usually are framed within a specific explanatory social or natural science discourse; a discipline such as psychology, history, or sociology, or an applied field such as social work, psychiatry, medicine, or education. That is why the TECAT program described in Example 5.5 is a case study and not an ethnography; it does emphasize process and description, but the description is not a cultural one. By contrast, the description of the Learning Circle Program presented in Examples 6.1 and 7.1 is derived from an ethnographic study because one of the key features of the investigation was the delineation of the culture of the participants and how it influenced the culture created in the program. Similarly, LeCompte’s studies of Navajo school district (Examples 1.1 and 1.6) and Schensul’s studies of children’s activities and AIDS risk in Mauritius (Examples 1.4 and 6.2) also would be considered ethnographies because of their focus on the culture of the community in which the studies were situated.

Ethnographies and other forms of case studies always involve a consideration of people and events in their natural
settings. They are, therefore, ideal for answering a question such as, "What's really happening in this program or with this individual?" The focus of such research, then, is on what makes the people in the study tick—how they behave, how they define their world, what is important to them, why they say and do what they do, and what structural or contextual features influence their thoughts, behaviors, and relationships.

Case study researchers and ethnographers typically live with or in the institutions or groups they are studying for extended periods of time because it takes considerable time to become acquainted with the participants; understand the dynamics of their interaction; understand how they relate to the physical and material environment; and elicit the meanings, goals, and objectives that are important to the participants. Ethnographies and other case studies all use participant observation and various forms of face-to-face, in-depth interviewing as principal forms of data collection. Consequently, they require that researchers develop considerable rapport with and trust among the people under study. Notwithstanding, they also employ many other different kinds of data collection as supplements to and corroboration for observations, such as the following:

- formal and informal interviews
- questionnaires
- standardized tests and measurements
- elicitation techniques
- archival records
- audio- and videotapes
- still photographs
- artifacts and maps

Cross Reference:
These forms of data collection are discussed in Books 2, 3, and 4.

Typically, ethnographers and other case study researchers observe and talk to members of a group to find
out what the members are doing and why. They try not to take for granted anything they see or hear, always cross-checking their own perceptions and conclusions with information from research participants. Then, they assemble all of the information that they have collected into descriptions of relationship and recurring patterns of behavior and belief so that a full portrait of the group can be constructed.

**Narratives**

In recent years, some researchers have come to study single individuals in a kind of research called narrative inquiry. Anthropology has a long history of using the accounts of single individuals, commonly called “key informants” (or cultural experts), to develop a picture of the beliefs and practices of a community. Key informants typically are chosen because they are quite knowledgeable about their own culture (and also are willing and able to communicate with anthropologists). Anthropologists also use life histories to understand the role and experience of individuals who are often unique in their time and setting. It is also common for anthropologists to collect narratives, or accounts of specific experiences (e.g., narratives of entry into drug use, or narratives describing the most recent experiences in treating a health problem or managing encounters with teachers in a child’s school). In general, narratives of all sorts constitute text data that provide rich descriptions of particular events, situations, or personal histories.

Although the stories told by key informants may, in some respects, resemble those told by participants in a narrative study, the purposes for which they are told differ dramatically. The anthropologist’s focus remains on the culture of the group; the stories told by key informants are only nominally the stories of that particular individual. Rather, they are used by the anthropologist to typify the behaviors and beliefs of the group. The narratives in narrative studies,
by contrast, have no necessary similar cultural referent; they are taken to represent the experience of the individual alone.

Strictly speaking, narratives involve human experience, although they can be constructed from a variety of sources. Sometimes, these texts originate in books as articles; they can be created from plays, court transcripts, films, and videotapes, or even from the stage directions used to direct such productions. However, most often they are generated by individuals in the course of talking about or recording their life experiences. They usually start out in the form of entries in diaries or journals, or as interview transcripts or oral histories elicited by researchers. A relatively new form of research design, narratives obtained from different people and sources can be used to assemble a composite picture of a group’s experiences.

Narratives focus on knowledge, beliefs, and practices; they are used to study how people practice their professions, how they learn to carry out tasks, and how they come to know about their world. They are also used to highlight the experiences of people who have been oppressed or marginalized where they live. In the latter cases, narratives often are defined as “giving voice” to people whose experiences are not well known in the mainstream of their society. Finally, narratives can be used to present multiple perspectives in a given setting (Clifford & Marcus, 1986).

There are many kinds of narratives. Commonly, they consist of more or less chronological accounts of a person’s life, career, or set of experiences. They can, however, be obtained from transcripts of courtroom or other formal proceedings; stories of people’s intention to do something or explanations of why they acted as they did; series of episodes, fantasies, or philosophical musings. They may or may not reflect the structure of what has been called “grand narrative,” with plot, setting, characters, conflict, conflict resolution, and a moral or summing up (Heath, 1996).
Particularly when talking with individuals whose culture is not informed by Western European and North American grand narratives, or with youth whose peer groups actively reject such narrative structure, ethnographers need to take care not to impose such structures on the discourse of participants—if, in fact, what is desired is the discourse style of the participant (see LeCompte, 1997, for a discussion of the pitfalls involved in such imposition).

Some research theorists argue that narrative by itself does not constitute a research design. Rather, they hold that narrative is a data collection technique that can be used fruitfully in a variety of research designs, including oral historiography, ethnography, and case studies. Notwithstanding, we include narrative here as a design primarily because it has become so widely used, especially in the fields of education and of ethnic and gender studies, to call attention to details of practice as well as to the experiences of marginalized individuals.

Compressed Ethnographic Research Designs

There are many occasions when resources of time, money, and staff do not permit conduct of a full-fledged ethnography, even though it is clear that an ethnography would be the most appropriate design. In these cases, some methodologists have designed modifications of traditional ethnography that accommodate to shortened time lines and/or multiple sites (e.g., Pelto & Gove, 1992; Scrimshaw & Gleason, 1992; Scrimshaw & Hurtado, 1985).

Compression is possible under certain circumstances: First, the ethnographers must already be familiar with the field setting and/or the cultural context, and, ideally, speak the language. Indeed, that particular setting may be in their own home community. Second, the work must be focused on one aspect of the culture. It should not attempt to cover a wide spectrum of beliefs and behaviors in different cul-
tural domains. For example, focused ethnographic studies can be conducted on symptoms of infant diarrhea for purposes of improving diagnosis and treatment (but not on childhood diseases in general), or on environmental barriers to millet production (but not on barriers to agricultural production in general). Third, ethnographers should work with cultural experts from the setting even if they share national origin with research participants. Ethnographers may not be familiar with the local setting; working with local experts or partners speeds the work and ensures validity. These partners can assist in establishing the context for the data collection, participate in designing the research, and interpret the results. This can avoid mistakes resulting from the researchers' lack of familiarity with the setting.

In compressed research designs, data collection techniques must be suitable to convenient use in a brief period of time. Favoring for this purpose are cognitive elicitation techniques, such as listing and pilesorts, group interviews with representative samples of individuals, in-depth interviews with cultural experts or key informants, and brief surveys administered to small representative samples. Triangulation of these multiple data sources is necessary to produce a comprehensive and consistent picture of a specific cultural domain.

**EXAMPLE 4.12**

**TRIANGULATION IN A MULTISITE RAPID ASSESSMENT OF NUTRITION AND PRIMARY CARE**

Anthropologist Susan Scrimshaw reported on a United Nations University-funded, 16-site investigation in nutrition and primary care conducted from a household perspective. Group interviews (conversations on an informal basis with informants or small groups) and focus groups (small, homogeneous groups gathered for group discussions of appropriate research topics) were part of the repertoire of data collection techniques used in this rapid assessment project.
Triangulation involved repeated questions, discussion, and actual observation, looking for the same information or information on the same topic. In terms of sampling, it was not efficient to seek random samples. The study focused on poor and rural households with children under 5 years of age. Random sampling was possible only in nine countries. Purposive or opportunistic sampling was more feasible, and "concerns for representativeness could be honored by a strong awareness of what was typical or deviant for the culture." Also, "families could be added to the sample if more seemed necessary because of a wide variability in responses." Scrimshaw notes that "the RAP is best done by researchers either from or familiar with the cultural setting who are starting with an already existing good basis of information." But, she cautions, even where researchers are local (i.e., nationals), communities may be wary of outsiders" (Scrimshaw, 1992, p. 31).

\textit{Action Research}

Some researchers define \textit{action research} broadly as any research conducted with a clear institutional or community structural change in mind. Others reserve the term for research designed to address structural inequalities, such as limited or poor quality mental health services for poor rural residents, gaps in computer and library resources in urban schools, or preferential hiring in private hospitals in urban areas of Sri Lanka. Regardless, action research is site-specific and involves researchers and participants who jointly participate in four specific steps: (a) the identification of a problem, (b) the joint conduct of research to gain a better understanding of the problem, (c) joint analysis of research results, and (d) taking action to remedy the problem. Researchers and participants engage in all of these steps, including joint action, as partners (Schensul & Schensul, 1978; Stringer, 1996). The following example illustrates the interaction of these steps.
Kanani describes a project in India that combined the use of rapid assessment procedures with action research. A nongovernmental organization interested in folk perceptions of women's morbidity as the backdrop for establishing a women's health initiative began a project in two urban, low-income slum areas differing by religion; one was Muslim and one was Hindu. An important outcome of the project was expected to be the establishment of a health center for women in each slum; this was a strongly felt local need: "Open a health center for us and you will know all about our health problems."

The sample included married women between the ages of 20 and 50 with at least one child who were likely to have heard about women's illnesses arising from marriage and motherhood. Center staff used a combination of focus groups, free listing and pilesorting, ethnographic interviews, narratives, and key informant interviews for the study. There were 19 group interviews with about 15 women in each group. The focus group discussions were to build rapport with women and to outline the general framework of women's morbidity—types, etiology, and treatment.

At first, researchers carried out informal interviews with naturally forming groups (or networks) in neighborhoods. Later groups were systematically formed by including an equal number of older (age 40 and up) and younger (ages 20-30) women in neighborhood-based groups of approximately 15 to 18 women. The group discussions helped to build rapport with women and provided a framework for their health problems, including reproductive health. Participants encouraged their neighbors to describe their problems freely, thus providing considerable data on women's morbidity, local terms used, and perceived etiologies and treatment patterns. Participants in focus groups located women leaders to help out with research and subsequent planning for health services, and to decide priorities for subsequent research (Kanani, 1992).
Ethnography is very useful in the first stages of an action research project to help in defining the problem, the cultural setting, and the action research partners. The most important consideration in conducting responsible action research is that the results are likely to be subjected to scrutiny by multiple audiences and critics: the research partners, research participants, public and private institutions, the media, and the scientific community. Because so much rests on valid and reliable results, great pains must be taken to ensure the rigor of the research and the appropriateness of the research design to all audiences. If one of the main audiences for the research will believe only the results of a survey, focus group research will not result in a successful outcome. For action research to end in the desired change, ethnographers must do an ethnography of both the problem and its social and political context for change.

The Interaction of Qualitative and Quantitative Designs

We said earlier in this chapter that qualitative and quantitative research designs are not mutually exclusive. Some researchers prefer to maintain separation of designs—they are purists, doing either qualitative or quantitative work. We believe, though, that features of qualitative and quantitative designs can complement and strengthen each other. Tables 4.4 and 4.5, respectively, summarize some of the main ways that qualitative and quantitative design features can be integrated as readers plan their research designs.

Now that we have discussed the design options available to ethnographers as they begin their work, we turn in the next chapter to a discussion of the decision-making process that researchers use to choose ethnographic designs and the strategies employed to design them.
<table>
<thead>
<tr>
<th>Quantitative Design Type</th>
<th>Role of Ethnography in Quantitative Research Designs</th>
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<tbody>
<tr>
<td>Cross-sectional research:</td>
<td>Preparation for survey</td>
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<tr>
<td>Population and sample surveys</td>
<td>- Identification of the problem and context</td>
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<td></td>
<td>- Identification of the range of responses</td>
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<td></td>
<td>- Identification of target population, characteristics, locations, and possible barriers to survey research</td>
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<td></td>
<td>Complementary data</td>
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<td></td>
<td>- Identification and exploration of social subgroups, explaining patterned variation in survey results</td>
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<tr>
<td>Experiments</td>
<td>Preparation</td>
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<td></td>
<td>- Identification of elements of the experiment</td>
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<td></td>
<td>- Identification of constraints in field</td>
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<td></td>
<td>- Pilot testing for acceptability and feasibility</td>
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<td>- Developing and validating measures of change</td>
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<td>Process</td>
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<td></td>
<td>- Finding differences in implementation</td>
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<tr>
<td></td>
<td>- Documenting content of intervention for comparison with outcome measures</td>
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<tr>
<td>Controlled field studies/</td>
<td>Preparation</td>
</tr>
<tr>
<td>quasi-experiments</td>
<td>- Identification of elements of the treatment</td>
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<td></td>
<td>- Identification of potential differences among treatment and control groups</td>
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<tr>
<td></td>
<td>- Identification of constraints to experimentation in the field</td>
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<tr>
<td></td>
<td>- Pilot testing for acceptability and feasibility</td>
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<td>- Developing and validating measures of change</td>
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<td>- Documenting content of intervention for comparison with outcome measures</td>
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</table>
TABLE 4.5 The Interaction of Quantitative Methods With Qualitative Research Designs

<table>
<thead>
<tr>
<th>Qualitative Research Designs</th>
<th>Role of Quantitative Research in Relation to Ethnography</th>
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</thead>
<tbody>
<tr>
<td>Case studies/ethnographies</td>
<td>- Survey to confirm and validate ethnographically defined patterns</td>
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<td></td>
<td>- &quot;Case-control&quot; matched sample to identify factors associated with presence/absence of element (e.g., disease, school performance, etc.)</td>
</tr>
<tr>
<td>Ethnographies</td>
<td>- Survey to confirm and validate ethnographically defined patterns</td>
</tr>
<tr>
<td></td>
<td>- &quot;Case-control&quot; matched sample to identify factors associated with presence/absence of element (e.g., disease, school performance, etc.)</td>
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<td>- Time series design (repeated observations of the same units over time) to define change more accurately</td>
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<tr>
<td>Narratives</td>
<td>- Survey to demonstrate presence of patterns revealed by narratives, using language and concepts of respondents</td>
</tr>
<tr>
<td>Compressed or rapid ethnographic assessments or focused ethnography</td>
<td>- Brief cross-sectional surveys with small samples</td>
</tr>
<tr>
<td></td>
<td>- Brief pre-post surveys and panel designs for assessing intervention</td>
</tr>
<tr>
<td>Action research</td>
<td>- Action research makes use of both qualitative and quantitative design features to accomplish the purpose designated by the problem and the partnership</td>
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</tbody>
</table>

NOTES

1. Validity has several meanings. At its broadest, validity refers to the "goodness," authenticity, credibility, and quality of the research (Lincoln & Guba, 1985). In experimental research, internal validity refers to the degree to which what happens in an experiment can be attributed to the experimental intervention that is the focus of the study (Campbell & Stanley, 1963; LeCompte & Preissle, 1993; Porter, 1978). In sample surveys and in experiments for which populations are chosen randomly, validity also refers to how accurately the results obtained describe the larger population from which the study sample was drawn (Campbell & Stanley, 1963; Jaeger, 1978; LeCompte & Preissle, 1993; Porter, 1978).

2. In many cases, researchers cannot establish a real control group because it would be unethical not to treat people who are, for example, injured or in need of a program. For this reason, many medical and educational programs use multiple comparison groups rather than the traditional control group. Example 4.7, as a case in point, includes multiple comparison groups because no patient went untreated. The researchers in Example 4.6, however, could have a real control group because their experiment was an optional summer
program. The control group was not deprived of regular classroom instruction.

3. Notwithstanding, randomized assignment to treatment and control groups, and educational counseling or prevention interventions that are standardized in curriculum or other instructional manuals, now often can be found in field or community settings as well as in laboratory-like settings. Situations calling for standardized intervention manuals include treatment and prevention of HIV/AIDS and sexually transmitted diseases, pregnancy prevention, and interventions with people with mental health and drug abuse diagnoses.