To the faculty and learners of The Union Institute, Cincinnati, Ohio, for their friendship and scholarship, and their commitments to methodological eclecticism, interdisciplinary inquiry, integration of theory and practice, valuing both reflection and action, scholarship that is socially relevant and meaningful, individualized professional and personal development, lifelong learning, social justice and equity, human diversity and global community; a scholarly community governed by principles and processes rather than rules and regulations, and innovations in learning-centered, nontraditional doctoral education, including faculty meetings that are interesting and important, an indication of innovation of the highest order

Qualitative Research & Evaluation Methods

3

EDITION

Michael Quinn Patton

Sage Publications
International Educational and Professional Publisher
Thousand Oaks ▪ London ▪ New Delhi

dissertation proposals on which I have served, Patton's is by far the most cited qualitative urch text."

—**Ian Baptiste,** *Penn State University*

book—a resource and training tool for countless applied researchers, evaluators, and iate students—has been completely revised with hundreds of new examples and stories inating all aspects of qualitative inquiry. In this edition, Patton has created the most prehensive, systematic, and up-to-date review of qualitative methods available.

Third Edition has retained and expanded upon the exhibits that highlight and summarize r issues and guidelines, the summative sections, tables, and figures as well as the sage e of the Sufi-Zen master, Halcolm. This revision will help readers integrate and make sense e great volume of qualitative works published in the past decade.

m dazzled by the material that this book describes and clarifies. He has shifted the focus of ext to qualitative inquiry in general, which includes qualitative evaluation. New examples his own work and that of others serve to clarify and deepen understanding of qualitative rch topics and processes. New discussion of many current issues and debates in qualitative larship (autoethnography, ethical issues of informed consent and confidentiality, focus o/group interviews, computer-assisted analysis, the complexity of creating criteria for ng the quality of qualitative research, etc.) will bring readers up-to-date with the variety in pectives about (and the variety within) qualitative inquiry. Most of the chapters in the book been substantially reorganized in ways that augment the reader's understanding."

—**Corrine Glesne,** *author of* Becoming Qualitative Researchers

Qualitative Research & Evaluation Methods

Qualitativ Research Evaluatio Methods

rly, this is a vastly improved, much more comprehensive, cogently systematic, and timely w—a tour de force, one might say—of the field of qualitative research, in terms of the theoretical, onceptual, methodological, and normative dimensions/foundations of qualitative research. This is one of the strengths of the volume. It seeks to bring together theory and practice/methods without overburdening one or the other—this is as rare as it is commendable, not to mention extremely useful, not only for the professional researcher but for the 'non-professional' as well."

Lester Edwin J. Ruiz, *Mid-Atlantic Symbiosis*

Patton

3 EDITION

3 EDITION

visit our website at www.sagepub.com

ISBN 0-7619-1971-6

SAGE Publications
International Educational and Professional Publisher
Thousand Oaks ▪ London ▪ New Delhi

Michael Quinn Patto

PART 3

Analysis, Interpretation, and Reporting

Halcolm will tell you this:

"Because you can name something does not mean you understand it.
Because you understand it does not mean it can be named."

And this:

"What you do not see you cannot describe.
What you cannot describe you cannot interpret.
But because you can describe something does not mean you can interpret it."

And yet this:

"The riddle about the sound of one hand clapping arose from watching the first decision maker reading the first evaluation report."

And finally this:

"Where the sun shines, there too is shadow.
Be illumined by the light of knowledge no less than by its shadow."

8

Qualitative Analysis and Interpretation

The Complete Analysis Isn't

The moment you cease observing, pack your bags, and leave the field, you will get a remarkably clear insight about that one critical activity you should have observed . . . but didn't.

The moment you turn off the tape recorder, say goodbye, and leave the interview, it will become immediately clear to you what perfect question you should have asked to tie the whole thing together . . . but didn't.

The moment you begin analysis it will become perfectly clear to you that you're missing the most important pieces of information and that without those pieces of information there is absolutely no hope of making any sense out of what you have.

Know, then, this:

The complete analysis isn't.

Analysis finally makes clear what would have been most important to study, if only we had known beforehand.

Evaluation reports finally make clear to decision makers what they had really wanted to know, but couldn't articulate at the time.

Analysis brings moments of terror that nothing sensible will emerge and times of exhilaration from the certainty of having discovered ultimate truth. In between are long periods of hard work, deep thinking, and weight-lifting volumes of material.

—From Halcolm's *Iron Laws of Evaluation Research*

The Challenge

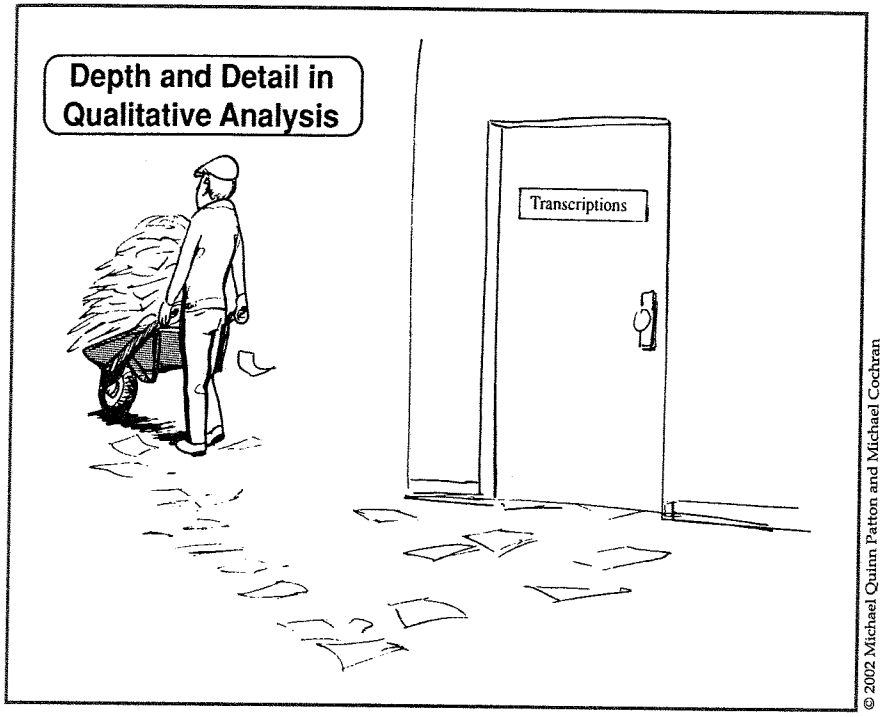
Qualitative analysis transforms data into findings. No formula exists for that transformation. Guidance, yes. But no recipe. Direction can and will be offered, but the final destination remains unique for each inquirer, known only when—and if—arrived at.

Medieval alchemy aimed to transmute base metals into gold. Modern alchemy aims to transform raw data into knowledge, the coin of the information age. Rarity increases value. Fine qualitative analysis remains rare and difficult—and therefore valuable.

Metaphors abound. Analysis begins during a larval stage that, if fully developed, metamorphoses from caterpillar-like beginnings into the splendor of the mature butterfly. Or this: The inquirer acts as catalyst on raw data, generating an interaction that synthesizes new substance born alive from the catalytic conversion. Or this: Findings emerge like an artistic mural created from collage-like pieces that make sense in new ways when seen and understood as part of a greater whole.

Consider the patterns and themes running through these metaphors. Transformation. Transmutation. Conversion. Synthesis. Whole from parts. Sense-making. Such motifs run through qualitative analysis like golden threads in a royal garment. They decorate the garment and enhance its quality, but they may also distract attention from the basic cloth that gives the garment its strength and shape—the skill, knowledge, experience, creativity, diligence, and work of the garment maker. No abstract processes of analysis, no matter how eloquently named and finely described, can substitute for the skill, knowledge, experience, creativity, diligence, and work of the of the qualitative analyst. Thus, Stake (1995) writes of the *art* of case study research. Van Maanen (1988) emphasizes the storytelling motifs of qualitative writing in his ethnographic book on telling tales. Golden-Biddle and Locke (1997) make *story* the central theme in their book *Composing Qualitative Research*. Corrine Glesne (1999), a researcher and a poet, begins with the story analogy, describing qualitative analysis as "finding your story," then later represents the process as "improvising a song of the world." Lawrence-Lightfoot and Davis (1997) call to mind "portraits" in naming their form of qualitative analysis *The Art and Science of Portraiture*. Brady (2000) explores "anthropological poetics." Janesick (2000) evokes dance in "The Choreography of Qualitative Research Design," which suggests that, for warming up, we may need "stretching exercises" (Janesick 1998). Hunt and Benford (1997) call to mind theater as they use "dramaturgy" to examine qualitative inquiry. Richardson (2000b) reminds us that qualitative analysis and writing involve us not just in making sense of the world but also in making sense of our relationship to the world and therefore in discovering things about ourselves even as we discover things about some phenomenon of interest. In this complex and multi- faceted analytical integration of disciplined science, creative artistry, and personal reflexivity, we mold interviews, observations, documents, and field notes into *findings*.

The challenge of qualitative analysis lies in making sense of massive amounts of data. This involves reducing the volume of raw information, sifting trivia from significance, identifying significant patterns, and constructing a framework for communicating the essence of what the data reveal. The problem is that "we have few agreed-on canons for qualitative data analysis, in the sense of shared ground rules for drawing conclusions and verifying their sturdiness" (Miles and Huberman 1984: 16). There are no formulas for determining significance. No ways exist of perfectly replicating the researcher's analytical thought processes. No straightforward tests can be applied for reliability and validity. In short, no absolute rules exist except perhaps this: Do your very best with your full intellect to fairly represent the data and communicate what the data reveal given the purpose of the study. Appendix 9.1, "A Documenter's Perspective," at the end of the next chapter takes you inside the experience of one novice analyst as she tries to make sense of the voluminous data she had gathered from observations and interviews.



Guidelines for analyzing qualitative data can be found in abundance, and studying examples of qualitative analysis can be especially helpful, as in the Miles and Huberman (1994) sourcebook. But guidelines, procedural suggestions, and exemplars are not rules. Applying guidelines requires judgment and creativity. Because each qualitative study is unique, the analytical approach used will be unique. Because qualitative inquiry depends, at every stage, on the skills, training, insights, and capabilities of the inquirer, qualitative analysis ultimately depends on the analytical intellect and style of the analyst. The human factor is the great strength and the fundamental weakness of qualitative inquiry and analysis—a scientific two-edged sword.

The first chapter presented several examples of qualitative findings:

- Patterns in women's ways of knowing (Belenky et al. 1986)

- Eight characteristics of organizational excellence (Peters and Waterman 1982)
- Seven habits of highly effective people (Covey 1990)
- Case studies illuminating why battered women kill (Browne 1987)
- Three primary processes that contribute to the development of a relationship: Being-In, Being-For, and Being-With (Moustakas 1995)
- Paradigm motifs in tribe-centered initiations compared with modern youth-centered coming-of-age celebrations (Patton 1999a)
- Case examples illustrating the diversity of experiences and outcomes in an adult literacy program (Patton and Stockdill 1987)
- Teachers' reactions to a Kalamazoo school accountability system (Perrone and Patton 1976)
- Observation of a parent education class to illuminate the parent-staff interactive process

Reviewing these examples of qualitative findings from the first chapter will ground this discussion of analytical processes in samples of the real fruit of qualitative inquiry. And this chapter will add many more examples.

The strategies, guidelines, and ideas for analysis offered here are meant to be suggestive and facilitating rather than confining or exhaustive. In actually doing analysis, you will have to adapt what is presented here to fit your specific situation and study. However analysis is done, **analysts have an obligation to monitor and report their own analytical procedures and processes as fully and truthfully as possible.** This means that qualitative analysis is a new stage of fieldwork in which analysts must observe their own processes even as they are doing the analysis. The final obligation of analysis is to analyze and report on the analytical process as part of the report of actual findings. The extent of such reporting will depend on the purpose of the study.

Purpose as Context

Purpose guides analysis. Chapter 5 presented a typology of inquiry purposes: basic research, applied research, summative evaluation research, formative evaluation, and action research. These varying purposes affect analysis because they involve different norms and expectations for what will be concluded and how it will be presented.

Basic qualitative research is typically reported through a scholarly monograph or published article with primary attention to the contribution of the research to social science theory. The theoretical framework within which the study is conducted will heavily shape the analysis. As Chapter 3 made clear, the theoretical framework for an ethnographic study will differ from that for ethnomethodology, heuristics, or hermeneutics.

Applied qualitative research may have a more or less scholarly orientation depending on primary audience. If the primary audience is scholars, then applied research will be judged by the standards of basic research, namely, research rigor and contribution to theory. If the primary audience is policymakers, the relevance, clarity, utility, and applicability of the findings will become most important.

For *scholarly qualitative research,* the published literature on the topic being studied helps bring focus to a particular study. Scholarship involves an ongoing dialogue with colleagues about particular questions

of interest within the scholarly community. The analytical focus, therefore, derives in part from what one has learned that will make a contribution to the literature in a field of inquiry. That literature will likely have contributed to the initial design of the study (implicitly or explicitly), so it is appropriate to revisit that literature to help focus the analysis.

Focus in *evaluation research* should derive from questions generated at the very beginning of the evaluation process, ideally through interactions with primary intended users of the findings. Too many times evaluators go through painstaking care, even agony, in the process of working with primary stakeholders to clearly conceptualize and focus evaluation questions before data collection begins. But, then, once the data are collected and analysis begins, they never look back over their notes to review and renew their clarity on the central issues in the evaluation. It is not enough to count on remembering what the evaluation questions were. The early negotiations around the purpose of an evaluation usually involve important nuances. To reestablish those nuances for the purpose of helping focus the analysis, it is important to review notes on decisions that were made during the conceptual part of the evaluation. (This assumes, of course, that the evaluator has treated the conceptual phase of the evaluation as a field experience and has kept detailed notes about the negotiations that went on and the decisions that were made.)

In addition, it may be worth reopening discussions with intended evaluation users to make sure that the original focus of the evaluation remains relevant. This accomplishes two things. First, it allows the evaluator to make sure that the analysis will focus on needed information. Second, it prepares evaluation users for the results. At the point of beginning formal analysis, the evaluator will have a much better perspective on what kinds of questions can be answered with the data that have been collected. It pays to check out which questions should take priority in the final report and to suggest new possibilities that may have emerged during fieldwork.

Summative evaluations will be judged by the extent to which they contribute to making decisions about a program or intervention, usually decisions about overall effectiveness, continuation, expansion, and/or replication in other sites. A full report presenting data, interpretations, and recommendations is required. In contrast, *formative evaluations,* conducted for program improvement, may not even generate a written report. Findings may be reported primarily orally. Summary observations may be listed in outline form or an executive summary may be written, but the timelines for formative feedback and the high costs of formal report writing may make a full, written report unnecessary. Staff and funders often want the insights of an experienced outsider who can interview program participants effectively, observe what goes on in the program, and provide helpful feedback. The methods are qualitative, the purpose is practical, and the analysis is done throughout fieldwork; no written report is expected beyond a final outline of observations and implications. Academic theory takes second place to understanding the program's theory of action as actually practiced and implemented. In addition, formative feedback to program staff may be ongoing rather than simply at the end of the study. However, in some situations, funders may request a carefully documented, fully developed, and formally written formative report. The nature

of formative reporting, then, is dictated by user needs rather than scholarly norms.

Action research reporting also varies a great deal. **In much action research, the process is the product,** so no report will be produced for outside consumption. On the other hand, some action research efforts are undertaken to test organizational or community development theory and therefore require fairly scholarly reports and publications. Action research undertaken by a group of people to solve a specific problem may involve the group sharing the analysis process to generate a mutually understood and acceptable solution with no permanent, written record of the analysis.

Students writing *dissertations* will typically be expected to follow very formal and explicit analytical procedures to produce a scholarly monograph with careful attention to methodological rigor. Graduate students will be expected to report in detail on all aspects of methodology, usually in a separate chapter, including thorough discussion of analytical procedures, problems, and limitations.

The point here is that the rigor, duration, and procedures of analysis will vary depending on the study's purpose and audience. Likewise, the reporting format will vary. First and foremost, then, analysis depends on clarity about purpose (as do all other aspects of the study).

When Does Analysis Begin?

Research texts typically make a hard-and-fast distinction between data collection and analysis. For data collection based on surveys, standardized tests, and experimental designs, the lines between data collection and analysis are clear. But the fluid and emergent nature of naturalistic inquiry makes the distinction between data gathering and analysis far less absolute. In the course of fieldwork, ideas about directions for analysis will occur. Patterns take shape. Possible themes spring to mind. Hypotheses emerge that inform subsequent fieldwork. While earlier stages of fieldwork tend to be generative and emergent, following wherever the data lead, later stages bring closure by moving toward confirmatory data collection—deepening insights into and confirming (or disconfirming) patterns that seem to have appeared.

Ideas for making sense of the data that emerge while still in the field constitute the beginning of analysis; they are part of the record of field notes. Sometimes insights emerge almost serendipitously. When I was interviewing recipients of MacArthur Foundation Fellowships, I happened to interview several people in major professional and personal transitions followed by several in quite stable situations. This happenstance of how interviews were scheduled suggested a major distinction that became important in the final analysis—distinguishing the impact of the fellowships on recipients in transition from those in more stable situations, at least comparatively.

Recording and tracking analytical insights that occur during data collection are part of fieldwork *and* the beginning of qualitative analysis. I've heard graduate students instructed to repress all analytical thoughts while in the field and concentrate on data collection. Such advice ignores the emergent nature of qualitative designs and the power of field-based analytical insights. Certainly, this can be overdone. Too much focus on analysis while fieldwork is still going on can interfere with the openness of naturalistic inquiry, which is its strength. Rushing to premature conclusions should be avoided. But repressing analytical insights may mean losing them forever, for there's no guarantee they'll return. And repressing in-the-field insights removes the opportunity to deepen

data collection that would test the authenticity of those insights while still in the field and fails to acknowledge the confirmatory possibilities of the closing stages of fieldwork. In the MacArthur Fellowship study, I added transitional cases to the sample near the end of the interviewing to better understand the varieties of transitions fellows were experiencing—an in-the-field form of emergent, purposeful sampling driven by field-based analysis. Such overlapping of data collection and analysis improves both the quality of data collected and the quality of the analysis so long as the fieldworker takes care not to allow these initial interpretations to overly confine analytical possibilities. Indeed, instead of focusing additional data collection entirely on confirming preliminary field hypotheses, the inquiry should become particularly sensitive to looking for alternative explanations and patterns that would invalidate initial insights.

In essence, when data collection has formally ended and it is time to begin the final analysis, the investigator has two primary sources to draw from in organizing the analysis: (1) the questions that were generated during the conceptual and design phases of the study, prior to fieldwork, and (2) analytic insights and interpretations that emerged during data collection.

Even then, once analysis and writing are under way, fieldwork may not be over. On occasion, gaps or ambiguities found during analysis cry out for more data collection, so, where possible, interviewees may be recontacted to clarify or deepen responses, or new observations are made to enrich descriptions. While writing the Grand Canyon-based book that describes modern male coming-of-age issues (Patton 1999a), I returned to the Grand Canyon four times to deepen my understanding of Canyon geology and add descriptive depth, and I conducted several follow-up and clarifying interviews with my two key informants. Each time that I thought, at last, fieldwork was over and I could just concentrate on writing, I came to a point where I simply could not continue without more data collection. Such can be the integrative, iterative, and synergistic processes of data collection and analysis in qualitative inquiry.

A final caveat, however: Perfectionism breeds imperfections. Often additional fieldwork isn't possible, so gaps and unresolved ambiguities are noted as part of the final report. Dissertation and publication deadlines may also obviate additional confirmatory fieldwork. And no amount of additional fieldwork can, or should, be used to force the vagaries of the real world into hard-and-fast conclusions or categories. Such perfectionist and forced analysis ultimately undermines the authenticity of inductive, qualitative analysis. Finding patterns is one result of analysis. Finding vagaries, uncertainties, and ambiguities is another.

Thick Description

Thick, rich description provides the foundation for qualitative analysis and reporting. Good description takes the reader into the setting being described. In his classic *Street Corner Society,* William Foote Whyte (1943) took us to the "slum" neighborhood where he did his fieldwork and introduced us to the characters there, as did Elliot Liebow in *Tally's Corner* (1967), a description of the lives of unemployed Black men in Washington, D.C., during the 1960s. In Constance Curry's (1995) oral history of school integration in Drew, Mississippi, in the 1960s, she tells the story of African American mother Mae Bertha Carter and her seven children as they faced day-to-day and night-to-night threats and terror from resistant, angry

Whites. Through in-depth case study descriptions, Angela Browne (1987) helps us experience and understand the isolation and fear of being a battered woman whose life is controlled by a rage-filled, violent man. Through detailed description and rich quotations, Alan Peshkin (1986) showed readers the "total world of a fundamentalist Christian school" as Erving Goffman (1961) had done earlier for other "total institutions," closed worlds such as prisons, army camps, boarding schools, nursing homes, and mental hospitals. Howard Becker (1953, 1985) described how one learns to become a marijuana user in such detail that you almost get the scent of the smoke from his writing.

These classic qualitative studies share the capacity to open up a world to the reader through rich, detailed, and concrete descriptions of people and places—"thick description" (Geertz 1973; Denzin 2001)—in such a way that we can understand the phenomenon studied and draw our own interpretations about meanings and significance.

Description forms the bedrock of all qualitative reporting, whether for scholarly inquiry, as in the examples above, or for program evaluation. For evaluation studies, basic descriptive questions include the following: What are the stated goals of the program (including different goals reported by different stakeholders)? What are the primary activities of the program? How do people get into the program? What is the program setting like? What happens to people in the program? What are the effects of the program on participants? Thick evaluation descriptions take those who need to use the evaluation findings *into* the experience and outcomes of the program.

A basic tenet of research admonishes careful separation of description from interpretation. Interpretation involves explaining the findings, answering "why" questions, attaching significance to particular results, and putting patterns into an analytic framework. It is tempting to rush into the creative work of interpreting the data before doing the detailed, hard work of putting together coherent answers to major descriptive questions. But description comes first.

Several options exist for organizing and reporting descriptive findings. Exhibit 8.1 presents several alternatives, depending on whether the primary organizing motif centers on telling the story of what occurred, presenting case studies, or illuminating an analytical framework.

These are not mutually exclusive or exhaustive ways of organizing and reporting qualitative data. Different parts of a report may use different reporting approaches. The point is that one must have some initial framework for organizing and managing the voluminous data collected during fieldwork.

For example, where variations in the experiences of individuals are the primary focus of the study, it is appropriate to begin by writing a case study using all the data for each person. Only then are cross-case analysis and comparative analysis done. For example, if one has studied 10 juvenile delinquents, the analysis would begin by doing a case description of each juvenile before doing cross-case analysis. On the other hand, if the focus is on a criminal justice program serving juveniles, the analysis might begin with description of variations in answers to common questions, for example, what were patterns of major program experiences, what did they like, what did they dislike, how did they think they had changed, and so forth.

Likewise in analyzing interviews, the analyst has the option of beginning with case analysis or cross-case analysis. Beginning

EXHIBIT 8.1 Options for Organizing and Reporting Qualitative Data

Storytelling Approaches	
Chronology and history	Describe what happened chronologically, over time, telling the story from beginning to end. This focuses on some development over time to portray the life of a person, the history of an organization or community, or the story of a family.
Flashback	Start at the end, then work backward to describe how the ending emerged. For example, in an evaluation study, a participant case study might begin with the outcome realized (or unrealized) and then present the chronology or story that illuminates that outcome.
Case Study Approaches	
People	If individuals or groups are the primary unit of analysis, then case studies of people or groups may be the focus for case studies. In *Respect*, Sara Lawrence-Lightfoot (2000) illustrates different forms of respect through case studies of people who manifest those different forms in the way they live their lives.
Critical incidents	Critical incidents or major events can constitute self-contained descriptive units of analysis, often presented in order of importance rather than in sequence of occurrence. McClure (1989) reported a case study of a university through the critical incidents that shaped it.
Various settings	Describe various places, sites, settings, or locations (doing case studies of each) before doing cross-setting pattern analysis. In an evaluation of multinational efforts to preserve ancient buildings, we reported on cases in Japan, England, and Indonesia before drawing cross-cultural conclusions.
Analytical Framework Approaches	
Processes	Qualitative data may be organized to describe important processes. For example, an evaluation of a program may describe recruitment processes, socialization processes, decision-making and communication processes, and so on. Distinguishing important processes becomes the analytical framework for organizing qualitative descriptions.
Issues	An analysis can be organized to illuminate key issues, often the equivalent of the primary evaluation questions, for example, variations in how participants changed as a result of the program. In a study of leadership training, we organized the qualitative report around such key issues as conflict management, negotiation skills, enhancing creativity, and effective communications—all important training issues.
Questions	Responses to interviews can be organized question by question, especially where a standardized interviewing format was used. For example, if an evaluation includes questions about perceived strengths and perceived weaknesses, responses to these questions would be grouped together.
Sensitizing concepts	Where sensitizing concepts such as "leadership" versus "followership" have played an important preordinate role in guiding fieldwork, the data can be organized and described through those sensitizing concepts.

with case analysis means writing a case study for each person interviewed or each unit studied (e.g., each critical event, each group, or each program location). Beginning with cross-case analysis means grouping together answers from different people to common questions, or analyzing different perspectives on central issues. If a standardized open-ended interview has been used, it is fairly easy to do cross-case or cross-interview analysis for each question in the interview. With an interview guide approach, answers from different people can be grouped by topics from the guide, but the relevant data won't be found in the same place in each interview. An interview guide, if it has been carefully conceived, actually constitutes a descriptive analytical framework for analysis.

A qualitative study will often include both kinds of analysis—individual cases and cross-case analyses—but one has to begin somewhere. Trying to do both individual case studies and cross-case analysis at the same time will likely lead to confusion.

Organizing the Data

> It wasn't curiosity that killed the cat.
> It was trying to make sense of all the data curiosity generated.
>
> —Halcolm

The data generated by qualitative methods are voluminous. I have found no way of preparing students for the sheer mass of information they will find themselves confronted with when data collection has ended. Sitting down to make sense out of pages of interviews and whole files of field notes can be overwhelming. Organizing and analyzing a mountain of narrative can seem like an impossible task.

How big a mountain? Consider a study of community and scientist perceptions of HIV vaccine trials in the United States done by the Centers for Disease Control. In a large, complex, multisite effort called Project LinCS: Linking Communities and Scientists, the study's 313 interviews generated more than 10,000 pages of transcribed text from 238 participants on a range of topics (MacQueen and Milstein 1999). Now that's an extreme case, but, on average, a one-hour interview will yield 10 to 15 single-spaced pages of text; 10 two-hour interviews will yield roughly 200 to 300 pages of transcripts.

Getting organized for analysis begins with an inventory of what you have. Are the field notes complete? Are there any parts that you put off to write later and never got to but need to be finished, even at this late date, before beginning analysis? Are there any glaring holes in the data that can still be filled by collecting additional data before the analysis begins? Are all the data properly labeled with a notation system that will make retrieval manageable (dates, places, interviewee identifying information, etc.)? Are interview transcriptions complete? Get a sense of the data; check out the quality of the information you have collected. **Get a sense of the whole.**

The problem of incomplete data is illustrated by the experience of a student who had conducted 30 in-depth pre- and post-interviews with participants in a special program. The transcription process took several weeks. She made copies of three transcripts and brought them to our seminar for assistance in doing the analysis. As I read the interviews, I got a terrible sinking feeling in my stomach. While other students were going over the transcriptions, I pulled her aside and asked her what instructions she had given the typist. It was clear from reading just a few pages that she did not have *verbatim* transcriptions—the essential raw data for qualitative analysis. The language in each interview was the same. The sentence structures were the same. The answers were grammatically correct. People in natural conversations simply do not talk that way. The grammar in natural conversations comes out atrocious when transcribed. Sentences hang incomplete, interrupted by new thoughts before the first sentence was completed. Without the knowledge of this student, and certainly without her permission, the typist had decided to summarize the participants' responses because "so much of what they said was just rambling on and on about nothing." All of the interviews had to be transcribed again before analysis could begin.

Earlier I discussed the transition between fieldwork and analysis. Transcribing offers another point of transition between data collection and analysis as part of data management and preparation. Doing all or some of your own interview transcriptions (instead of having them done by a transcriber), for example, provides an opportunity to get immersed in the data, an experience that usually generates emergent insights. Typing and organizing handwritten field notes offer another opportunity to immerse yourself in the data in the transition between fieldwork and full analysis, a chance to get a feel for the cumulative data as a whole. Doing your own transcriptions, or at least checking them by listening to the tapes as you read them, can be quite different from just working off transcripts done by someone else.

Protecting Data

Thomas Carlyle lent the only copy of his handwritten manuscript on the history of the French Revolution, his master work, to philosopher J. S. Mill, who lent it to a Mrs. Taylor. Mrs. Taylor's illiterate housekeeper thought it was waste paper and burned it. Carlyle behaved with nobility and stoicism, and immediately set about rewriting the book. It was published in 1837 to critical acclaim and consolidated Carlyle's reputation as one of the foremost men of letters of his day. We'll never know how the acclaimed version compared with the original or what else Carlyle might have written in the year lost after the fireplace calamity.

So, it is prudent to make back-up copies of all your data, putting one master copy away someplace secure for safekeeping. Indeed, if data collection has gone on over any long period, it is wise to make copies of the data as they are collected, being certain to put one copy in a safe place where it will not be disturbed and cannot be lost or burned. The data you've collected are unique and precious. The exact observations you've made, the exact words people have spoken in interviews—these can never be recaptured in precisely the same way, even if new observations are undertaken and new interviews are conducted. Moreover, you've likely make promises about protecting confidentiality, so you have an obligation to take care of the data. Field notes and interviews should be treated as the valuable material they are. Protect them.

Beyond Thomas Carlyle's cautionary tale, my advice in this regard comes from two more recent disasters. I was at the Uni-

versity of Wisconsin when antiwar protesters bombed a physics building, destroying the life work of several professors. I also had a psychology doctoral student who carried his dissertation work, including all the raw data, in the trunk of his car. An angry patient from a mental health clinic with whom he was working firebombed his car, destroying all of his work. Tragic stories of lost research, while rare, occur just often enough to remind us about the wisdom of an ounce of prevention.

Once a copy is put away for safekeeping, I like to have one hard copy handy throughout the analysis, one copy for writing on, and one or more copies for cutting and pasting. A great deal of the work of qualitative analysis involves creative cutting and pasting of the data, even if done on a computer, as is now common, rather than by hand. Under no circumstances should one yield to the temptation to begin cutting and pasting the master copy. The master copy or computer file remains a key resource for locating materials and maintaining the context for the raw data.

Computer-Assisted Qualitative Data Management and Analysis

Computers and software are tools that *assist* analysis. Software doesn't really analyze qualitative data. Qualitative software programs facilitate data storage, coding, retrieval, comparing, and linking—but human beings do the analysis. Software has eased significantly the old drudgery of manually locating a particular coded paragraph. Analysis programs speed up the processes of locating coded themes, grouping data together in categories, and comparing passages in transcripts or incidents from field notes. But the qualitative analyst doing content analysis must still decide what things go together to form a pattern, what constitutes a theme, what to name it, and what meanings to extract from case studies. The human being, not the software, must decide how to frame a case study, how much and what to include, and how to tell the story. Still, computers can play a role in qualitative analysis as they do in statistical analysis.

> Quantitative programs revolutionized that research by making it possible to crunch our numbers, more accurately, more quickly, and in more ways. . . . Much of the tedious, boring, mistake-prone data manipulation has been removed. This makes it possible to spend more time investigating the meaning of their data.
>
> In a similar way, QDA [qualitative data analysis] programs improve our work by removing drudgery in managing qualitative data. Copying, highlighting, cross-referencing, cutting and pasting transcripts and field notes, covering floors with index cards, making multiple copies, sorting and resorting card piles, and finding misplaced cards have never been the highlights of qualitative research. It makes at least as much sense for us to use qualitative programs for tedious tasks as it does for those people down the hall to stop hand-calculating gammas. (Durkin 1997:93)

The analysis of qualitative data involves creativity, intellectual discipline, analytical rigor, and a great deal of hard work. Computer programs can facilitate the work of analysis, but they can't provide the creativity and intelligence that make each qualitative analysis unique. Moreover, since new software is being constantly developed and upgraded, this book can do no more than provide some general guidance about how to undertake computer-assisted analysis.

Most of this chapter will focus on the human thinking processes involved in analysis rather than the mechanical data management challenges that computers help solve. For an excellent review of computer software in relation to various theoretical and practical issues in qualitative analysis, see Fielding and Lee (1998).

Exhibit 8.2 presents examples of major computer-assisted qualitative data analysis software (CAQDAS). What began as distinct software approaches have become more standardized as the various packages converged to offer similar functions, though sometimes with different names for the same functions. They all facilitate marking text, building codebooks, indexing, categorizing, creating memos, and displaying multiple text entries side-by-side. Import and export capabilities vary. Some support teamwork and multiple users more than others. Graphics and matrix capabilities vary but are becoming increasingly sophisticated. All take time to learn to use effectively. The greater the volume of data to be analyzed, the more helpful these software programs are. Moreover, knowing which software program you will use *before* data collection will help you collect and enter data in the way that works best for a particular program.

Fielding (1995, 2000), who has followed qualitative software as diligently as anyone, distinguishes three basic types of qualitative analysis software: text retrievers, code-and-retrieve packages, and theory-builders. He advises that packages vary substantially and that one must use care in picking the right software for a particular set of analysis challenges, for example, whether you'll be engaged in individual or team analysis. Indeed, he cautions that you need to know something about qualitative analysis before choosing a package. He has identified several critical ways in which qualitative analysis software varies (Fielding 1995):

- How you enter your data (typing directly, imported from word processing, scanning; flexible or fixed formatting)
- Storage differences (internal vs. external databases)
- Coding variations (on-screen coding vs. assign the codes first)
- Differences in ease of organizing, reorganizing, and relabeling codes
- Variations in whether memos and annotations can be attached to codes (especially important for team analysis)
- Data-linking mechanisms and ease vary (connecting different data sources or segments during analysis)
- Ease of navigating and browsing
- Ease, speed, and process of search and retrieval
- Important display variations (e.g., with and without context)
- Tracking details (recording what you've done for review)

Qualitative discussion groups on the Internet regularly discuss, rate, compare, and debate the strengths and weaknesses of different software programs (see Exhibit 8.3 for examples of such groups). While preferences vary, these discussions usually end with consensus that any of the major programs will satisfy the needs of most qualitative researchers. Increasingly, distinctions depend on "feel," "style," and "ease of use"—matters of individual taste—more than differences in function. Still, differences exist and new developments can be expected to solve existing limitations.

EXHIBIT 8.2 Examples of Software Programs for Qualitative Analysis

AnSWR (Analysis Software for Word-Based Records): (freeware from CDC[a])	www.cdc.gov/hiv/software/answr.htm
ATLAS.ti	www.atlasti.de/
C-I-SAID (Code-A-Text)	www.scolari.com
CDC EZ-Text (freeware from CDC)	www.cdc.gov/hiv/software/ez-text.htm
Ethnograph	www.qualisresearch.com
HyperRESEARCH	www.researchware.com
QCA (Qualitative Comparative Analysis)	www.nwu.edu/IPR/publications/qca.html
QSR NVivo	www.qsr-software.com
QSR NUD*IST (Non-numerical Unstructured Data With Indexing, Searching, and Theorizing)	www.qsr-software.com
TextSmart	www.spss.com
winMAX	www.scolari.com

Computer-assisted qualitative data analysis software (CAQDAS) continues to develop rapidly. See www.scolari.com for the latest versions, prices, and links to home pages of software companies. Most major software marketers have their own Web sites for support and will provide demo disks that allow a user to learn and compare functions. A number of organizations worldwide have developed training workshops to teach use of CAQDAS. These are often posted on qualitative listservs (see Chapter 1, Exhibit 1.5, for a resource list). Software comparisons are also frequently discussed on the Qualitative Internet listservs. Exhibit 8.3 in this chapter lists Internet listserv resources for analysis, including software support discussion lists.

a. Centers for Disease Control, U.S. government: If these URLs have changed, go to the CDC home page (www.cdc.gov). From there, a simple text search should turn up the software.

Data management is a black box in virtually all qualitative software, hidden from view and difficult to access. Programs differ in the specific elements in the underlying database (the design), the way these elements are configured (the architecture), the mechanics of how the user works with the database on-screen (the graphical user interface, or GUI), and the extent to which the database elements can be separated from the software program with their linkages intact (the export capability). (MacQueen and Milstein 1999:30)

One special challenge involves better interfaces between programs. To help solve this problem, MacQueen and Milstein (1999)

EXHIBIT 8.3 Internet Resources and E-mail Discussion Groups (listservs) on Qualitative Analysis

1. Qual-software@jiscmail.ac.uk: A list on qualitative analysis computer programs; to subscribe, send this message to jiscmail@jiscmail.ac.uk: join qual-software ourname.
2. ATLAS-TI@atlasti.de: Topics on the text analysis, text management, and theory-building program ATLAS/ti; to subscribe, send a one-line message to listserv@atlasti.DE: SUB ATLAS-TI yourfirstname yourlastname your institution.
3. QSR-Forum@qsr.com.au (Qualitative Solutions and Research), for the qualitative analysis programs NUD*IST and Nvivo. To subscribe, send a message to mailing-list-request@qsr.com.au with the words SUBSCRIBE QSR-FORUM in the main body of the text. If you have any problems, send e-mail to list-master@qsr.com.au.
4. VISCOM@listserv.temple.edu: Visual Communications Discussion List; to subscribe, send this message to listserv@listserv.temple.edu: subscribe viscom ourname.
5. OnlineRsch@onelist.com: Discussion of analysis, methodology, and ethics in online research, including sociology, anthropology, and other related disciplines.
6. Online articles about CAQDAS: http://caqdas.soc.surrey.ac.uk/news.htm.

NOTE: Thanks to Judith Preissle, Aderhold Distinguished Professor, Social Foundations of Education, University of Georgia, for list subscription details. These sites and subscription details may change, and this list is not exhaustive. This list is meant to be suggestive of the qualitative analysis resources available through the Internet. See Chapter 1, Exhibit 1.5, and Chapter 3, Exhibit 3.7, for additional qualitative resources through the Internet.

have proposed "a systems approach to qualitative data management and analysis" that focuses on the data elements that are commonly found in a wide range of qualitative approaches in hopes of encouraging the development of common protocols for importing and exporting data between software programs. They note that "with a common foundation, qualitative researchers could work with multiple programs without penalty" (p. 30). Their proposal centers on a database whose elements correspond to the fundamental types of information associated with qualitative research and the processes driving the generation of that information. These four fundamental types of information that contribute to the construction of a finding or "answer" in qualitative analysis are

> (1) characteristics of the sources where information is sought, (2) primary information or objects collected from the sources, (3) secondary information or objects created to aid in the interpretation of primary objects, and (4) characteristics of the coders who construct the secondary objects. (MacQueen and Milstein 1999:31)

Their approach has been encapsulated as the foundation for a public domain software program called AnSWR: Analysis Software for Word-Based Records, sponsored by the Centers for Disease Control (CDC) (see Exhibit 8.2). From a database management per-

spective, they divide coding activities into two categories: *segmenting activities* and *metadata activities.*

> *Segmenting activities:* Any analytic actions that can be directly mapped onto text or other digitized objects are classified here as segmenting activities. Examples include defining the boundaries of a narrative passage or segment, applying codes to a segment, using tags or other marks to identify points in an object, and creating hyper links between segments or points in an object.
>
> *Metadata activities:* Metadata activities entail the creation of data about data; here, we extend the meaning of *data* to encompass all symbolic representations of information and meaning. Prompted by meaning discerned in the primary objects, the coder generates metadata in the form of codes, comments, memos, and annotations, as well as graphical summaries of the interpreted objects (e.g., diagrams, networks, clusters, and maps) capable of showing the multidimensional structure of coding patterns.
>
> Segmenting and metadata activities take place in an iterative fashion, with feedback between the two elements. For example, a typical sequence of coder activities may include the highlighting or bracketing of a chunk of text containing semantically related terms (segmenting), the creation of a code to describe the cultural significance of the chunk of text (metadata), the establishment of a link between the code and the chunk in the data base (segmenting), the creation of a memo describing related concepts described in the literature (metadata), the establishment of a link between the memo and the chunk in the data base (segmenting), and incorporation of the code into a diagram describing conceptual links among related codes (metadata). This complex process is the primary focus of most qualitative approaches. (MacQueen and Milstein 1999:35-36)

For more detailed discussion of computer-assisted qualitative data management and analysis, especially graphics and display capabilities, see Ryan and Bernard (2000), Fielding and Lee (1998), and Gahan and Hannibal (1998). In considering whether to use software to assist in analysis, keep in mind that this is partly a matter of individual style, comfort with computers, amount of data to be analyzed, and personal preference. Computer analysis is not necessary and can interfere with the analytic process for those who aren't comfortable spending long hours in front of a screen. Some self-described "concrete" types like to get a physical feel for the data that isn't possible with a computer. Participants on a qualitative listserv posted these responses to a thread on software analysis:

> The best advice I ever received about coding was to read the data I collected over and over and over. The more I interacted with the data, the more patterns and categories began to "jump out" at me. I never even bothered to use the software program I installed on the computer because I found it much easier to code it by hand.
>
> I found that hand-coding was easier and more productive than using a computer program. For me, actually seeing the data in concrete form was vital in recognizing emerging themes. I actually printed multiple copies of data and cut it into individual "chunks," color coding as I went along, and actually physically manipulating the data by grouping chunks by apparent themes, filing in colored folders, etc. This technique was especially useful when data seemed to fit more than one theme and facilitated merging of my initial impressions as themes solidified. Messy, but vital for us concrete people.

So although software analysis has become common and many swear by it—it can offer leaps in productivity for those adept at it—it is not a requisite for qualitative inquiry. We turn now to how to think through and actually analyze qualitative data with emphasis on where the real work takes place—in your head.

Case Studies

> Case study is not a methodological choice but a choice of what is to be studied. . . . We could study it analytically or holistically, entirely by repeated measures or hermeneutically, organically or culturally, and by mixed methods—but we concentrate, at least for the time being, on the case. (Stake 2000:435)

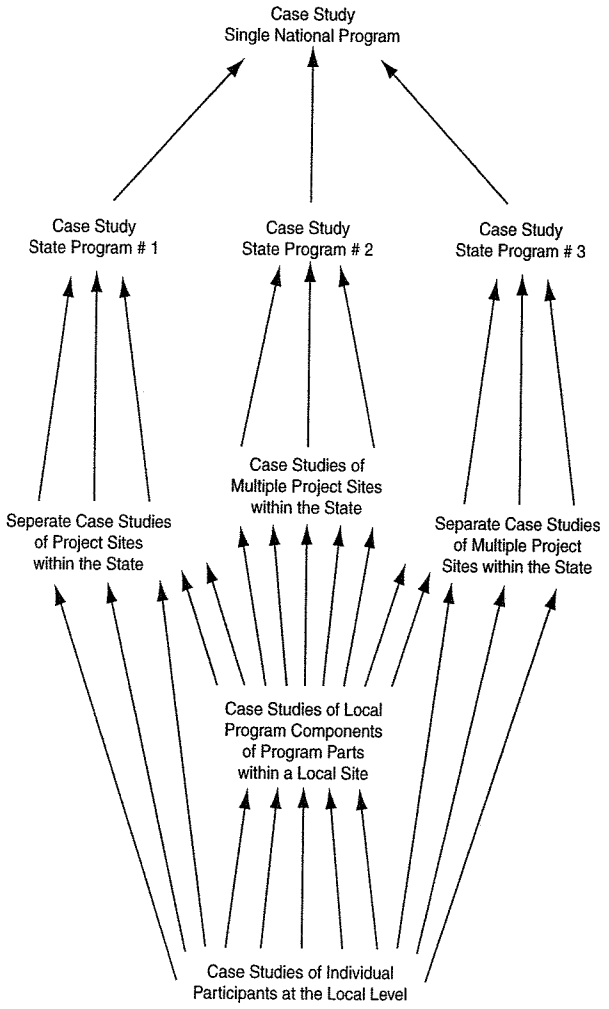
Case analysis involves organizing the data by specific cases for in-depth study and comparison. Well-constructed case studies are *holistic* and *context sensitive*, two of the primary strategic themes of qualitative inquiry discussed in Chapter 2. Cases can be individuals, groups, neighborhoods, programs, organizations, cultures, regions, or nation-states. "In an ethnographic case study, there is exactly one unit of analysis —the community or village or tribe" (Bernard 1995:35-36). Cases can also be critical incidents, stages in the life of a person or program, or anything that can be defined as a "specific, unique, bounded system" (Stake 2000:436). Cases are units of analysis. What constitutes a case, or unit of analysis, is usually determined during the design stage and becomes the basis for purposeful sampling in qualitative inquiry (see Chapter 5, especially Exhibit 5.5). Sometimes, however, new units of analysis, or cases, emerge during fieldwork or from the analysis after data collection. For example, one might have sampled schools as the unit of analysis, expecting to do case studies of three schools, and then, reviewing the fieldwork, decide that classrooms are a more meaningful unit of analysis and shift to case studies of classrooms instead of schools, or add case studies of particular teachers or students. Contrariwise, one could begin by sampling classrooms and end up doing case studies on schools. This illustrates the critical importance of thinking carefully about the question "What is a case?" (Ragin and Becker 1992).

The case study approach to qualitative analysis constitutes a specific way of collecting, organizing, and analyzing data; in that sense it represents an analysis *process.* The purpose is to gather comprehensive, systematic, and in-depth information about each case of interest. The analysis process results in a *product:* a case study. Thus, the term *case study* can refer to either the process of analysis or the product of analysis, or both.

Case studies may be layered or nested. For example, in evaluation, a single program may be a case study. However, within that single-program case ($N = 1$), one may do case studies of several participants. In such an approach, the analysis would begin with the individual case studies; then the cross-case pattern analysis of the individual cases might be part of the data for the program case study. Likewise, if a national or state program consists of several project sites, the analysis may consist of three layers of case studies: individual participant case studies at project sites combined to make up project site case studies, project site case studies combined to make up state program case studies, and state programs combined to make up a national program case study. Exhibit 8.4 shows this layered case study approach.

This kind of layering recognizes that you can always build larger case units out of smaller ones; that is, you can always combine studies of individuals into studies of a program, but if you only have program-

EXHIBIT 8.4 Case Study: Layers of Possible Analysis



level data, you can't disaggregate it to construct individual cases.

> Remember this rule: No matter what you are studying, always collect data on the lowest level unit of analysis possible. . . .
>
> Collect data about individuals, for example, rather than about households. If you are interested in issues of production and consumption (things that make sense at the household level), you can always package your data about individuals into data about households during analysis. . . . You can always aggregate data collected on individuals, but you can never disaggregate data collected on groups. (Bernard 1995:37)

Though a scholarly or evaluation project may consist of several cases and include cross-case comparisons, **the analyst's first and foremost responsibility consists of doing justice to each individual case. All else depends on that.**

> Ultimately, we may be interested in a general phenomenon or a population of cases more than in the individual case. And we cannot understand this case without knowing about other cases. But while we are studying it, our meager resources are concentrated on trying to understand its complexities. For the while, we probably will not study comparison cases. We may simultaneously carry on more than one case study, but each case study is a concentrated inquiry into a single case. (Stake 2000:436)

Case data consist of all the information one has about each case: interview data, observations, the documentary data (e.g., program records or files, newspaper clippings), impressions and statements of others about the case, and contextual information—in effect, all the information one has accumulated about each particular case goes into that case study. These diverse sources make up the raw data for case analysis and can amount to a large accumulation of material. For individual people, case data can include interviews with the person and those who know her or him, clinical records, background and statistical information about the person, a life history profile, things the person has produced (diaries, photos, writings, paintings, etc.), and personality or other test results (yes, quantitative data can be part of a qualitative case study). At the program level, case data can include program documents, statistical profiles, program reports and proposals, interviews with program participants and staff, observations of the program, and program histories.

From Data to Case Study

Once the raw case data have been accumulated, the researcher may write a case record. The case record pulls together and organizes the voluminous case data into a comprehensive, primary resource package. The case record includes all the major information that will be used in doing the final case analysis and writing the case study. Information is edited, redundancies are sorted out, parts are fitted together, and the case record is organized for ready access chronologically and/or topically. The case record must be complete but manageable; it should include all the information needed for subsequent analysis, but it is organized at a level beyond that of the raw case data.

> A case record should make no concessions to the reader in terms of interest or communication. It is a condensation of the case data aspiring to the condition that no interpreter requires to appeal behind it to the raw data to sustain an interpretation. Of course, this criterion cannot be fully met: some case records will be better than others. The case record of a school attempts a portrayal through the organization of data alone, and a portrayal without theoretical aspirations. (Stenhouse 1977:19)

The case record is used to construct a case study appropriate for sharing with an intended audience, for example, scholars, policymakers, program decision makers, or practitioners. The tone, length, form, structure, and format of the final case presentation depend on audience and study purpose. The final case study is what will be

EXHIBIT 8.5 The Process of Constructing Case Studies

Step 1	Assemble the raw case data.
	These data consist of all the information collected about the person, program, organization, or setting for which a case study is to be written.
Step 2 (optional; depends on complexity of data and case)	Construct a case record.
	This is a condensation of the raw case data organized, classified, and edited into a manageable and accessible file.
Step 3	Write a final case study narrative.
	The case study is a readable, descriptive picture of or story about a person, program, organization, and so forth, making accessible to the reader all the information necessary to understand the case in all its uniqueness. The case story can be told chronologically or presented thematically (sometimes both). The case study offers a holistic portrayal, presented with any context necessary for understanding the case.

communicated in a publication or report. The full report may include several case studies that are then compared and contrasted, but the basic unit of analysis of such a comparative study remains the distinct cases and the credibility of the overall findings will depend on the quality of the individual case studies. Exhibit 8.5 shows this sequence of moving from raw case data to the written case study. The second step—converting the raw data to a case record before writing the actual case study—is optional. A case record is constructed only when a great deal of unedited raw data from interviews, observations, and documents must be edited and organized before writing the final case study. In many studies, the analyst will work directly and selectively from raw data to write the final case study.

The case study should take the reader into the case situation and experience—a person's life, a group's life, or a program's life. Each case study in a report stands alone, allowing the reader to understand the case as a unique, holistic entity. At a later point in analysis, it is possible to compare and contrast cases, but initially each case must be represented and understood as an idiosyncratic manifestation of the phenomenon of interest. A case study should be sufficiently detailed and comprehensive to illuminate the focus of inquiry without becoming boring and laden with trivia. A skillfully crafted case reads like a fine weaving. And that, of course, is the trick. How to do the weaving? How to tell the story? How to decide what stays in the final case presentation and what gets deleted along the way? Elmore Leonard (2001:7), the author of *Glitz* and other popular detective thrillers, was once asked how he managed to keep the action in his books moving so quickly. He said, "I leave out the parts that people skip." Not bad advice for writing an engaging case study.

In doing biographical or life history case studies, Denzin (1989b) has found particular value in identifying what he calls "epiphanies"—"existentially problematic moments in the lives of individuals" (p. 129).

> It is possible to identify four major structures, or types of existentially problematic moments, or epiphanies, in the lives of individuals. First, there are those moments that are major and touch every fabric of a person's life. Their effects are immediate and long term. Second, there are those epiphanies that represent eruptions, or reactions, to events that have been going on for a long period of time. Third are those events that are minor yet symbolically representative of major problematic moments in a relationship. Fourth, and finally, are those episodes whose effects are immediate, but their meanings are only given later, in retrospection, and in the reliving of the event. I give the following names to these four structures of problematic experience: (1) the major epiphany, (2) the cumulative epiphany, (3) the illuminative, minor epiphany, and (4) the relived epiphany. (Of course, any epiphany can be relived and given new retrospective meaning.) These four types may, of course, build upon one another. A given event may, at different phases in a person's or relationship's life, be first, major, then minor, and then later relived. A cumulative epiphany will, of course, erupt into a major event in a person's life. (Denzin 1989b:129)

Programs, organizations, and communities have parallel types of epiphanies, though they're usually called critical incidents, crises, transitions, or organizational lessons learned. For a classic example of an organizational development case study in the business school tradition, see the analysis of the Nut Island sewage treatment plant in Quincy, Massachusetts, the complex story of how an outstanding team—highly competent, deeply committed to excellence, focused on the organizational mission, and working hard—still ended up in a "catastrophic failure" (Levy 2001).

Studying such examples is one of the best ways to learn how to write case studies. The Thick Description section, earlier in this chapter, cited a number of case studies that have become classics in the genre. Chapter 1 presented case vignettes of individuals in an adult literacy program. Chapter 4 (Exhibit 4.2) presented highlights of a participant case study used to illuminate a Vietnamese woman's experience in an employment training program; in addition to describing what a job placement meant to her, the case was constructed to illuminate such hard-to-measure outcomes as "understanding the American workplace culture" and "speaking up for oneself," learnings that can be critical to long-term job success for an emigrant. Another example of a full individual case study is presented as Appendix 8.2 at the end of this chapter. Originally prepared for an evaluation report that included several participant case studies, it tells the story of one person's experiences in a career education program. This case represents an exemplar of how multiple sources of information can be brought together to offer a comprehensive picture of a person's experience, in this instance, a student's changing involvement in the program and changing attitudes and behaviors over time. The case data for each student in the evaluation study included

(a) observations of selected students at employer sites three times during the year,

(b) interviews three times per year with the students' employer-instructors at the time of observation,

(c) parent interviews once a year,

(d) in-depth student interviews four times a year,

(e) informal discussions with program staff,

(f) a review of student projects and other documents, and

(g) 23 records from the files of each student (including employer evaluations of students, student products, test scores, and staff progress evaluations of students).

A set of guide questions was prepared for analyzing and reviewing each source (Fehrenbacher, Owens, and Haehnn 1976: 7-8). Information from all of these sources was integrated to produce a highly readable narrative that could be used by decision makers and funders to better understand what it was like to be in the program (Owens, Haehnn, and Fehrenbacher 1987). The evaluation staff of the Northwest Regional Educational Laboratory took great pains to carefully validate the information in the case studies. Different sources of information were used to cross-validate findings, patterns, and conclusions. Two evaluators reviewed the material in each case study to independently make judgments and interpretations about the content and meaning of the material in the case. In addition, an external evaluator reviewed the raw data to check for biases or unwarranted conclusions. Students were asked to read their own case studies and comment on the accuracy of fact and interpretation in the study. Finally, to guarantee the readability of the case studies, a newspaper journalist was employed to help organize and edit the final versions. Such a rigorous case study approach increases the confidence of readers that the cases are accurate and comprehensive. Both in its content and the process by which it was constructed, the Northwest Lab case study presented at the end of this chapter (Appendix 8.2) exemplifies how an individual case study can be prepared and presented.

The same rigorous process would apply to case study data at the group or program level. For excellent examples of case studies in education, see Brizuela et al. (2000), Stake, Bresler, and Mabry (1991), Perrone (1985), and Alkin, Daillak, and White (1979); for family research see Sussman and Gilgun (1996); for international development see Salmen (1987) and Searle (1985); in government accountability see Kloman (1979); and for a detailed example of conducting and presenting an evaluation case study, see Hébert (1986).

How one compares and contrasts cases will depend on the purpose of the study and how cases were sampled. As discussed in Chapter 5, critical cases, extreme cases, typical cases, and heterogeneous cases serve different purposes. Other excellent resources for qualitative case analysis include Stake (1995), Merriam (1997), Yin (1994), Hamel (1993), and the U.S. General Accounting Office (1987). To pursue case studies as stories that build on and display the elements of good storytelling, see Glesne (1999).

Once case studies have been written, the analytic strategies described in the remainder of this chapter can be used to further analyze, compare, and interpret the cases to generate cross-case themes, patterns and findings.

Pattern, Theme, and Content Analysis

> The ability to use thematic analysis appears to involve a number of underlying abilities, or competencies. One competency can be called *pattern recognition.* It is the ability to see patterns in seemingly random information. (Boyatzis 1998:7)

No precise or agreed-on terms describe varieties and processes of qualitative analysis. Content analysis, for example, sometimes refers to searching text for recurring words or themes. For example, a speech by a politician might be analyzed to see what phrases or concepts predominate, or speeches of two politicians might be compared to see how many times and in what contexts they used a phrase such as "global economy" or "family values." Content analysis usually refers to analyzing text (interview transcripts, diaries, or documents) rather than observation-based field notes. **More generally, however, content analysis is used to refer to any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings.** Case studies, for example, can be content analyzed.

The core meanings found through content analysis are often called patterns or themes. Alternatively, the process of searching for patterns or themes may be distinguished, respectively, as pattern analysis or theme analysis. I'm asked frequently about the difference between a pattern and a theme. There's no hard-and-fast distinction. The term *pattern* usually refers to a descriptive finding, for example, "Almost all participants reported feeling fear when they rappelled down the cliff," while a theme takes a more categorical or topical form: *Fear.* Putting these terms together, a report on a wilderness education study might state:

> The *content analysis* revealed a *pattern* of participants reporting being afraid when rappelling down cliffs and running river rapids; many also initially experienced the group process of sharing personal feelings as evoking some fear. Those patterns make "Dealing with fear" a major *theme* of the wilderness education program experience.

Inductive and Deductive Qualitative Analyses

> Francis Bacon is known for his emphasis on *induction, the use of direct observation to confirm ideas and the linking together of observed facts to form theories or explanations of how natural phenomenon work.* Bacon correctly never told us how to get ideas or how to accomplish the linkage of empirical facts. Those activities remain essentially humanistic—you think hard. (Bernard 2000:12)

Bacon (1561-1626) is recognized as one of the founders of scientific thinking, but he also has been awarded "the dubious honor of being the first martyr of empiricism" (Bernard 2000:12). Still pondering the universe at age 65, he got an idea one day while driving his carriage in the snow in a farming area north of London. It occurred to him that cold might delay the biological process of putrefaction, so he stopped, purchased a hen from a farmer, killed it on the spot, and stuffed it with snow. His idea worked. The snow did delay the rotting process, but he caught bronchitis and died a month later. As I noted in Chapter 6, fieldwork can be risky. Engaging in analysis, on the other hand, is seldom life threatening, though you do risk being disputed and sometimes ridiculed by those who arrive at contrary conclusions.

Inductive analysis involves *discovering* patterns, themes, and categories in one's data. Findings emerge out of the data, through the analyst's interactions with the data, in contrast to *deductive analysis* where the data are analyzed according to an existing framework. Qualitative analysis is typically inductive in the early stages, especially when developing a codebook for content analysis or figuring out possible categories, patterns, and themes. This is often called "open coding" (Strauss and Corbin 1998:223) to emphasize the importance of being open to the

data. "Grounded theory" (Glaser and Strauss 1967) emphasizes becoming immersed in the data—being *grounded*—so that embedded meanings and relationships can emerge. The French would say of such an immersion process: *Je m'enracine.* "I root myself." The analyst becomes implanted in the data. The resulting analysis grows out of that groundedness.

Once patterns, themes, and/or categories have been established through inductive analysis, the final, confirmatory stage of qualitative analysis may be deductive in testing and affirming the authenticity and appropriateness of the inductive content analysis, including carefully examining deviate cases or data that don't fit the categories developed. Generating theoretical propositions or formal hypotheses after inductively identifying categories is considered deductive analysis by grounded theorists Strauss and Corbin (1998): "Anytime that a researcher derives hypotheses from data, because it involves interpretation, we consider that to be a deductive process" (p. 22). Grounded theorizing, then, involves both inductive and deductive processes: "At the heart of theorizing lies the interplay of making inductions (deriving concepts, their properties, and dimensions from data) and deductions (hypothesizing about the relationships between concepts)" (Strauss and Corbin 1998:22).

Analytic induction, in contrast to grounded theory, begins with an analyst's deduced propositions or theory-derived hypotheses and "is a procedure for verifying theories and propositions based on qualitative data" (Taylor and Bogdan 1984:127). Sometimes, as with analytic induction, qualitative analysis is first deductive or quasi-deductive and then inductive as when, for example, the analyst begins by examining the data in terms of theory-derived sensitizing concepts or applying a theoretical framework developed by someone else (e.g., testing Piaget's developmental theory on case studies of children). After or alongside this deductive phase of analysis, the researcher strives to look at the data afresh for undiscovered patterns and emergent understandings (inductive analysis). I'll discuss both grounded theory and analytic deduction at greater length later in this chapter.

Because, as identified and discussed in Chapter 2, inductive analysis is one of the primary characteristics of qualitative inquiry, we'll focus on strategies for thinking and working inductively. There are two distinct ways of analyzing qualitative data inductively. First, the analyst can identify, define, and elucidate the categories developed and articulated by the people studied to focus analysis. Second, the analyst may also become aware of categories or patterns for which the people studied did not have labels or terms, and the analyst develops terms to describe these inductively generated categories. Each of these approaches is described below.

Indigenous Concepts and Practices

A good place to begin inductive analysis is to inventory and define key phrases, terms, and practices that are special to the people in the setting studied. What are the indigenous categories that the people interviewed have created to make sense of their world? What are practices they engage in that can be understood only within their worldview? Anthropologists call this *emic* analysis and distinguish it from *etic* analysis, which refers to labels imposed by the researcher. (For more on this distinction and its origins, see Chapter 6, which discusses emic and etic perspectives in fieldwork.) "Identifying the categories and terms used by informants themselves is also called *in vivo* coding" (Bernard and Ryan 1998:608).

Consider the practice among traditional Dani women of amputating a finger joint when a relative dies. The Dani people live in the lush Baliem Valley of Irian Java, Indonesia's most remote province on the western half of New Guinea. The joint is removed to honor and placate ancestral ghosts. Missionaries have fought the practice as sinful and the government has banned it as barbaric, but many traditional women still practice it.

> Some women in Dani villages have only four stubs and a thumb on each hand. In tribute to her dead mother and brothers, Soroba, 38, has had the tops of six of her fingers amputated. "The first time was the worst," she said. "The pain was so bad, I thought I would die. But it's worth it to honor my family." (Sims 2001:6)

Analyzing such an indigenous practice begins by understanding it from the perspective of its practitioners, within the indigenous context, in the words of the local people, in their language, within their worldview.

> According to this view, cultural behavior should always be studied and categorized in terms of the inside view—the actors' definition—of human events. That is, the units of conceptualization in anthropological theories should be "discovered" by analyzing the cognitive processes of the people studied rather than "imposed" from cross-cultural (hence, ethnocentric) classifications of behavior. (Pelto and Pelto 1978:54)

Anthropologists, working cross-culturally, have long emphasized the importance of preserving and reporting the indigenous categories of people studied. Franz Boas (1943) was a major influence in this direction: "If it is our serious purpose to understand the thoughts of a people, the whole analysis of experience must be based on their concepts, not ours" (p. 314).

In an intervention program, certain terms may emerge or be created by participants to capture some essence of the program. In the wilderness education program I evaluated, the idea of "detoxification" became a powerful way for participants to share meaning about what being in the wilderness together meant (Patton 1999a:49-52). In the Caribbean Extension Project evaluation, the term *liming* had special meaning to the participants. Not really translatable, it essentially means passing time, hanging out, doing nothing, shooting the breeze—but doing so agreeably, without guilt, stress, or a sense that one ought to be doing something more productive with one's time. *Liming* has positive, desirable connotations because of its social, group meaning—people just enjoying being together with nothing that has to be accomplished. Given that uniquely Caribbean term, what does it mean when participants describe what happened in a training session or instructional field trip as primarily "liming"? How much liming could acceptably be built into training for participant satisfaction and still get something done? How much programmatic liming was acceptable? These became key formative evaluation issues.

In evaluating a leadership training program, we gathered extensive data on what participants and staff meant by the term *leadership.* Pretraining and posttraining exercises involved participants in writing a paragraph on leadership; the writing was part of the program curriculum, not designed for evaluation, but the results provided useful qualitative evaluation data. There were small group discussions on leadership. The training included lectures and group discussions on leadership, which we observed. We participated in and took notes on informal

discussions about leadership. Because the very idea of "leadership" was central to the program, it was essential to capture variations in what participants meant when they talked about leadership. The results showed that ongoing confusion about what leadership meant was one of the problematic issues in the program. Leadership was an indigenous concept in that staff and participants throughout the training experience used it extensively, but it was also a *sensitizing concept* because we knew going into the fieldwork that it would be an important notion to study.

Sensitizing Concepts

In contrast to purely indigenous concepts, sensitizing concepts refer to categories that the analyst brings to the data. Experienced observers often use sensitizing concepts to orient fieldwork, an approach discussed in Chapter 6. These sensitizing concepts have their origins in social science theory, the research literature, or evaluation issues identified at the beginning of a study. Sensitizing concepts give the analyst "a general sense of reference" and provide "directions along which to look" (Blumer 1969: 148). Using sensitizing concepts involves examining how the concept is manifest and given meaning in a particular setting or among a particular group of people.

Conroy (1987) used the sensitizing concept "victimization" to study police officers. Innocent citizens are frequently thought of as the victims of police brutality or indifference. Conroy turned the idea of victim around and looked at what it would mean to study police officers as victims of the experiences of law enforcement. He found the sensitizing concept of victimization helpful in understanding the isolation, lack of interpersonal affect, cynicism, repressed anger, and sadness observed among police officers. He used the idea of victimization to tie together the following quotes from police officers:

> As a police officer and as an individual I think I have lost the ability to feel and to empathize with people. I had a little girl that was run over by a bus and her mother was there and she had her little book bag. It was really sad at the time but I remember feeling absolutely nothing. It was like a mannequin on the street instead of some little girl. I really wanted to be able to cry about it and I really wanted to have some feelings about it, but I couldn't. It's a little frightening for me to be so callous and I have been unable to relax.

> I am paying a price by always being on edge and by being alone. I have become isolated from old friends. We are different. I feel separate from people, different, out of step. It becomes easier to just be with other police officers because they have the same basic understanding of my environment, we speak the same language. The terminology is crude. When I started I didn't want to get into any words like "scumbags" and "scrotes," but it so aptly describes these people.

> I have become isolated from who I was because I have seen many things I wish I had not seen. It's frustrating to see things that other people don't see, won't see, can't see. I wish sometimes, I didn't see the things. I need to be assertive, but don't like it. I have to put on my police mask to do that. But now it is getting harder and harder to take that mask off. I take my work home with me. I don't want my work to invade my personal life but I'm finding I need to be alone more and more. I need time to recharge my batteries. I don't like to be alone, but must. (Conroy 1987:52)

Two additional points are worth making about these quotations. First, by presenting the actual data on which the analysis is based, the readers are able to make their own determination of whether the concept "victimization" helps in making sense of the data. By presenting respondents in their own words and reporting the actual data that was the basis of his interpretation, Conroy invites readers to make their own analysis and interpretation. The analyst's constructs should not dominate the analysis, but rather should facilitate the reader's understanding of the world under study.

Second, these three quotations illustrate the power of qualitative data. The point of analysis is not simply to find a concept or label to neatly tie together the data. What is important is understanding the people studied. Concepts are never a substitute for direct experience with the descriptive data. **What people actually say and the descriptions of events observed remain the essence of qualitative inquiry.** The analytical process is meant to organize and elucidate telling the story of the data. Indeed, the skilled analyst is able to get out of the way of the data to let the data tell their own story. The analyst uses concepts to help make sense of and present the data, but not to the point of straining or forcing the analysis. The reader can usually tell when the analyst is more interested in proving the applicability and validity of a concept than in letting the data reveal the perspectives of the people interviewed and the intricacies of the world studied.

Having suggested how singular concepts can bring focus to inductive analysis, the next level of analysis, constructing typologies, moves us into a somewhat more complex analytical strategy.

Indigenous Typologies

Typologies are classification systems made up of categories that divide some aspect of the world into parts along a continuum. They differ from *taxonomies*, which completely classify a phenomenon through mutually exclusive and exhaustive categories, like the biological system for classifying species. Typologies, in contrast, are built on ideal-types or illustrative endpoints rather than a complete and discrete set of categories. Well-known and widely used sociological typologies include Redfield's folk-urban continuum (*gemeinschaft/gesellschaft*) and Von Wiese's and Becker's sacred-secular continuum (for details, see Vidich and Lyman 2000:52). Sociologists classically distinguish ascribed from achieved characteristics. Psychologists distinguish degrees of mental illness (neuroses to psychoses). Political scientists classify governmental systems along a democratic-authoritarian continuum. Economists distinguish laissez-faire from centrally planned economic systems. Systems analysts distinguish open from closed systems. In all of these cases, however, the distinctions involves matters of degree and interpretation rather than absolute distinctions. All of these examples have emerged from social science theory and represent theory-based typologies constructed by analysts. We'll examine that approach in greater depth in a moment. First, however, let's look at identifying indigenous typologies as a form of qualitative analysis.

Illuminating indigenous typologies requires an analysis of the continua and distinctions used by people in a setting to break up the complexity of reality into distinguishable parts. The language of a group of people reveals what is important to them in that they name something to separate and distinguish it from other things with other names. Once these labels have been identified from an analysis of what people have said during fieldwork, the next step is to identify the attributes or characteristics that distinguish one thing from another. In describing this

kind of analysis, Charles Frake (1962) used the example of a hamburger. Hamburgers can vary a great deal in how they are cooked (rare to well-done) or what is added to them (pickles, mustard, ketchup, lettuce), and they are still called hamburgers. However, when a piece of cheese is added to the meat, it becomes a cheeseburger. The task for the analyst is to discover what it is that separates "hamburger" from "cheeseburger," that is, to discern and report "how people construe their world of experience from the way they talk about it" (Frake 1962:74).

An analysis example of this kind comes from a formative evaluation aimed at reducing the dropout rate among high school students. In observations and interviews at the targeted high school, it became important to understand the ways in which teachers categorized students. With regard to problems of truancy, absenteeism, tardiness, and skipping class, the teachers had come to label students as either "chronics" or "borderlines." One teacher described the chronics as "the ones who are out of school all the time and everything you do to get them in doesn't work." Another teacher said, "You can always pick them out, the chronics. They're usually the same kids." The borderlines, on the other hand, "skip a few classes, waiting for a response, and when it comes they shape up. They're not so different from your typical junior high student, but when they see the chronics getting away with it, they get more brazen in their actions." Another teacher said, "Borderlines are gone a lot but not constantly like the chronics."

Not all teachers used precisely the same criteria to distinguish chronics from borderlines, but all teachers used these labels in talking about students. To understand the program activities directed at reducing high school dropouts and the differential impact of the program on students, it became important to observe differences in how borderlines and chronics were treated. Many teachers, for example, refused even to attempt to deal with chronics. They considered it a waste of their time. Students, it turned out, knew what labels were applied to them and how to manipulate these labels to get more or less attention from teachers. Students who wanted to be left alone called themselves "chronics" and reinforced their "chronic" image with teachers. Students who wanted to graduate, even if only barely and with minimal school attendance, cultivated an image as "borderline."

Another example of an indigenous typology emerged in the wilderness education program I evaluated. During the second year of the project, one subgroup's members started calling themselves the "turtles." They contrasted themselves to the "truckers." On the surface, these labels were aimed at distinguishing different styles of hiking and backpacking, one slow and one fast. Beneath the surface, however, the terms came to represent different approaches to the wilderness and different styles of experience in relation to the wilderness and the program.

Groups, cultures, organizations, and families develop their own language systems to emphasize distinctions they consider important. Every program gives rise to a special vocabulary that staff and participants use to differentiate types of activities, kinds of participants, styles of participation, and variously valued outcomes. These indigenous typologies provide clues to analysts that the phenomena to which the labels refer are important to the people in the setting and that to fully understand the setting it is necessary to understand those terms and their implications.

Analyst-Constructed Typologies

Once indigenous concepts, typologies, and themes have been surfaced, the analyst moves to a different task of induction—looking for patterns, categories, and themes for which the analyst can construct a typology to further elucidate findings. Such constructions must be done with considerable care to avoid creating things that are not really in the data. The advice of biological theorist John Maynard Smith (2000) is informative in this regard: Seek models of the world that make sense and whose consequences can be worked out, for "to replace a world you do not understand by a model of a world you do not understand is no advance" (p. 46).

Constructing ideal-types or alternative paradigms is one simple form of presenting qualitative comparisons. Exhibit 1.3 in Chapter 1 presented my ideal-typical comparison of coming-of-age paradigms that contrasts tribal initiation themes with contemporary coming-of-age themes (Patton 1999a). A series of patterns is distilled into contrasting themes that create alternative ideal-types. The notion of "ideal-types" makes it explicit that the analyst has constructed and interpreted something that supersedes purely descriptive analysis.

In creating analyst-constructed typologies through inductive analysis, you take on the task of identifying and making explicit patterns that appear to exist but remain unperceived by the people studied. The danger is that analyst-constructed typologies impose a world of meaning on the participants

BEYOND NAMING PROBLEMS: HOLISTIC AND BROADLY GAUGED ANALYSES

Excerpts of Reflections of Philosopher Elizabeth Minnich

United States readers [of critiques of popular culture such as Robert Putnam's Bowling Alone*] tend to respond with enthusiasm to easily grasped analyses of what is wrong with us from whatever left/middle/right stance they come—viz., to pick just a few that otherwise differ radically, the popularity of 50's analyses of "the organization man" and "the ugly American"; of Baldwin's* The Fire Next Time*; Friedan's "the problem that has no name" in* The Feminine Mystique*; Harrington's* The Other America*, Bellah et al.'s* Habits of the Heart*, Bloom's* The Closing of the American Mind*; William Bennett's and Cornel West's politically opposite diagnoses of a moral crisis that is besetting the nation.*

Such analyses give us the relief of names to attach to widespread concerns: they catch on like a new kind of pill for a real social ill that, whether the catchily named pill works or not, gives us some sense that at least someone knows about our pain. . . .

It is because they come into the vicinity of where we are hurting that we respond so strongly: poke my wound, even to help me heal it, and I will react. But this "poking" is also not as healing as it could be insofar as it remains too narrow in ways that constrain and may misdirect the holistic help we want. Like many analysts before them, what they have done is to focus on where a problem becomes readily evident. But as analyses of wife beating that focus on the victims tend to lead to proposals (often formulated by entirely other people than the analysts) that also focus on the women, excluding from the picture the male perpetrators and the systems that empower them, this won't do. We need other analyses and broader gauge ones. (Minnich 1999:8,11)

that better reflects the observer's world than the world under study. One way of testing analyst-constructed typologies is to present them to people whose world is being analyzed to find out if the constructions make sense to them.

> The best and most stringent test of observer constructions is their recognizability to the participants themselves. When participants themselves say, "yes, that is there, I'd simply never noticed it before," the observer can be reasonably confident that he has tapped into extant patterns of participation. (Lofland 1971:34)

Exhibit 8.6, using the problem of classifying people's ancestry, shows what can happen when indigenous and official constructions conflict, a matter of some consequence to those affected.

A good example of an analyst-generated typology comes from an evaluation of the National Museum of Natural History, Smithsonian Institution, done by Robert L. Wolf and Barbara L. Tymitz (1978). This has become a classic in the museum studies field. They conducted a naturalistic inquiry of viewers' reactions to the "Ice Age Mammals and Emergence of Man" exhibit. From their observations, they identified four different kinds of visitors to the exhibit. These descriptions are progressive in that each new category identifies a person more serious about the exhibit hall.

- *The Commuter:* This is the person who merely uses the hall as a vehicle to get from the entry point to the exit point....
- *The Nomad:* This is a casual visitor, a person who is wandering through the hall, apparently open to becoming interested in something. The Nomad is not really sure why he or she is in the hall and not really sure that s/he is going to find anything interesting in this particular exhibit hall. Occasionally the Nomad stops, but it does not appear that the nomadic visitor finds any one thing in the hall more interesting than any other thing.
- *The Cafeteria Type:* This is the interested visitor who wants to get interested in something, and so the entire museum and the hall itself are treated as a cafeteria. Thus, the person walks along, hoping to find something of interest, hoping to "put something on his or her tray" and stopping from time to time in the hall. While it appears that there is something in the hall that spontaneously sparks the person's interest, we perceive this visitor has a predilection to becoming interested, and the exhibit provides the many things from which to choose.
- *The V.I.P.—Very Interested Person:* This visitor comes into the hall with some prior interest in the content area. This person may not have come specifically to the hall, but once there, the hall serves to remind the V.I.P.'s that they were, in fact, interested in something in that hall beforehand. The V.I.P. goes through the hall much more carefully, much slower, much more critically— that is, he or she moves from point to point, stops, examines aspects of the hall with a greater degree of scrutiny and care. (Wolf and Tymitz 1978: 10-11)

This typology of types of visitors became important in the full evaluation because it permitted analysis of different kinds of museum experiences. Moreover, the evaluators recommended that when conducting interviews to get museum visitors' reactions to exhibits, the interview results should be differentially valued depending on the type of person being interviewed—commuter, nomad, cafeteria type, or VIP.

A different typology was developed to distinguish how visitors learn in a museum: "Museum Encounters of the First, Second, and Third Kind," a take-off on the popular science fiction movie *Close Encounters of the Third Kind*, which referred to direct human contact with visitors from outer space.

EXHIBIT 8.6 **Qualitative Analysis of Ancestry at the U.S. Census**

To count different kinds of people—the job of the Census Bureau—you need categories to count them in. The long form of the 2000 census, given to 1 in 6 households, asked an open-ended, fill-in-the-blank question about "ancestry." Analysts then coded the responses into categories, 1 of 604 categories, up from 467 in 1980. The government doesn't ask about religion, so if people respond that they are Jewish, they don't get their ancestry counted. However, those who write in that they are Amish or Mennonite do get counted because those are considered cultural categories.

Ethnic minorities that cross national boundaries, such as French and Spanish Basques, and groups affected by geopolitical change, such as Czechs and Slovaks or groups within the former Yugoslavia, are counted in distinct categories. The Census Bureau, following advice from the U.S. State Department, differentiates Taiwanese Americans from Chinese Americans, a matter of political sensitivity.

Can Assyrians and Chaldeans be lumped together? When the Census Bureau announced that it would combine the two in the same ancestry code, an Assyrian group sued over the issue, but lost the lawsuit. Assyrian Americans trace their roots to a biblical-era empire covering much of what is now Iraq and believe that Chaldeans are a separate religious subgroup. A fieldworker for the Census Bureau did fieldwork on the issue.

"I went into places where there were young people playing games, went into restaurants, and places where older people gathered," says Ms. McKenney.... She paid a visit to Assyrian neighborhoods in Chicago, where a large concentration of Assyrian Americans live. At a local community center and later that day at the Assyrian restaurant next door, community leaders presented their case for keeping the ancestry code the same. Over the same period, she visited Detroit to look into the Chaldean matter....

"I found that many of the people, especially the younger people, viewed it as an ethnic group, not a religion," says Ms. McKenney. She and Mr. Reed (Census Bureau ancestry research expert) concurred that enough differences existed that the Chaldeans could potentially qualify as a separate ancestry group.

In a conference call between interested parties, a compromise was struck. Assyrians and Chaldeans would remain under a single ancestry code, but the name would no longer be Assyrian, it would be Assyrian/Chaldean/Syriac–Syriac being the name of the Aramaic dialect that Assyrians and Chaldeans speak. "There was a meeting of the minds between all the representatives, and basically it was a unified decision to say that we're going to go under the same name," says the Chaldean Federation's Mr. Yono. (Kulish 2001:1)

- *Museum Encounters of the First Kind:* This encounter occurs in halls that use display cases as the primary approach to specimen presentation. Essentially, the visitor is a passive observer to the "objects of interest." Interaction is visual and may occur only at the awareness level. The visitor is probably not provoked to think or consider ideas beyond the visual display.

- *Museum Encounters of the Second Kind:* This encounter occurs in halls that employ a variety of approaches to engage the visitor's attention and/or learning. The visitor has several choices to become active in his/her participation. . . . The visitor is likely to perceive, question, compare, hypothesize, etc.

- *Museum Encounters of the Third Kind:* This encounter occurs in halls that invite high levels of visitor participation. Such an encounter invites the visitor to observe phenomena in process, to create, to question the experts, to contribute, etc. Interaction is personalized and within the control of the visitor. (Wolf and Tymitz 1978:39)

Here's a sample of a quite different classification scheme, this one developed from fieldwork by sociologist Rob Rosenthal (1994) as "a map of the terrain" of the homeless.

- *Skidders:* Most often women, typically in their 30s, grew up middle or upper class but "skidded" into homelessness as divorced or separated parents.
- *Street people:* Mostly men, often veterans, rarely married; highly visible net and know how to use the resources of the street.
- *Wingnuts:* People with severe mental problems, occasionally due to longterm alcoholism, a visible subgroup.
- *Transitory workers:* People with job skills and a history of full-time work who travel from town to town, staying months or years in a place, and then heading off to greener pastures.

Categories of how homeless people spend their time:

- Hanging out
- Getting by
- Getting ahead

As these examples illustrate, the first purpose of typologies is to distinguish aspects of an observed pattern or phenomenon *descriptively.* Once identified and distinguished, these types can later be used to make interpretations and they can be related to other observations to draw conclusions, but the first purpose is description based on an inductive analysis of the patterns that appear in the data.

The Intellectual and Mechanical Work of Analysis

Coding Data, Finding Patterns, Labeling Themes, and Developing Category Systems

> Classification is Ariadne's clue through the labyrinth of nature.
>
> —George Sand, *Nouvelles Lettres d'un Voyageur,* 1869

Thus far, I've provided lots of examples of the fruit of qualitative inquiry: patterns, themes, categories, and typologies. Let's back up now to consider how you recognize patterns in qualitative data and turn those patterns into meaningful categories and themes. This chapter could have started with this section, but I think it's helpful to understand what kinds of findings can be generated from qualitative analysis before delving very deeply into the mechanics, especially because the mechanics vary greatly and are undertaken differently by analysts in different disciplines and working from divergent frameworks. That said, some guidance can be offered.

Raw field notes and verbatim transcripts constitute the undigested complexity of reality. Simplifying and making sense out of that complexity constitutes the challenge of content analysis. **Developing some manageable classification or coding scheme is the first step of analysis.** Without classification there is chaos and confusion. Content analysis, then, involves identifying, coding, categorizing, classifying, and labeling the primary patterns in the data. This essentially means analyzing the core *content* of interviews and observations to determine what's significant. In explaining the process, I'll describe it as done traditionally, which is without software, to highlight the thinking and mechanics involved. Software programs provide different tools and formats for coding, but the principles of the analytical process are the same whether doing it manually or with the assistance of a computer program.

I begin by reading through all of my field notes or interviews and making comments in the margins or even attaching pieces of paper or Post-it notes that contain my notions about what I can do with the different parts of the data. This constitutes the first cut at organizing the data into topics and files. Coming up with topics is like constructing an index for a book or labels for a file system: You look at what is there and give it a name, a label. The copy on which these topics and labels are written becomes the indexed copy of the field notes or interviews. Exhibit 8.7 shows a sampling of codes from the field note margins of the evaluation of the wilderness education program I described in the chapter on observation.

The shorthand codes are written directly on the relevant data passages, either in the margins or with an attached tab on the relevant page. Many passages will illustrate more than one theme or pattern. The first reading through the data is aimed at developing the coding categories or classification system. Then a new reading is done to actually start the formal coding in a systematic way. Several readings of the data may be necessary before field notes or interviews can be completely indexed and coded. Some people find it helpful to use colored highlighting pens—color coding different idea or concepts. Using self-adhesive colored dots or Post-it notes offers another option. Some use a color printer to print out transcripts in different colors to make it easy to track the source of a quote when cutting and pasting different quotes into a theme.

> If sensing a pattern or "occurrence" can be called *seeing,* then the encoding of it can be called *seeing as.* That is, you first make the observation that something important or notable is occurring, and then you classify or describe it. . . . [T]he *seeing as* provides us with a link between a new or emergent pattern and any and all patterns that we have observed and considered previously. It also provides a link to any and all patterns that others have observed and considered previously through reading. (Boyatzis 1998:4)

EXHIBIT 8.7 First-Cut Coding Examples: Sample Codes From the Field Note Margins

Code: Ps Re Prog (meaning: participants' reactions to the program)
Code: Ps Re Ps (participants' reactions to other participants)
Code: Ob PP (observations of participants' interactions)
Code: Ob SS (observations of staff's interactions)
Code: Ob SP (observations of staff/participant interactions)
Code: Phil (statements about program philosophy)
Code: Prc (examples of program processes)
Code: P/outs (effects of program on participants/outcomes)
Code: S-G (subgroup formations)
Code: GPrc (group process)
Code: C! (conflicts)
Code: C-PP (conflicts among participants)
Code: C-SP (conflicts between staff and participants)
Code: C-SS (conflicts among staff)

NOTE: P = participants, S = staff. These codes are from the field note margins of the evaluation of the wilderness education program described in the chapter on observation. The shorthand codes (abbreviations) are written in the margins directly on the relevant data passages or quotations. The full labels in parentheses are the designations for separate files that contain all similarly coded passages.

Where more than one person is working on the analysis, it is helpful to have each person (or small teams for large projects) develop the coding scheme independently, then compare and discuss similarities and differences. Important insights can emerge from the different ways in which two people look at the same set of data, a form of analytical triangulation.

Often an elaborate classification system emerges during coding, particularly in large projects where a formal scheme must be developed that can be used by several trained coders. In the study of evaluation use that is the basis for *Utilization-Focused Evaluation* (Patton 1997a), graduate students in the evaluation program at the University of Minnesota conducted lengthy interviews with 60 project officers, evaluators, and federal decision makers. We developed a comprehensive classification system that would provide easy access to the data by any of the student or faculty researchers. Had only one investigator been intending to use the data, such an elaborate classification scheme would not have been necessary. However, to provide access to several students for different purposes, every paragraph in every interview was coded using a systematic and comprehensive coding scheme made up of 15 general categories with subcategories. Portions of the codebook used to code the utilization of evaluation data appear in Appendix 8.1 at the end of this chapter as an example of one kind of qualitative analysis codebook. This codebook was developed from four sources: (a) the standardized open-ended questions used in interviewing, (b) review of the utilization literature for ideas to be examined and hypotheses to be reviewed, (c) our initial inventory review of the interviews in which two of us read all the data and added categories for coding, and (d) a few additional categories added during coding when passages didn't fit well in the available categories.

Every interview was coded twice by two independent coders. Each individual code, including redundancies, was entered into our qualitative analysis database so that we could retrieve all passages (data) on any subject included in the classification scheme, with brief descriptions of the content of those passages. The analyst could then go directly to the full passages and complete interviews from which passages were extracted to keep quotations in context. In addition, the computer analysis permitted easy cross-classification and cross-comparison of passages for more complex analyses across interviews.

Some such elaborate coding system is routine for very rigorous analysis of a large amount of data. Complex coding systems with multiple coders categorizing every paragraph in every interview constitute a labor-intensive form of coding, one that would not be used for small-scale formative evaluation or action research projects. However, where data are going to be used by several people, or where data are going to be used over a long period of time, including additions to the data set over time, such a comprehensive and computerized system can be well worth the time and effort required.

Kibel (1999) developed a very sophisticated and comprehensive system for coding stories of successful outcomes attainment that he called "results mapping." His system permitted converting individualized stories into standardized categories that permitted aggregation, comparison, and even quantification. However, it required intensive training to use and proved too cumbersome and demanding for most human services and educational programs. As this was being written, he had gone back to the drawing board and was working on a more usable coding framework to capture and code the stories of program participants in a standardized framework, an approach to be called "journey mapping."

Classifying and coding qualitative data produce a framework for organizing and describing what has been collected during fieldwork. (For published examples of coding schemes, see Bernard 1998:325-28, 387-89, 491-92, 624; Bernard 2000:447-50; Boyatzis 1998; Strauss and Corbin 1998; Miles and Huberman 1994.) This descriptive phase of analysis builds a foundation for the interpretative phase when meanings are extracted from the data, comparisons are made, creative frameworks for interpretation are constructed, conclusions are drawn, significance is determined, and, in some cases, theory is generated.

Convergence and Divergence in Coding and Classifying

In developing codes and categories, a qualitative analyst must first deal with the challenge of *convergence* (Guba 1978)—figuring out what things fit together. Begin by looking for *recurring regularities* in the data. These regularities reveal patterns that can be sorted into categories. Categories should then be judged by two criteria: *internal homogeneity* and *external heterogeneity*. The first criterion concerns the extent to which the data that belong in a certain category hold together or "dovetail" in a meaningful way. The second criterion concerns the extent to which differences among categories are bold and clear. "The existence of a large number of unassignable or overlapping data items is good evidence of some basic fault in the category system" (Guba 1978:53). The analyst then works back and forth between the data

and the classification system to verify the meaningfulness and accuracy of the categories and the placement of data in categories. If several different possible classification systems emerge or are developed, some priorities must be established to determine which are more important and illuminative. Prioritizing is done according to the utility, salience, credibility, uniqueness, heuristic value, and feasibility of the classification schemes. Finally, the category system or set of categories is tested for completeness.

1. The set should have internal and external plausibility, a property that might be termed "integratability." Viewed internally, the individual categories should appear to be consistent; viewed externally, the set of categories should seem to comprise a whole picture. . . .

2. The set should be reasonably inclusive of the data and information that do exist. This feature is partly tested by the absence of unassignable cases, but can be further tested by reference to the problem that the inquirer is investigating or by the mandate given the evaluator by his client/sponsor. If the set of categories did not appear to be sufficient, on logical grounds, to cover the facets of the problem or mandate, the set is probably incomplete.

3. The set should be reproducible by another competent judge. . . . The second observer ought to be able to verify that (a) the categories make sense in view of the data which are available, and (b) the data have been appropriately arranged in the category system. . . . The category system auditor may be called upon to attest that the category system "fits" the data and that the data have been properly "fitted into" it.

4. The set should be credible to the persons who provided the information which the set is presumed to assimilate. . . . Who is in a better position to judge whether the categories appropriately reflect their issues and concerns than the people themselves? (Guba 1978:56-57)

After analyzing for convergence, the mirror analytical strategy involves examining *divergence*. By this Guba means the analyst must "flesh out" the patterns or categories. This is done by processes of extension (building on items of information already known), bridging (making connections among different items), and surfacing (proposing new information that ought to fit and then verifying its existence). The analyst brings closure to the process when sources of information have been exhausted, when sets of categories have been saturated so that new sources lead to redundancy, when clear regularities have emerged that feel integrated, and when the analysis begins to "overextend" beyond the boundaries of the issues and concerns guiding the analysis. Divergence also includes careful and thoughtful examination of data that doesn't seem to fit including *deviant cases* that don't fit the dominant identified patterns.

This sequence, convergence then divergence, should not be followed mechanically, linearly, or rigidly. The processes of qualitative analysis involve both technical and creative dimensions. As noted early in this chapter, no abstract processes of analysis, no matter how eloquently named and finely described, can substitute for the skill, knowledge, experience, creativity, diligence, and work of the qualitative analyst. "The task of converting field notes and observations about issues and concerns into systematic categories is a difficult one. No infallible procedure exists for performing it" (Guba 1978:53).

Determining Substantive Significance

In lieu of statistical significance, qualitative findings are judged by their *substantive significance*. The analyst makes an argument for substantive significance in presenting findings and conclusions, but readers and users of the analysis will make their own value judgments about significance. In determining substantive significance, the analyst addresses these kinds of questions:

- How solid, coherent, and consistent is the evidence in support of the findings? (Triangulation, for example, can be used in determining the strength of evidence in support of a finding.)
- To what extent and in what ways do the findings increase and deepen understanding of the phenomenon studied (*Verstehen*)?
- To what extent are the findings consistent with other knowledge? (A finding supported by and supportive of other work has confirmatory significance. A finding that breaks new ground has discovery or innovative significance.)
- To what extent are the findings useful for some intended purpose (e.g., contributing to theory, informing policy, summative or formative evaluation, or problem solving in action research)?

The qualitative analyst's effort at uncovering patterns, themes, and categories includes using both creative and critical faculties in making carefully considered judgments about what is really significant and meaningful in the data. Since qualitative analysts do not have statistical tests to tell them when an observation or pattern is significant, they must rely first on their own intelligence, experience, and judgment; second, they should take seriously the responses of those who were studied or participated in the inquiry; and third, the researcher or evaluator should consider the responses and reactions of those who read and review the results. Where all three—analyst, those studied, and reviewers—agree, one has *consensual validation* of the substantive significance of the findings. Where disagreements emerge, which is the more usual case, you get a more interesting life and the joys of debate.

INTEROCULAR SIGNIFICANCE

"If we are interested in real significance, we ignore little differences. . . . We ignore them because, although they are very likely real, they are very unlikely to hold up in replications. Fred Mosteller, the great applied statistician, was fond of saying that he did not care much for statistically significant differences, he was more interested in interocular differences, the differences that hit us between the eyes" (Scriven 1993:71).

Determining substantive significance can involve the making of the qualitative analyst's equivalent of Type I and Type II errors from statistics: The analyst may decide that something is not significant when in fact it is, or, conversely, the analyst may attribute significance to something that is meaningless. A story illustrates this problem of making judgments about what is really significant.

Halcolm was approached by a woman who handed him something. Without hesitation, Halcolm returned the object to the woman. The many young disciples who followed Halcolm to learn his wisdom began arguing among themselves about the special meaning of this interchange. A variety of interpretations were offered.

When Halcolm heard of the argument among his young followers, he called them together and asked each one to report on the significance of what they had observed. They offered a variety of interpretations. When they had finished he said, "The real purpose of the exchange was to enable me to show you that you are not yet sufficiently masters of observation to know when you have witnessed a meaningless interaction."

Logical Analysis

While working inductively, the analyst is looking for emergent patterns in the data. These patterns, as noted in preceding sections, can be represented as dimensions, categories, classification schemes, themes, and categories. Once some dimensions have been constructed, using either participant-generated constructions or analyst-generated constructions, it is sometimes useful to cross-classify different dimensions to generate new insights about how the data can be organized and to look for patterns that may not have been immediately obvious in the initial, inductive analysis. Creating cross-classification matrices is an exercise in logic.

The logical process involves creating potential categories by crossing one dimension or typology with another, and then working back and forth between the data and one's logical constructions, filling in the resulting matrix. This logical system will create a new typology, all parts of which may or may not actually be represented in the data. Thus, the analyst moves back and forth between the logical construction and the actual data in a search for meaningful patterns.

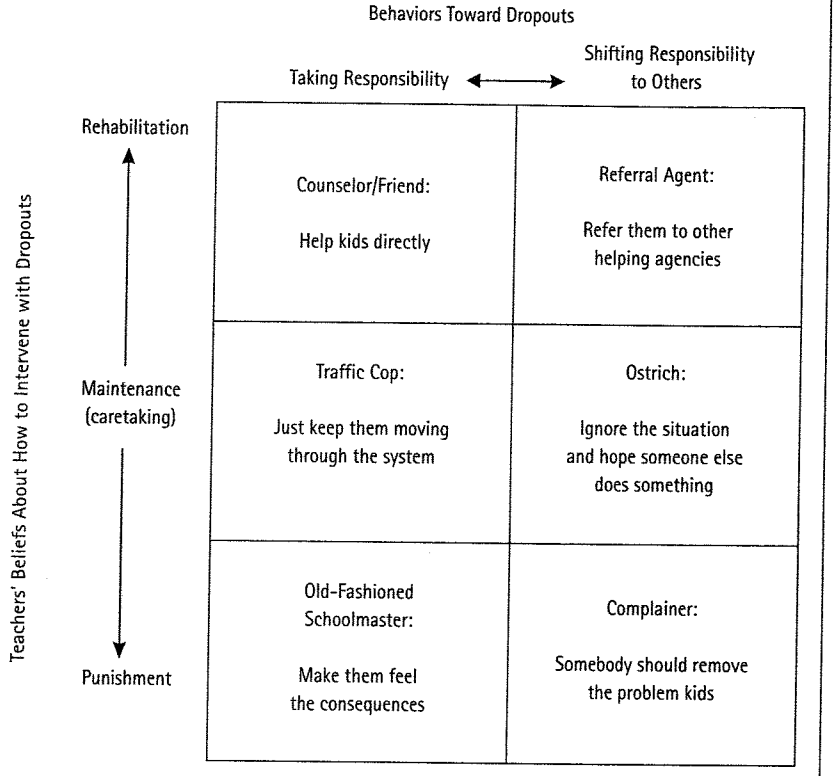
In the high school dropout program described earlier, the focus of the program was reducing absenteeism, skipping of classes, and tardiness. An external team of consultant/change agents worked with teachers in the school to help them develop approaches to the dropout problem. Observations of the program and interviews with the teachers gave rise to two dimensions. The first dimension distinguished *teachers' beliefs about what kind of programmatic intervention was effective* with dropouts, that is, whether they primarily favored maintenance (caretaking or warehousing of kids to just keep the schools running), rehabilitation efforts (helping kids with their problems), or punishment (no longer letting them get away with the infractions they had been committing in the past). *Teachers' behaviors toward dropouts* could be conceptualized along a continuum from taking direct responsibility for doing something about the problem, at one end, to shifting responsibility to others at the opposite end. Exhibit 8.8 shows what happens when these two dimensions are crossed. Six cells are created, each of which represents a different kind of teacher role in response to the program.

The evaluator analyst working with these data had been struggling in the inductive analysis to find the patterns that would express the different kinds of teacher roles manifested in the program. He had tried several constructions, but none of them quite seemed to work. The labels he came up with were not true to the data. When he described to me the other dimensions he had generated, I suggested that he cross them, as shown in Exhibit 8.8. When he did, he said that "the whole thing immediately fell into place." Working back and forth between the matrix and the data, he generated a full descriptive analysis of diverse and conflicting teacher roles.

The description of teacher roles served several purposes. First, it gave teachers a mirror image of their own behaviors and attitudes. It could thus be used to help teachers make more explicit their own understanding of roles. Second, it could be used by the external team of consultants to more carefully gear their programmatic efforts toward different kinds of teachers who were acting out the different roles. The matrix makes it clear that an omnibus strategy for helping teachers establish a program that would reduce dropouts would not work in this school; teachers manifesting different roles would need to be approached and worked with in different ways. Third, the description of teacher roles provided insights into the nature of the dropout problem. Having identified the various roles, the evaluator analyst had a responsibility to report on the distribution of roles in this school and the observed consequences of that distribution.

One must be careful about this kind of logical analysis. It is easy for a matrix to begin to manipulate the data as the analyst is tempted to force data into categories created by the cross-classification to fill out the ma-

EXHIBIT 8.8 An Empirical Typology of Teacher Roles in Dealing With High School Dropouts



trix and make it work. Logical analysis to generate new sensitizing concepts must be tested out and confirmed by the actual data. **Such logically derived sensitizing concepts provide conceptual hypotheses to test.** Levin-Rozalis (2000), following American philosopher Charles Sanders Pierce of the pragmatic school of thought, suggests labeling the logical generation and discovery of hypotheses and findings *abduction* to distinguish such logical analysis from data-based inductive analysis and theory-derived deductive analysis.

Denzin (1978b) has explained abduction in qualitative analysis as a combination of inductive and deductive thinking with logical underpinnings:

> Naturalists inspect and organize behavior specimens in ways which they hope will permit them to progressively reveal and better understand the underlying problematic features of the social world under study. They seek to ask the question or set of questions which will make that world or social organization understandable. They do not approach that world with a rigid set of preconceived hypotheses. They are initially directed toward an interest in the routine and taken-for-granted features of that world. They ask how it is that the persons in question know about producing orderly patterns of interaction and meaning. . . . They do not use a full-fledged deductive hypothetical scheme in thinking and developing propositions. Nor are they fully inductive, letting the so-called "facts" speak for themselves. Facts do not speak for themselves. They must be interpreted. Previously developed deductive models seldom conform with empirical data that are gathered. The method of abduction combines the deductive and inductive models of proposition development and theory construction. It can be defined as *working from consequence back to cause or antecedent*. The observer records the occurrence of a particular event, and then works back in time in an effort to reconstruct the events (causes) that produced the event (consequence) in question. (pp. 109-10)

Famous fictional detective Sherlock Holmes relied on abduction more than deduction or induction, at least according to a review by William Sanders (1976) of Holmes's analytical thinking in *The Sociologist as Detective.* We've already suggested that the qualitative analyst is part scientist and part artist. Why not add the qualitative analyst as detective? The empty cell of a logically derived matrix (the cell created by crossing two dimensions for which no name or label immediately occurs) creates an intersection of a possible consequence and antecedent that begs for abductive exploration and explanation. Each such intersection of consequence and antecedent sensitizes the analyst to the possibility of a category of activity or behavior that either has been overlooked in the data or is logically a possibility in the setting but has not been manifested. The latter cases are important to note because their importance derives from the fact that they did not occur. The next section will look in detail at a process/outcomes matrix ripe with abductive possibilities.

Nick Smith (1980) used a matrix to draw important distinctions among different kinds of evaluation use by asking if "techniques of effective evaluation utilization differ with regard to audience or entity studied." His matrix crossed a programs/policies dimension (what can be studied?) with a program managers/policymakers distinction (who is to be aided?) to show different kinds of utilization in each case. Exhibit 8.9 shows a matrix for mapping stakeholders' stakes in a program or policy. This matrix can be used to guide data collection as well as analysis. Later this chapter presents a process/outcomes matrix for crossing program processes with program outcomes as a qualitative analysis framework.

MODUS OPERANDI ANALYSIS

Modus operandi (MO) was conceptualized by evaluation theorist Michael Scriven (1976) as a way of inferring causality when experimental designs are impractical or inappropriate. The MO approach, drawing from forensic science, makes the inquirer a detective. Detectives compare clues discovered at a crime scene to known patterns of possible suspects. Those suspects whose MO (method of operating) does not fit the crime scene pattern are eliminated from further investigation.

Translated to research and evaluation, the inquirer/detective observes some pattern and makes a list of possible causes. Evidence from the inquiry is compared to the list of suspects (possible causes). Those possible causes that do not fit the pattern of evidence can be eliminated from further consideration. Following the autopsy-like logic of Occam's razor, as each possible cause is compared to the evidence, that cause supported by the preponderance of evidence and offering the simplest interpretation among competing possibilities is preferred and considered most likely.

To study how schools used planning and evaluation processes, Campbell (1983) developed a 500-cell matrix (Exhibit 8.10) that begins (but just begins) to reach the outer limits of what one can do in three-dimensional space. Campbell used this matrix to guide data collection and analysis in studying how the mandated, statewide educational planning, evaluation, and reporting system in Minnesota was used. She examined 5 levels of use (high school, . . . community, district), 10 components of the statewide project (planning, goal-setting, . . . student involvement), and 10 factors affecting utilization (personal factor, political factors, . . .). Exhibit 8.10 again illustrates matrix thinking for both data organization and analytical/conceptual purposes.

Miles and Huberman (1994) have provided a rich source of ideas and illustrations of how to use matrices in qualitative analysis. They include examples of a time-ordered matrix, role-ordered matrix, role-by-time matrix, role-by-group matrix, conceptually clustered matrix, site dynamics matrix, and predictor-outcome matrix, among others. Their *Sourcebook* provides a variety of ideas for analytical approaches to qualitative data including a variety of concept mapping and visual display techniques.

Other ways of graphing and mapping findings include concept mapping and cognitive mapping. For a detailed discussion of concept mapping as a way of visually displaying data to facilitate analytic clarity and depicting relationships in a network or system, see Trochim (1989). For an example of cognitive mapping as a way of displaying qualitative results showing the "structure and content of decision schemas" among senior managers, see Clarke and Mackaness (2001).

A Process/Outcomes Matrix

The linkage between processes and outcomes constitutes such a fundamental issue in many program evaluations that it provides a particularly good focus for illustrating qualitative matrix analysis. As discussed in Chapter 4, qualitative methods can be particularly appropriate for evaluation where program processes, impacts, or both are largely unspecified or difficult to measure. This can be the case because the outcomes are meant to be individualized;

EXHIBIT 8.9 Mapping Stakeholders' Stakes

How high are the stakes for various primary stakeholders?	Estimate of Various Stakeholders' Inclination Toward the Program: Favorable	Neutral or Unknown	Antagonistic
High			
Moderate			
Low			

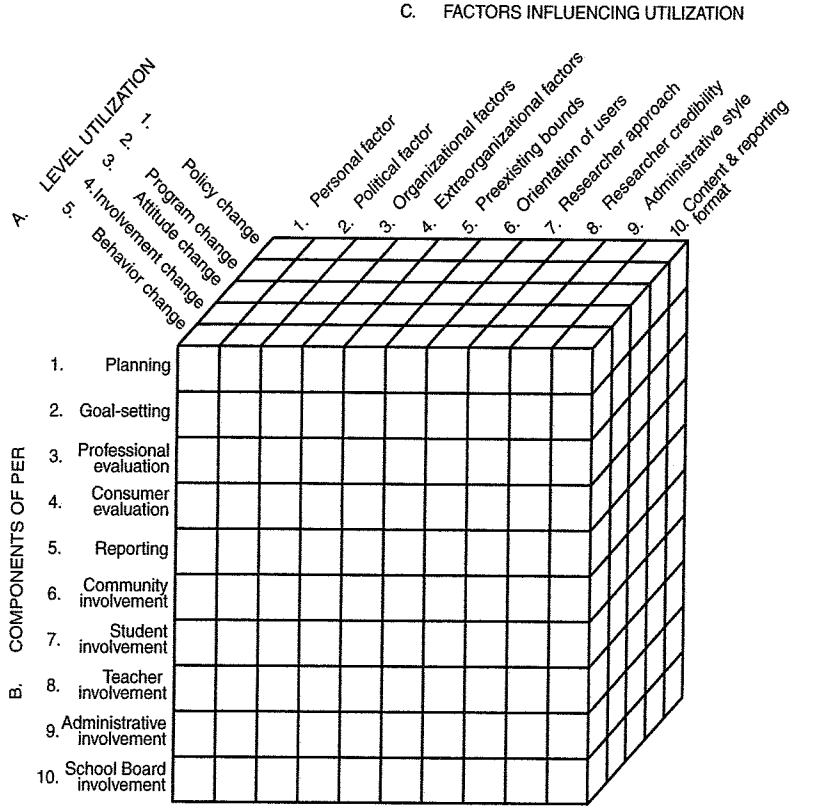
SOURCE: Patton (1997a:344).
NOTE: Construct illustrative case studies for each cell based on fieldwork.

sometimes the program is simply uncertain what its outcomes will be; and, in many programs, neither processes nor impacts have been carefully articulated. Under such conditions, one purpose of the evaluation may be to illuminate program processes, program impacts, and the linkages between the two. This task can be facilitated by constructing a process/outcomes matrix to organize the data.

Exhibit 8.11 (p. 474) shows how such a matrix can be constructed. Major program processes or identified implementation components are listed along the left side. Types or levels of outcomes are listed across the top. The category systems for program processes and outcomes are developed from the data in the same way that other typologies are constructed (see previous sections). The cross-classification of any process with any outcome produces a cell in the matrix; for example, the first cell in Exhibit 8.11 is created by the intersection of process 1 with outcome a. The information that goes in cell 1a (or any other cell in the matrix) describes linkages, patterns, themes, experiences, content, or actual activities that help us understand the relationships between processes and outcomes. Such relationships may have been identified by participants themselves during interviews or discovered by the evaluator in analyzing the data. In either case, the process/outcomes matrix becomes a way of organizing, thinking about, and presenting the qualitative connections between program implementation dimensions and program impacts.

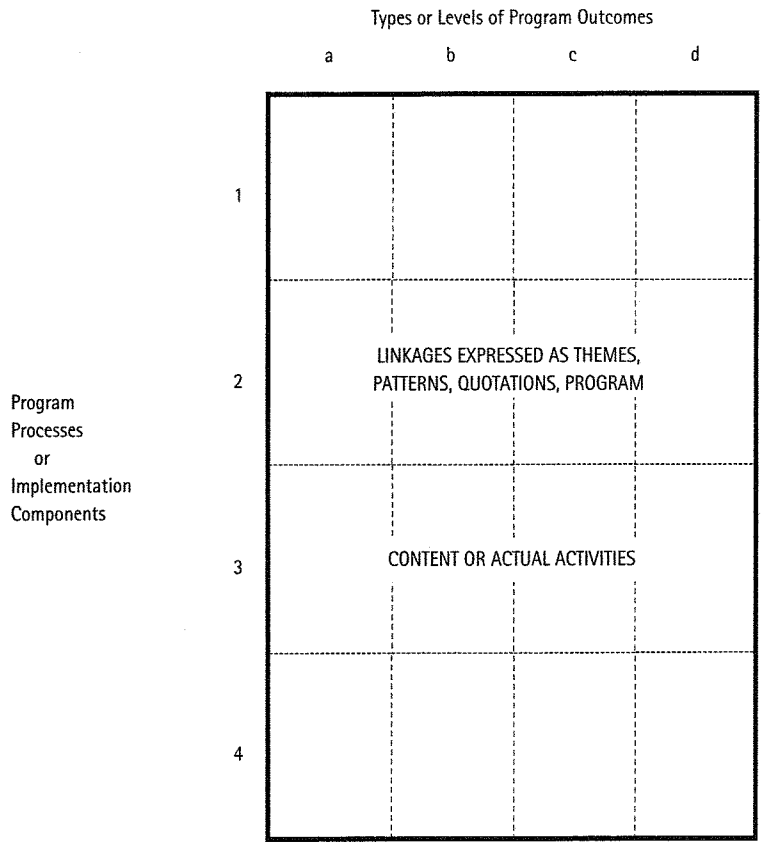
An example will help make the notion of the process/outcomes matrix more concrete. Suppose we have been evaluating a juvenile justice program that places delinquent youth in foster homes. We have visited several foster homes, observed what the home environments are like, and interviewed the juveniles, the foster home parents, and the probation officers. A *regularly recurring process theme* concerns the importance of "letting kids learn to make their own decisions." A *regularly recurring outcomes theme* involves "keeping the kids

EXHIBIT 8.10 Conceptual Guide for Data Collection and Analysis: Utilization of Planning, Evaluation, and Reporting



straight" (reduced recidivism). By crossing the program process ("kids making their own decisions") with the program outcome ("keeping kids straight"), we create a data analysis question: What actual decisions do juveniles make that are supposed to lead to reduced recidivism? We then carefully review our field notes and interview quotations looking for data that help us understand how people in the program have answered this question based on their actual behaviors and practices. By describing what decisions juveniles actually make in the program, the decision makers to whom our findings are reported can make their own judgments about the strength or weakness of the linkage between this program process and the desired outcome. Moreover, once the process/outcomes descriptive analysis of linkages has been completed, the evaluator is at liberty to offer interpretations and judgments about the nature and quality of this process/outcomes connection.

EXHIBIT 8.11 Matrix of Linkages Between Program Processes and Impacts



SOURCE: Campbell (1983).

An Analysis Example: Recognizing Processes, Outcomes, and Linkages in Qualitative Data

Because of the centrality of the sensitizing concepts "program process" and "program outcome" in evaluation research, it may be helpful to provide a more detailed description of how these concepts can be used in qualitative analysis. How does one recognize a program process? Learning to identify and label program processes is a critical evaluation skill. This sensitizing notion of "process" is a way of talking about the common action that cuts across program activities, observed interactions, and program content. The example I shall use involves

data from the wilderness education program I evaluated and discussed throughout the observations chapter (Chapter 6). That program, titled the Southwest Field Training Project, used the wilderness as a training arena for professional educators in the philosophy and methods of experiential education by engaging those educators in their own experiential learning process. Participants went from their normal urban environments into the wilderness for 10 days at a time, spending at least one day and night completely alone in some wilderness spot "on solo." At times, while backpacking, the group was asked to walk silently so as not to be distracted from the wilderness sounds and images by conversation. In group discussions, participants were asked to talk about what they had observed about the wilderness and how they felt about being in the wilderness. Participants were also asked to write about the wilderness environment in journals. *What do these different activities have in common, and how can that commonality be expressed?*

We begin with several different ways of abstracting and labeling the underlying process:

- Experiencing the wilderness
- Learning about the wilderness
- Appreciating the wilderness
- Immersion in the environment
- Developing awareness of the environment
- Becoming conscious of the wilderness
- Developing sensitivity to the environment

Any of these phrases, each of which consists of some verb form (experiencing, learning, developing, and so on) and some noun form (wilderness, environment), captures some nuance of the process. The qualitative analyst works back and forth between the data (field notes and interviews) and his or her conception of what it is that needs to be expressed to find the most fitting language to describe the process. What language do people in the program use to describe what those activities and experiences have in common? What language comes closest to capturing the essence of this particular process? What level of generality or specificity will be most useful in separating out this particular set of things from other things? How do program participants and staff react to the different terms that could be used to describe the process?

It's not unusual during analysis to go through several different phrases before finally settling on exact language that will go into a final report. In the Southwest Field Training Project, we began with the concept label "Experiencing the wilderness." However, after several revisions, we finally described the process as "developing sensitivity to the environment" because this broader label permitted us to include discussions and activities that were aimed at helping participants understand how they were affected by and acted in their normal institutional environments. "Experiencing the wilderness" became a specific subprocess that was part of the more global process of "developing sensitivity to the environment." Program participants and staff played a major role in determining the final phrasing and description of this process.

Below are other processes identified as important in the implementation of the program:

- Encountering and managing stress
- Sharing in group settings
- Examining professional activities, needs, and commitments

- Assuming responsibility for articulating personal needs
- Exchanging professional ideas and resources
- Formally monitoring experiences, processes, changes, and impacts

As you struggle with finding the right language to communicate themes, patterns, and processes, keep in mind that there is no absolutely "right" way of stating what emerges from the analysis. There are only more and less useful ways of expressing what the data reveal.

Identifying and conceptualizing program outcomes and impacts can involve induction, deduction, and/or logical analysis. *Inductively,* the evaluator analyst looks for changes in participants, expressions of change, program ideology about outcomes and impacts, and ways that people in the program make distinctions between "those who are getting *it*" and "those who aren't getting *it*" (where *it* is the desired outcome). In highly individualized programs, the statements about change that emerge from program participants and staff may be global. Such outcomes as "personal growth," increased "awareness," and "insight into self" are difficult to operationalize and standardize. That is precisely the reason qualitative methods are particularly appropriate for capturing and evaluating such outcomes. The task for the evaluator analyst, then, is to describe what actually happens to people in the program and what they say about what happens to them. Appendix 8.3 at the end of this chapter presents portions of the report describing the effects on participants of their experiences in the wilderness education program. The data come from in-depth, open-ended interviews. This report excerpt shows how descriptive data (direct quotations) are used to support and explain inductive thematic analysis.

Deductively, the evaluator analyst may draw from outcomes identified in similar programs or from goal statements found in program proposals, brochures, and planning documents that were used to guide data collection.

Logically (or abductively), constructing a process/outcomes matrix can suggest additional possibilities. That is, where data on both program processes and participant outcomes have been sorted, analysis can be deepened by organizing the data through a logical scheme that links program processes to participant outcomes. Such a logically derived scheme was used to organize the data in the Southwest Field Training Project. First, a classification scheme that described different types of outcomes was conceptualized:

(a) changes in skills,
(b) changes in attitudes,
(c) changes in feelings,
(d) changes in behaviors, and
(e) changes in knowledge.

These general themes provided the reader of the report with examples of and insights into the kinds of changes that were occurring and how those changes that were perceived by participants to be related to specific program processes. I emphasize that the process/outcomes matrix is merely an organizing tool; the data from participants themselves and from field observations provide the actual linkages between processes and outcomes.

What was the relationship between the program process of "developing sensitivity to the environment" and these individual-level outcomes? Space permits only a few examples from the data.

Skills: "Are you kidding? I learned how to survive without the comforts of civilization. I learned how to read the terrain ahead and pace myself. I learned how to carry a heavy load. I learned how to stay dry when it's raining. I learned how to tie a knot so that it doesn't come apart when pressure is applied. You think those are metaphors for skills I need in my work? You're damn right they are."

Attitudes: "I think it's important to pay attention to the space you're in. I don't want to just keep going through my life oblivious to what's around me and how it affects me and how I affect it."

Feelings: "Being out here, especially on solo, has given me confidence. I know I can handle a lot of things I didn't think I could handle."

Behaviors: "I use my senses in a different way out here. In the city you get so you don't pay much attention to the noise and the sounds. But listening out here I've also begun to listen more back there. I touch more things too, just to experience the different textures."

Knowledge: "I know about how this place was formed, its history, the rock formations, the effects of the fires on the vegetation, where the river comes from and where it goes."

A different way of thinking about organizing data around outcomes was to think of different levels of impact: effects at the individual level, effects on the group, and effects on the institutions from which participants came into the program. The staff hoped to have impacts at all of these levels. Thus, it also was possible to organize the data by looking at what themes emerged when program processes were crossed with levels of impact. How did "developing sensitivity to the environment" affect individuals? How did the process of "developing sensitivity to the environment" affect the group? What was the effect of "developing sensitivity to the environment" on the institutions to which participants returned after their wilderness experiences? The process/outcomes matrix thus becomes a way of asking questions of the data, an additional source of focus in looking for themes and patterns in hundreds of pages of field notes and interview transcriptions.

Interpreting Findings

> Simply observing and interviewing do not ensure that the research is qualitative; the qualitative researcher must also interpret the beliefs and behaviors of participants.
>
> —Valerie J. Janesick (2000:387)

Interpreting for Meaning

Qualitative interpretation begins with elucidating meanings. The analyst examines a story, a case study, a set of interviews, or a collection of field notes and asks, What does this mean? What does this tell me about the nature of the phenomenon of interest? In asking these questions, the analyst works back and forth between the data or story (the evidence) and his or her own perspective and understandings to make sense of the ev-

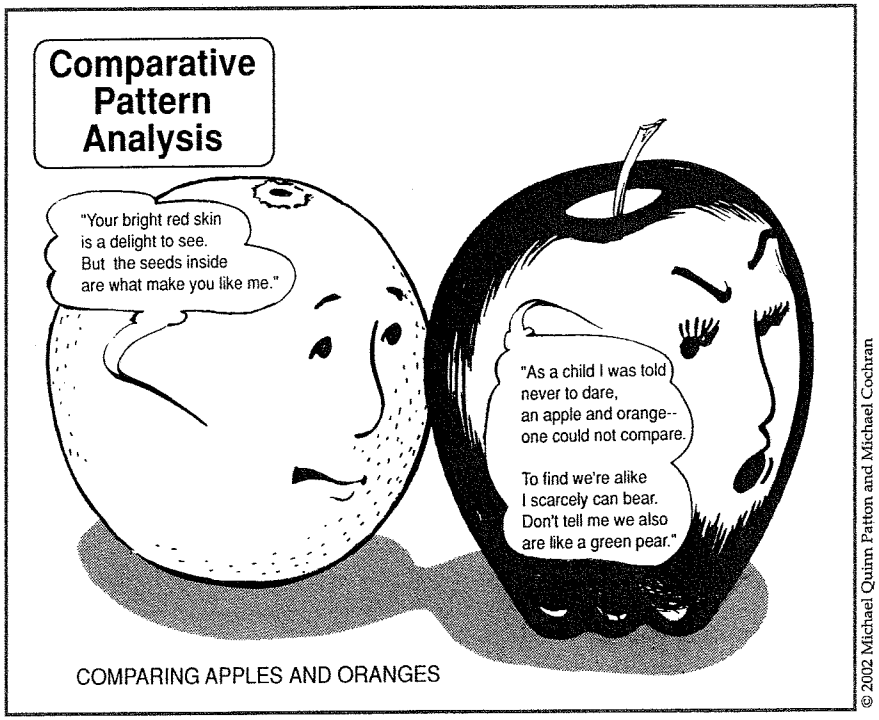
idence. Both the evidence and the perspective brought to bear on the evidence need to be elucidated in this choreography in searching of meaning. Alternative interpretations are tried and tested against the data.

For example, when we analyzed follow-up interviews with participants who had gone through intensive community leadership training, we found a variety of expressions of uncertainty about what they should do with their training. In the final day of a six-day retreat, after learning how to assess community needs, work with diverse groups, communicate clearly, empower people to action, and plan for change, they were cautioned to go easy in transitioning back to their communities and take their time in building community connections before taking action. What program staff meant as a last-day warning about not returning to the community as a bull in a china shop and charging ahead destructively had, in fact, paralyzed the participants and made them afraid to take any action at all. The program, which intended to poise participants for action, had inadvertently left graduates in "action paralysis" for fear of making mistakes. That *meaning*, "action paralysis," emerged from the data analysis through interpretation. No one used that specific phase. Rather, we interpreted that as the essence of what interviewees were reporting through a haze of uncertainties, ambiguities, worried musings, and wait-and-see-before-acting reflections.

Narrative analysis (see Chapter 3) has focused specifically on how to interpret stories, life history narratives, historical memoirs, and creative nonfiction to reveal cultural and social patterns through the lens of individual experiences. This "biographical turn in social science" (Chamberlayne, Bornat, and Wengraf 2000) or "narrative turn" in qualitative inquiry (Bochner 2001) honors people's stories as data that can stand on their own as pure description of experience or be analyzed for connections between the psychological, sociological, cultural, political, and dramaturgic dimensions of human experience to reveal larger meanings. Much of the analytical focus in narrative studies concerns the nature of interpretation (Denzin 1989a, 1989b, 1997b). How to interpret stories and, more specifically, the texts that tell the stories is at the heart of narrative analysis (Lieblich, Tuval-Mashiach, and Zilber 1998). Meaning-making also comes from comparing stories and cases and can take the form of inquiring into and interpreting causes, consequences, and relationships.

Comparisons, Causes, Consequences, and Relationships

Thus far, this chapter has emphasized the tasks of organization, description, and linking. Even the matrix analyses just discussed were aimed at organizing and describing the themes, patterns, activities, and content of a study rather than elucidating causal linkages between processes and outcomes. To the extent that you are describing the causal linkages suggested by and believed in by those you've interviewed, you haven't crossed the line from description into causal interpretation. And, indeed, much qualitative inquiry stops with the presentation of case data and cross-case descriptive comparisons aimed at enhancing understanding rather than explaining "why." Stake (1995) has emphasized that "explanations are intended to promote understanding and understanding is sometimes expressed in terms of explanation—but the two aims are epistemologically quite different . . . , a difference important to us, the difference between case studies seeking to identify cause and effect relationships and those seeking



understanding of human experience" (p. 38). Appreciating and respecting this distinction, once case studies have been written and descriptive typologies have been developed and supported, the tasks of organization and description are largely complete and it is appropriate, if desired, to move on to making comparisons and considering causes, consequences, and relationships.

Statements about which things appear to lead to other things, for example, which aspects of a program produce certain effects, and how processes lead to outcomes are natural areas for interpretation and hypothesizing. When careful study of the data gives rise to ideas about causal linkages, there is no reason to deny those interested in the study's results the benefit of those insights. What is important is that such statements be clearly qualified as what they are: interpretation and hypothesizing.

A researcher who has lived in a community for an extensive period of time will likely have insights into why things happen as they do there. A qualitative analyst who has spent hours interviewing people will likely come away from the analysis with possible explanations for how the phenomenon of interest takes the forms and has the effects it does. The evaluator who has studied a program, lived with the data from the field, and reflected at length about the patterns and themes that run through the data is in as good a position as anyone else at that point to speculate about meanings, make conjectures about significance, and offer hypotheses about relationships. Moreover, if decision makers and evaluation users have

asked for such information—and in my experience they virtually always welcome these kinds of analyses—there is no reason not to share insights with them to help them think about their own causal presuppositions and hypotheses and to explore what the data do and do not support in the way of interconnections and potential causal relationships.

Lofland's (1971) musings are helpful in clarifying the role of causal speculation in qualitative analysis. He argued that the strong suit of the qualitative researcher is the ability "to provide an orderly description of rich, descriptive detail" (p. 59); the consideration of causes and consequences using qualitative data should be a "tentative, qualified, and subsidiary task" (p. 62).

> It is perfectly appropriate that one be curious about causes, so long as one recognizes that whatever account or explanations he develops is conjecture. In more legitimacy-conferring terms, such conjectures are called hypotheses or theories. It is proper to devote a portion of one's report to conjectured causes of variations so long as one clearly labels his conjectures, hypotheses or theories as being that. (Lofland 1971:62)

Interpretation, by definition, involves going beyond the descriptive data. Interpretation means attaching significance to what was found, making sense of findings, offering explanations, drawing conclusions, extrapolating lessons, making inferences, considering meanings, and otherwise imposing order on an unruly but surely patterned world. The rigors of interpretation and bringing data to bear on explanations include dealing with rival explanations, accounting for disconfirming cases, and accounting for data irregularities as part of testing the viability of an interpretation. All of this is expected—and appropriate—as long as the researcher owns the interpretation and makes clear the difference between description and interpretation.

Schlechty and Noblit (1982) concluded that an interpretation may take one of three forms:

- Making the obvious obvious
- Making the obvious dubious
- Making the hidden obvious

This captures rather succinctly what research colleagues, policymakers, and evaluation stakeholders expect: (1) Confirm what we know that is supported by data, (2) disabuse us of misconceptions, and (3) illuminate important things that we didn't know but should know. Accomplish these three things and those interested in the findings can take it from there.

A particular limitation as one moves into the arena of interpretations about causes, consequences, and relationships concerns our capacity to escape simplistic linear modeling. We fall back on the linear assumptions of much quantitative analysis and begin to specify isolated independent and dependent variables that are mechanically linked together out of context. In contrast, the challenge of qualitative inquiry involves portraying a *holistic picture* of what the phenomenon, setting, or program is like and struggling to understand the fundamental nature of a particular set of activities and people *in a specific context*. "Particularization is an important aim, coming to know the particularity of the case" (Stake 1995:39). Simple statements of linear relationships may be more distorting than illuminating. The ongoing challenge, paradox, and dilemma of qualitative analysis engage us in constantly moving back and forth between the phenomenon of interest and our abstractions of that phenomenon, between the descriptions of what has occurred and our interpretations of those descriptions, between the complexity of reality and our simplifications of those complexities, between the circularities and interdependencies of human activity and our need for linear, ordered statements of cause-effect.

Gregory Bateson traced at least part of the source of our struggle to the ways we have been taught to think about things. We are told that a *noun* is the "name of a person, place, or thing." We are told that a *verb* is an "action word." These kinds of definitions, Bateson argues, were the beginning of teaching us that "the way to define something is by what it supposedly is in itself—not by its relations to other things."

> Today all that should be changed. Children could be told a noun is a word having a certain relationship to a predicate. A verb has a certain relationship to a noun, its subject, and so on. Relationship could now be used as a basis for definition, and any child could then see that there is something wrong with the sentence, " 'Go' is a verb." . . . We could have been told something about the pattern which connects: that all communication necessitates context, and that without context there is no meaning. (Bateson 1978:13)

Without belaboring this point about the difference between linear causal analysis (x causes y) and a holistic perspective that describes the interdependence and interrelatedness of complex phenomena, I would simply offer the reader a Sufi story. I suggest trying to analyze the data represented by the story in two ways. First, try to isolate specific variables that are important in the story, deciding which are the independent and which the dependent variables, and then write a statement of the form: These things caused this thing. Then read the story again. For the second analysis, try to distinguish among and label the different meanings of the situation expressed by the characters observed in the story, then write a statement of the form: These things and these things came together to create _____. Don't try to decide that one approach is right and the other is wrong; simply try to experience and understand the two approaches. Here's the case data, otherwise known as a story.

> Walking one evening along a deserted road, Mulla Nasrudin saw a troop of horsemen coming towards him. His imagination started to work; he imagined himself captured and sold as a slave, or robbed by the oncoming horsemen, or conscripted into the army. Fearing for his safety, Nasrudin bolted, climbed a wall into a graveyard, and lay down in an open tomb.
>
> Puzzled at this strange behavior the men —honest travelers—pursued Nasrudin to see if they could help him. They found him stretched out in the grave, tense and quivering.
>
> "What are you doing in that grave? We saw you run away and see that you are in a state of great anxiety and fear. Can we help you?"
>
> Seeing the men up close Nasrudin realized that they were honest travelers who were genuinely interested in his welfare. He didn't want to offend them or embarrass himself by telling them how he had misperceived them, so Nasrudin simply sat up in the grave and said, "You ask what I'm doing in this grave. If you must know, I can tell you only this: *I* am here because of you, and you are here because of me." (adapted from Shah 1972:16)

Theory-Based Analysis Approaches

Thus far, this chapter has been looking at generic approaches to qualitative analysis.

The next sections examine how certain theoretical and philosophical perspectives affect analysis. Every perspective presented in Chapter 3 on theoretical orientations has implications for analysis in that the fundamental premises articulated in a theoretical framework or philosophy are meant to inform how one makes sense of the world. Likewise, the various applications in Chapter 4 affect analysis in that they shape the questions that guide the inquiry and therefore the analysis. While Chapters 3 and 4 were presented early in this book to help researchers and evaluators select frameworks to guide their inquiry, those chapters also offer frameworks for analyzing data. The two sections that follow contrast two of the major theory-oriented analytical approaches discussed in Chapter 3, but this time focusing on analysis. The two contrasting approaches are phenomenological analysis and grounded theory.

Phenomenological Analysis

> Phenomenology asks for the very nature of a phenomenon, for that which makes a some-"thing" what it is—and without which it could not be what it is.
>
> —Max Van Manen (1990:10)

Phenomenological analysis seeks to grasp and elucidate the meaning, structure, and essence of the lived experience of a phenomenon for a person or group of people. Before I present the steps of one particular approach to phenomenological analysis, it is important to note that phenomenology has taken on a number of meanings, has a number of forms, and encompasses varying traditions including transcendental phenomenology, existential phenomenology, and hermeneutic phenomenology (Schwandt 2001). Moustakas (1994:13) further distinguishes empirical phenomenological from transcendental phenomenology. Gubrium and Holstein (2000:488) add the label "social phenomenology." Van Manen (1990) prefers "hermeneutical phenomenological reflection." Sonnemann (1954:344) introduced the term "phenomenography" to label phenomenological investigation aimed at "a descriptive recording of immediate subjective experience as reported." Harper (2000: 727) talks of looking at images through "the phenomenological mode," that is, from the perspective of the self: "from the phenomenological perspective, photographs express the artistic, emotional, or experiential intent of the photographer." Add to this confusion of terminology the difficulty of distinguishing phenomenological philosophy from phenomenological methods and phenomenological analysis, all of which adds to tensions and contradictions in qualitative inquiry (Gergen and Gergen 2000).

> The use of the term phenomenology in contemporary versions of qualitative inquiry in North America tends to reflect a subjectivist, existentialist, and non-critical emphasis not present in the Continental tradition represented in the work of Husserl and Heidegger. The latter viewed the phenomenological project, so to speak, as an effort to get beneath or behind subjective experience to reveal the genuine, objective nature of things, and as a critique of both taken-for-granted meanings and subjectivism. Phenomenology, as it is commonly discussed in accounts of qualitative research, emphasizes just the opposite: It aims to identify and describe the subjective experiences of respondents. It is a matter of studying everyday experience from the point of view of the subject, and it shuns critical evaluation of forms of social life. (Schwandt 2001:192)

A PHENOMENOGRAPHY OF ADULT CRITICAL REFLECTION

Phenomenography applied to adult education focuses on exploring and portraying how learners experience and interpret learning. Brookfield (1994) identified five themes related to critical reflection "as an adult capacity"; he examined "the way adults feel their way through critically reflective episodes—to understanding the visceral, emotive dimensions of this process" (p. 203). He found the following five themes in journals, conversations, and autobiographies:

- *Impostership*—the sense that participating in critical thought is an act of bad faith
- *Cultural suicide*—the recognition that challenging conventional assumptions risks cutting people off from the cultures that have defined and sustained them up to the that point in their lives
- *Lost innocence*—the move from dualistic certainty toward dialectical and multiplistic modes of reasoning
- *Roadrunning*—the incrementally fluctuating flirtation with new modes of thought and being
- *Community*—the importance of a sustaining support group to those in critical process.

These distinctions and variations in use make it relatively meaningless to describe "phenomenological analysis" as if it constituted a single approach or perspective. I have chosen to include here the phenomenological approach to analysis taken by Clark Moustakas and Bruce Douglass of The Union Institute Graduate College (Cincinnati, Ohio) and the Center for Humanistic Studies (Detroit, Michigan). More than most approaches, they focus on the analytical process itself (Douglass and Moustakas 1985). Moreover, the extensive writings of Moustakas on phenomenology (1961, 1988, 1990b, 1994, 1995) are readily accessible and highly readable. Finally, they are esteemed colleagues whose work I know, appreciate, and, no small point when dealing with phenomenology, I think I understand. They have developed an outline of phenomenological analysis that they use in graduate seminars. Much of this section is based on their work and that of their students. Before presenting the steps and procedures of phenomenological analysis, let's get deeper into the perspective and language.

> Husserl's transcendental phenomenology is intimately bound up in the concept of intentionality. In Aristotelian philosophy the term *intention* indicates the orientation of the mind to its object; the object exists in the mind in an intentional way. . . .
>
> *Intentionality* refers to consciousness, to the internal experience of being conscious of something; thus the act of consciousness and the object of consciousness are intentionally related. Included in understanding of consciousness are important background factors

such as stirrings of pleasure, shapings of judgment, or incipient wishes.

Knowledge of intentionality requires that we be present to ourselves and things in the world, that we recognize that self and world are inseparable components of meaning. . . .

Consider the experience of joy on witnessing a beautiful landscape. The landscape is the *matter.* The landscape is also the object of the intentional act, for example, its perception in consciousness. The matter enables the landscape to become manifest as an object rather than merely exist in consciousness.

The *interpretive form* is the perception that enables the landscape to appear; thus the landscape is self-given; my perception creates it and enables it to exist in my consciousness. The *objectifying quality* is the actuality of the landscape's existence, as such, while the *non-objectifying quality* is a joyful feeling evoked in me by the landscape.

Every intentionality is composed of a *nomea* and *noesis.* The nomea is not the real object but the phenomenon, not the tree but the appearance of the tree. The object that appears in perception varies in terms of when it is perceived, from what angle, with what background of experience, with what orientation of wishing, willing, or judging, always from the vantage point of the perceiving individual. . . . The tree is out there present in time and space while the perception of the tree is in consciousness. . . .

Every intentional experience is also noetic. . . .

In considering the nomea-noesis correlate . . . , the "perceived as such" is the nomea; the "perfect self-evidence" is the noesis. Their relationship constitutes the intentionality of consciousness. For every nomea, there is a noesis; for every noesis, there is a nomea. On the noematic side is the uncovering and explication, the unfolding and becoming distinct, the clearing of what is actually presented in consciousness. On the noetic side is an explication of the intentional processes themselves. . . .

Summarizing the challenges of intentionality, the following processes stand out:

1. Explicating the sense in which our experiences are directed;

2. Discerning the features of consciousness that are essential for the individuation of objects (real or imaginary) that are before us in consciousness (Noema);

3. Explicating how beliefs about such objects (real or imaginary) may be acquired, how it is that we are experiencing what we are experiencing (Noesis); and

4. Integrating the noematic and noetic correlates of intentionality into meanings and essences of experience. (Moustakas 1994:28-32)

If those are the challenges, what are the steps for meeting them? The first step in phenomenological analysis is called *epoche.*

> Epoche is a Greek word meaning to refrain from judgment, to abstain from or stay away from the everyday, ordinary way of perceiving things. In a natural attitude we hold knowledge judgmentally; we presuppose that what we perceive in nature is actually there and remains there as we perceive it. In contrast, Epoche requires a new way of looking at things, a way that requires that we learn *to see* what stands before our eyes, what we can distinguish and describe. . . .
>
> In the Epoche, the everyday understandings, judgments, and knowings are set aside, and the phenomena are revisited, visually, naively, in a wide-open sense, from the vantage point of a pure or transcendental ego. (Moustakas 1994:33)

In taking on the perspective of *epoche,* the researcher looks inside to become aware of personal bias, to eliminate personal involvement with the subject material, that is, eliminate, or at least gain clarity about, preconceptions. Rigor is reinforced by a "phenomenological attitude shift" accomplished through *epoche.*

> The researcher examines the phenomenon by attaining an attitudinal shift. This shift is known as the phenomenological attitude. This attitude consists of a different way of looking at the investigated experience. By moving beyond the natural attitude or the more prosaic way phenomena are imbued with meaning, experience gains a deeper meaning. This takes place by gaining access to the constituent elements of the phenomenon and leads to a description of the unique qualities and components that make this phenomenon what it is. In attaining this shift to the phenomenological attitude, *epoche* is a primary and necessary phenomenological procedure.
>
> *Epoche* is a process that the researcher engages in to remove, or at least become aware of, prejudices, viewpoints or assumptions regarding the phenomenon under investigation. *Epoche* helps enable the researcher to investigate the phenomenon from a fresh and open viewpoint without prejudgment or imposing meaning too soon. This suspension of judgment is critical in phenomenological investigation and requires the setting aside of the researcher's personal viewpoint in order to see the experience for itself. (Katz 1987:36-37)

According to Ihde (1979), *epoche* requires that looking precede judgment and that judgment of what is "real" or "most real" be suspended until all the evidence (or at least sufficient evidence) is in (p. 36). As such, *epoche* is an ongoing analytical process rather than a single fixed event. The process of *epoche* epitomizes the data-based, evidential, and empirical (vs. empiricist) research orientation of phenomenology.

Following *epoche,* the second step is phenomenological reduction. In this analytical process, the researcher "brackets out" the world and presuppositions to identify the data in pure form, uncontaminated by extraneous intrusions.

> Bracketing is Husserl's (1913) term. In bracketing, the researcher holds the phenomenon up for serious inspection. It is taken out of the world where it occurs. It is taken apart and dissected. Its elements and essential structures are uncovered, defined, and analyzed. It is treated as a text or a document; that is, as an instance of the phenomenon that is being studied. It is not interpreted in terms of the standard meanings given to it by the existing literature. Those preconceptions, which were isolated in the deconstruction phase, are suspended and put aside during bracketing. In bracketing, the subject matter is confronted, as much as possible, on its own terms. Bracketing involves the following steps:
>
> 1. Locate within the personal experience, or self-story, key phrases and statements that speak directly to the phenomenon in question.
>
> 2. Interpret the meanings of these phrases, as an informed reader.
>
> 3. Obtain the subject's interpretations of these phrases, if possible.
>
> 4. Inspect these meanings for what they reveal about the essential, recurring features of the phenomenon being studied.
>
> 5. Offer a tentative statement, or definition, of the phenomenon in terms of the essen-

> tial recurring features identified in step 4. (Denzin 1989b:55-56)

Once the data are bracketed, all aspects of the data are treated with equal value, that is, the data are "horizontalized." The data are spread out for examination, with all elements and perspectives having equal weight. The data are then organized into meaningful clusters. Then the analyst undertakes a delimitation process whereby irrelevant, repetitive, or overlapping data are eliminated. The researcher then identifies the invariant themes within the data in order to perform an "imaginative variation" on each theme. Douglass has described this as "moving around the statue" to see the same object from differing views. Through imaginative variation, the researcher develops enhanced or expanded versions of the invariant themes.

Using these enhanced or expanded versions of the invariant themes, the researcher moves to the textural portrayal of each theme—a description of an experience that doesn't contain that experience (i.e., the feelings of vulnerability expressed by rape victims). The textural portrayal is an abstraction of the experience that provides content and illustration, but not yet essence.

Phenomenological analysis then involves a "structural description" that contains the "bones" of the experience for the whole group of people studied, "a way of understanding *how* the coresearchers as a group experience *what* they experience" (Moustakas 1994:142). In the structural synthesis, the phenomenologist looks beneath the affect inherent in the experience to deeper meanings for the individuals who, together, make up the group.

The final step requires "an integration of the composite textual and composite structural descriptions, providing a synthesis of the meanings and essences of the experience" (Moustakas 1994:144). In summary, the primary steps of the Moustakas transcendental phenomenological model are *epoche*, phenomenological reduction, imaginative variation, and synthesis of texture and structure. Other detailed analytical techniques are used within each of these stages (see Moustakas 1994:180-81).

Heuristic inquiry (Moustakas 1990b) involves a somewhat different analytical process. The heuristic process of phenomenological inquiry is a highly personal process. Moustakas describes five basic phases in the heuristic process of phenomenological analysis: immersion, incubation, illumination, explication, and creative synthesis.

Immersion is the stage of steeping oneself in all that is, of contacting the texture, tone, mood, range, and content of the experience. This state "requires my full presence, to savor, appreciate, smell, touch, taste, feel, know without concrete goal or purpose" (Moustakas 1981:56). The researcher's total life and being are centered in the experience. He or she becomes totally involved in the world of the experience, questioning, mediating, dialoging, daydreaming, and indwelling.

The second state, *incubation,* is a time of "quiet contemplation" where the researcher waits, allowing space for awareness, intuitive or tacit insights, and understanding. In the incubation stage, the researcher deliberately withdraws, permitting meaning and awareness to awaken in their own time. One "must permit the glimmerings and awakenings to form, allow the birth of understanding to take place in its own readiness and completeness" (Moustakas 1981:50). This stage leads the way toward a clear and profound awareness of the experience and its meanings.

In the phase of *illumination,* expanding awareness and deepening meaning bring new clarity of knowing. Critical textures and structures are revealed so that the experience is known in all of its essential parameters. The experience takes on a vividness and understanding grows. Themes and patterns emerge, forming clusters and parallels. New life and new visions appear along with new discoveries.

In the *explication* phase, other dimensions of meanings are added. This phase involves a full unfolding of the experience. Through focusing, self-dialogue, and reflection, the experience is depicted and further delineated. New connections are made through further explorations into universal elements and primary themes of the experience. The heuristic analyst refines emergent patterns and discovered relationships.

> It is an organization of the data for oneself, a clarification of patterns for oneself, a conceptualization of concrete subjective experience for oneself, an integration of generic meanings for oneself, and a refinement of all these results for *oneself.* (Craig 1978:52)

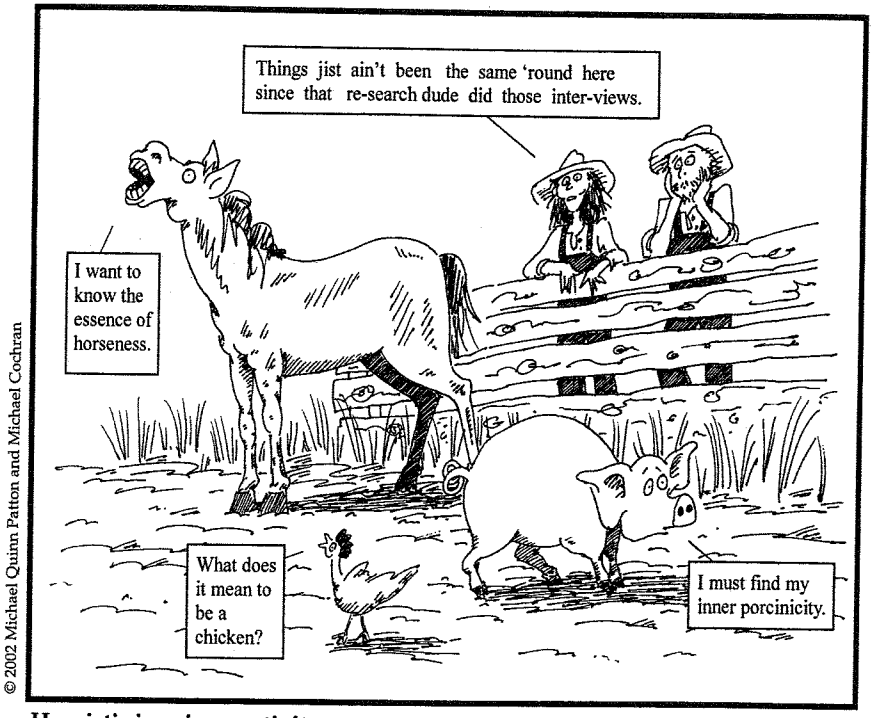
What emerges is a depiction of the experience and a portrayal of the individuals who participated in the study. The researcher is ready now to communicate findings in a creative and meaningful way. *Creative synthesis* is the bringing together of the pieces that have emerged into a total experience, showing patterns and relationships. This phase points the way for new perspectives and meanings, a new vision of the experience. The fundamental richness of the experience and the experiencing participants is captured and communicated in a personal and creative way. In heuristic analysis, the insights and experiences of the analyst are primary, including drawing on "tacit" knowledge that is deeply internal (Polanyi 1967).

These brief outlines of phenomenological and heuristic analysis can do no more than hint at the in-depth *living with the data* that is intended. The purpose of this kind of disciplined analysis is to elucidate the essence of experience of a phenomenon for an individual or group. The analytical vocabulary of phenomenological analysis is initially alien, and potentially alienating, until the researcher becomes immersed in the holistic perspective, rigorous discipline, and paradigmatic parameters of phenomenology. As much as anything this outline reveals the difficulty of defining and sequencing the internal intellectual processes involved in qualitative analysis more generally.

Grounded Theory

> *Theory denotes a set of well-developed categories (e.g., themes, concepts) that are systematically interrelated through statements of relationship to form a theoretical framework that explains some relevant social, psychological, educational, nursing, or other phenomenon. The statements of relationship* explain who, what, when, where, why, how, and with what consequences an event occurs. Once concepts are related through statements of relationship into an explanatory theoretical framework, the research findings move beyond conceptual ordering to theory. . . . A theory usually is more than a set of findings; it offers an explanation about phenomena. (Strauss and Corbin 1998:22)

Chapter 3 provided an overview of grounded theory in the context of other theoretical perspectives such as ethnography, constructivism, phenomenology, and hermeneutics. Norman K. Denzin, coeditor of the *Handbook of Qualitative Research* and the journal *Qualitative Inquiry,* has called grounded theory "the most influential paradigm for qualitative research in the social sciences today" (1997a:18). As I noted in Chapter 3, grounded theory has opened the door to qualitative inquiry in many traditional academic social science and education



Heuristic inquiry reactivity

departments, especially as a basis for doctoral dissertations, in part, I believe, because of its overt emphasis on the importance of and specific procedures for generating theory. In addition, I suspect its popularity (Glaser 2000) may owe much to the fact that it unabashedly admonishes the researcher to strive for "objectivity." The postmodern attack on objectivity has found its way into qualitative inquiry through constructivism, hermeneutic interpretivism, and the emphasis on subjective experience in phenomenology. Those social scientists and academics who find some value in the methods of qualitative inquiry, namely, in-depth interviewing and observation, but who eschew the philosophical underpinnings of constructivism and interpretivism can find comfort in the attention paid to objectivity in grounded theory.

> Fortunately, over the years, researchers have learned that a state of complete objectivity is impossible and that in every piece of research—quantitative or qualitative—there is an element of subjectivity. What is important is to recognize that subjectivity is an issue and researchers should take appropriate measures to minimize its intrusion into their analyses. . . . Over the years, we have wrestled with the problem of objectivity and have developed some techniques to increase our awareness and help us control intrusion of bias into analysis while retaining sensitivity to what is being said in the data. (Strauss and Corbin 1998:43)

Thinking comparatively is one such technique.

> *Theoretical comparisons are tools (a list of properties) for looking at something somewhat objectively rather than naming or classifying without a thorough examination of the object at the property and dimensional levels.* If the properties are evident within the data, then we do not need to rely on these tools. However, because details are not always evident to the "naked" eye, and because we (as human beings) are so fallible in our interpretations despite all attempts to "deconstruct" an event, incident, or interview, there are times when this is not so easy and we have to stand back and ask, "What is this?" In asking this question, we begin, even if unconsciously, to draw on properties from what we do know to make comparisons. (Strauss and Corbin 1998:80-81)

In addition to comfort with striving for objectivity, grounded theory emphasizes systematic rigor and thoroughness from initial design, through data collection and analysis, culminating in theory generation.

> By systematic, I still mean systematic every step of the way; every stage done systematically so the reader knows exactly the process by which the published theory was generated. The bounty of adhering to the whole grounded theory method from data collection through the stages to writing, using the constant comparative method, shows how well grounded theory fits, works and is relevant. Grounded theory produces a core category and continually resolves a main concern, and through sorting the core category organizes the integration of the theory. . . . Grounded theory is a package, a lock-step method that starts the researcher from a "know nothing" to later become a theorist with a publication and with a theory that accounts for most of the action in a substantive area. The researcher becomes an expert in the substantive area. . . . And if an incident comes his way that is new he can humbly through constant comparisons modify his theory to integrate a new property of a category. . . .
>
> Grounded theory methodology leaves nothing to chance by giving you rules for every stage on what to do and what to do next. If the reader skips any of these steps and rules, the theory will not be as worthy as it could be. The typical falling out of the package is to yield to the thrill of developing a few new, capturing categories and then yielding to use them in unending conceptual description and incident tripping rather than analysis by constant comparisons. (Glaser 2001:12)

In their book on techniques and procedures for developing grounded theory, Strauss and Corbin (1998:13) emphasize that analysis is the interplay between researchers and data, so what grounded theory offers as a framework is a set of "coding procedures" to "help provide some standardization and rigor" to the analytical process. Grounded theory is meant to "build theory rather than test theory." It strives to "provide researchers with analytical tools for handling masses of raw data." It seeks to help qualitative analysts "consider alternative meanings of phenomena." It emphasizes being "systematic and creative simultaneously." Finally, it elucidates "the concepts that are the building blocks of theory." Grounded theory operates from a *correspondence perspective* in that it aims to generate explanatory propositions that correspond to real-world phenomena. The characteristics of a grounded theorist, they posit, are these:

1. The ability to step back and critically analyze situations

2. The ability to recognize the tendency toward bias

3. The ability to think abstractly

4. The ability to be flexible and open to helpful criticism

5. Sensitivity to the words and actions of respondents

6. A sense of absorption and devotion to work process. (Strauss and Corbin 1998:7)

Grounded theory begins with *basic description*, moves to *conceptual ordering* (organizing data into discrete categories "according to their properties and dimensions and then using description to elucidate those categories," p. 19), and then *theorizing* ("conceiving or intuiting ideas—concepts—then also formulating them into a logical, systematic, and explanatory scheme," p. 21).

> In doing our analyses, we *conceptualize and classify* events, acts, and outcomes. The categories that emerge, along with their relationships, are the foundations for our developing theory. This abstracting, reducing, and relating is what makes the difference between *theoretical and descriptive coding (or theory building and doing description).* Doing line-by-line coding through which categories, their properties, and relationships emerge automatically takes us beyond description and puts us into a *conceptual mode of analysis.* (Strauss and Corbin 1998:66)

Strauss and Corbin (1998) have defined terms and processes in ways that are quite specific to grounded theory. It is informative to compare the language of grounded theory with the language of phenomenological analysis presented in the previous section. Here's a sampling of important terminology.

Microanalysis: "The detailed line-by-line analysis necessary at the beginning of a study to generate initial categories (with their properties and dimensions) and to suggest relationships among categories; a combination of open and axial coding" (p. 57).

Theoretical sampling: "Sampling on the basis of the emerging concepts, with the aim being to explore the dimensional range or varied conditions along which the properties of concepts vary" (p. 73).

Theoretical saturation: "The point in category development at which no new properties, dimensions, or relationships emerge during analysis" (p. 143).

Range of variability: "The degree to which a concept varies dimensionally along its properties, with variation being built into the theory by sampling for diversity and range of properties" (p. 143).

Open coding: "The analytic process through which concepts are identified and their properties and dimensions are discovered in data" (p. 101).

Axial coding: "The process of relating categories to their subcategories, termed 'axial' because coding occurs around the axis of the category, linking categories of the level of properties and dimensions" (p. 123).

Relational statements: "We call these initial hunches about how concepts relate 'hypotheses' because they link two or more concepts, explaining the what, why, where, and how of phenomena" (p. 135).

As noted in introducing this section, comparative analysis constitutes a central feature of grounded theory development. Making *theoretical comparisons*—systematically and creatively—engages the analyst in "raising questions and discovering properties and dimensions that might be in the data by increasing researcher sensitivity" (p. 67). Theoretical comparisons are one of the techniques used when doing microscopic analysis. Such comparisons enable "identification of *variations* in the patterns to be found in the data. It is not just one form of a category or pattern in which we are interested but also how that pattern varies dimensionally, which is discerned through a comparison of properties and dimensions under different conditions" (p. 67). Strauss and Corbin (1998) offer specific techniques to increase the systematic and rigorous processes of comparison, for example, "the flip-flop technique":

> This indicates that a concept is turned "inside out" or "upside down" to obtain a different perspective on the event, object, or actions/interaction. In other words, we look at opposites or extremes to bring out significant properties. (p. 94)

In the course of conducting a grounded theory analysis, one moves from lower-level concepts to higher-level theorizing:

> Data go to concepts, and concepts get transcended to a core variable, which is the underlying pattern. Formal theory is on the fourth level, but the theory can be boundless as the research keeps comparing and trying to figure out what is going on and what the latent patterns are. (Glaser 2000:4)

Glaser (2000) worries that the popularity of grounded theory has led to a preponderance of lower-level theorizing without completing the full job. Too many qualitative analysts, he warns, are satisfied to stop when they've merely generated "theory bits."

> Theory bits are a bit of theory from a substantive theory that a person will use briefly in a sentence or so. . . .

Theory bits come from two sources. First, they come from generating one concept in a study and conjecturing without generating the rest of the theory. With the juicy concept, the conjecture sounds grounded, but it is not; it is only experiential. Second, theory bits come from a generated substantive theory. A theory bit emerges in normal talk when it is impossible to relate the whole theory. So, a bit with grab is related to the listener. The listener can then be referred to an article or a report that describes the whole theory. . . .

Grounded theory is rich in imageric concepts that are easy to apply "on the fly." They are applied intuitively, with no data, with a feeling of "knowing" as a quick analysis of a substantive incident or area. They ring true with great credibility. They empower conceptually and perceptually. They feel theoretically complete ("Yes, that accounts for it"). They are exciting handles of explanation. They can run way ahead of the structural constraints of research. They are simple one or two variable applications, as opposed to being multivariate and complex. . . . They are quick and easy. They invade social and professional conversations as colleagues use them to sound knowledgeable. . . . The danger, of course, is that they might be just plain wrong or irrelevant unless based in a grounded theory. Hopefully, they get corrected as more data come out. The grounded theorist should try to fit, correct, and modify them even as they pass his or her lips.

Unfortunately, theory bits have the ability to stunt further analysis because they can sound so correct. . . . Multivariate thinking stops in favor of a juicy single variable, a quick and sensible explanation. . . . Multivariate thinking can continue these bits to fuller explanations. This is the great benefit of trusting a theory that fits, works, and is relevant as it is continually modified. . . . But a responsible grounded theorist always should finish his or her bit with a statement to the effect that "Of

course, these situations are very complex or multivariate, and without more data, I cannot tell what is really going on." (Glaser 2000:7-8)

As noted throughout this chapter in commenting on how to learn qualitative analysis, it is crucial to study examples. Bunch (2001) has published a grounded theory study about people living with HIV/AIDS. Glaser (1993) and Strauss and Corbin (1997) have collected together in edited volumes a range of grounded theory exemplars that include several studies of health (life after heart attacks, emphysema, chronic renal failure, chronically ill men, tuberculosis, Alzheimer's disease), organizational headhunting, abusive relationships, women alone in public places, selfhood in women, prison time, and characteristics of contemporary Japanese society. The journal *Grounded Theory Review* began publication in 2000. (See Exhibit 3.7 in Chapter 3 for the grounded theory Web site.)

Qualitative Comparative Analysis

Another approach that focuses on making comparisons to generate explanations is "qualitative comparative analysis" (QCA) presented by Charles Ragin (1987, 2000). Ragin has taken on the problem of making systematic case comparisons across a number of cases. He uses Boolean algebra to facilitate comparisons of large case units such as nation-states and historical periods, or macro-social phenomena such as social movements. His comparative method involves representing each case as a combination of causal and outcome conditions. These combinations can be compared with each other and then logically simplified through a bottom-up process of paired comparison. Ragin's aim in developing this configurational approach to cross-case pattern analysis was to retain the strength of holism embedded in context-rich individual cases while making possible systematic comparisons of relatively large numbers of cases, for example, 15 to 25, or more. Ragin (2000) draws on fuzzy set theory and calls the result "diversity-oriented research" because it systematically codes and takes into account case variations and uniquenesses as well as commonalities, thereby elucidating both similarities and differences. The analysis involves constructing a "truth table" in which the analyst codes each case for the presence or absence of each attribute of interest (Fielding and Lee 1998:158-59). The information in the truth table displays the different combinations of conditions that produce a specific outcome. To deal with the large number of comparisons needed, QCA is done using a software program (Drass and Ragin 1992; see Exhibit 8.2).

Analysts conducting diversity-oriented research are admonished to assume maximum causal complexity by considering the possibility that no single causal condition may be either necessary or sufficient to explain the outcome of interest. Different combinations of causal conditions might produce the observed result, though singular causes can also be considered, examined, and tested. Despite reducing large amounts of data to broad patterns represented in matrices or some other form of shorthand, Ragin (1987) stresses repeatedly that these representations must ultimately be evaluated by the extent to which they enhance understanding of specific cases. A cause-consequence comparative matrix, then, can be thought of as a map providing guidance through the terrain of multiple cases.

> QCA seeks to recover the complexity of particular situations by recognizing the conjunctural and context-specific character of causation. Unlike much qualitative analysis, the method forces researchers to select cases and variables in a systematic manner. This reduces the likelihood that "inconvenient" cases will be dropped from the analysis or data forced into inappropriate theoretical moulds. . . .
>
> QCA clearly has the potential to be used beyond the historical and cross-national contexts originally envisioned by Ragin. (Fielding and Lee 1998:160, 161-62)

In cross-cultural research, the challenge of determining *comparable units of analysis* has created controversy. For example, when definitions of "family" vary dramatically, can one really do systematic comparisons? Are extended families in nonliterate societies and nuclear families in modern societies so different that, beyond the obvious surface differences, they cease to be comparable units for generating theory? "The main problem for ethnologists has been to define and develop adequate and equivalent cultural units for cross-cultural comparison" (De Munck 2000:279). Analytic induction, another comparative approach, which we turn to now, also depends on defining comparable units of analysis.

Analytic Induction

Analytic induction also involves cross-case analysis in an effort to seek explanations. Ragin's QCA formalized and moderated the logic of analytic induction (Ryan and Bernard 2000:787), but it was first articulated as a method of "exhaustive examination of cases in order to prove universal, causal generalizations" (Peter Manning quoted in Vidich and Lyman 2000:57). Norman Denzin, in his sociological methods classic *The Research Act* (1978b), identified analytic induction based on comparisons of carefully done case studies as one of the three primary strategies available for dealing with and sorting out rival explanations in generating theory; the other two are experiment-based inferences and multivariate analysis. Analytic induction as a comparative case method

> was to be the critical foundation of a revitalized qualitative sociology. The claim to universality of the causal generalizations is . . . derived from the examination of a single case studied in light of a preformulated hypothesis that might be reformulated if the hypothesis does not fit the facts. . . . Discovery of a single negative case is held to disprove the hypothesis and to require its reformulation. (Vidich and Lyman 2000:57)

Over time, those using analytic induction have eliminated the emphasis on discovering universal causal generalizations and have instead emphasized it as a strategy for engaging in qualitative inquiry and comparative case analysis that includes examining preconceived hypotheses, that is, without the pretense of the mental blank slate advocated in purer forms of phenomenological inquiry and grounded theory.

> In analytic induction, researchers develop hypotheses, sometimes rough and general approximations, prior to entry into the field or, in cases where data already are collected, prior to data analysis. These hypotheses can be based on hunches, assumptions, careful examination of research and theory, or combinations. Hypotheses are revised to fit emerging interpretations of the data over the course of data collection and analysis. Researchers actively seek to disconfirm emerging hypotheses through negative case analysis, that is, analysis of cases that hold promise for disconfirming emerging hypotheses and that add

variability to the sample. In this way, the originators of the method sought to examine enough cases to assure the development of universal hypotheses.

Originally developed to produce universal and causal hypotheses, contemporary researchers have de-emphasized universality and causality and have emphasized instead the development of descriptive hypotheses that identify patterns of behaviors, interactions and perceptions. . . . Bogdan and Biklen (1992) have called this approach modified analytic induction. (Gilgun 1995:268-69)

Jane Gilgun used modified analytic induction in a study of incest perpetrators to test hypotheses derived from the literature on care and justice and to modify them to fit in-depth subjective accounts of incest perpetrators. She used the literature-derived concepts to sensitize her throughout the research while remaining open to discovering concepts and hypotheses not accounted for in the original formulations. And she did have new insights:

> Most striking about the perpetrators' accounts was that almost all of them defined incest as love and care. The types of love they expressed ranged from sexual and romantic to care and concern for the welfare of the children. These were unanticipated findings. I did not hypothesize that perpetrators would view incest as caring and as romantic love. Rather, I had assumed that incest represented lack of care and, implicitly, an inability to love. It did not occur to me that perpetrators would equate incest and romance, or even incest and feelings of sexualized caring. From previous research, I did assume that incest perpetrators would experience profound sexual gratification through incest. Ironically, their professed love of whatever type was contradicted by many other aspects of their accounts, such as continuing the incest when children wanted to stop, withholding permission to do ordinary things until the children submitted sexually, and letting others think the children were lying when the incest was disclosed. These perpetrators, therefore, did not view incest as harmful to victims, did not reflect on how they used their power and authority to coerce children to cooperate, and even interpreted their behavior in many cases as forms of care and romantic love. (Gilgun 1995:270)

Analytic induction reminds us that qualitative inquiry can do more than discover emergent concepts and generate new theory. A mainstay of science has always been examining and reexamining and reexamining yet again those propositions that have become the dominant belief or explanatory paradigm within a discipline or group of practitioners. Modified analytic induction provides a name and guidance for undertaking such qualitative inquiry and analysis.

Special Analytical Issues and Frameworks

Reflexivity and Voice

In Chapter 2, when presenting the major strategic themes of qualitative inquiry, I included as one of the 12 primary themes that of "voice, perspective, and reflexivity."

> The qualitative analyst owns and is reflective about her or his own voice and perspective; a credible voice conveys authenticity and trustworthiness; complete objectivity being impossible and pure subjectivity undermining credibility, the researcher's focus becomes balance—understanding and depicting the world *authentically* in all its complexity while being self-analytical, politically aware, and reflexive in consciousness. (see Exhibit 2.1)

Analysis and reporting are where these awarenesses come to the fore. Throughout analysis and reporting, as indeed throughout all of qualitative inquiry, questions of reflexivity and voice must be asked as part of a process of engaging the data and extracting findings. Triangulated reflexive inquiry involves three sets of questions (see Exhibit 2.2 in Chapter 2):

1. *Self-reflexivity.* What do I know? How do I know what I know? What shapes and has shaped my perspective? How have my perceptions and my background affected the data I have collected and my analysis of those data? How do I perceive those I have studied? With what voice do I share my perspective? (See Chapter 3, discussion of autoethnography.) What do I do with what I have found? These questions challenge the researcher to also be a learner, to reflect on our "personal epistemologies"—the ways we understand knowledge and the construction of knowledge (Rossman and Rallis 1998:25).

2. *Reflexivity about those studied.* How do those studied know what they know? What shapes and has shaped their worldview? How do they perceive me, the inquirer? Why? How do I know?

3. *Reflexivity about audience.* How do those who receive my findings make sense of what I give them? What perspectives do they bring to the findings I offer? How do they perceive me? How do I perceive them? How do these perceptions affect what I report and how I report it?

Self-awareness, even a certain degree of self-analysis, has become a requirement of qualitative inquiry. As these reflexive questions suggest, attention to voice applies not only to intentionality about the voice of the analyst but also to intentionality and consciousness about whose voices and what messages are represented in the stories and interviews we report. Qualitative data "can be used to relay dominant voices or can be appropriated to 'give voice' to otherwise silenced groups and individuals" (Coffey and Atkinson 1996:78). Eminent qualitative sociologist Howard Becker (1967) posed this classically as the question of "Whose side are we on?" Societies, cultures, organizations, programs, and families are stratified. Power, resources, and status are distributed differentially. How we sample in the field, and then sample again during analysis in deciding who and what to quote, involves decisions about whose voices will be heard.

Finally, as we report findings, we need to anticipate how what we report will be heard and understood. We need strategies for thinking about the nature of the reporter-audience interaction, for example, understanding how "six basic tendencies of human behavior come into play in generating a positive response: reciprocation, consistency, social validation, liking, authority and scarcity" (Cialdini 2001:76). Some writers eschew this responsibility, claiming that they write only for themselves. But researchers and evaluators have larger social responsibilities to present their findings for peer review and, in the cases of applied research, evaluation and action research, to present their findings in ways that are understandable and useful.

Triangulated reflexive inquiry provides a framework for sorting through these issues during analysis and report writing—and then including in the report how these reflections informed your findings. For examples of qualitative writings centered on illuminating issues of reflexivity and voice, see Hertz (1997).

Collaborative and Participatory Analyses

Collaborative and participatory approaches to qualitative inquiry include working with nonresearchers and nonevaluators not only in collecting data but also in analyzing data. This requires special facilitation skills to help those involved adopt analytical thinking. Some of the challenges include the following:

- Deciding how much involvement nonresearchers will have, for example, whether they will simply react and respond to the researcher's analysis or whether they will be involved in the generative phase of analysis. Determining this can be a shared decision. "In participatory research, participants make decisions rather than function as passive subjects" (Reinharz 1992:185).
- Creating an environment in which those collaborating feel that their perspective is genuinely valued and respected.
- Demystifying research.
- Combining training in how to do analysis with the actual work of analysis.
- Managing the difficult mechanics of the process, especially where several people are involved.
- Developing processes for dealing with conflicts in interpretations (e.g., agreeing to report multiple interpretations).
- Maintaining confidentiality with multiple analysts.

A good example of these challenges concerns how to help lay analysts deal with counterintuitive findings and counterfactuals, that is, data that don't fit primary patterns, negative cases, and data that oppose primary preconceptions or predilections. M. W. Morris (2000) found that shared learning, especially the capacity to deal with counterfactuals, was reduced when participants feared judgment by others, especially those in positions of authority.

In analyzing hundreds of open-ended interviews with parents who had participated in early childhood parent education programs throughout the state of Minnesota, I facilitated a process of analysis that involved some 40 program staff. The staff worked in groups of two and three, each analyzing 10 pre and post paired interviews at a time. No staff analyzed interviews with parents from their own programs. The analysis included coding interviews with a framework developed at the beginning of the study as well as inductive, generative coding in which the staff could create their own categories. Following the coding, new and larger groups engaged in interpreting the results and extracting central conclusions. Everyone worked together in a large center for three days. I moved among the groups helping resolve problems. Not only did we get the data coded, but the process, as is intended in collaborative and participatory research processes, proved to be an enormously stimulating and provocative learning experience for the staff participants. The process forced them to engage deeply with parents' perceptions and feedback, as well as to engage each other's reactions, biases, and interpretations. In that regard, the process also facilitated communication among diverse staff members from across the state, another intended outcome of the collaborative analysis process. Finally, the process saved thousands of dollars in research and evaluation costs, while making a staff and program development contribution. The results were intended primarily for internal program improvement use. As would be expected in such a nonresearcher analysis process, external stakeholders placed less value on the results than did those who participated in the process (Program Evaluation Division 2001; Mueller 1996; Mueller and Fitzpatrick 1998).

The Hermeneutic Circle and Interpretation

> Hermes was messenger to the Greek gods. . . . Himself the god of travel, commerce, invention, eloquence, cunning, and thievery, he acquired very early in his life a reputation for being a precocious trickster. (On the day he was born he stole Apollo's cattle, invented the lyre, and made a fire.) His duties as messenger included conducting the souls of the dead to Hades, warning Aeneas to go to Italy, where he founded the Roman race, and commanding the nymph Calypso to send Odysseus away on a raft, despite her love for him. With good reason his name is celebrated in the term "hermeneutics," which refers to the business of interpreting. . . . Since we don't have a godly messenger available to us, we have to interpret things for ourselves. (Packer and Addison 1989:1)

Hermeneutics focuses on interpreting something of interest, traditionally a text or work of art, but in the larger context of qualitative inquiry, it has also come to include interpreting interviews and observed actions. The emphasis throughout concerns the nature of interpretation, and various philosophers have approached the matter differently, some arguing that there is no method of interpretation per se because everything involves interpretation (Schwandt 2000, 2001). For our purposes here, the *hermeneutic circle*, as an analytical process aimed at enhancing understanding, offers a particular emphasis in qualitative analysis, namely, relating parts to wholes, and wholes to parts.

> Construing the meaning of the whole meant making sense of the parts, and grasping the meaning of the parts depended on having some sense of the whole. . . . [T]he hermeneutic circle indicates a necessary condition of interpretation, but the circularity of the process is only temporary—eventually the interpreter can come to something approximating a complete and correct understanding of the meaning of a text in which whole and parts are related in perfect harmony. Said somewhat differently, the interpreter can, in time, get outside of or escape the hermeneutic circle in discovering the "true" meaning of the text. (Schwandt 2001:112)
>
> The *method* involves playing the strange and unfamiliar parts of an action, text, or utterance off against the integrity of the action, narrative, or utterance as whole until the meaning of the strange passages and the meaning of the whole are worked out or accounted for. (Thus, for example, to understand the meaning of the first few lines of a poem, I must have a grasp of the overall meaning of the poem, and vice versa.) In this process of applying the hermeneutic method, the interpreter's self-understanding and sociohistorical location neither affects nor is affected by the effort to interpret the meaning of the text or utterance. In fact, in applying the method, the interpreter abides by a set of procedural rules that help ensure that the interpreter's historical situation does not distort the bid to uncover the actual meaning embedded in the text, act, or utterance, thereby helping to ensure the objectivity of the interpretation. (Schwandt 2001:114)

The circularity and universality of hermeneutics (every interpretation is layered in and dependent on other interpretations, like a series of dolls that fit one inside the other, and then another and another) pose the problem for the qualitative analyst of where to begin. How and where do you break into

the hermeneutic circle of interpretation? Packer and Addison (1989), in adapting the hermeneutic circle as an inquiry approach for psychology, suggest beginning with "practical understanding":

> Practical understanding is not an origin for knowledge in the sense of a foundation; it is, instead, the starting place for interpretation. Interpretive inquiry begins not from an absolute origin of unquestionable data or totally consistent logic, but at a place delineated by our everyday participatory understanding of people and events. We begin there in full awareness that this understanding is corrigible, and that it is partial in the twin senses of being incomplete and perspectival. Understanding is always moving forward. Practical activity projects itself forward into the world from its starting place, and shows us the entities we are home among. This means that neither commonsense nor scientific knowledge can be traced back to an origin, a foundation. . . . (p. 23)
>
> The circularity of understanding, then, is that we understand in terms of what we already know. But the circularity is not, Heidegger argues, a "vicious" one where we simply confirm our prejudices, it is an "essential" one without which there would be no understanding at all. And the circle is complete; there is accommodation as well as assimilation. If we are persevering and open, our attention will be drawn to the projective character of our understanding and—in the backward arc, the movements of return—we gain an increased appreciation of what the fore-structure involves, and where it might best be changed. . . . (p. 34).
>
> Hermeneutic inquiry is not oriented toward a grand design. Any final construction that would be a resting point for scientific inquiry represents an illusion that must be resisted. If all knowledge were to be at last collected in some gigantic encyclopedia this would mark not the triumph of science so much as the loss of our human ability to encounter new concerns and uncover fresh puzzles. So although hermeneutic inquiry proceeds from a starting place, a self-consciously interpretive approach to scientific investigation does not come to an end at some final resting place, but works instead to keep discussion open and alive, to keep inquiry under way. (p. 35)

At a general level and in a global way, hermeneutics reminds us of the interpretive core of qualitative inquiry, the importance of context and the dynamic whole-part interrelations of a holistic perspective. At a specific level and in a particularistic way, the hermeneutic circle offers a process for formally engaging in interpretation.

Analyzing Institutional Documents

Gale Miller (1997) has studied the particular challenges of "contextualizing organizational texts." Written documents of all kinds are pervasive in modern institutions such as hospitals, schools, nursing homes, police departments, courts, clinics, and social welfare agencies. Governments, nonprofit agencies, philanthropic organizations, and private institutions produce massive amounts of files and reports. Miller argues that

> qualitative researchers are uniquely positioned to study these texts by analyzing the practical social contexts of everyday life within which they are constructed and used. Texts are one aspect of the sense-making activities through which we reconstruct, sustain, contest and change our senses of social reality. They are socially constructed realities that warrant study in their own right. (p. 77)

Special challenges in analyzing documents include the following:

- Getting access to documents
- Understanding how and why the documents were produced
- Determining the accuracy of documents
- Linking documents with other sources, including interviews and observations
- Deconstructing and demystifying institutional texts

Miller concludes, "Demystifying institutional texts is one way of demystifying institutional authority" (p. 91).

Dramaturgical Analysis

> Dramaturgy is a perspective that uses a theatrical metaphor to understand social interaction. The approach takes *act* to be its central concept. From a dramaturgical point of view, humans, in a specific social and temporal context, act to create meaning and demonstrate purpose. . . . [Doing this involves] "impression management," suggesting that individuals present themselves to others so as to foster and maintain particular images or fronts. In their performances, individuals construct some images intentionally and provide others inadvertently. (Hunt and Benford 1997:106)

Dramaturgy puts the concept of "acting" on center stage at the theater of qualitative inquiry. A dramaturgical analysis of human interactions employs theatrical sensitizing concepts:

- Scripting
- Staging
- Dialogue and direction
- Developing dramatis personae
- Confrontations between protagonists and antagonists
- Costumes and props
- Dramaturgical loyalty, which "requires performers to 'act as if they have accepted certain moral obligations' " (p. 113).

Hunt and Benford (1997) argue that "dramaturgy might provide a reflexive sociological method":

> First, our approach presents a conceptual framework for understanding research productions generally and field studies more specifically. Dramaturgical method also illuminates common pitfalls in social science work, implying that researchers might be well-advised to pay particular attention to the details of impression management as well as the problems of securing resources, audiences and the like. The third contribution is that dramaturgical method furnishes a vantage point for social scientists to examine their own research productions critically. By equating research with drama, we have sought to limit the pretentiousness that seems endemic to most social science work. Instead of presenting a window to "reality," a dramaturgical method serves as a constant reminder that researchers are in the business of "reality construction." (Hunt and Benford 1997:116-17)

To appreciate how an interpretive framework such as dramaturgical analysis affects interpretation, it helps to compare data and conclusions using different frameworks. Martha Feldman (1995) has done just that by analyzing her study of a university housing office through the lenses of ethnomethodology (how physical realities such as buildings become institutional realities), semiotics (how written policies become institutional realities

with real consequences), deconstruction (of university salaries in relation to hierarchy and power), and dramaturgical analysis (how "backstage" events deep within the institution become manifest for targeted audiences). She compares the strengths and weaknesses of each approach, a useful reminder that all frameworks have both strengths and weaknesses.

Finding Nothing

Students beginning dissertations often ask me, their anxiety palpable and understandable, "What if I don't find out anything?" Bob Stake of responsive evaluation and case study fame said at his retirement:

> Paraphrasing Milton: They also serve who leave the null hypothesis tenable. . . .
>
> It is a sophisticated researcher who beams with pride having, with thoroughness and diligence, found nothing there. (Stake 1998:364, with a nod to Michael Scriven for inspiration)

True enough. But in another sense, it's not possible to find nothing there, at least not in qualitative inquiry. The case study is there. It may not have led to new insights or confirmed one's predictions, but the description of that case at that time and that place is there. That is much more than nothing. The interview responses and observations are there. They, too, may not have led to headline-grabbing insights or confirmed someone's eminent theory, but the thoughts and reflections from those people at that time and that place are there, recorded and reported. That is much more than nothing.

Halcolm will tell you this:

> You can only find nothing if you stare at a vacuum.
>
> You can only find nothing if you immerse yourself in nothing.
>
> You can only find nothing if you go nowhere.
>
> Go to real places.
>
> Talk to real people.
>
> Observe real things.
>
> You will find something.
>
> Indeed, you will find much, for much is there.
>
> You will find the world.

Synthesizing Qualitative Studies

Synthesizing research to aggregate and substantiate knowledge has become one of the important challenges of the information age, especially synthesizing applied research to inform policy making (Cooper 1998). As qualitative research has become better understood, more widely used, and more fully reported, a new opportunity —and a new challenge—has emerged: *synthesizing qualitative studies.* In one sense each qualitative study is a case. Synthesis of different qualitative studies on the same subject is a form of cross-case analysis. Such a synthesis is much more than a literature review. Noblit and Hare (1988) describe synthesizing qualitative studies as "meta-ethnography" in which the challenge is to "retain the uniqueness and holism of accounts even as we synthesize them in the translations" (p. 7).

For scholarly inquiry, the qualitative synthesis is a way to build theory through induction and interpretation. For evaluators, a qualitative synthesis can identify and extrapolate *lessons learned.* Evaluators can synthesize lessons from a number of case studies to generate generic factors that contribute to program effectiveness as, for example, Lisbeth Schorr (1988) did for poverty programs in her review and synthesis *Within Our Reach: Breaking the Cycle of Disadvantage.* The U.S. Agency for International Development has supported lessons learned synthesis studies on such subjects as irrigation (Steinberg 1983), rural electrification (Wasserman and Davenport 1983), food for peace (Rogers and Wallerstein 1985), education development efforts (Warren 1984), private sector development (Bremer et al. 1985), contraceptive social marketing (Binnendijk 1986), agriculture and rural development (Johnston et al. 1987), agricultural policy analysis and planning (Tilney and Riordan 1988), and agroforestry (Chew 1989). In synthesizing separate evaluations to identify lessons learned, evaluators build a store of knowledge for future program development, more effective program implementation, and enlightened policy making.

The sample for synthesis studies usually consists of case studies with a common focus, for example, elementary education, health care for the elderly, and so forth. However, one can also learn lessons about effective human intervention processes more generically by synthesizing case studies on quite different subjects. I synthesized three quite different qualitative evaluations conducted for The McKnight Foundation: a major family housing effort, a downtown development endeavor, and a graduate fellowship program for minorities. Before undertaking the synthesis, I knew nothing about these programs, nor did I approach them with any particular preconceptions. I was not looking for any specific similarities and none were suggested to me by either McKnight or program staff. The results were intended to provide insights into The McKnight Foundation's operating philosophy and strategies *as exemplified in practice by real operating programs.* Independent evaluations of each program had already been conducted and presented to The McKnight Foundation showing that these programs had successfully attained and exceeded intended outcomes. But why were they successful? That was the intriguing and complex question on which the synthesis study focused.

The synthesis design included fieldwork (interviews with key players and site visits to each project) as well as extensive review of their independent evaluations. I identified common success factors that were manifest in all three projects. Those were illuminating, but not surprising. The real contribution of the synthesis was in how the success factors fit together, an unanticipated pattern that deepened the implications for understanding effective philanthropy.

The 12 success factors common to all three programs were as follows:

- High-quality people
- Substantial financial resources
- Creative partnerships
- Leverage
- Vision
- A clear values orientation
- Self-sustaining institutions
- Long time frames
- Flexibility
- Cutting edge foresight
- Risk taking
- Leadership

While each of these factors provided insight into an important element of effective philanthropic programming, the unanticipated pattern was how these factors fit together to form a constellation of excellence. I found that I couldn't prioritize these factors because they worked together in such a way

that no one factor was primary or sufficient; rather, each made a critical contribution to an integrated, effectively functioning whole. The lesson that emerged for effective philanthropy was not a series of steps to follow, but rather a mosaic to create; that is, effective philanthropy appears to be a process of matching and integrating elements so that the pieces fit together in a meaningful and comprehensive way as a solution to complex problems. This means matching people with resources; bringing vision and values to bear on problems; and nurturing partnerships through leverage, careful planning, community involvement, and shared commitments. And doing all these things in mutually reinforcing ways. The challenge for effective philanthropy, then, is putting all the pieces and factors together to support integrated, holistic, and high-impact efforts and results—and to do so creatively (Storm and Vitt 2000:115-16).

As qualitative evaluation and research proliferate, the opportunities for and importance of synthesizing diverse studies will increase accordingly.

Reporting Findings

> At one time, one blade of grass is as effective as a sixteen-foot golden statue of Buddha. At another time, a sixteen-foot golden statute of Buddha is as effective as a blade of grass.
>
> —Wu-Men

Some reports are thin as a blade of grass; others feel 16 feet thick. Size, of course, is not the issue. Quality is. But given the volume of data involved in qualitative inquiry and the challenges of data reduction already discussed, reporting qualitative findings is the final step in data reduction and size is a real constraint, especially when writing in forms other than research monographs and book-length studies, such as journal articles and newsletter summaries. Each step in completing a qualitative project presents *quality* challenges (Morse 1997), but the final step is completing a report so that others can know what you've learned and how you learned it. This means finding and writing your story (Glesne 1999). It also means dealing with what Lofland (1971) called the "the agony of omitting"—deciding what material to leave out of the story.

> It can happen that an overall structure that organizes a great deal of material happens also to leave out some of one's most favorite material and small pieces of analysis. . . . Unless one decides to write a relatively disconnected report, he must face the hard truth that no overall analytic structure is likely to encompass every small piece of analysis and all the empirical material that one has on hand. . . .
>
> The underlying philosophical point, perhaps, is that everything is related to everything else in a flowing, even organic fashion, making coherence and organization a difficult and problematic human task. But in order to have any kind of understanding, we humans require that some sort of order be imposed upon that flux. No order fits perfectly. All order is provisional and partial. Nonetheless, understanding requires order, provisional and partial as it may be. It is with that philosophical view that one can hopefully bring himself to accept the fact that he cannot write about everything that he has seen (or analyzed) and still write something with overall coherence or overall structure. (Lofland 1971:123)

This chapter opened with the reminder that purpose guides analysis. Purpose also guides report writing and dissemination of findings. The keys to all writing start with (1) knowing your audience and (2) knowing what you want to say to them—a form of strategic communications (Weiss 2001). *Dissertations* have their own formats and requirements (Patton 1996a; Fitzpatrick, Secrist, and Wright 1998; Rudestam and Newton 1992). *Scholarly journals* in various disciplines and applied research fields have their own standards and norms for what they publish. The best way to learn those is to read and study them, and study specialized qualitative methods journals such as *Qualitative Inquiry, Field Methods, Symbolic Interaction, Journal of Contemporary Ethnography,* and *Grounded Theory Review.* Below I'll discuss evaluation and action research reporting.

Balance Between Description and Interpretation

One of the major decisions that has to be made about what to omit in the process of data reduction for reporting involves how much description to include. Description and quotation provide the foundation of qualitative reporting. Sufficient description and direct quotations should be included to allow the reader to enter into the situation and thoughts of the people represented in the report. Description should stop short, however, of becoming trivial and mundane. The reader does not have to know everything that was done or said. Focus comes from having determined what's substantively significant and providing enough detail and evidence to illuminate and make that case.

Yet, the description must not be so "thin" as to remove context or meaning. Qualitative analysis, remember, is grounded in "thick description."

> A thick description does more than record what a person is doing. It goes beyond mere fact and surface appearances. It presents detail, context, emotion, and the webs of social relationships that join persons to one another. Thick description evokes emotionality and self-feelings. It inserts history into experience. It establishes the significance of an experience, or the sequence of events, for the person or persons in question. In thick description, the voices, feelings, actions, and meanings of interacting individuals are heard. (Denzin 1989b:83)

Thick description sets up and makes possible interpretation. "It contains the necessary ingredients for thick interpretation" (Denzin 1989b:83). By "thick interpretation" Denzin means, in part, connecting individual cases to larger public issues and to the programs that serve as the linkage between individual troubles and public concerns. "The perspectives and experiences of those persons who are served by applied programs must be grasped, interpreted, and understood if solid, effective, applied programs are to be put into place" (p. 105).

Description is thus balanced by analysis and interpretation. Endless description becomes its own muddle. The purpose of analysis is to organize the description so that it is manageable. Description provides the skeletal frame for analysis that leads into interpretation. An interesting and readable report provides sufficient description to allow the reader to understand the basis for an interpretation, and sufficient interpretation to

allow the reader to appreciate the description.

Details of verification and validation processes (topics of the next chapter) are typically placed in a separate methods section of a report, but parenthetical remarks throughout the text about findings that have been validated can help readers value what they are reading. For example, if I describe some program process and then speculate on the relationship between that process and client outcomes, I may mention that (1) staff and clients agreed with this analysis when they read it, (2) I experienced this linkage personally in my own participant-observation experience in the program, and (3) this connection was independently arrived at by two analysts looking at the data separately.

The analyst should help readers understand different degrees of significance of various findings, if these exist. Because qualitative analysis lacks the parsimonious statistical significance tests of statistics, the qualitative analyst must make judgments that provide clues for the reader as to the writer's belief about variations in the credibility of different findings: When are patterns "clear"? When are they "strongly supported by the data"? When are the patterns "merely suggestive"? Readers will ultimately make their own decisions and judgments about these matters based on the evidence you've provided, but your analysis-based opinions and speculations deserve to be reported and are usually of interest to readers given that you've struggled with the data and know the data better than anyone else.

Appendix 8.3 at the end of this chapter presents portions of a report describing the effects on participants of their experiences in the wilderness education program. The data come from in-depth, open-ended interviews. This excerpt illustrates the centrality of quotations in supporting and explaining thematic findings.

Communicating With Metaphors and Analogies

All perception of truth is the detection of an analogy.

—Henry David Thoreau (1817-1862)

The museum study reported earlier in the discussion of analyst-generated typologies differentiated different kinds of visitors by using metaphors: the "commuter," the "nomad," the "cafeteria type," and the "V.I.P." and an analogy between visitors to Earth from outer space and visitors to a museum. In the dropout study, we relied on metaphors to depict the different roles we observed teachers playing in interacting with truants: the "cop," the "old-fashioned school master," and the "ostrich." Language not only supports communication but also serves as a form of representation, shaping how we perceive the world (Chatterjee 2001; Patton 2000; Smith 1981).

Metaphors and analogies can be powerful ways of connecting with readers of qualitative studies, but some analogies offend certain audiences. Thus, metaphors and analogies must be selected with some sensitivity to how those being described would feel and how intended audiences will respond. At a meeting of the Midwest Sociological Society, distinguished sociologist Morris Janowitz was asked to participate in a panel on the question "What is the cutting edge of sociology?" Janowitz, having written extensively on the sociology of the military, took offense at the "cutting edge" metaphor. He explained:

> Paul Russell, the humanist, has prepared a powerful and brilliant sociological study of the literary works of the great wars of the 20th century which he entitled *The Great War and Modern Memory.* It is a work which all sociologists should read. His conclusion is that World War I and World War II, Korea and Vietnam have militarized our language. I agree and therefore do not like the question "Where is the cutting edge of sociology?" "Cutting Edge"is a military term. I am put off by the very term cutting edge. Cutting edge, like the parallel term breakthrough, are slogans which intellectuals have inherited from the managers of violence. Even if they apply to the physical sciences, I do not believe that they apply to the social sciences, especially sociology, which grows by gradual accretion. (Janowitz 1979:591)

"Strategic planning" has military origins and connotations as does "rapid reconnaissance," a phrase used to describe certain short-term, intensive fieldwork efforts (see Chapter 4). Some stakeholder groups will object to such associations. Of particular importance, in this regard, is avoiding metaphors with possible racist and sexist connotations, for instance, "It's black and white." At the Educational Evaluation and Public Policy Conference sponsored by the Far West Laboratory for Educational Research and Development, the women's caucus expressed concern about the analogies used in evaluation and went on to suggest some alternatives.

> To deal with diversity is to look for new metaphors. We need no new weapons of assessment—the violence has already been done! How about brooms to sweep away the attic-y cobwebs of our male/female stereotypes? The tests and assessment techniques we frequently use are full of them. How about knives, forks, and spoons to sample the feast of human diversity in all its richness and color. Where are the techniques that assess the delicious-ness of response variety, independence of thought, originality, uniqueness? (And lest you think those are female metaphors, let me do away with that myth—at our house everybody sweeps and everybody eats!) Our workgroup talked about another metaphor —the cafeteria line versus the smorgasbord banquet of styles of teaching/learning/assessing. Many new metaphors are needed as we seek clarity in our search for better ways of evaluating. To deal with diversity is to look for new metaphors. (Hurty 1976)

Metaphors can be powerful and clever ways of communicating findings. A great deal of meaning can be conveyed in a single phrase with a powerful metaphor. Moreover, developing and using metaphors can be fun, both for the analyst and for the reader. It is important, however, to make sure that the metaphor serves the data and not vice versa. The creative analyst who finds a powerful metaphor may be tempted to manipulate the data to fit the metaphor. Moreover, because metaphors carry implicit connotations, it is important to make sure that the data fit the most prominent of those connotations so that what is communicated is what the analyst wants to communicate. Finally, one must avoid reifying metaphors and acting as if the world were really the way the metaphor suggests it is.

> The metaphor is chiefly a tool for revealing special properties of an object or event. Frequently, theorists forget this and make their metaphors a real entity in the empirical world.

> It is legitimate, for example, to say that a social system is like an organism, but this does not mean that a social system is an organism. When metaphors, or concepts, are reified, they lose their explanatory value and become tautologies. A careful line must be followed in the use of metaphors, so that they remain a powerful means of illumination. (Denzin 1978b:46)

Drawing Conclusions

In his practical monograph *Writing Up Qualitative Research*, Wolcott (1990) considers the challenge of how to conclude a qualitative study. Purpose again rules in answering this question. Scholarly articles, dissertations, and evaluation reports have different norms for drawing conclusions. But Wolcott goes further by questioning the very idea of conclusions:

> Give serious thought to dropping the idea that your final chapter must lead to a conclusion or that the account must build toward a dramatic climax. . . . In reporting qualitative work, I avoid the term *conclusion*. I do not want to work toward a grand flourish that might tempt me beyond the boundaries of the material I have been presenting or detract from the power (and exceed the limitations) of an individual case. (p. 55)

This admonition reminds us not to take anything for granted or fall into following some recipe for writing. Asking yourself, "When all is said and done, what conclusions do I draw from all this work?" can be a focusing question that forces you to get at essence. Or, as Wolcott suggests, it can be an unnecessary and inappropriate burden.

Or it can be a chance to look to the future. The Spanish-born philosopher and poet George Santayana concluded thusly when he retired from Harvard. Students and colleagues packed his classroom for his final appearance. He gave an inspiring lecture and was about to conclude when, in mid-sentence, he cut the head of a forsythia beginning to blossom in melting snow outside the window. He stopped abruptly, picked up his coat, hat, and gloves, and headed for the door. He turned at the door and said gently, "Gentlemen, I should not be able to finish that sentence. I have just discovered that I have an appointment with April."

Or as Halcolm would say, **Not concluding is its own conclusion.**

Special Issues in Evaluation Reporting and an Example

> A dialectic among several mindsets is essential to good evaluation.
>
> —Robert Stake (1998:370)

Feedback and Analysis

Evaluation poses special challenges when, as is typical, intended users (especially program staff and administrators) want preliminary feedback while fieldwork is still under way or as soon as data collection is over. Providing preliminary feedback provides an opportunity to reaffirm with intended users the final focus of the analysis and nurture their interest in findings. Academic social scientists have a tendency to want to withhold their findings until they have polished their presentation. Use of evaluation findings, however, does not necessarily center on the final report, which should be viewed as one element in a total utilization process, sometimes a minor element, especially in formative evaluation.

Evaluators who prefer to work diligently in the solitude of their offices until they can spring a final report on a waiting world may find that the world has passed them by. Feedback can inform ongoing thinking about a program rather than serve only as a one-shot information input for a single decision point. However, sessions devoted to reestablishing the focus of the evaluation analysis and providing initial feedback need to be handled with care. The evaluator will need to explain that analysis of qualitative data involves a painstaking process requiring long hours of careful work, going over notes, organizing the data, looking for patterns, checking emergent patterns against the data, cross-validating data sources and findings, and making linkages among the various parts of the data and the emergent dimensions of the analysis. Thus, any early discussion of findings can only be preliminary, directed at the most general issues and the most striking, obvious results. If, in the course of conducting the more detailed and complete analysis of the data, the evaluator finds that statements made or feedback given during a preliminary session were inaccurate, evaluation users should be informed about the discrepancy at once.

Evaluative Feedback Using Indigenous Typologies

Identifying indigenous typologies as part of a program evaluation can facilitate increased understanding when providing feedback. A good example comes from feedback we provided after evaluating the leadership development program described earlier. After six days of intense (and sometimes tense) participant observation in a retreat setting, we needed a framework for providing formative, descriptive feedback to program staff *in a way that could be heard.* We knew that staff were heavily ego-involved in the program and would be very sensitive to an approach that might appear to substitute *our* concept of the program for theirs. Yet, a major purpose of the evaluation was to help them identify and make explicit their operating assumptions as evidenced in what actually happened during the six-day retreat. As our team of three accumulated more and more data, debriefing each night what we were finding, we became increasingly worried about how to focus feedback. The problem was solved the fifth night when we realized that we could use *their* frameworks for describing to them what we were finding. For example, a major component of the program was having participants work with the Myers-Briggs Type Indicator, an instrument that measures individual personality type based on the work of Carl Jung (cf. Berens and Nardi 1999; Myers 1995; Krueger and Thuesen 1988; Hirsh and Kummerow 1987). The Myers-Briggs Type Indicator gives individuals scores on four bipolar scales:

(E)	Extraversion-Introversion	(I)
(S)	Sensing-Intuition	(N)
(T)	Thinking-Feeling	(F)
(J)	Judgment-Perception	(P)

In the feedback session, we began by asking the six staff members to characterize the overall retreat culture using the Myers-Briggs framework. Staff members shared their separate ratings, on which there was not consensus, and then we shared our per-

ceptions. We spent the whole morning discussing the data for and implications of each scale as a manifestation of the program's culture. We ended the session by discussing where the staff wanted the program to be on each dimension. Staff members were able to hear what we said, without becoming defensive, because we used *their* framework, a framework they had defined as nonjudgmental, facilitative, and developmental.

We formatted our presentation to staff using a distinction between "observations" and "perceived impacts" that program participants were taught as part of the leadership training. Observation: "You interrupted me in midsentence." Perceived impact: "I felt cut-off and didn't contribute after that." This simple distinction, aimed at enhancing interpersonal communications, served as a comfortable, familiar format for program staff to receive formative evaluation feedback. Our report, then, followed this format. Three of 20 observations from the report are reproduced in Exhibit 8.12.

The critical point here is that we presented the findings using their categories and their frameworks. This greatly facilitated the feedback and enhanced the subsequent formative, developmental discussions. Capturing and using indigenous typologies can be a powerful analytical approach for making sense of and reporting qualitative data.

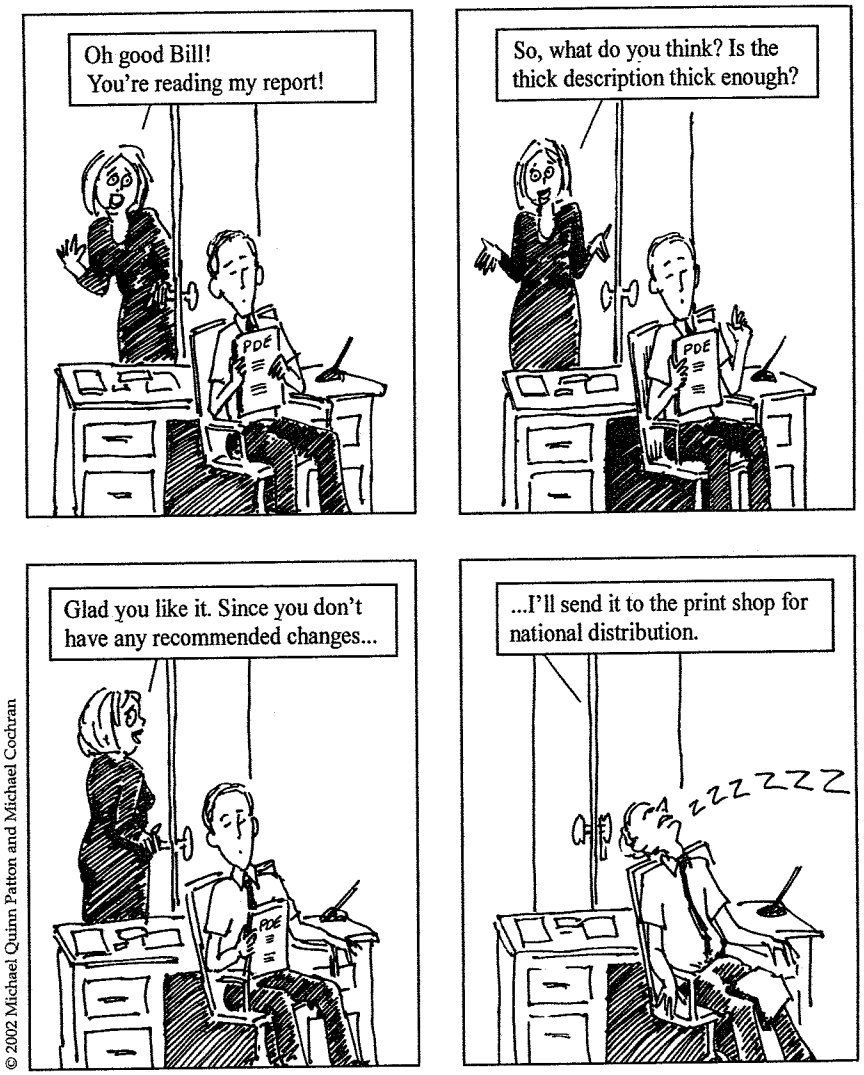
For evaluators, the inductive search for patterns is guided by the evaluation questions identified at the beginning of the study and a focus on how the findings are intended to be used by intended users (Patton 1997a). This utilization focus keeps findings from becoming too abstract, esoteric, or theoretical. For example, I was asked by The McKnight Foundation to review The McKnight Programs in Higher Education in Florida, a minority fellowship program endowed with $15 million ($10 million from The McKnight Foundation and $5 million from the state of Florida). The program had conducted its own evaluations, which showed they were successfully attaining intended outcomes. The question posed to me by The McKnight Foundation decision makers was, What factors explain the high level of success achieved by this program? I observed the program's annual conference for all 92 doctoral fellows; made site visits; reviewed program records and documents; interviewed a purposeful sample of participants, key knowledgeables, and the program's executive director; and asked all participants to write responses to some questions. The analysis of all that data reduced to 10 major success factors (which later became part of the synthesis reported earlier, p. 501):

1. *Strong leadership* through a bold initiative from The McKnight Foundation that mobilized educational leaders in Florida.
2. A *sizable amount of money* ($15 million) able to attract attention and generate support.
3. Effective use of *leverage* at every level of program operation. (McKnight insisted on major matching funds and use of local in-kind resources from participating universities.)
4. A *long-term perspective* on and commitment to a sustainable program with cumulative impact over time—in perpetuity. (The program was finally converted to an endowment.)
5. A carefully melded *public-private partnership.*
6. A program based on a *vision* made real through a carefully designed model that was true to the vision.
7. Taking the time and effort to carefully *plan* in a process that generated *broad-based community and political support* throughout the state.
8. The careful structuring of *local board control* so that responsibility and ownership resided in Florida among key influentials.
9. Taking advantage of the right *timing* and climate for this kind of program.
10. Clear *accountability and evaluation* so that problems could be corrected and accomplishments could be recognized.

These patterns are straightforward and understandable. The themes above answer a focused evaluation question. The report presented data supporting each success factor and explaining in greater detail what each one meant and how it operated. But the list

EXHIBIT 8.12 Distinguishing Observations From Perceived Impacts

Observations	*Perceived Impacts*
1. The retreat setting, away from the world, is introverted.	1. There is deep bonding among group members; there is a sense of the group as separate from the "real" world, though participants are expected to engage the "real" world after the retreat.
2. The retreat is more conceptual and abstract in content than fact and skill oriented. It is primarily intuitive (as opposed to step-by-step and practical).	2. Participants are conceptually stimulated and exposed to a variety of ideas. Some express uncertainty about what to do with the ideas (lack of practical applications).
3. Retreat culture is heavily affective, feelings oriented, not thinking oriented.	3a. Highly emotional connections are made among participants. b. Participants are sensitized to how they feel about what they are experiencing, explicitly encouraged to share feelings. c. Participants are affirmed as important; they feel special, cared about, and valued; it is a safe environment for learning. d. Participants are not stretched intellectually; logical distinctions are not made, key concepts remain ambiguous. Affirming participants is clearly more important than challenging them; harmony is valued over clarity.



represents *the* 10 major patterns in the data. There is no presentation of an elegant theory or carefully conceptualized typology. These 10 factors were the qualitative evaluation findings. They answered the intended users' primary evaluation question. Such an analysis is an example of practical, utilization-focused evaluation.

To Write a Report or Not to Write a Report?

I find in my own work that final reports frequently have less impact than the direct, face-to-face interactions I have with primary evaluation users to provide them with feedback about evaluation findings and to share with them the nature of the data. Making oral briefings is an increasingly important evaluation competence (Hendricks 1982). Final reports often serve an important dissemination function to audiences beyond immediate decision makers and information users, but they are not automatically and necessarily the primary source of information for those who are expected to actually use evaluation findings. I have done evaluations that involved no polished, final report because certain formative situations don't justify putting a lot of scarce resources into the production of a polished final report that will sit on a shelf somewhere. Eyebrows may be raised when evaluators ask, "Is there any reason to produce a final, written report for this evaluation?" But it's a question worth asking, and, in my opinion, the burden of proof lies with the evaluation users to justify production of a full report in cases of formative evaluation and informal action research.

Normally, of course, a full report will be produced. The contents, length, and nature of the report are partly a matter for negotiation between evaluators and primary users (Patton 1997a). While individual style will and should affect what a final report looks like, following some basic principles can enhance the presentation of qualitative evaluation data.

Focus

Even a comprehensive report will have to omit a great deal of information collected by the evaluator. **Focus is essential.** Evaluators who try to include everything risk losing their readers in the sheer volume of the presentation. To enhance a report's impact, the evaluation should address clearly each major evaluation question, that is, present the descriptive findings, analysis, and interpretation of each focused issue together succinctly. An evaluation report should be readable, understandable, and relatively free of academic jargon. The data should impress the reader, not the academic training of the evaluator.

The advice I find myself repeating most often to students when they are writing reports is, *Focus, focus, focus!* The agony on the part of the evaluator of having omitted things is matched only by the readers' agony in having to read those things that were not omitted but should have been. (See illustration of utilization-focused reporting in Exhibit 8.13 [p. 512].)

The Executive Summary and Research Abstract

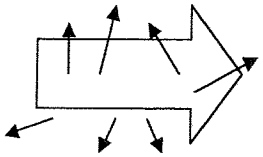
> The executive summary is a fiction.
>
> —Robert Stake (1998:370)

The fact that qualitative reports tend to be relatively lengthy can be a major problem when busy decision makers do not have the time (*or, more likely, will not take the time*) to read a lengthy report. Stake's preference for insisting on telling the whole story notwithstanding (a preference I share, by the way), my pragmatic, living-in-the-real-world side leads me to conclude that evaluators must develop the ability to produce an executive summary of one or two pages that presents the essential findings, conclusions, and rea-

EXHIBIT 8.13 Utilization-Focused Evaluation Reporting

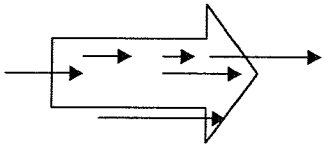
Unfocused Reporting:

Lots of side tracks



Focused Reporting:

Parts cohere in addressing priority concerns of primary intended users



sons for confidence in the summary. The executive summary is a dissemination document, a political instrument, and cannot be—nor is it meant to be—a full and fair representation of the study. An executive summary or abstract should be written in plain language, be highly focused, and state the core findings and conclusions. Keep in mind, when writing the executive summary or research abstract, that more people are likely to read the summary than any other document you produce.

Carpe Diem Briefings

As the hymnbook is to the sound of music, the executive summary is to the oral briefing. Legendary are the stories of having spent a year of one's life gathering data, pouring over it, and writing a rigorous and conscientious evaluation report, then encountering some "decision" maker (I use the term here lightly) who says, "Well, now, I know that you put a lot of work into this. I'm anxious to hear all about what you've learned. I've got about 10 minutes before my next appointment."

Should you turn heel and show him your back side? Not if you want your findings to make a difference. Use that 10 minutes well! Be prepared to make it count. *Carpe diem.*

The Creativity of Qualitative Inquiry

> Creativity will dominate our time after the concepts of work and fun have been blurred by technology.
>
> —Isaac Asimov (1983:42)

I have commented throughout this book that the human element in qualitative inquiry is both its strength and weakness—its strength in allowing human insight and experience to blossom into new understandings and ways of seeing the world, its potential weakness in being so heavily dependent on the inquirer's skills, training, intellect, discipline, and creativity. Because the researcher is the instrument of qualitative inquiry, the quality of the result depends heavily on the qualities of that human being. Nowhere does this ring more true than in analysis. Being an empathic interviewer or astute observer does not necessarily make one an insightful analyst—or a creative one. Creativity seems to be one of those special human qualities that plays an especially important part in qualitative analysis, interpretation, and reporting. Therefore, I close this chapter with some observations on creativity in qualitative inquiry.

I opened this chapter by commenting on qualitative inquiry as both science and art, especially qualitative analysis. The scientific part demands systematic and disciplined intellectual work, rigorous attention to details within a holistic context, and a critical perspective in questioning emergent patterns even while bringing evidence to bear in support of them. The artistic part invites exploration, metaphorical flourishes, risk taking, insightful sense-making, and creative connection-making. While both science and art involve critical analysis and creative expression, science emphasizes *critical* faculties more, especially in analysis, while art encourages creativity. The critical thinker assumes a stance of doubt and skepticism; things have to be proven; faulty logic, slippery linkages, tautological theories, and unsupported deductions are targets of the critical mind. The critical thinker studies details and looks beyond appearances to find out what is really happening. Evaluators are trained to be rigorous and unyielding in critically thinking about and analyzing programs. Indeed, evaluation is built on the foundation of critical analysis.

Critical thinkers, however, tend not to be very creative. The creative mind generates new possibilities; the critical mind analyzes those possibilities looking for inadequacies and imperfections. In summarizing research on critical and creative thinking, Barry Anderson (1980) warned that the centrality of doubt in critical thinking can lead to a narrow, skeptical focus that hampers the creative ability to come up with innovative linkages or new insights.

> The critical attitude and the creative attitude seem to be poles apart. . . . On the one hand, there are those who are always telling you why ideas won't work but who never seem able to come up with alternatives of their own; and, on the other hand, there are those who are constantly coming up with ideas but seem unable to tell good from the bad.
>
> There are people in whom both attitudes are developed to a high degree . . . , but even these people say they assume only one of these attitudes at a time. When new ideas are needed, they put on their creative caps, and when ideas need to be evaluated, they put on their critical caps. (Anderson 1980:66)

Qualitative inquiry draws on both critical and creative thinking—both the science and art of analysis. But the technical, procedural, and scientific side of analysis is easier to present and teach. Creativity, while easy to prescribe, is harder to teach, and perhaps harder to learn, but here's some guidance

derived from research and training on creative thinking (Kelley and Littman 2001; De Bono 1999; Von Oech 1998; Patton 1987a: 247-48).

1. *Be open.* Creativity begins with openness to multiple possibilities.

2. *Generate options.* There's always more than one way to think about or do something.

3. *Diverge-converge-integrate.* Begin by exploring a variety of directions and possibilities before focusing on the details. Branch out, go on mental excursions and brainstorm multiple perspectives before converging on the most promising.

4. *Use multiple stimuli.* Creativity training often includes exposure to many different avenues of expression: drawing, music, role-playing, story-boarding, metaphors, improvisation, playing with toys, and constructing futuristic scenarios. Synthesizing through triangulation (see Chapter 9) promotes creative integration of multiple stimuli.

5. *Side-track, zigzag, and circumnavigate.* Creativity is seldom a result of purely linear and logical induction or deduction. The creative person explores back and forth, round and about, in and out, over and under.

6. *Change patterns.* Habits, standard operating procedures, and patterned thinking pose barriers to creativity. Become aware of and change your patterned ways of thinking and behaving.

7. *Make linkages.* Many creative exercises include practice in learning how to connect the seemingly unconnected. Matrix approaches presented in this chapter push linkages. Explore linking qualitative and quantitative data.

8. *Trust yourself.* Self-doubt short-circuits creative impulses. If you say to yourself, "I'm not creative," you won't be. Trust the process.

9. *Work at it.* Creativity is not all fun. It takes hard work, background research, and mental preparation.

10. *Play at it.* Creativity is not all work. It can and should be play and fun.

I close this chapter with a practical reminder that both the science and art of qualitative analysis are constrained by limited time. Some people thrive under intense time pressure and their creativity blossoms. Others don't. The way in which any particular analyst combines critical and creative thinking becomes partly a matter of style, partly a function of the situation, and often is dependent on how much time can be found to play with creative possibilities. But exploring possibilities can also become an excuse for not finishing. There comes a time for bringing closure to analysis (or a book chapter) and getting on with other things. Taking too much time to contemplate creative possibilities may involve certain risks, a point made by the following story (to which you can apply both your critical and creative faculties).

The Past and the Future: Deciding in Which Direction to Look

A spirit appeared to a man walking along a narrow road. "You may know with certainty what has happened in the past, or you may know with certainty what will happen in the future, but you cannot know both. Which do you choose?"

The startled man sat down in the middle of the road to contemplate his choices. "If I know with certainty what will happen in the future," he reasoned to himself, "then the future will soon enough become the past and I will also know with certainty what has happened in the past. On the other hand, it is said that the past is prologue to the future, so if I know with certainty what has happened in the past I will know much about what will happen in the future without losing the elements of surprise and spontaneity."

Deeply lost to the present in the reverie of his calculations about the past and future he was unaware of the sound of a truck approaching at great speed. Just as he came out of his trance to tell the spirit that he had chosen to know with certainty the future, he looked up and saw the truck bearing down on him, unable to stop its present momentum.

—From Halcolm's *Evaluation Parables*

APPENDIX 8.1

Excerpts From a Codebook for Use by Multiple Coders

Characteristics of Program Evaluated
- 0101 nature or kind of program
- 0102 program relationship to government hierarchy
- 0103 funding (source, amount, determination of, etc.)
- 0104 purpose of program
- 0105 history of program (duration, changes, termination, etc.)
- 0106 program effectiveness

Evaluator's Role in Specific Study
- 0201 evaluator's role in initiation and planning stage
- 0203 evaluator's role in data collection stage
- 0204 evaluator's role in final report and dissemination
- 0205 relationship of evaluator to program (internal/external)
- 0206 evaluator's organization (type, size, staff, etc.)
- 0207 opinions/feelings about role in specific study
- 0208 evaluator's background
- 0209 comments on evaluator, evaluator process

Decision Maker's Role in Specific Study
- 0301 decision maker's role in initiation and planning stage
- 0302 decision maker's role in data-collection stage
- 0303 decision maker's role in final report and dissemination
- 0304 relationship of decision maker to program
- 0305 relationship of decision maker to other people or units in government
- 0306 comments on decision maker and decision-making process (opinions, feelings, facts, knowledge, etc.)

Stakeholder Interactions
- 0501 stakeholder characteristics
- 0502 interactions during or about initiation of study
- 0503 interactions during or about design of study
- 0504 interactions during or about data collection
- 0505 interactions during or about final report/findings
- 0506 interactions during or about dissemination

Planning and Initiation Process of This Study (how and who started)
- 0601 initiator
- 0602 interested groups or individuals
- 0603 circumstances surrounding initiation

Purpose of Study (why)
- 0701 description of purpose
- 0702 changes in purpose

CODING

Political Context
- 0801 description of political context
- 0802 effects on study

Expectations for Utilization
- 0901 description of expectations
- 0902 holders of expectations
- 0903 effect of expectations on study
- 0904 relationship of expectations to specific decisions
- 0905 reasons for lack of expectations
- 0906 people mentioned as not having expectations
- 0907 effect of lack of expectations on study

Data Collection, Analysis, Methodology
- 1001 methodological quality
- 1002 methodological appropriateness
- 1003 factors affecting data collection and methodology

Findings, Final Report
- 1101 description of findings/recommendations
- 1102 reception of findings/recommendations
- 1103 comments on final report (forms, problems, quality)
- 1104 comments and description of dissemination

Impact of Specific Study
- 1201 description of impacts on program
- 1202 description of nonprogram impacts
- 1203 impact of specific recommendations

Factors and Effects on Utilization
- 1301 lateness
- 1302 methodological quality
- 1303 methodological appropriateness
- 1304 positive/negative findings
- 1305 surprise findings
- 1306 central/peripheral objectives
- 1307 point in life of program
- 1308 presence/absence of other studies
- 1309 political factors
- 1310 interaction with evaluators
- 1311 resources
- 1312 most important factor

NOTE: This codebook was for use by multiple coders of interviews with decision makers and evaluators about their utilization of evaluation research.

APPENDIX 8.2

Mike: An Illustrative Case Study

Background: Sitting in a classroom at Metro City High School was difficult for Mike. In some classes he was way behind. In math he was always the first to finish a test. "I loved math and could always finish a test in about ten minutes, but I wasn't doing well in my other classes," Mike explained.

He first heard about Experience-Based Career Education (EBCE) when he was a sophomore. "I really only went to the assembly to get out of one of the classes I didn't like," Mike confessed.

But after listening to the EBCE explanation, Mike was quickly sold on the idea. He not only liked the notion of learning on the job, but also thought the program might allow him to work at his own speed. The notion of no grades and no teachers also appealed to him.

Mike took some descriptive materials home to his parents and they joined him for an evening session at the EBCE learning center to find out more about the program. Now, after two years in the program, Mike is a senior and his parents want his younger brother to get into the program.

Early EBCE testing sessions last year verified the inconsistency of Mike's experiences in school. While his reading and language scores were well below the average scored by a randomly selected group of juniors at his school, he showed above average abilities in study skills and demonstrated superior ability in math.

On a less tangible level, EBCE staff members early last school year described Mike as being hyperactive, submissive, lacking in self-confidence and unconcerned about his health and physical appearance when he started the EBCE program. He was also judged to have severe writing deficiencies. Consequently, Mike's EBCE learning manager devised a learning plan that would build his communication skills (in both writing and interpersonal relations) while encouraging him to explore several career possibilities. Mike's job experiences and projects were designed to capitalize on his existing interests and to broaden them.

First-year EBCE experiences. A typical day for Mike started at 8:00 a.m., just as in any other high school, but the hours in between varied considerably. When he first arrived at the EBCE learning center, Mike said he usually spent some time "fooling around" with the computer before he worked on projects underway at the center.

On his original application, Mike indicated his career preference would be computer operator. This led to an opportunity in the EBCE program to further explore that area and to learn more about the job. During April and May, Mike's second learning level experience took place in the computer department of City Bank Services. He broke up his time there each day into morning and afternoon blocks, often arriving before his employer instructor did for the morning period. Mike usually spent that time going through computer workbooks. When his employer instructor arrived they went over flow charts together and worked on computer language.

Mike returned to the high school for lunch and a German class he selected as a project. EBCE students seldom take classes at the high school but Mike had a special interest in German since his grandparents speak the language.

Following German class, Mike returned to the learning center for an hour of work on other learning activities and then went to City Bank. "I often stayed there until 5:00 p.m.," Mike said, even though high school hours ended at three.

Mike's activities and interests widened after that first year in the EBCE program but his goal of becoming a computer programmer was reinforced by the learning experience at City Bank. The start of a new hobby—collection of computer materials—also occurred during the time he spent at City Bank. "My employer instructor gave me some books to read that actually started the collection," Mike said.

Mike's interests in animals also was enhanced by his EBCE experience. Mike has always liked animals and his family has owned a horse since he was 12 years old. By picking blueberries Mike was able to save enough to buy his own colt two years ago. One of Mike's favorite projects during the year related to his horse. The project was designed to help Mike with Basic Skills and to improve his critical thinking skills. Mike read about breeds of horses and how to train them. He then joined a 4-H group with hopes of training his horse for show.

Several months later, Mike again focused on animals for another EBCE project. This time he used the local zoo as a resource, interviewing the zoo manager and doing a thorough study of the Alaskan brown bear. Mike also joined an Explorer Scouting Club of volunteers to help at the zoo on a regular basis. "I really like working with the bears," Mike reflected. "They were really playful. Did you know when they rub their hair against the bars it sounds like a violin?" Evaluation of the zoo project, one of the last Mike completed during the year, showed much improvement. The learning manager commented to Mike, "You are getting your projects done faster, and I think you are taking more time than you did at first to do a better job."

Mike got off to a slow start in the area of Life Skills development. Like some of his peers, he went through a period described by one of the learning managers as "freedom shock" when removed from the more rigid structure normally experienced in a typical school setting. Mike tended to avoid his responsibility to the more "academic" side of his learning program. At first, Mike seldom followed up on commitments and often did not let the staff know what he was doing. By the end of the year, he had improved remarkably in both of these behavior areas.

Through the weekly writing required in maintaining his journal, Mike demonstrated a significant improvement in written communications, both in terms of presenting ideas and feelings and in the mechanics of writing. Mike also

CASE STUDY

noted an interesting change in his behavior. "I used to watch a lot of TV and never did any reading." At the beginning of the following year, Mike said: "I read two books last year and have completed eight more this summer. Now I go to the book instead of the television" Mike's favorite reading materials are science fiction.

Mike also observed a difference in his attitude about homework. "After going to school for six hours I wouldn't sit down and do homework. But in the EBCE program I wasn't sitting in a classroom, so I didn't mind going home with some more work on my journal or projects."

Mike's personal development was also undergoing change. Much of this change was attributed to one of his employer instructors, an elementary school teacher, who told him how important it is in the work world to wash and wear clean clothes. Both she and the project staff gave Mike much positive reinforcement when his dress improved. That same employer also told Mike that she was really interested in what he had to say and therefore wanted him to speak slower so he could be understood.

Mike's school attendance improved while in the EBCE program. During the year, Mike missed only six days. This was better than the average absence for others in the program, which was found to be 12.3 days missed during the year, and much improved over his high school attendance.

Like a number of other EBCE students in his class, Mike went out on exploration level experiences but completed relatively few other program requirements during the first three months of the school year. By April, however, he was simultaneously working on eight different projects and pursuing a learning experience at City Bank. By the time Mike completed his junior year he had finished nine of the required thirteen competencies, explored nine business sites, completed two learning levels and carried through on eleven projects. Two other projects were dropped during the year and one is uncompleted but could be finished in the coming year.

On a more specific level, Mike's competencies included transacting business on a credit basis, maintaining a checking account, designing a comprehensive insurance program, filing taxes, budgeting, developing physical fitness, learning to cope with emergency situations, studying public agencies and operating an automobile.

Mike did not achieve the same level of success on all of his job sites. However, his performance consistently improved throughout the year. Mike criticized the exploration packages when he started them in the first months of the program and, although he couldn't pinpoint how, said they could be better. His own reliance on the questions provided in the package was noted by the EBCE staff with a comment that he rarely followed up on any cues provided by the person he interviewed. The packets reflected Mike's disinterest in the exploration portion of EBCE work. They showed little effort and a certain sameness of remarks about his impressions at the various sites.

Mike explored career possibilities at an automobile dealer, an audiovisual repair shop, a supermarket, an air control manufacturer, an elementary school, a housing development corporation, a city public works, a junior high school and a bank services company.

Mike's first learning level experience was at the elementary school. At the end of three and one-half months the two teachers serving as his employer instructors indicated concern about attendance, punctuality, initiative in learning and amount of supervision needed to see that Mike's time was used constructively. Mike did show significant improvement in appropriate dress, personal grooming and quality of work on assignments.

Reports from the second learning level experience—at the computer department of the bank services company—showed a marked improvement. The employer instructor there rated Mike satisfactory in all aspects and by the time of the final evaluation gave excellent ratings in ten categories—attendance/punctuality, adhering to time schedules, understanding and accepting responsibility, observing employer rules, showing interest and enthusiasm, poise and self-confidence, using initiative in seeking opportunities to learn, using employer site learning resources, beginning assigned tasks promptly and completing tasks assigned.

During the latter part of the school year, Mike worked on several projects at once. He worked on a project on basic electricity and took a course on "Beginning Guitar" for project credit.

To improve his communication skills Mike also worked on an intergroup relations project. This project grew out of an awareness by the staff that Mike liked other students but seemed to lack social interaction with his peers and the staff. Reports at the beginning of the year indicated that he appeared dependent and submissive and was an immature conversationalist. In response to these observations, Mike's learning manager negotiated project objectives and activities with him that would help improve his communication skills and help him solve some of his interpersonal problems. At the end of the year Mike noted a positive change related to his communication skills. "I can now speak up in groups," he said.

Mike's unfinished project related to his own experience and interests. He had moved to the Portland area from Canada ten years previously and frequently returns to see relatives. The project was on immigration laws and regulations in the functional citizenship area. At the same time, it will help Mike improve his grammar and spelling. Since students have the option of completing a project started during their junior year when they are a senior, Mike had a chance to finish the project this year. Of the year Mike said, "It turned out even better than I thought." Things he liked best about the new experience in EBCE were working at his own speed, going to a job and having more freedom.

At the end of the year, Mike's tests showed significant increases in both reading and language skills. In the math and study skills areas where he was already above average, only slight increases were indicated.

CASE STUDY

Tests on attitudes, given both at the beginning and the end of the year, indicated positive gains in self-reliance, understanding of roles in society, tolerance for people with differences in background and ideas than his, and openness to change.

Aspirations did not change for Mike. He still wants to go into computer programming after finishing college. "When I started the year I really didn't know too much about computers. I feel now that I know a lot and want even more to make it my career."

(The description of Mike's second year in EBCE is omitted. We pick up the case study after the second-year description.)

Mike's views of EBCE. Mike reported that his EBCE experiences, especially the learning levels, had improved all of his basic skills. He felt he had the freedom to do the kinds of things he wanted to do while at employer sites. These experiences, according to Mike, have strengthened his vocational choice in the field he wanted to enter and have caused him to look at educational and training requirements plus some other alternatives. For instance, Mike tried to enter the military, figuring it would be a good source of training in the field of computers, but was unable to because of a medical problem.

By going directly to job sites Mike has gotten a feel for the "real world" of work. He said his work at computer repair-oriented sites furthered his conceptions of the patience necessary when dealing with customers and fine degree of precision needed in the repair of equipment. He also discovered how a customer engineer takes a problem, evaluates it and solves it.

When asked about his work values Mike replied, "I figure if I get the right job, I'd work at it and try to do my best . . . in fact, I'm sure that even though I didn't like the job I'd still do more than I was asked to. . . . I'd work as hard as I could." Although he has always been a responsible person, he feels that his experiences in EBCE have made him more trustworthy. Mike also feels that he is now treated more like an adult because of his own attitudes. In fact, he feels he understands himself a lot more now.

Mike's future plans concern trying to get a job in computer programming at an automobile dealership or computer services company. He had previously done some computer work at the automobile dealership in relation to a project in Explorer Scouts. He also wants more training in computer programming and has discussed these plans with the student coordinator and an EBCE secretary. His attitude towards learning is that it may not be fun, but it is important, important to his future.

When asked in which areas he made less growth than he had hoped to, Mike responded, "I really made a lot of growth in all areas." He credits the EBCE program for this, finding it more helpful than high school. It gives you the opportunity to "get out and meet more people and get to be able to communicate better with people out in the community."

Most of Mike's experiences at the high school were not too personally rewarding. He did start a geometry class there this year, but had to drop it as he had started late and could not catch up. Although he got along all right with the staff at the high school, in the past he felt the teachers there had a "barrier between them and the students." The EBCE staff "treat you on a more individual type circumstance . . . have the time to talk to you." In EBCE you can "work at your own speed . . . don't have to be in the classroom."

Mike recommends the program to most of his friends, although some of his friends had already dropped out of school. He stated, "I would have paid to come into EBCE, I think it's really that good of a program. . . . In fact, I've learned more in these two years in EBCE than I have in the last four years at the high school." He did not even ask for reimbursement for travel expenses because he said he liked the program so much.

The views of his parents. When Mike first told his parents about the program they were concerned about what was going to be involved and whether it was a good program and educational. When interviewed in March, they felt that EBCE had helped Mike to be more mature and know where he is going.

Mike's parents said they were well-informed by the EBCE staff in all areas. Mike tended to talk to them about his activities in EBCE, while the only thing he ever talked about at the high school was photography. Mike's career plans have not really changed since he entered EBCE and his parents have not tried to influence him, but EBCE has helped him to rule out mechanic and truck driving as possible careers.

Since beginning the EBCE program his parents have found Mike to be more mature, dependable and enthusiastic. He also became more reflective and concerned about the future. His writing improved and he read more.

There are no areas where his parents felt that EBCE did not help him and they rated the EBCE program highly in all areas.

Test progress measures on Mike. Although Mike showed a great improvement in almost all areas of the Comprehensive Test of Basic Skills during the first year of participation, his scores decline considerably during the second year. Especially significant were the declines in Mike's arithmetic applications and study skills scores.

Mike's attitudinal scores all showed a positive gain over the two-year total period, but also tended to decline during the second year of participation. On the semantic differential, Mike scored significantly below the EBCE mean at FY 75 posttest on the community resources, adults, learning and work scales.

Mike showed continued growth over the two-year period on the work, self-reliance, communication, role, and trust scales of the Psychosocial Maturity Scale. He was significantly above the EBCE posttest means on the work, role, and social commitment scales and below average on only the openness to change scale. The openness to change score also showed a significant decline over the year.

The staff rated Mike on seven student behaviors. At the beginning of the year he was significantly above the EBCE mean on "applies knowledge of his/her own aptitudes, interests, and abilities to potential career interests" and below the mean on "understands another person's message and feelings." At posttest time he was still below the EBCE mean on this latter behavior as well as on

CASE STUDY

"demonstrates willingness to apply Basic Skills to work tasks and to vocational interests."

Over the course of the two years in the EBCE program Mike's scores on the Self-Directed Search (SDS) showed little change in pattern, although the number of interests and competencies did expand. Overall, realistic (R) occupations decreased and enterprising (E) occupations increased as his code changed from RCI (where C is conventional and I is investigative occupations) at pretest FY 74 to ICR at pretest FY 75 (a classification which includes computer operators and equipment repairers) to CEI at posttest FY 75. However, the I was only one point stronger than the R and the CER classification includes data processing workers. Thus, Mike's SDS codes appeared very representative of his desired occupational future.

Evaluators' reflections. Mike's dramatic declines in attitudes and basic skill scores reflect behavior changes which occurred during the second half of his second year of the program and were detected by a number of people. In February at a student staffing meeting his learning manager reported of Mike that "no progress is seen in this zone with projects . . . still elusive . . . coasting right now . . . may end up in trouble." The prescription was to "watch him—make him produce . . . find out where he is." However, at the end of the next to last zone in mid-May the report was still "the elusive butterfly! (Mike) needs to get himself in high gear to get everything completed on time!!!" Since the posttesting was completed before this time, Mike probably coasted through the posttesting as well.

Other data suggesting his lack of concern and involvement during the second half of his senior year was attendance. Although he missed only two days the first half of the year, he missed thirteen days during the second half.

Mike showed a definite change in some of his personality characteristics over the two years he spent in the EBCE program. In the beginning of the program he was totally lacking in social skills and self-confidence. By the time he graduated, he had made great strides in his social skills (although there was still much room for improvement). However, his self-confidence had grown to the point of overconfidence. Indeed the employer instructor on his last learning level spent a good deal of time trying to get Mike to make a realistic appraisal of his own capabilities.

When interviewed after graduation, Mike was working six evenings a week at a restaurant where he worked part-time for the last year. He hopes to work there for about a year, working his way up to cook, and then go to a business college for a year to study computers.

SOURCE: Fehrenbacher, Owens, and Haehnn (1976). Used by permission of Northwest Regional Educational Laboratory.

APPENDIX 8.3

Excerpts From an Illustrative Interview Analysis: Reflections on Outcomes From Participants in a Wilderness Education Program

Experiences affect people in different ways. This experiential education truism means that the individual outcomes, impacts, and changes that result from participation in some set of activities are seldom predictable with any certainty. Moreover, the meaning and meaningfulness of such changes as do occur are likely to be highly specific to particular people in particular circumstances. While the individualized nature of learning is a fundamental tenet of experiential education, it is still important to stand back from those individual experiences in order to look at the patterns of change that cut across the specifics of person and circumstances. One of the purposes of the evaluation of the Learninghouse Southwest Field Training Project was to do just that—to document the experiences of individuals and then to look for the patterns that help provide an overview of the project and its impacts.

A major method for accomplishing this kind of reflective evaluation was the conduct of follow-up interviews with the 11 project participants. The first interviews were conducted at the end of October 1977, three weeks following the first field conference in the Gila wilderness of New Mexico. The second interviews were conducted during the third week of February, three weeks after the wilderness experience in the Kofa Mountains of Arizona. The third and final interviews were conducted in early May following the San Juan River conference in southern Utah. All interviews were conducted by telephone. The average interview took 20 minutes with a range from 15 to 35 minutes. Interviews were tape-recorded and transcribed for analysis.

The interviews focus on three central issues: (1) How has your participation in the Learninghouse Project affected you personally? (2) How has your participation in the project affected you professionally? (3) How has your participation in the Learninghouse Project affected your institution?

In the pages that follow, participant responses to these questions are presented and analyzed. The major purpose of the analysis was to organize participant responses in such a way that overall patterns would become clear. The emphasis throughout is on letting participants speak for themselves. The challenge for the evaluators was to present participant responses in a cogent fashion that integrates the great variety of experiences and impacts recorded during the interviews.

Personal Change

"How has your participation in the Learninghouse Project affected you personally? What has been the impact of the project on you as a person?"

Questions about personal change generated more reactions from participants than subsequent questions about professional and institutional change. There is an intensity to these responses about individual change that makes it clear just how significant these experiences were in stimulating personal growth and development. Participants attempted throughout the interviews to indicate that they felt differently about themselves as persons because of their Learninghouse experiences. While such personal changes are often difficult to articulate, the interviews reflect a variety of personal impacts.

Confidence: A Sense of Self

During the three weeks in the wilderness, participants encountered a number of opportunities to test themselves. Can I carry a full pack day after day, uphill and downhill? Can I make it up that mountain? Do I have anything to contribute to the group? As participants encountered and managed stress, they learned things about themselves. The result was often an increase in personal confidence and a greater sense of self.

> It's really hard to say that LH did one thing or another. I think increased self-confidence has helped me do some things that I was thinking about doing. And I think that came, self-confidence came about largely because of the field experiences. I, right after we got back, I had my annual merit evaluation meeting with my boss, and at that I requested that I get a, have a change in title or a different title, and another title really is what it amounts to, and that I be given the chance for some other responsibilities that are outside the area that I work in. I want to get some individual counseling experience, and up to this point I have been kind of hesitant to ask for that, but I feel like I have a better sense of what I need to do for myself and that I have a right to ask for it at least. (Cliff, post-Kofas)

> I guess something that has been important to me in the last couple of trips and will be important in the next one is just the outdoor peace of it. Doing things that perhaps I'd not been willing to attempt before for whatever reason. And finding I'm better at it than expected. Before I was afraid. (Charlene, post-Kofas)

The interviews indicate that increased confidence came not only from physical accomplishments but also—and especially—from interpersonal accomplishments.

> After the Kofas I achieved several things that I've been working on for two years. Basically, the central struggle of the last two years of my life has been to no longer try to please people. No matter what my own feelings and needs are I try to please you. And in the past I had done whatever another person wanted me to do in spite of my own feelings and needs. And to have arrived at a point where I could tend to my own feelings and take care of what I needed to do for me is by far the most important victory I've won . . . a major one.

> In the Kofas, I amazed myself that I didn't more than temporarily buy into how . . . I was being described . . . when I didn't recognize myself yet. And that's new for me. In the past I'd accept others' criticisms of me as if they were indeed describing me . . . and get sucked into that. And I felt that was an achievement for me to hold onto my sense of myself in the face of criticisms has long been one of my monsters I've been struggling with, so to hold onto me is, especially as I did, was definitely an achievement. (Billie, post-Kofas)

> I've been paying a lot of attention to not looking for validation from other people. Just sticking with whatever kinds of feelings I have and not trying to go outside of myself . . . and lay myself on a platter for approval. I think the project did have a lot to do with that, especially this second trip in the Kofas. (Greg, post-Kofas)

> I would say the most important thing that happened to me was being able to talk to other people quite honestly about, I think really about their problems more than mine. That's very interesting in that I think that I had, I think I had an effect upon Billie and Charlene both. As a result of that it gave me a lot more confidence and positive feelings. Do you follow that? Where rather than saying I had this problem and I talked to somebody and they solved it for me, it was more my helping other people to feel good about themselves that made me feel more adequate and better about myself. (Rod, post-Gila)

Another element of confidence concerns the extent to which one believes in one's own ideas—a kind of intellectual confidence.

> I think if I take the whole project into consideration, I think that I've gained a lot of confidence myself in some of the ideas that I have tried to use, both personally and let's say professionally. Especially in my teaching aspects, especially teaching at a woman's college where I think one of our roles is not only to teach women subject matter, but also to teach them to be more assertive. I think that's a greater component of our mission than normally would have it at most colleges. I think that a lot of the ideas that I had about personal growth and about my own interactions with people were maybe reinforced by the LH experience, so that I felt more confident about them, and as a result they have come out more in my dealings with people. I would say specifically in respect to a sort of a more humanistic approach to things. (Rod, post-Kofas)

Increased confidence for participants was often an outcome of learning that they could do something new and difficult. At other times, however, increased

INTERVIEW ANALYSIS

confidence emerged as a result of finding new ways to handle old and difficult situations, for example, learning how to recognize and manage stress.

> A change I've noticed most recently and most strongly is the ability to recognize stress. And also the ability to recognize that I can do a task without needing to make it stressful, which is something I didn't know I did. So what I find I wind up doing, for example, is when I've had a number of things happen during the day and I begin to feel myself keying up I find myself very willing to say both to close friends and to people I don't know very well, I can't deal with this that you're bringing me. Can we talk about it tomorrow? This is an issue that really needs a lot of time and a lot of attention. I don't want to deal with it today, can we talk later, . . . etc. So I'm finding myself really able to do that. And I'm absolutely delighted about it.
>
> (Whereas before you just piled it on?)
>
> Exactly. I'd pile it and pile it until I wouldn't understand why I was going in circles. (Charlene, post-Kofas)

Personal Change—Overview

The personal outcomes cited by Learninghouse participants are all difficult to measure. What we have in the interviews are personal perceptions about personal change. The evidence, in total, indicates that participants felt differently and, in many cases, behaved differently as a result of their project participation. Different participants were affected in different ways and to varying extents. One participant reported virtually no personal effects from the experiences.

> And as far as the effect it had on me personally, which was the original question, okay, to be honest with you, to a large degree it had very little effect, and that's not a dig on the program, because at some point in people's lives I think things start to have smaller effect, but they still have effect. So I think that for me, what it did have an effect on was tolerance. Because there were a lot of things that occurred on the trip that I didn't agree with. And still don't agree, but I don't find myself to be viciously in disagreement any longer, just plainly in disagreement. So it was kind of like before, I didn't want to listen to the disagreement, or I wanted to listen to it but resolve it. Now, you know, there's a third option, that I can listen to it, continue to disagree with it, and not mind continuing to listen to it. (Cory, post-San Juan)

The more common reaction, however, was surprise at just how much personal change occurred.

> My expected outcome was increase the number of contacts in the Southwest, and every one of my expected outcomes were professional. That, you know, much more talk about potential innovations in education and directions to go, and you know, field-based education, what that's about, and I didn't expect at all, which may not be realistic on my part, but at least I didn't expect at all—the personal impact. (Charlene, post-Gila)

For others the year's participation in Learninghouse was among the most important learning experiences of a lifetime, precisely because the project embraced personal as well as professional growth.

> I've been involved in institutions and in projects as an educator, let's say, for 20 years. I started out teaching in high school, going to the NSF institutions during the summertime and I've gone to a lot of Chautauqua things and a lot of conferences, you know, of various natures. And I really think that this project has by far the greatest . . . has had by far the greatest impact on me. And I think that the reason is that in all the projects that I've had in the past . . . they've been all very specifically oriented toward one subject or toward one . . . more of a, I guess, more of a science, more of a subject matter orientation to them. Whereas this having a process orientation has a longer effect. I mean a lot of the things I learn in these instances is out of date by now and you keep up with the literature, for example, and all that and maybe that stimulates you to keep up . . . but in reality as far as a growth thing on my part, I think on the part of other participants, I think that this has been phenomenal. And I just think that this is the kind of thing that we should be looking towards funding on any level, federal, or any level. (Rod, post-San Juan)

We come now to a transition point in this report. Having reported participants' perceptions about personal change, we want to report the professional outcomes of the Learninghouse Project. The problem is that in the context of a holistic experience like the Southwest Field Training Project, the personal-professional distinction becomes arbitrary. A major theme running throughout discussions during the conferences was the importance of reducing the personal-professional schism, the desirability of living an integrated life and being an integrated self. This theme is reflected in the interviews, as many participants had difficulty responding separately to questions about personal versus professional change.

Personal/Professional Change

Analytically, there is at least a connotative difference between personal and professional change. For evaluation purposes, we tried to distinguish one from the other as follows: personal changes concern the thoughts, feelings, behaviors, intentions, and knowledge people have about themselves; professional changes concern the skills, competences, ideas, techniques, and processes people use in their work. There is, however, a middle ground. How does one categorize changes in thoughts, feelings, and intentions about competences, skills, and processes? There are changes in the person that affect that person's work. This section is a tribute to the complexity of human beings in defying the neat

INTERVIEW ANALYSIS

categories of social scientists and evaluators. This section reports changes that, for lack of a better nomenclature, we have called simply personal/professional impacts.

The most central and most common impact in this regard concerned changes in personal perspective that affected fundamental notions about and approaches to the world of work. The wilderness experiences and accompanying group processes permitted and/or forced many participants to stand back and take a look at themselves in relation to their work. The result was a changed perspective. The following four quotations are from interviews conducted after the first field conference in the Gila, a time when the contrasts provided by the first wilderness experience seemed to be felt most intensely.

> The trip came at a real opportune time. I've been on this new job about 4-5 weeks and was really getting pretty thoroughly mired in it, kind of overwhelmed by it, and so it came after a particularly hellish week, so in that sense it was just a critical, really helpful time to get away. To feel that I had, to remember that I had some choices, both in terms of whether I stayed here or went elsewhere, get some perspective of what it was I actually wanted to accomplish in higher education rather than just surviving to keep my sanity. And it gave me some, it renewed some of my ability to think of doing what I wanted to do here at the University, or trying to, that there were things that were important for me to do rather than just handling the stuff that poured across my desk. (Henry, post-Gila)

> I think it's helped make me become more creative, and just, and that's kind of tied in with the whole idea of the theory of experiential education. And the way we approached it on these trips. And so for instance I'm talking with my wife the other night, after I got Laura's paper that she'd given in Colorado, and I said you oughta read this because you can go out and teach history and you know, experientially. Then I gave her an idea of how I would teach frontier history for instance, and I don't know beans about frontier history. But it was an idea which, then she told another friend about it, and this friend says oh, you can get a grant for that. You know. So that was just a real vivid example, and I feel like, it's, I've been able to apply, or be creative in a number of different situations, I think just because I give myself a certain freedom, I don't know, I can't quite pinpoint what brought it about, but I just feel more creative in my work. (Cliff, post-San Juan)

> You know my biggest problem is I've been trying to save the world, and what I'm doing is pulling back. Because, perhaps the way I've been going about it has been wrong or whatever, but at least my motives are clearer and I know much more directly what I need and what I don't need and so I'm more open but less, yeah, as I said, I've been in a let's save the world kind of thing, now I feel more realistic and honest. (Charlene, post-Gila)

> I've been thinking about myself and my relationship to men and my boss, and especially to ideas about fear and risk . . . I decided that I needed to become a little more visible at the department. After the October experience, I just said I was a bit more ready to become visible at the department level. And I volunteered then to work on developing a department training policy and develop the plan and went down to the department and talked to the assistant about it and put myself in a consulting role while another person was assigned the actual job of doing it. And I think that I was ready to make that decision and act on it after I first of all got clear that I was working on male-female relationships. My department has a man, again, not a terribly easy one to know, so it's a risk for me to go talk with him and yet I did it. I was relatively comfortable and felt very good and very pleased with myself that I had done that and I think that's also connected. (Billie, post-Kofas)

The connection between personal changes and professional activities was an important theme throughout the Learninghouse Project. The passages reported in this section illustrate how that connection took hold in the minds and lives of project participants. As we turn now to more explicit professional impacts, it is helpful to keep in mind the somewhat artificial and arbitrary nature of the personal-professional distinction.

(Omitted are sections on changed professional knowledge about experiential education, use of journals, group facilitation skills, individual professional skills, personal insights regarding work and professional life, and the specific projects participants undertook professionally. Also omitted are sections on institutional impacts. We pick up the report in the concluding section.)

Final Reflections

Personal change . . . professional change . . . institutional change. . . . Evaluation categories aim at making sense out of an enormously complex reality. The reflections by participants throughout the interviews make it clear that most of them came away from the Learninghouse program feeling changes in themselves. Something had touched them. Sometimes it meant a change in perspective that would show up in completely unexpected ways.

> For one thing, I just finished the purchase of my house. First of all, that's a new experience for me. I've never done it before. I've never owned a home and never even wanted to. It seemed odd to me that my desire to "settle down" or make this type of commitment to a place occurred just right after the Gila trip. Just sort of one of those things that I woke up and went, "Wow, I want to stay here. I like this place. I want to buy it." And I had never in my life lived in a house or a place that I felt that way about. I thought that was kind of strange. And I do see that as a function of personal growth and stability. At least some kind of stability.
>
> Other areas of personal growth: one has been, and this kind of crosses over I think into the professional areas, and that would be an ability to gain perspective. Certainly the trips I think . . . incredibly valuable for gaining perspective on what's happening in my home situation, my personal life, my professional life . . . the

INTERVIEW ANALYSIS

whole thing. And it has allowed me to focus on some priority types of things for me. And deal with some issues that I've been kind of dragging on for years and years and not really wanting to face up with them or deal with them. And I have been able to move on and move through those kinds of things in the last 6 or 9 months or so to a much greater extent than ever before. (Tom, post-San Juan)

Other participants came away from the wilderness experiences with a more concrete orientation that they could apply to work, play, and life.

The thing that I realized as I was trying to make some connections between the river and raft trip, was that in some ways I can see the parallels of my life being kind of like our raft trip was, and the rapids, or the thrill ride, and they're a lot of fun, but it's nice to get out of them for a while and dry off. It's nice sometimes to be able to just drift along and not worry about things. But a lot of it also is just hard work. A lot of times I wish I could get out of it and go a different way, and that's been kind of a nice thing for me to think about and kind of a viewpoint to have whenever I see things in a lull or in a real high speed pace, that I can say, "Okay, I'm going to be in this for a while, but I'm going to come out of it and go into something else." And so that's kind of a metaphor that I use as somewhat of a philosophy or point of view that's helpful as I go from day to day. (Cliff, post-San Juan)

A common theme that emerged as participants reflected on their year's involvement with Learninghouse was a new awareness of options, alternatives, and possibilities.

I would say that if I have one overall comment, the effect of the first week overall, is to renew my sense of the broader possibilities in my job and in my life. Opens things to me. I realize that I have a choice to be here and be myself. And since I have a choice, there are responsibilities. Which is a good feeling. (Henry, post-Gila)

I guess to me what sticks out overall is that the experience was an opportunity for me to step out of the rest of my life and focus on it and evaluate it, both my personal life and my work, professional life aspect. (Michael, post-San Juan)

As participants stood back and examined themselves and their work they seemed to discover a clarity that had previously been missing. Perspective, awareness, clarity . . . stuff of which personal/professional/institutional change is made.

I think I had a real opportunity to explore some issues of my own worth with a group of people who were willing to allow me to explore those. And it may have come later, but it happened then. On the Learninghouse, through the Learninghouse . . . and I think it speeded up the process of growing for me in that way, accepting my own worth, my own ideas about education, about what I was doing, and in terms of being a teacher it really aided my discussions of people and my interactions. It really gave me a lot of focus on what I was doing. I think I would've muddled around a long time with some issues that I was able to, I think, gain some clarity on pretty quickly by talking to people who were sharing their experience and were working towards the same goals, self-directed learning, and experiential education. (Greg, post-San Juan)

I think what happened is that for me it served as a catalyst for some personal changes, you know, the personal, institutional, they're all wound up, bound up together. I think I was really wrestling with jobs and career and so on. For me the whole project was a catalyst, a kind of permission to look at things that I hadn't looked at before. One of the realizations, one of the insights that I had in the process was, kind of neat on my part, to become concrete, specific in my actions in my life, no matter whether that was writing that I was doing, or if it was in my job, or whatever it was. But to really pay attention to that. I think that's one of the things that happened to me. (Peter, post-San Juan)

These statements from interviews do not represent a final assessment of the impacts of the Learninghouse Southwest Field Training Project. Several participants resisted the request to make summary statements about the effects and outcomes of their participation in the program because they didn't want to force premature closure.

(Can you summarize the overall significance of participation in the project?)

I do want to make a summary, and I don't again. . . . It feels like the words aren't easy and for me being very much a words person, that's unusual. It's not necessarily that the impact hasn't been in the cognitive areas. There have been some. But what they've been, where the impact has been absolutely overwhelming is in the affective areas. Appreciation of other people, appreciation of this kind of education. Though I work in it, *I haven't done it before!* A real valuing of people, the profession, of my colleagues in a sense that I never had before. . . .

The impact feels like it's been dramatic, and I'm not sure that I can say exactly how. I'm my whole . . . it all can be summarized perhaps by saying I'm much more in control. In a good kind of sense. In accepting risk and being willing to take it; accepting challenge and being willing to push myself on that; accepting and understanding more about working at the edge of my capabilities . . . what that means to me. Recognizing very comfortably what I can do and feeling good about that confidence, and recognizing that what I haven't yet done, and feeling okay about trying it. The whole perception of confidence has changed. (Charlene, post-San Juan)

The Learninghouse program was many things—the wilderness, a model of experiential education, stress, professional development—but most of all, the project was the people who participated. In response after response participants talked about the importance of the people to everything that happened. Because of the dominance of that motif throughout the interviews, we want to end this report with that highly personal emphasis.

INTERVIEW ANALYSIS

I said before I think that to know some people, that meant a lot to me, people who were also caring. And people who were also involved, very involved in some issues, philosophical and educational, that were pretty basic not only to education, but to living. Knowing these people has been really important to me. It's given me a kind of continuity and something to hold onto in the midst of a really frustrating, really difficult situation where I didn't have people where I could get much feedback from, or that I could share much thinking about, talking about, and working with. It's just kind of basic issues. That kind of continuity is real important to just my feelings, important to myself. Feeling like I have someplace to go. . . . Sometimes I feel funny about placing so much emphasis on the people. . . . But the people have really meant a lot to me as far as putting things together for myself. Being able to have my hands in something that might, that really offers me a way to go. (Greg, post-San Juan)

SOURCE: By Jeanne Campbell and Michael Patton.

Between-Chapters Interlude

Riddles of Qualitative Inquiry

Who Am I?

Gary D. Shank

Lately, I have been thinking about riddles. Riddles are one of those things that we used for millennia to build inquiry around and then conveniently mislaid or trivialized. Riddles were once powerful and heady things. Now we have riddles that are nothing but child's word play. Word play was certainly important in riddles, but they were anything but simply child's fare.

We have discarded the riddle in favor of the puzzle. Scientists and other empirical inquirers "puzzle" over the meaning of their data and seek to solve the "puzzles" of life and creation. This is all well and good, but why can't we reclaim the riddle as well? Each of the following four riddles seeks to highlight and illuminate some overlooked or covert or murky aspect of a qualitative research skill.[1] Since most riddles are in verse, I decided to preserve the form—for these riddles I used Petrarchian sonnet structure. (Note: As a reminder of the imperfect patterns found in the real world, the last line of Riddle Four violates the sonnet rules; instead of abbaabba cdecde it is abbaabba cdecdc.)

The question is: Can you solve the riddles?

Riddle Number One

When I have fears that I have found a place
Where I have never chanced to be before
And where the odds are great, that nevermore
Will I again be out there, face to face;
How then should I begin to set the chase?
When wonder's great and familiarity poor
How then should my tired eyes keep up the score
When all things strange are ordinary grace?

Where is my ear, when eyes run fast ahead?
What do my fingertips alone reveal?
What is the pulse and pace of this strange land?
And by whose claim are things mundane instead,
Like some dried tangerine stripped of its peel,
An hourglass sucked dry of all its sand?

Who am I?

Riddle Number Two

Your hands rest lightly on your chin, because
You cannot always find the words you need.
Life races past our thoughts, both trapped and freed
Of solid form, like sheets of film and gauze
Whose shifting shapes cause us to halt and pause.
We find ourselves belonging to a breed
Of ordinary folk, like some strange creed
Who seek out yet another staged applause.

What do you say, that I have never said?
What brave new world can you make me believe?
Are you this calm, or are you filled with spite?
These ragged thoughts take root, and then my head
Seeks any path of rest. You may relieve
My fright, or plunge me deeper in the night.

Who am I?

Riddle Number Three

Suppose your home looks like a subway station
Where geeks and pimps roll out their tattered wares
And teenage mothers linger on the stairs,
Framed once more in hollow consternation.
Refugees who know both love and Haitian
Size up easy marks, doled out in pairs
You feel like turning circles into squares—
Two moves away from last year's conflagration.

How could there be no peace in Paradise?
Where children and their parents all excel?
With levees standing high above the flood.
How can you rage, if everything is nice?
Down here inside the Nineteenth hole of Hell
Where school kids lie in puddles of their blood?

Who am I?

Riddle Number Four

I see the rats somewhere inside the cheese.
Cheddar, or Brie, or Swiss with all its holes?
Rats burrowing inside, like long-tailed moles
Or ghostly galleons tossed on stormy seas?
How do these metaphors lock up and seize
My brain, like glaciers marching from the Poles
Or fiery furnaces with red-hot coals
That simultaneously burn and freeze?

Things are themselves, as much as they are not
I want to put my hand upon their flank
And with a mighty yank to reel them in.
But they seek me as much as they are sought,
They bind my hands and make me walk the plank
And night is broken down without a shot.

Who am I?

Answers are at the end of Chapter 9, page 598.

Note

1. Riddles composed by Gary D. Shank, author of *Qualitative Research: A Personal Skills Approach* (2002). Used by permission.