

6304

24
 11

- Ausubel, D. P. *The psychology of meaningful verbal learning*. New York: Grune & Stratton, 1963.
- Ausubel, D. P., & Fitzgerald, D. Organizer, general background and antecedent learning variables in sequential verbal learning. *Journal of Educational Psychology*, 1962, 53, 243-249.
- Ausubel, D. P., & Robinson, F. G. *School learning*. New York: Holt, Rinehart & Winston, Inc., 1969.
- Barnes, B. R., & Clawson, E. V. Do advance organizers facilitate learning? Recommendations for further research based on an analysis of 32 studies. *Review of Educational Research*, 1975, 45, 637-659.
- Barron, R. R. *The effects of advance organizers on the reception learning and retention of general science content* (Final Report). Department of Health, Education, and Welfare Project No. 1B-030; Grant No. OEG-2-710030, November 1971. (ERIC Document Reproduction Service No. ED 061 554).
- Feller, W. A. The effects of two types of advance organizers and two types of spaced questions on the ability of a selected group of tenth grade biology students to recall, comprehend, and apply facts from written science material. (Doctoral dissertation, Temple University, 1973). *Dissertation Abstracts International*, 1974, 34, 1766A. (University Microfilms No. 73-23, 331).
- Jerrolds, B. W. The effects of advance organizers in reading for the retention of specific facts. (Doctoral dissertation, University of Wisconsin, 1967). *Dissertation Abstracts*, 1968, 28, 4532A. (University Microfilms No. 73-33, 188).
- Kass, H. Structure in perceived relations among physics concepts. *Science Education*, 1972, 55, 339-340.
- Lawton, J. T. *An analytical study of the use of advance organizers in facilitating children's learning*. Unpublished Ph.D. Thesis, University of Leeds, Leeds, England, 1974.
- Lawton, J. T., Hooper, F. H., Wanska, S. K., & Saunders, R. A. *A comparison of two early childhood instructional programs* (Technical Report). Madison: Wisconsin Research and Development Center for Cognitive Learning (in preparation. Delivery date, 1977).
- Lawton, J. T., & Wanska, S. K. *Facilitating the learning of meaningful verbal materials and logical operations by the use of advance organizers: A replication and expansion study*. Wisconsin Research and Development Center for Cognitive Learning, Madison, Wisconsin (in preparation).
- Lucas, S. B. *The effects of utilizing three types of advance organizers in the learning of social science materials: Experiments 1-3* (Report No. 64). Baltimore: Johns Hopkins University, April, 1970. (ERIC Document Reproduction Service No. ED 039 156).
- Neisworth, J. T. The use of advance organizers with the educable mentally retarded. (Doctoral dissertation, University of Pittsburgh, 1967). *Dissertation Abstracts*, 1968, 28, 4539A. (University Microfilms No. 68-7515).
- Novak, J. D., Ring, D. G., & Tamier, P. Interpretation of research findings in terms of Ausubel's theory and implications for science education. *Science Education*, 1971, 55, 483-526.
 - Ring, D. G., & Novak, J. D. Effects of cognitive structure variables on achievement in college chemistry. *Journal of Research in Science Teaching*, 1971, 8, 325-333.
 - Scandura, J. M., & Wells, H. N. Advance organizers in learning abstract mathematics. *American Educational Research Journal*, 1967, 4, 295-301.
 - West, L. H. T., & Fensham, P. J. Prior knowledge and the learning of science: A review of Ausubel's theory of this process. *Studies in Science Education*, 1974, 1, 61-81.

The Use of Ethnographic Techniques in Educational Research

Stephen Wilson

Center for New Schools

There is a growing interest in the use of anthropological techniques in educational and psychological research. The backgrounds of many researchers, however, contain little training in or experience with this kind of research, also called qualitative, phenomenological, or ethnographic. Because ethnographic methodology differs significantly from the research approaches more commonly used in education and psychology, it is important to clarify its rationale and its data collection processes. It is essential to understand the ways in which ethnographic approaches differ from other approaches because they represent fundamentally different claims about the nature of human behavior and the best ways of coming to understand it. We propose, therefore, to review the differences between this kind of research and the techniques more familiar to most researchers by explaining the rationale behind its use and by discussing some of the proc-

This article was a part of research projects supported by grants to the Center for New Schools from the Urban Education Research Fund of the University of Illinois at Chicago Circle, the National Institute of Education, the National Institute of Mental Health, and the Carnegie Corporation.

The Center for New Schools is a not-for-profit organization working to improve urban education through a combination of research and assistance activities. The author prepared this paper as part of the efforts of an interdisciplinary team of psychologists, anthropologists, sociologists, teacher trainers, community organizers, teachers and community members, which compose the Center. Drs. Emile Scheppers, Thomas Wilson, Donald Moore, Richard Johnson, and Phyllis Wilson critiqued early drafts of this article. Hazel Domangue and Monica Ingram helped in its production.

esses by which this research is conducted. This article is focused on educational research, but the discussion applies equally to social psychological research in all settings.

Ethnographical research is referred to as an anthropological method because historically it has been associated with that particular discipline. Anthropologists, of course, use a variety of research techniques. In the context of this paper, however, "anthropological" usually means some variety of participant observation, long considered basic to anthropological research.

Until recently, most ethnographic studies were conducted outside American society or within minority subcultures. As the next section explains, however, this kind of approach can provide data just as valuable for mainstream American schools as for those in other cultures.

There are indications that the use of ethnographic techniques for studying American schools is growing. The National Institute of Education (NIE, 1973) is encouraging this kind of approach and many researchers involved in the evaluation of educational programs and in the processes of innovation are finding these approaches useful (CNS, 1972; CNS, 1974b; Smith, 1974; and Nelson, Lundin, & Gianotta, Note 1). Several general studies of schools have been completed or are in progress: Cusick (1974) on student life in a high school; CNS (1974a) on student-teacher relations in alternative schools; Jackson (1968) on life in elementary classrooms; Ianni, Becker, Verenne, Dalton, Leichter, and Levine (Note 2) on comparisons among various kinds of high schools; Smith and Geoffrey (1969) on life in an inner city classroom; Smith and Keith (1971) on the events surrounding the establishment of an innovative elementary school; Wolcott (1973) on the day to day realities of an administrator; and Wilson (1972) on the culture of an alternative high school without walls.

Our purpose here is not to report on the substantive findings of studies of this kind. For such findings the reader is urged to consult other sources (for example, Sindell, 1969; Ianni & Storey, 1973; Spindler, 1963; Wax, Gearing, & Diamond, 1973; Wolcott, 1975; and the *Council on Anthropology and Education [CAE] Quarterly*). Our purpose is to present a review of the methodology as it relates to educational research.

Rationale

Ethnographic techniques are part of a research tradition that has been developed by anthropologists and community-study sociologists. These methods have been found to be useful for gathering certain important kinds of data; in fact, some researchers claim that these anthropological techniques may gather information about human behavior that it is impossible to

obtain by the more quantitative methods. The rationale underlying this methodology is based on two sets of hypotheses about human behavior: (a) the naturalistic-ecological hypothesis, and (b) the qualitative-phenomenological hypothesis. These two fundamental hypotheses accepted together provide a strong rationale for participant observation research. Below is a review of several independent strands of research and theory that have given rise to each of these hypotheses.

Naturalistic-Ecological Perspective

Many social scientists believe that human behavior is significantly influenced by the settings in which it occurs. They, therefore, believe that it is essential to study psychological events in natural settings, and they claim that settings generate regularities in behavior that often transcend differences among individuals. Extensive research has been conducted that demonstrates the importance of the influence of the setting and the often divergent findings that result when the same phenomenon is studied in the laboratory and in the field. (For a full discussion of this research and rationale see Barker, 1968, and Willems and Raush, 1969.) Ecological psychologists claim that if one hopes to generalize research findings to the everyday world where most human events occur, then the research must be conducted in settings similar to those that the researchers hope to generalize about, where those same forces that will one day act are not interrupted. The ethologists (for example, Hess, 1962) have noted similar problems with much research on animals. The typical laboratory or zoo distorts animals' behavior into patterns that have little to do with how they behave in natural settings.

How does the setting influence people in it? Barker writes of forces generated both by the physical arrangements of the settings and by internalized notions in people's minds about what is expected and allowed. Significantly, a second tradition of social science has arrived independently at the same point of emphasizing the importance of the internalized notions generated in settings. Sociologists studying organizations assert the importance of the traditions, roles, values, and norms that are part of life in organizations. Much behavior in organizations is influenced by the participants' awareness of these mental states and by pressures generated by others who are influenced by these states (see March, 1965). Though organizational theorists might not necessarily claim that research must be conducted in the field, they do recognize many of the forces that the ecological psychologists see as important.

As organizations, schools exert many powerful forces on participant behavior. For example, see Lortie, 1973 for a discussion of

teacher roles and traditions; for a discussion of norms, see Dreeban, 1968; for a discussion of other pressures in these settings, see Jackson, 1968, and Sarason, 1971. Realizing that these forces exist, the ecological psychologist would warn that if one wants ultimately to generalize research findings to schools, then the research is best conducted within school settings where all these forces are intact. The inability of classical learning theories to say very much that is meaningful about everyday classroom learning can be explained in part by the absence of these school/organizational forces in the research laboratories where the theories were developed.

The same kind of realization about the importance of context for research has been arrived at in a third independent tradition of research. Social psychologists realized that their experiments were often picking up influences other than those on which they were focusing. They found that the experimental situation—for example, the questionnaire, the interview, the laboratory—was a unique setting of its own with its own dynamics and influences on behavior. Rosenthal and Rosnow in *Artifact in Behavioral Research* (1969) review the findings of extensive research undertaken to determine the nature of these influences. For instance, the role of being a research subject in social science research often includes the following influences on behavior: a suspiciousness of the intent of the research, a sense of the behavior that is either appropriate or expected, a special interpersonal relationship with the experimenter, and a desire to be evaluated positively. All these forces can shape behavior in a way that is extraneous to the focus of the research. A person filling out a questionnaire, responding to an interview, or behaving in an experiment—even though he is trying to be genuine—may not be able to provide accurate information about his usual behavior in real, complex settings. One area in which this shortcoming has been especially frustrating is attitude research. Consistently, people's responses on questionnaires and in interviews have not provided adequate information about their observed actions (Deutscher, 1966).

Several reactions to these realizations about artifact in research are possible. The researchers in the Rosenthal and Rosnow work have attempted to find ways to monitor and control these influences in their research. Cook and Selltitz (1964), in their multiple indicator approach, provide another way to attempt to monitor extraneous forces. The most common method used to overcome these difficulties of artifact is studying the phenomenon naturalistically and unobtrusively (Campbell, Schwartz, & Sechrest, 1966). Under the conditions of naturalistic observation, the behavior studied is subject to the influences of

the natural setting rather than the specialized influences of research settings.

Many researchers will have no trouble accepting the preceding rationale. Observation is deeply ingrained in the American educational research tradition, and the only demand that the ecological hypothesis makes is that behavior be studied in the field. The rest of standard technique is left intact—for example, deriving explicit a priori hypotheses, defining operational categories of observation, developing objective methods of data gathering, and conducting appropriate statistical analyses. The next section discusses a part of the rationale behind anthropological techniques that qualifies these processes.

Qualitative-Phenomenological Hypothesis

Much of American social science strives toward the natural science model of objectivity. Phenomenology, a tradition of social science that has thrived in Europe but has been largely neglected in educational research in the United States, offers an alternative view of objectivity and methods appropriate for studying human behavior. Those who work within this tradition assert that the social scientist *cannot understand human behavior without understanding the framework within which the subjects interpret their thoughts, feelings, and actions*. They point out that the natural science approach to objectivity requires the researcher to impose a priori limitations on the data, an act which makes it difficult to discover the perspectives of the subjects. (See Bantock, 1965, Broadbeck, 1968, and Kocklemass, 1967.)

The ramifications of this position are far-ranging. The traditional stance of objective outsider favored by social scientists and the usual research procedures are deemed inadequate for gathering information that takes these participant perspectives into account. Moreover, the customary deductive activities of framing hypotheses and defining categories a priori before undertaking the study, and of analyzing within prespecified frameworks are seen as inappropriate.

Generally, researchers try to find strategies that minimize the role of subjectivity. They try to standardize the interpretations that they (or anyone else) attribute to data perceived by their senses. Deriving a scheme for coding behaviors observed in a classroom is an example. Theoretically, a coding scheme and a framework for interpreting observed behaviors can be developed and communicated so that anyone who has learned the scheme, with training and practice, will interpret the behaviors in ap-

proximately the same way. This method is seen as guaranteeing objectivity.

The phenomenologist points out that the adoption of this particular framework for interpreting and coding behavior is arbitrary. Any number of meaning systems could be selected. In fact, the most important frameworks to understand might be those of the subjects rather than the researchers. The objective social scientist, in standardizing the interpretation, may have destroyed some of the most valuable data he or she had. Severyn Bruyn (1966) has expressed this view:

The traditional empiricist considers himself (as a scientist) to be the primary source of knowledge, and trusts his own senses and logic more than he would trust that of his subjects. The participant observer, on the other hand, considers the interpretations of his subjects to have first importance. . . . By taking the role of his subjects he recreates in his own imagination and experience the thoughts and feelings which are in the minds of those he studies. (p. 12)

To know merely the fact that feelings, thoughts, or actions exist is not enough without also knowing the framework within which these behaviors fit. The social scientist must come to understand how all those who are involved interpret behavior in addition to the way he or she as scientist interprets it from his objective outside perspective. Moreover, since the subjects cannot always articulate their perspectives, the researcher must find ways to cultivate awareness of the latent meanings without becoming oversocialized and unaware as most participants may be. The researcher must develop a dynamic tension between the subjective role of participant and the role of observer so that he is neither one entirely.

The necessity of abandoning traditional deductive processes such as a priori hypothesis formation usually follows as a consequence to this general approach to understanding human behavior. Because quantitative researchers are restricted within their own perspectives, they risk being concerned about irrelevant variables. Glaser and Strauss (1967) describe a careful method by which social scientists can ground their theory and research in the reality they are studying. They use the tension between participant data and observer analysis to constantly refine their theory. Traditional research analysis framed without this on-going awareness can seem forced to fit the theory guiding the research. Formal theory should enter only after the researchers have become convinced of its relevance. Glaser and Strauss (1967) describe the advantages of their open approach over a pre-structured study.

The consequence [of the traditional approach] is often a forcing of data as well as a neglect of relevant concepts and hypotheses that may emerge. . . . Our approach, allowing substantive concepts and hypotheses to emerge first, on their own, enables the analyst to ascertain which, if any, existing formal theory may help him generate his substantive theories. He can then be more objective and less theoretically biased. (p. 34)

No one, of course, enters a situation a true *tabula rasa*. Language is itself a limiting factor which provides one set of conceptual tools and screens out others. Similarly, previous experiences influence the scientist's observation and thought. In fact, traditional empirical scientific methods have sought to extrapolate along these lines by asking the researcher to be most explicit and rigorous in the formulation of the perspective underlying the research. There is room in the realms of research, however, for other more inductive approaches where the role of the preformed hypothesis and circumscribed data gathering techniques are reduced to a minimum.

Those who work within the anthropological tradition cultivate the skill of suspending (the phenomenologists call it "bracketing") their preconceptions. They study prior research and theory as much as the traditional researcher, but they then purposely suspend this knowledge until their experience with the research setting suggests its relevance.

To illustrate this very important concept of meaning and perspective, let us assume that a traditional researcher is interested in studying interstudent aggression in the classroom, perhaps to determine the relation of its occurrence to some aspects of teacher activities or some set of student characteristics. To determine frequency of various kinds of aggression, the researcher sets up categories and trains observers to be sensitive, reliable recorders of these aggressive events. The researcher simultaneously finds ways to record and measure other variables of interest.

Let us assume that "student hits other student" is one of these categories of aggression. Those who have been observers/coders in the classrooms are aware intuitively that not every "student hits other student" event is commensurate. The objective tradition and training leads a person to put these reservations aside (or to make limited inferences) and report the "facts."

The participant observer is not willing to sacrifice all this information about the subtle differences between similar hitting events. In fact, this observer feels that understanding these differences is crucial and much of the research is specifically

aimed at getting this information. Moreover, the danger exists even in quantitative systematic observation that the failure to understand the meanings of hitting events may result in miscoding, the under- or overestimation of relationships, or the total neglect of powerful concepts and hypothesis related to the researcher's interests.

The participant observer systematically works to be aware of the meanings of events. For example, in relation to the hitting example above, he or she would be aware of the following participant perspectives and would know which were relevant in the situation being studied:

How do the various participants (the hitter, person being hit, onlookers, teacher) perceive the event?

Do they even see it as aggression?

Do the hitter and person being hit concur on the meaning?

It could, for example, not be an act of aggression:

It could be an act of affection as in a game of exchange.

It could be part of subcultural norms. (In some black subcultures, preadolescent and adolescent males hit each other on the arm and the shoulder as playful demonstration of strength rather than as a specific act of aggression.)

It could be an attempt to get the teacher's attention or to disrupt class order rather than being directed to the person being hit.

Even if it is aggression, there are many critical differences among events that it is important to understand.

The event could be an initiatory first act, or it could be a retribution for previous acts of aggression not necessarily linked immediately in space, time, or kind.

The event could be part of a personal relationship between the two students involved, or it could be part of a larger interpersonal network of relations—for example, intergroup hostility.

There are critical aspects of human behavior to understand. The qualitative researcher learns of some of these perspectives by hearing participants express them in the flow of events. To learn of others, the researcher must ask the participants questions and become acquainted with "emic" (actor-relevant) categories that are rarely expressed. Some of what we are calling perspectives or meanings, however, may not even be conscious for the participants; no participant could spontaneously articu-

late them. The participant/observer's day-to-day observation of the full range of activities and the status of outsider/insider put the observer in a unique position to understand these forces on behavior and to articulate them.

This brief discussion has certainly not exhausted all the possible meanings of this particular action. Any setting where human beings act is full of behaviors that have their similarly rich sets of possible meanings. Although it is impossible for any individual to comprehend all the meanings in any setting, a researcher using anthropological techniques can be aware of them and be able to use them in understanding and explaining human behavior.

Summary

We have briefly explained, then, the two sets of hypotheses underlying the rationale for participant observation research: (a) Human behavior is complexly influenced by the context in which it occurs. Any research plan which takes the actors out of the naturalistic setting may negate those forces and hence obscure its own understanding. (b) Human behavior often has more meaning than its observable "facts." A researcher seeking to understand behavior must find ways to learn the manifest and latent meanings for the participants, and must also understand the behavior from the objective outside perspective.

Because these hypotheses taken together fundamentally challenge the way that much traditional educational research is conducted, they will undoubtedly raise many questions and protests. Such debate can be beneficial if it leads researchers of all persuasions to question their basic assumptions about human behavior and ways of understanding it.

Research Process

Understanding the actual processes involved in this kind of research is as important as understanding the rationale. Ethnographic research is much like quantitative research in that it has a long tradition within which investigators are working continually to refine and develop effective and appropriate research methods.

Educational researchers who are unfamiliar with the anthropological research tradition often see this kind of research as synonymous with journalistic reporting and anecdotal or impressionistic story-telling. Their expectation is that someone enters a setting, looks around for a time, talks to some people, and writes a report of his impressions. They speculate that any person in the setting could produce the same insights by writing

some recollections. They do not see this as real research and fear a lack of objectivity. This section will attempt to bridge the serious gap between ethnographic and non-ethnographic researchers by describing the actual procedures involved.

As explained in the section describing the rationale, the underlying principle guiding this kind of research is the assumption that individuals have meaning structures that determine much of their behavior. The research seeks to discover what these meaning structures are, how they develop, and how they influence behavior, in as comprehensive and objective a fashion as possible. For the sake of analysis, the ethnographic research process will be divided into a series of issues: entry and establishment of researcher role; data collection procedures; objectivity; and analysis of data.

Entry and Establishment of Role

Ethnography is based on the assumption that what people say and do is consciously and unconsciously shaped by the social situation. The ethnographer is sensitive to the way he enters a setting and carefully establishes a role that facilitates the collection of information. He must make decisions about how involved he will become in community activities (Gold, 1958) because he knows his activities will influence the ways in which people react to him. He monitors the way his entry into the community is initiated both officially and unofficially because he knows this will influence how people see him (Geer, 1964; Kahn & Mann, 1952; Vidich, 1955). He tries not to be identified with any particular group in the setting. Moreover, throughout the study he monitors the views participants have of him; for instance, he would note carefully the difference between what people say and do with each other (either in his presence or as reported to him) and what they say and do when alone with him (Becker, 1961). Most importantly, the participants must come to trust and value the observer enough to be willing to share intimate thoughts with him and answer his endless questions (Bruyn, 1966). The outsider occasionally coming in and talking to people does not have this opportunity to systematically cultivate and monitor a role that facilitates collection of all kinds of information at all levels.

To offer a concrete example, we will briefly consider how a participant observer might have gone about cultivating his role in the study of student aggression and the hitting episode considered previously. The researcher would be careful about the way he entered the situation and came to be perceived. For example, he would work methodically to avoid being identified as the member of any particular subgroup. Did the teachers con-

sider him someone the principal had sent? Did they feel he would be sympathetic toward the teacher point of view? If there were factions of teachers, did the observer become identified with any one of them? Similarly, did the students consider him to be a teacher-like person? Did particular groups of students see him as an ingrouper or an outgroup? The group identity of the observer is important not only because the participants might consciously withhold information from someone with the wrong identification (for example, students not talking about plans for "getting" certain classmates in front of a teacher-like person), but also because the participants might consciously color what they said and did (for example, students not talking about hitting games in front of a teacher-like person who they felt would consider them silly).

In every ethnographic study we have conducted in high schools, students have expressed their concern about the researcher's identity. In one alternative school, an assembly was held to introduce the observer and to answer questions about the research. One student asked from the audience, "Are you a teacher or a student?" Later events demonstrated that this was an important concern. The observer tried to explain his unique status of belonging to no one group. This explanation was not fully accepted or understood at that time. During the next several weeks, the observer spent much energy establishing this role and finally was accepted as being in neither group as illustrated by student willingness to discuss issues that were taboo in front of teachers.

Data Collection

Also a key factor in understanding ethnographic research is a realization of what constitutes data and what the customary methods of obtaining it are. This kind of anthropological inquiry seeks to discover the meaning structures of the participants in whatever forms they are expressed. Hence, this research is multimodal, and all of the following are relevant kinds of data:

1. Form and content of verbal interaction between participants
2. Form and content of verbal interaction with the researcher
3. Nonverbal behavior
4. Patterns of action and nonaction
5. Traces, archival records, artifacts, documents

The essential tasks for the anthropological researcher are learning what data will be necessary to answer his questions and

getting access to that information. The previous section illustrated how the researcher works on interpersonal access by becoming someone with whom participants are willing to share information and reactions. Even as these problems are being solved, however, the ethnographer must constantly make decisions about where to be, what kind of data to collect, and to whom to talk. Unlike prestructured research designs, the information that is gathered and the theories that emerge must be used to direct subsequent data collection.

The researcher must learn the formal and informal psychics, schedules and geographies of the participants (Bruyn, 1966). He must become aware of all the behavior settings in the community and their important characteristics (Barker & Gump, 1964). He works to become part of the various communication networks that daily orient participants about where and when significant events are likely to occur. The researcher develops sampling procedures that reflect the research goals. When these situations exist, the researcher makes calculated decisions about what kind of data to collect and whether or not he should engage in active field interviewing (probing, rather than relying on naturalistic observation).

Also important is the choice of whom to talk to. The researcher becomes aware of various persons' roles in the community and the personal matrix through which persons filter information. The methodological literature (Dean, Eichorn, Dean, 1967; Dean & Whyte, 1958; Argyris, 1952) is rich with discussions of the bases for making these decisions about who is an appropriate respondent or informant for various purposes. Again, decisions about who is talked to are made in terms of emerging theory and previously gathered information.

Much of the information gathered by participant observation is similar to that which can be gathered by other methods, for instance, systematic observation and structured interviewing. The participant observer has more latitude in that he is not limited to prespecified places and times. He can interview and observe in many situations not usually available to other researchers. He also has an advantage in his ability to monitor the rapport he has built with interviewees and to gain access to confidential information.

In other ways, the data gathered by participant observation is significantly different from that gathered by other methods. The researcher links together the information he gathers by various methods in a way that is nearly impossible with other approaches, and he has access to some unique kinds of information. For instance, he compares the following: (a) what a subject says in response to a question; (b) what he says to other people; (c)

what he says in various situations; (d) what he says at various times; (e) what he actually does; (f) various nonverbal signals about the matter (for example, body postures); and (g) what those who are significant to the person feel, say, and do about the matter. Furthermore, the participant observer in interviewing knows much about the persons or incidents referred to in the answers to his questions. Finally, the participant observer cultivates an empathetic understanding with the participant that is nearly impossible with quantitative methods. The researcher shares the daily life of participants and systematically works to understand their feelings and reactions.

It is important to note that there are also disadvantages in the use of participant observation; for instance, the difficulty of obtaining a picture of the complete distribution of attitudes in a large community. A single observer would not be able efficiently to get the feelings of a majority of people at one point in time. For a description of other disadvantages in participant observation, see McCall and Simmons, 1969.

Ethnographic inquiry is a systematic research process, just as are the quantitative approaches more familiar to educational researchers. As this brief section has demonstrated, ethnographic researchers methodically plan the forms of data they will collect, the settings in which they will gather the data, the participants with whom they will interact, and the questions they will ask. They also try to be open to new information, but they do so in a calculated fashion, for example, by seeking out places that are likely to present this new information.

To illustrate, we will describe the data collection that would be part of the study of the hitting event discussed previously. The participant observer would use his flexibility and his special acceptance by the community to discover where he would find relevant information. He might make all the following moves:

He would be present when these events were likely to occur.

He would note verbal and nonverbal behavior related to the event (for instance, the reactions of the student being hit, the teacher, and bystander students).

He would discover where and when students were likely to discuss the event, and he would be present (for instance, in the halls or at recess).

He would be present where and when teachers discussed the event (for instance, in the teachers' lounge).

He would work to become the kind of person the participants wanted to share their reactions with (for instance, by being friendly and sharing valued activities).

To confirm emergent theory, he would ask people questions which would help him refine and develop the theory.

He would build up the history of involvement that would enable him to relate any new bit of information to previously gathered information. (For instance, he would consider a teacher's comment about the hitting event in terms of the following: the teacher's relationship to the people being talked to, previous comments anyone in this group had made about similar events, the event as actually witnessed by the observer, similar events observed previously, similar situations where these events did not occur, and student thoughts about the event.)

These and similar strategies help the researcher to accumulate the understanding of human action that is sought by ethnography.

Objectivity

Because the qualitative researcher does not use familiar quantitative methods of standardizing subjects' expression or researchers' observations, those not acquainted with participant observation fear that the data will be polluted with the observers' subjective bias. However, well-executed ethnographic research uses a technique of *disciplined* subjectivity that is as thorough and intrinsically objective as are other kinds of research. To explain this assertion, we must refer to the qualitative-phenomenological hypothesis about human behavior discussed previously. Human actions have more meaning than just the concrete facts of who, what, where, and when that an outsider can observe; they have more meanings than even the responses that subjects could give when being introspective (for instance, in an interview or an attitude scale marking). The ethnographer strives to uncover these meanings.

He uses the techniques we have described to be in touch with a wide range of participant experiences. He makes sure that his sampling is representative (Bruyn, 1966) and that data are interpreted in terms of the situation where they were gathered (Becker, 1958). In order to understand these hidden or unexpressed meanings, the researcher must learn to systematically empathize with the participants. He must synthesize the various experiences of participants to comprehend the subtleties of their actions, thoughts, and feelings. Sometimes he uses his own reactions, which he has cultivated by undergoing the same experiences as participants, to understand the reactions of those he is studying.

The assumption about human behavior—that these meanings exist and that understanding them requires involvement in the participants' perspectives—calls for such techniques as empathy and nonstandardized observation. However, these techniques are not used in an impressionistic manner. There are important differences between the subjectivity of the participants and that of the researcher who is careful never to abandon himself to these perspectives. The discipline of the research tradition calls for him to constantly monitor and test his reactions. In addition to systematically taking the perspectives of the subjects, who rarely share a monolithic point of view, he also views actions from the perspective of the outsider. By systematically seeking to understand actions from the different perspectives of various groups of participants, the researcher avoids getting caught in any one outlook (Vidich, 1955; Wilson, 1972). He is able to view behavior simultaneously from all perspectives. These tensions in point of view—between outsider and insider and between groups of insiders—keep the careful researcher from lapsing into subjectivity.

A concrete example from the study of the hitting event will illustrate this kind of objectivity. The participant observer would understand the same act from the perspectives of all involved:

Teacher: The observer would comprehend fully the teacher's anger at these students, the fear of losing control, and the determination to change their future behavior.

Students Involved: The observer might understand their perceptions of the hitting event as a game, their lack of intention to disrupt the class, and their confusion about the teacher's reaction.

Bystander Students: The observer would know which students saw the hitting as a game, which saw it as a challenge to the teacher, and which saw it some other way—for instance, as a specific act of aggression.

Each scientist who applies this disciplined research method might be expected to gather similar data, just as in quantitative methods scientists using the same techniques collect similar facts. The danger exists that, as in quantitative research, the same data can be interpreted differently. See Robert Redfield's book *Tepoztlan* and Oscar Lewis' book *Life in a Mexican Village: Tepoztlan Revisited*, on their various interpretations of life in the

same village. Anthropologists are currently debating this problem.¹

Analysis of Data

A final area that it is important to understand is how ethnographers analyze their data and develop theory. Some ethnographic research is very similar to traditional educational research in its deductive use and development of theory. Other kinds of ethnographic research, however, are much more inductive.

The anthropologist seeks to understand the meanings of the participants and hence seeks to be careful not to have his interpretations prematurely overstructured by theory or previous research. Furthermore, he is perhaps more ready than other kinds of researchers to accept the possible uniqueness of the various settings, groups, organizations, etc., that he studies.

Seeking theory grounded in the reality of participants does not mean a disregard for previous work. The researcher must become thoroughly acquainted with related research and theory so that he can use it whenever it is helpful for explaining events. Similarly, he contributes to the development of knowledge by pointing out corroboration and contradiction of his findings with the findings of other researchers. Moreover, he uses previous research and theory to select the setting he is studying and to inform the initial focus of his information gathering.

The development of grounded theory is not haphazard. The researcher constantly tests his emerging hypotheses against the reality he is observing daily. Unlike the usual prestructured research designs, participant observation includes a constant necessity for testing theory against real data. For a further description of this constant *comparative method*, the reader is urged to consult Glaser and Strauss (1967). Becker (1961) points out that the search for *negative evidence* is another way that participant observers refine and test their theories. Because of his awareness of the setting, the researcher knows what situations are likely to provide discordant information. He enters these situations to confront this possibly negative evidence, probes to find out why the theory cannot account for what is observed, and gradually develops his theory. It makes sense, then, to think of participant observation as a series of studies that follow each other daily and build on each other in a cybernetic fashion.

¹ This view of objectivity, of course, represents an ideal. Anthropologists are currently debating about how objective participant observers can be even within the rigorous tradition. Participant observation, however, is no less intrinsically objective than other research methods.

Summary

We have briefly described the ethnographic rationale and research process. More elaborate considerations of this methodology are available in the following sources: Adams and Priess, 1960; Bruyn, 1966; Filstead, 1970; Glaser and Strauss, 1967; McCall and Simmons, 1969; Naroll and Cohen, 1970; Scott, 1965; Schatzman and Strauss, 1974.

The methodology of ethnographic researchers is as rigorous and systematic as that of other researchers. It is a vital and viable tradition which is constantly in the process of being evaluated and refined. One of the most important ideas behind participant observation is that there is no one right method: the method should match the study. The techniques described here can be coordinated with other methods into an excellent research design that could elicit information not accessible to researchers using more quantitative techniques.

There are, of course, questions that can be raised about the variations in the quality of participant observation studies, just as there are variations in studies using quantitative methodologies. The questions that are appropriate to ask are not easily answered within a journal article format. An almost complete history of each particular research project would be required, an undertaking that would necessitate as much space as the discussion of the substantive findings. We will illustrate, however, some important considerations by briefly outlining the questions ethnographers might ask about each other's work.

The qualitative research enterprise depends on the ability of the researcher to make himself a sensitive research instrument by transcending his own perspective and becoming acquainted with the perspectives of those he is studying. In a fundamental way it is impossible to know to what degree this was accomplished in any particular study without being in the field. The answers to the following kinds of questions, however, give the fellow scientist some basis on which to judge the work. Our list of questions is adopted from those used by Naroll (1967) in judging cross-cultural studies.

The first set of questions probes the researcher's ability to move beyond his own perspectives. A reviewer thus needs to know what were the researcher's original points of view. Information about these questions can be sought from any source, but the primary emphasis is on the researcher's self-reports.

What was the researcher's role in the setting? (e.g., teacher, administrator, researcher?)

What was his training and background?

What was his previous experience in the field?

What were his theoretical orientations about relevant issues?

What were his personal feelings about the topic?

What was the purpose of the field study?

Who supported the study?

Why was the particular setting chosen?

To what extent did he become a participant?

There are important qualities to note about these questions. Their answers provide only tentative guidelines rather than firm bases by which to judge the research. For instance, a researcher with previous experience as an administrator or with a certain theoretical orientation does not necessarily mean that he is locked into those perspectives and that his research can be discounted as being biased by those points of view.

The second set of questions probe the effectiveness of the researcher in coming to understand the perspectives of the participants.

How long was the researcher in the setting?

How regularly was he there?

Where did he spend most of his time?

With whom did he spend most of his time?

How well did he understand the language of the participants?

How was he perceived by various groups of participants?

Which members of the community were his informants?

Was there systematic variance in his understanding of the perspectives of various groups?

What were the differences in information gathered by various methods?

What were the levels of confidence the researcher placed in various conclusions?

What was some of the negative evidence?

It is important to realize that a full discussion of these issues is impossible within the length limitations of the usual vehicles of communication. Within monographs and books ethnographers do usually discuss these issues in appendices. What is customarily done in shorter formats, however, is a compromise. The researcher offers a brief history of the research involvement, a discussion of some of the major issues in conducting the research,

a discussion of particularly problematic conclusions, and an attempt to provide field data within the text adequate for readers to make independent judgments.

Ethnography is not just a new fad; rather it is part of a long-respected research tradition that for various historical reasons has remained outside the mainstream of educational research. Similarly, it is not a static tradition; researchers are constantly working to refine the methods. At present, investigators are examining ways in which qualitative and quantitative approaches can supplement each other (CNS, Note 3), the ways teams of qualitative researchers can be used to guarantee multiple perspectives, and in a forthcoming CNS publication the ways qualitative approaches can be used in evaluative research will be examined. Educational research will be considerably enriched as qualitative and quantitative researchers learn to integrate their approaches.

Reference Notes

1. Nelson, H., Lundin, S., & Giannotta, F. *Multidisciplinary evaluation of educational innovations: An anthropological perspective*. Paper presented at the meeting of the American Educational Research Association, Chicago, 1974.
2. Ianni, F. (Chair.), Becker, H., Varenne, H., Dalton, W., Leichter, H., & Levine, D. *Social organization of the high school*. Symposium presented at the meeting of the American Educational Research Association, New Orleans, 1973.
3. Center for New Schools. *A quantitative-qualitative study of student subcultures in an alternative high school*. Paper presented at the meeting of the American Educational Research Association, Chicago, 1974.

References

- Adams, R., & Preiss, J. (Eds.). *Human organization research*. Homewood, Ill.: Dorsey Press, 1960.
- Argyris, C. Diagnosing defenses against the outsider. *Journal of Social Issues*, 1952, 8(3), 24-34.
- Bantock, G. H. *Education and values*. London: Oxford University Press, 1965.
- Barker, R. *Ecological psychology*. Stanford: Stanford University Press, 1968.
- Barker, R., & Gump, P. *Big school, small school*. Stanford: Stanford University Press, 1964.
- Becker, H. Problems of inference and proof in participant observation. *American Sociological Review*, 1958, 23, 652-660.
- Becker, H., et al., *Boys in white*. Chicago: University of Chicago Press, 1961.
- Broadbeck, M. *Readings in the philosophy of the social sciences*. New York: Macmillan, 1968.
- Bruyn, S. *Human perspective in sociology*. Englewood Cliffs, N.J.: Prentice-Hall, 1966.
- Center for New Schools. Strengthening alternative high schools. *Harvard Educational Review*, 1972, 42(3), 315-350.
- Center for New Schools. You can talk to the teachers. Chicago: Author, 1974.(a)
- Center for New Schools. The use of ethnography in educational evaluation. Chicago: Author, 1974.(b)
- Cook, S. W., & Sellitz, C. A multiple indicator approach to attitude measurement. *Psychological Bulletin*, 1964, 62, 36-55.

- Cusick, P. *Inside high school*. New York: Holt, Rinehart & Winston, 1973.
- Dean, J., & Whyte, W. How do you know if the informant is telling the truth? *Human Organization*, 1958, 17(2), 34-38.
- Dean, J., Eichhorn, R., & Dean, L. Fruitful informants for intensive interviewing. In J. Roby (Ed.), *Introduction to social research*. New York: Appleton-Century-Crofts, 1967.
- Deutscher, I. Words and deeds: Social science and social policy. *Social Problems*, 1966, 13, 235-254.
- Dreeban, R. *On what is learned in school*. Reading, Mass.: Addison-Wesley, 1968.
- Filstead, W. *Qualitative methodology*. Chicago: Markham, 1970.
- Geer, B. First days in the field. In P. Hammond, *Sociologists at work*. New York: Basic Books, 1964.
- Glaser, B., & Strauss, A. *Discovery of grounded theory*. Chicago: Aldine, 1967.
- Gold, R. Roles in sociological field observations. *Social Forces*, 1958, 36, 217-223.
- Hess, E. Ethnology: An approach toward the complete analysis of behavior. In R. Brown, E. Galanter, E. Hess, & G. Mandler, *New directions in psychology*. New York: Holt, Rinehart & Winston, 1962.
- Ianni, F., & Storey, E. *Cultural relevance and education*. Boston: Little Brown & Co., 1973.
- Jackson, P. *Life in classrooms*. New York: Holt, Rinehart & Winston, 1968.
- Kahn, R., & Mann, F. Developing research partnerships. *Journal of Social Issues*, 1952, 8(3), 4-10.
- Kocklemass, J. *First introduction to Husserl's phenomenology*. Pittsburgh: Duquesne University Press, 1967.
- Lewis, O. *Life in a Mexican village; Tepoztlan revisited*. Urbana: University of Illinois Press, 1963.
- Lortie, D. Observations in teaching as work. In R. Travers (Ed.), *Second handbook of research on teaching*. Chicago: Rand McNally, 1973.
- March, J. (Ed.). *Handbook of organization*. Chicago: Rand McNally, 1965.
- McCall, G., & Simmons, J. *Issues in participant observation*. Reading, Mass: Addison-Wesley, 1969.
- National Institute of Education. Guidelines for field-initiated research proposals. Washington, D.C.: Author, 1974.
- Naroll, R. *Data quality control*. New York: Free Press, 1967.
- Naroll, R., & Cohen, R. *Handbook of method in cultural anthropology*. Garden City, N.Y.: Natural History Press, 1970.
- Redfield, R. *Tepoztlan: A Mexican village*. Chicago: University of Chicago Press, 1930.
- Rosenthal, R., & Rosnow, R. (Eds.). *Artifact in behavioral research*. New York: Academic Press, 1969.
- Sarason, S. *Problem of change and the culture of schools*. New York: Allyn & Bacon, 1971.
- Schatzman, L., & Strauss, A. *Field research*. New York: Prentice Hall, 1974.
- Scott, R. Fieldwork in organizations. In J. March (Ed.), *Handbook of organizations*. Chicago: Rand McNally, 1965.
- Sindell, P. Anthropological approaches to the study of education. *Review of Educational Research*, 1969, 39, 593-607.
- Smith, L. (Ed.). *Anthropological perspectives on evaluation*. In AERA Monograph Series in Evaluation. Chicago: Rand McNally, 1974.
- Smith, L., & Geoffrey, R. *Complexities of an urban classroom*. New York: Holt, Rinehart & Winston, 1969.
- Smith, L., & Keith, P. *Anatomy of an educational innovation*. New York: Wiley, 1971.
- Spindler, G. *Education and culture*. New York: Holt, Rinehart & Winston, 1963.
- Vidich, A. Participant observation and the collection and interpretation of data. *American Journal of Sociology*, 1955, 60, 354-360.

- Wax, M., Diamond, S., & Gearing, F. (Eds.). *Anthropological perspectives on education*. New York: Basic Books, 1973.
- Webb, E., Campbell, D. T., Schwartz, R., & Sechrest, L. *Unobtrusive measurement*. Chicago: Rand McNally, 1966.
- Willems, E., & Raush, H. (Eds.). *Naturalistic viewpoints in psychological research*. New York: Holt, Rinehart & Winston, 1969.
- Wilson, S. *A participant observation study of decision-making in an alternative high school*. Ph.D. Dissertation, University of Chicago, 1972.
- Wolcott, H. *Man in the principal's office*. New York: Holt, Rinehart & Winston, 1973.
- Wolcott, H. (Ed.). Special issue on ethnography of schools. *Human Organization*, Summer 1975.

AUTHOR

STEPHEN WILSON Address: Center for New Schools, 59 East Van Buren, Chicago, Illinois 60605. Title: Research Coordinator. Degrees: A.B., Antioch College; M.Ed., Boston College; Ph.D., University of Chicago. Specialization: Research and evaluation methodology, social psychology of education, innovative process.