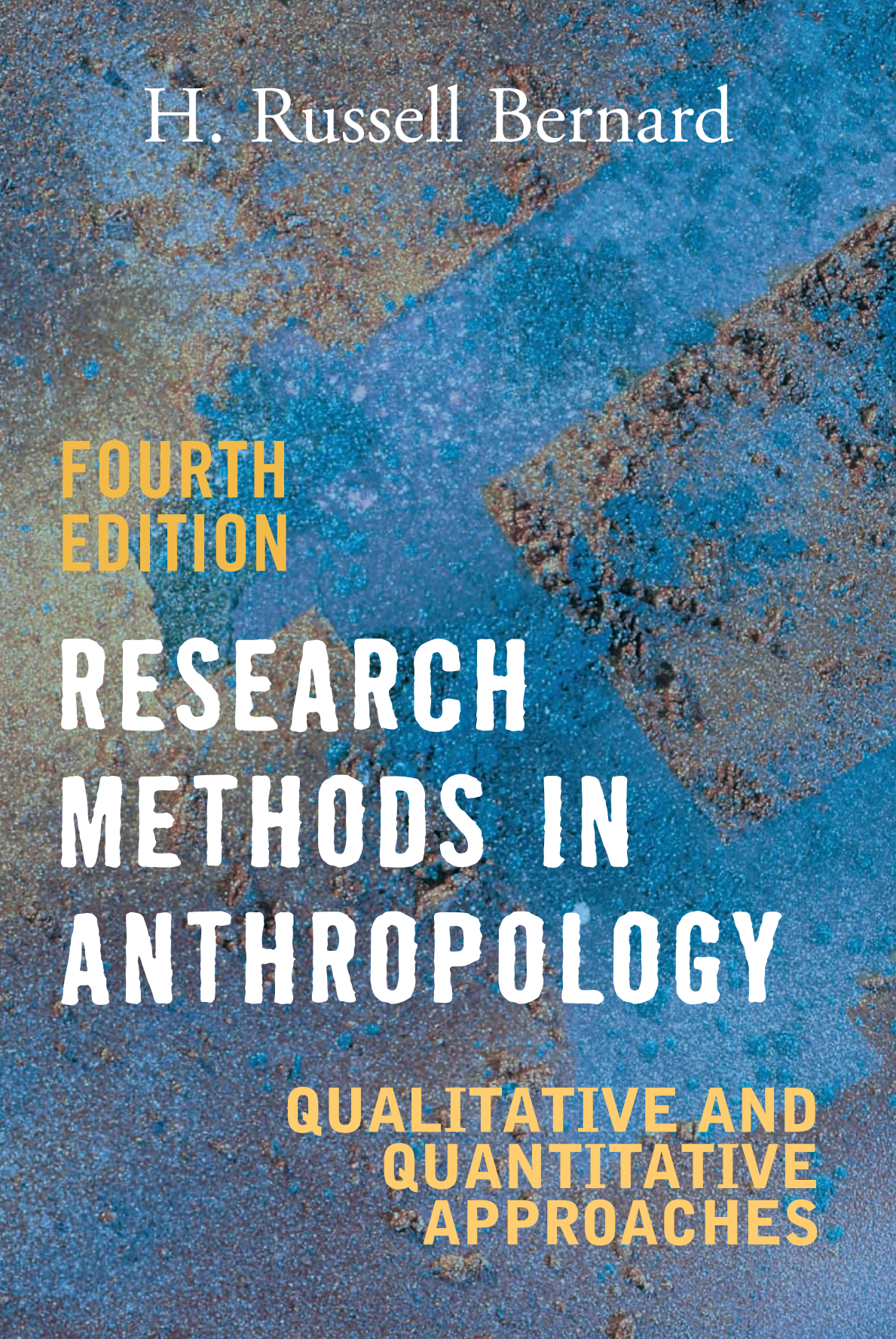
H. Russell Bernard
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QUALITATIVE AND QUANTITATIVE APPROACHES

Research Methods in Anthropology

Fourth Edition

Qualitative and Quantitative Approaches

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Contents

14

Field Notes: How to Take Them, Code Them, Manage Them

> Those who want to use qualitative methods because they seem easier than statistics are in for a rude awakening.
>
> —Taylor and Bogdan 1984:53

Anthropologists collect many kinds of data. We collect audiotapes of musical performances and of recitations of folktales and myths; videotapes of ceremonies, dances, and everyday activities; photographs; newspaper clippings; transcriptions of formal interviews; caches of personal letters. But all anthropologists take field notes. In this chapter, I focus on field notes—how to write them, how to code them, and how to manage them. Many of the lessons about coding and managing field notes apply just as well to transcripts of interviews and to other textual data, which I'll take up in chapter 17.

About Field Notes

Plan to spend 2–3 hours every working day of a participant observation study writing up field notes, working on your diary, and coding interviews and notes. Ralph Bolton asked 34 anthropologists about their field note practices; they reported spending anywhere from 1.5 hours to 7 hours a day on write-up (1984:132).

Remember that it takes twice as long to write up notes *about* a recorded interview as it does to conduct an interview in the first place. You have to listen to a recorded interview at least once before you can write up the essen-

tial notes from it, and then it takes as long again to get the notes down. If you need full transcriptions of interviews, plan to spend 6–8 hours for each hour of interview, assuming that the recording is clear, the interview is in your own language, and you have a transcribing machine with a foot pedal. You can cut transcription time in half by using voice recognition software (more about this back in chapter 9, and see appendix F for information on transcription hardware and software).

Every colleague with whom I've ever discussed this agrees that it's best to set aside a time each day for working on your notes. And don't sleep on your notes. It's easy to forget material that you want in your notes if you don't write them up in the afternoon or evening each day. The same goes for your own thoughts and impressions of events. If you don't write them up every day, while they are fresh, you'll forget them.

This means that you shouldn't get embroiled in a lot of activities that prevent you from writing up field notes. There are plenty of exceptions to this rule. Here's one. You are studying how families create culture by telling and retelling certain stories. You sit down to write up the day's field notes and you get a call from a key informant who tells you to come right on over to meet her father who is leaving on a trip in the morning and wants to tell you himself the story she had told you earlier about his experience as a refugee during World War II. You couldn't possibly turn that one down. But remember, it's easy to let doing anything except writing notes become the norm rather than the exception.

Create many small notes rather than one long, running commentary. Write your notes on a computer and make many separate files—one for each day is fine—rather than adding to the same humongous file day after day. The advantage is that you can name your notes by their date of creation. That way, the computer will present the notes to you in chronological order so you can always find a particular day's (or week's) notes. Many small files are also easier to handle when we get to text management and retrieval programs.

Finally, there are two radically different styles when it comes to writing field notes. Some people like to immerse themselves completely in the local culture and concentrate on the experience. They write up field notes when and as they find the time. Most ethnographers advocate writing up field notes every day, while you are still capable of retrieving detail about the day's events and interactions. I've done both and, like Miles and Huberman (1994), I'm convinced that obsessiveness about writing field notes is the way to go.

How to Write Field Notes

The method I present here for making and coding field notes was developed and tested by the late Michael Kenny and me, between 1967 and 1971, when

we ran those NSF-supported field schools in cultural anthropology that I described in chapter 13. Kenny and I relied initially on our own experience with field notes and we borrowed freely from the experience of many colleagues. The method we developed—involving jottings, a diary, a daily log, and three kinds of formal notes—was used by 40 field-school participants in the United States and in Mexico and by others since then. Some years later, after personal computers came on the scene, my students and I began to think about using machines to help manage textual data (Bernard and Evans 1983).

Two things can be said about the method I'm going to lay out here: (1) It works; and (2) It's not the only way to do things. If you do field research, you'll develop your own style of writing notes and you'll add your own little tricks as you go along. Still, the method described here will help you work systematically at taking field notes and it will allow you to search through them quickly and easily to look for relations in your data. I wish I had used this method when I was doing my own M.A. and Ph.D. fieldwork—and I wish that computers and database management systems had been available then, too.

Four Types of Field Notes

You'll write four kinds of notes in fieldwork: **jottings**, a diary, a log, and field notes proper.

Jottings

Field jottings—what Roger Sanjek calls **scratch notes** (1990:96)—are what get you through the day. Human memory is a very poor recording device, especially for the kind of details that make the difference between good and so-so ethnographic research. Keep a note pad with you at all times and make field jottings on the spot. This applies to both formal and informal interviews in bars and cafés, in homes and on the street.

It also applies to things that just strike you as you are walking along. Jottings will provide you with the trigger you need to recall a lot of details that you don't have time to write down while you're observing events or listening to an informant. Even a few key words will jog your memory later. Remember: *If you don't write it down, it's gone*.

Clearly, there are times when you just can't take notes. Morris Freilich did research in the 1950s with the Mohawks in Brooklyn, New York, and on the Caughnanaga Reservation, 10 miles south of Montreal. He did a lot of participant observation in a bar and, as Freilich tells it, every time he pulled out a notebook his audience became hostile. So, Freilich kept a small notebook in

his hip pocket and would periodically duck into the men's room at the bar to scribble a few jottings (Freilich 1977:159).

William Sturtevant used stubby little pencils to take furtive notes; he found the technique so useful, he published a note about it in the *American Anthropologist* (1959). When Hortense Powdermaker did her research on race relations in Mississippi in 1932, she took surreptitious notes on sermons at African American churches. "My pocketbook was large," she said, "and the notebook in it was small" (1966:175).

Every fieldworker runs into situations where it's impossible to take notes. It is always appropriate to be sensitive to people's feelings, and it is sometimes a good idea to just listen attentively and leave your notebook in your pocket. You'd be surprised, though, how few of these situations there are. Don't talk yourself into not jotting down a few notes on the incorrect assumption that people won't like it if you do.

The key is to take up the role of researcher immediately when you arrive at your field site, whether that site is a peasant village in a developing nation or a corporate office in Chicago. Let people know from the first day you arrive that you are there to study their way of life. Don't try to become an inconspicuous participant rather than what you really are: an observer who wants to participate as much as possible. Participant observation means that you try to *experience* the life of your informants to the extent possible; it doesn't mean that you try to melt into the background and *become* a fully accepted member of a culture other than your own.

It's usually impossible to do that anyway. After four decades of coming and going in Indian villages in Mexico, I still stick out like a sore thumb and have yet to become the slightest bit inconspicuous. Be honest with people and keep your notepad out as much of the time as possible. Ask your informants for their permission to take notes while you are talking with them. If people don't want you to take notes, they'll tell you.

Or they may tell you to take notes when you don't want to. Paul Killworth studied the social organization of the British Army. Since notebooks are, as he says, "part of Army uniform," he was able to go anywhere with his notebook in hand and take notes freely. But if he put his notebook aside for more than a few minutes, soldiers would ask him if he was getting lazy. "More than one relaxing moment," he says, "was stopped by someone demanding that I write something down" (1997:5).

Or they may ask to see your notes. A student researcher in one of our field schools worked in a logging camp in Idaho. He would write up his notes at night from the jottings he took all day. Each morning at 6:00 A.M. he nailed the day's sheaf of notes (along with a pen on a string) to a tree for everyone to look at. Some of the men took the time to scribble helpful (or amusing, or

rude) comments on the notes. If you use this technique, watch out for the CNN effect. That's when people tell you things they want to tell everyone because they know you're going to broadcast whatever they say. This is a disaster if you're trying to make everybody around you feel confident that you're not going to blab about them.

Even when people get accustomed to your constant jottings, you can overdo it. Emerson et al. (1995:23) cite the following field note from an ethnographer who was studying divorce negotiations:

> On one occasion when finishing up a debriefing . . . [the mediator] began to apply some eye make-up while I was finishing writing down some observations. She flashed me a mock disgusted look and said, "Are you writing *this* down too!" indicating the activity with her eye pencil.

The Diary

Notes are based on observations that will form the basis of your publications. A diary, on the other hand, is personal. It's a place where you can run and hide when things get tough. You absolutely need a diary in an ethnography project. It will help you deal with loneliness, fear, and other emotions that make fieldwork difficult.

A diary chronicles how you feel and how you perceive your relations with others around you. If you are really angry at someone, you should write about it—in your diary. Jot down emotional highs and lows while they're happening, if you can, and write them up in your diary at the end of the day. Try to spend at least half an hour each day pouring out your soul to a diary. Later on, during data analysis, your diary will become an important professional document. It will give you information that will help you interpret your field notes and will make you aware of your personal biases.

The important thing about a diary is just to have one and to keep it separate from your other field notes. Franz Boas got engaged to Marie Krackowizer in May 1883, just 3 weeks before beginning his first field trip. It was a grueling 15 months on Baffin Island and at sea. Boas missed German society terribly and, although he couldn't mail the letters, he wrote about 500 pages to his fiancée. Here is an excerpt from his extraordinary diary:

> December 16, north of Pangnirtung. My dear sweetheart. . . . Do you know how I pass these long evenings? I have a copy of Kant with me, which I am studying, so that I shall not be so completely uneducated when I return. Life here really makes one dull and stupid. . . . I have to blush when I remember that during our meal tonight I thought how good a pudding with plum sauce would taste. But you have no idea what an effect privations and hunger, real hunger, have on a

> person. Maybe Mr. Kant is a good antidote! The contrast is almost unbelievable when I remember that a year ago I was in society and observed all the rules of good taste, and tonight I sit in this snow hut with Wilhelm and an Eskimo eating a piece of raw, frozen seal meat which had first to be hacked up with an axe, and greedily gulping my coffee. Is that not as great a contradiction as one can think of? (Cole 1983:29)

> February 16. Anarnitung . . . I long for sensible conversation and for someone who really understands me! Unfortunately, this time I did not bring a book to read, so I cannot help myself. I read all the advertisements and everything else on one page of the *Kolnische Zeitung* [a magazine]. In four days I shall have been away eight months. I have heard from none of you for four and a half months. (ibid.:42)

When Malinowski was trapped in the Trobriand Islands during World War I, he too, missed his fiancée and European society and occasionally lashed out at the Trobrianders in his diary (Malinowski 1967:253–254). Fieldwork in another culture is an intense experience, but don't think that you have to be stranded in the Arctic or in Melanesia for things to get intense.

Your diary will give you an outlet for writing things that you don't want to become part of a public record. Publication of Malinowski's and Boas's diaries have helped make all fieldworkers aware that they are not alone in their frailties and self-doubts.

The Log

A log is a running account of how you plan to spend your time, how you actually spend your time, and how much money you spent. A good log is the key to doing systematic fieldwork and to collecting both qualitative and quantitative data on a systematic basis.

A field log should be kept in bound books of blank, lined pages. Some of my students have been able to use handheld computers with schedule-planning software for their logs (Kenneth Sturrock, Lance Gravlee, personal communication), but if you are not completely comfortable with that technology, then stick with a big, clunky logbook, at least $6'' \times 8''$ in size so that you can see at a glance what your agenda is.

Each day of fieldwork, whether you're out for a year or a week, should be represented by a double page of the log. The pages on the left should list what you *plan* to do on any given day. The facing pages will recount what you *actually* do each day.

Begin your log on pages 2 and 3. Put the date on the top of the even-numbered page to the left. Then, go through the entire notebook and put the suc-

cessive dates on the even-numbered pages. By doing this in advance, even the days on which you "do nothing," or are away from your field site, you will have double log pages devoted to them.

The first day or two that you make a log you will use only the right-hand pages where you keep track of where you go, who you see, and what you spend. Some people like to carry their logs around with them. Others prefer to jot down the names of the people they run into or interview, and enter the information into their logs when they write up their notes in the evening. Keep an alphabetized file of 25-word profiles on as many people you meet as you can.

This can be on index cards or on a computer database. The file will make it much easier to remember who you're dealing with. Before you go into any second or third interview, look up the key biographical information you have about the person (handheld computers are perfect for this sort of thing). During the first couple of minutes of the interview, work in a comment that shows you remember some of those key bio-facts. You'll be surprised how far that'll take you.

Jot down the times that you eat and what you eat (especially if you are doing fieldwork in another culture) and write down who you eat with and how much you spend on all meals away from your house. You'd be surprised at how much you learn from this, too.

After a day or two, you will begin to use the left-hand sheets of the log. As you go through any given day, you will think of many things that you want to know but can't resolve on the spot. Write those things down in your jot book or in your log. When you write up your field notes, think about who you need to interview, or what you need to observe, regarding each of the things you wondered about that day.

Right then and there, open your log and commit yourself to finding each thing out at a particular time on a particular day. If finding something out requires that you talk to a particular person, then put that person's name in the log, too. If you don't know the person to talk to, then put down the name of someone whom you think can steer you to the right person.

Suppose you're studying a school system. It's April 5th and you are talking to MJR, a fifth-grade teacher. She tells you that since the military government took over, children have to study politics for 2 hours every day and she doesn't like it. Write a note to yourself in your log to ask mothers of some of the children about this issue and to interview the school principal.

Later on, when you are writing up your notes, you may decide not to interview the principal until after you have accumulated more data about how mothers in the community feel about the new curriculum. On the left-hand page for April 23rd you note: "target date for interview with school princi-

pal." On the left-hand page of April 10th you note: "make appointment for interview on 23rd with school principal." For April 6th you note: "need interviews with mothers about new curriculum."

As soon as it comes to you that you need to know how many kilowatt hours of electricity were burned in a village, or you need to know the difference in price between fish sold off a boat and the same fish sold in the local market, commit yourself *in your log to a specific time* when you will try to resolve the questions. Whether the question you think of requires a formal appointment, or a direct, personal observation, or an informal interview in a bar, write the question down in one of the left-hand pages of your log.

Don't worry if the planned activity log you create for yourself winds up looking nothing like the activities you actually engage in from day to day. Frankly, you'll be lucky to do half the things you think of to do, much less do them when you want to. The important thing is to fill those left-hand pages, as far out into the future as you can, with specific information that you need and specific tasks you need to perform to get that information.

This is not just because you want to use your time effectively, but because the process of building a log forces you to think hard about the questions you really want to answer in your research and the data you really need. You will start any field research project knowing some of the questions you are interested in. But those questions may change; you may add some and drop others—or your entire emphasis may shift.

The right-hand pages of the log are for recording what you actually accomplish each day. As I said, you'll be appalled at first at how little resemblance the left-hand and the right-hand pages have to one another.

Remember, good field notes do not depend on the punctuality of informants or your ability to do all the things you want to do. They depend on your systematic work over a period of time. If some informants do not show up for appointments (and often they won't), you can evaluate whether or not you really need the data you thought you were going to get from them. If you do need the data, then put a note on the left-hand page for that same day, or for the next day, to contact the informant and reschedule the appointment.

If you still have no luck, you may have to decide whether it's worth more of your time to track down a particular person or a particular piece of information. Your log will tell you how much time you've spent on it already and will make the decision easier. There's plenty of time for everything when you think you've got months stretching ahead of you. But you only have a finite amount of time in any fieldwork project to get useful data, and the time goes very quickly.

Field Notes

And now, about field notes. . . . Let's face it: After a hard day trekking all over [town] [the village] [the jungle] [the desert] interviewing people, hanging out, and recording behavior, it's hard to sit down and write up field notes. Sometimes, it's downright intimidating. We know this much about field notes for sure: The faster you write up your observations, the more detail you can get down. More is better. Much more is much better (except, of course, when data are systematically biased, in which case more is decidedly worse).

There are still places where you can't haul in a big desktop computer or find the power to run it, but handheld computers, with real keyboards, now run on small batteries that can be charged from solar power cells. You can write up field notes with a word processor anywhere.

We're not going back to paper field notes, but taking notes on a computer means that you have to be doubly paranoid about protecting those notes. If you have access to the Internet, you can e-mail copies of your notes to a couple of trusted friends or colleagues (encrypt the notes if you need to). The friend or colleague can print a copy of your notes for you, so you've got a hard copy somewhere in case your computer is stolen *and* all your backup disks are destroyed in a fire at the same time. Think this can't happen? Think again. Trees are a renewable resource. Make paper backups. And upload your notes to an Internet server for good measure. If you can't use your college's or university's server (many restrict the file space that students can use), then rent space on a private server (see appendix F).

There are three kinds of field notes: **methodological notes**, descriptive notes, and analytic notes.

Methodological Notes

Methodological notes deal with technique in collecting data. If you work out a better way to keep a log than I've described here, don't just *use* your new technique; write it up in your field notes and publish a paper about your technique so others can benefit from your experience. (See appendix F for a list of professional journals that publish articles on research methods in the social and behavioral sciences.) If you find yourself spending too much time with marginal people in the culture, make a note of it, and discuss how that came to be. You'll discover little tricks of the trade, like the "uh-huh" technique discussed in chapter 9. (Remember that one? It's where you learn how and when to grunt encouragingly to keep an interview going.) Write up notes

about your discoveries. Mark all these notes with a big "M" at the top—M for "method."

Methodological notes are also about your own growth as an instrument of data collection. Collecting data is always awkward when you begin a field project, but it gets easier as you become more comfortable in a new culture. During this critical period of adjustment, you should intellectualize what you're learning about doing fieldwork by taking methodological notes.

When I first arrived in Greece in 1960, I was invited to dinner at "around 7 P.M." When I arrived at around 7:15 (what I thought was a polite 15 minutes late), I was embarrassed to find that my host was still taking a bath. I should have known that he really meant "around 8 P.M." when he said "around 7." My methodological note for the occasion simply stated that I should not show up for dinner before 8 P.M. in the future.

Some weeks later, I figured out the general rules for timing of evening activities, including cocktails, dinner, and late-night desserts in the open squares of Athens. Robert Levine has studied the psychology of time by asking people around the world things like "How long would you wait for someone who was late for a lunch appointment?" On average, Brazilians say they'd wait 62 minutes. On average, says Levine, "Americans would need to be back at their office two minutes *before*" the late Brazilian lunch was just getting underway (Levine 1997:136).

When I began fieldwork with the Ñähñu people of central Mexico in 1962, I was offered *pulque* everywhere I went. (*Pulque* is fermented nectar from the maguey cactus.) I tried to refuse politely; I couldn't stand the stuff. But people were very insistent and seemed offended if I didn't accept the drink. Things were particularly awkward when I showed up at someone's house and there were other guests there. Everyone enjoyed *pulque* but me, and most of the time people were too poor to have beer around to offer me.

At that time, I wrote a note that people "felt obliged by custom to offer *pulque* to guests." I was dead wrong. As I eventually learned, people were testing me to see if I was affiliated with the Summer Institute of Linguistics (SIL), an evangelical missionary group (and, of course, nondrinkers of alcohol) that had its regional headquarters in the area where I was working.

The SIL is comprised of many excellent linguists who produce books and articles on the grammar of the nonwritten languages of the world and translations of the Bible into those languages. There was serious friction between the Indians who had converted to Protestantism and those who remained Catholic. It was important for me to disassociate myself from the SIL, so my methodological note discussed the importance of conspicuously consuming alcohol and tobacco in order to identify myself as an anthropologist and not as a missionary.

Nine years later I wrote:

> After all this time, I still don't like *pulque*. I'm sure it's unhealthy to drink out of the gourds that are passed around. I've taken to carrying a couple of six packs of beer in the car and telling people that I just don't like *pulque*, and telling people that I'd be pleased to have them join me in a beer. If they don't offer me beer, I offer it to them. This works just fine, and keeps my reputation of independence from the SIL intact.

Eight years later, in 1979, I read that William Partridge had a similar predicament during his work in Colombia (Kimball and Partridge 1979:55). Everywhere Partridge went, it seems, people offered him beer, even at 7:00 in the morning. He needed an acceptable excuse, he said, to avoid spending all his waking hours getting drunk.

After a few months in the field, Partridge found that telling people "*Estoy tomando una pastilla*" ("I'm taking a pill") did the trick. Locally, the pill referred to in this phrase was used in treating venereal disease. Everyone knew that you didn't drink alcohol while you were taking this pill, and the excuse was perfect for adding a little virility boost to Partridge's reputation. Partridge used his knowledge of local culture to get out of a tough situation.

Methodological notes, then, have to do with the conduct of field inquiry itself. You will want to make methodological notes especially when you do something silly that breaks a cultural norm. If you are feeling particularly sheepish, you might want to write those feelings into your diary where no one else will see what you've written; but you don't want to waste the opportunity to make a straightforward methodological note on such occasions, as well.

Descriptive Notes

Descriptive notes are the meat and potatoes of fieldwork. Most notes are descriptive and are from two sources: watching and listening. Interviews with informants produce acres of notes, especially if you use a recorder and later write down large chunks of what people say. Observations of processes, like feeding children, building a house, making beer, and so on, also produce a lot of notes. Descriptive field notes may contain birth records that you've copied out of a local church registry; or they may consist of summary descriptions of a village plaza, or an urban shopping mall, or any environmental features that you think are important.

The best way to learn to write descriptive field notes is to practice doing it with others who are also trying to learn. Get together with one or more partners and observe a process that's unfamiliar to all of you. It could be a church

service other than one you've seen before, or it could be an occupational process that you've not witnessed. (I remember the first time I saw plasterers hang ceilings: They did it on stilts.)

Whatever you observe, try to capture in field notes the details of the behavior and the environment. Try to get down "what's going on." Then ask informants who are watching the ceremony or process to explain what's going on, and try to get notes down on their explanation. Later, get together with your research partner(s) and discuss your notes with one another. You'll find that two or three people see much more than just one sees. You might also find that you and your partners saw the same things but wrote down different subsets of the same information.

Analytic Notes

You will write up fewer analytic notes than any other kind. This is where you lay out your ideas about how you think the culture you are studying is organized. Analytic notes can be about relatively minor things. When I finally figured out the rules for showing up on time for evening functions in Greece, that was worth an analytic note. And when I understood the rules that governed the naming of children, that was worth an analytic note, too.

As I said in chapter 2, in the section on theory, it took me almost a year to figure out why the casualty rate among Kalymnian sponge divers was going up, while the worldwide demand for natural sponges was going down. When it finally made sense, I sat down and wrote a long, long analytic field note about it. After thinking about the problem for many years, I finally understood why bilingual education in Mexico does not result in the preservation of Indian languages (it's a long story; see Bernard 1992). As the ideas developed, I wrote them up in a series of notes.

Analytic notes are the product of a lot of time and effort and may go on for several pages. They are often the basis for published papers, or for chapters in dissertations and books. They will be the product of your understanding and that will come about through your organizing and working with descriptive and methodological notes over a period of time. Don't expect to write a great many analytic notes, but write them all your life, even (especially) after you are out of the field.

Coding Field Notes

Gene Shelley (1992) studied people who suffer from end-stage kidney disease. Most patients are on hemodialysis. Some are on peritoneal dialysis. The

"hemo" patients go to a dialysis center, several times a week, while the "pero" patients perform a dialysis (called continuous ambulatory peritoneal dialysis, or CAPD) on themselves several times a day.

Figure 14.1 shows two descriptive notes from Shelley's research. The stuff along the top of each note are codes. First, there's a delimiter (she used the

$ 615 8-16-89: 757.3; Dr. H
Dr. H explains that in peritoneal dialysis you exchange 2 liters of fluid several times a day (based on body size). Women do it about 3 times and men about 4 times because of larger body size. People mostly do a "dwell" for about 8 hours overnight while they sleep (fluid is inflowed into peritoneal cavity and allowed to sit there overnight). Then they do peritoneal dialysis when they wake up and another time or two during the day. Peritoneal dialysis patients are pretty close to being healthy. They have to take medication but you cannot tell them from healthy people, he says.

$ 742 8-30-89: 57.3, 757.5; Nurse Ralph B.
CAPD training takes about a week to 10 days. During this time, the patient comes in every day and receives training. Ralph thinks that when the whole family comes in for the training, the patients do better. They have about 20 CAPD patients right now. Ralph said there are 3 types of CAPD patients: (1) those patients who are already on hemo and in pretty good shape, usually well-motivated. (2) those who are late getting started and are in trouble (medically) and are hurriedly trying to learn the procedure. (It takes 2 weeks to get a catheter inserted and then have it heal. Since this surgery is viewed as "elective surgery," it can be bumped and rescheduled.) Only after surgery and healing can the training take place. (3) those who have lost a kidney which was transplanted. They are just waiting for another kidney and they view CAPD as temporary and are not that motivated to learn it because they think they won't be on it long.

Figure 14.1. Field notes from Gene Shelley's study of kidney disease patients (1992). Reproduced by permission.

dollar sign) that marks the beginning of each note. This lets you pack all the notes together in one big file if you want to but lets a word processor or text management program know where notes begin and end. Next is a unique number that identifies the note in a continuing sequence, starting with 0001. Next is the date.

Then come some numbers that refer to **topical codes** (more on this in the section coming right up). Finally, at the end of the codes at the top of each

field note, there's a cryptic indicator of the person to whom Shelley attributes the information.

When William Partridge interviewed cannabis growers in Colombia, he identified the texts by a letter code and kept the only copy of his notes in a locked trunk (Kimball and Partridge 1979:174). You don't have to be interviewing cannabis growers to be paranoid about keeping your informants' identity secret. You never know what seemingly innocuous information might embarrass or hurt someone if your data fall into the wrong hands.

Topical Codes: The OCM

Shelley used a modified version of the *Outline of Cultural Materials*, or OCM, to code her field notes. The OCM was developed originally by G. P. Murdock in 1950 as a way to index and organize ethnographic materials in the Human Relations Area Files. (The HRAF is a library of ethnographic and archaeological materials on cultures around the world, past and present. More about HRAF and the OCM in the section on content analysis in chapter 17.)

There are 82 big cultural domains in the OCM, in blocks of 10, from 10 to 91. Block 58, for example, covers marriage with codes for nuptials (585), divorce (586), and so on. Other major domains are things like kinship, entertainment, social stratification, war, health, sex, and religious practices. The OCM has gone through several editions over the years. The full version, which you can print out and take with you to the field, is available online at http://www.yale.edu/hraf/collections.htm (Murdock et al. 2004).

Every project is unique, so you'll need codes that aren't in the OCM, but you can add decimals (or words) and extend the codes forever. Table 14.1 shows Shelley's adaptation of the OCM code 757 (medical therapy):

TABLE 14.1
Shelley's (1992) Adaptation of the OCM Code 757 on Medical Therapy

757.1	Transplantation
757.2	Hemodialysis
757.3	CAPD (peritoneal dialysis)
757.4	Home dialysis
757.5	Adjustment to dialysis
757.6	Compliance with medical regime
757.7	Machinery involved in dialysis
757.8	Medicines
757.9	Medical test results
757.91	HIV test results

Don't be put off by the lengthiness of the OCM coding list. That is its strength. Lots of anthropologists have used the OCM over the years to code their field notes and other materials. George Foster coded his 50 years of notes on the Mexican community of Tzintzuntzán using the OCM, and Robert Van Kemper uses it to code the data that he's collecting on the same community (George Foster, personal communication; Kemper 2002:289). John Honigman used it in his fieldwork on Canadian Indians; the 37 field researchers in Clyde Kluckhohn's Comparative Study of Values in Five Cultures Project all used the OCM to code their notes, as did the fieldworkers on the Cornell University team project studying a village in India (Sanjek 1990:108, 232, 331). You'll only use a fraction of the codes on any given project, but once you start using it in the field, you'll quickly find yourself building supplemental coding schemes to fit your particular needs.

Figure 14.2 shows two more descriptive field notes coded with the OCM. The first is from fieldwork I did in Tarpon Springs, Florida (Bernard 1965) and the second is from a study of an ocean-going research vessel (Bernard and Killworth 1974).

Figure 14.3 shows how Gordon Gibson (of the Smithsonian) used the OCM to code a series of ethnographic films on the Himba, a cattle herding society in Namibia (in Kreiss and Stockton 1980:287). In the first note in figure 14.2, I used the OCM codes for assimilation, cultural goals, vacations, and retirement. I also added a code, K, which marks people's relations to Kalymnos, the island in Greece where they or their parents were born.

In this note, 571 is the OCM code for social relationships and groups. I expanded it to include 571.1, which I call "between-group conflict."

In figure 14.3, the entire film is about a wedding, so each piece is coded 585, the OCM code for nuptials. Where the hut is seen, the code for dwellings (342) is inserted. Where the film shows people eating meat, the codes 262 (diet) and 264 (eating) are inserted. In the frame at 11:45:10, the code for visiting (574) appears, and in the two earlier frames, the code for childhood activities (857) is inserted. When Gibson did this work in the 1970s, the database was held on a mainframe. Today, you can watch an ethnographic film on DVD and enter codes into a database as you go. (For more on this, see the section on database management, below, and chapter 17 on text analysis).

Topical Codes: Other Coding Schemes

There are, of course, other useful checklists for coding cultural data. Allen Johnson and his colleagues developed one in conjunction with Johnson's Time Allocation Project (see chapter 15 on direct observation methods). Like the OCM and like *Notes and Queries in Anthropology*, the Johnson et al. (1987) checklist can be used as a reminder of the kinds of data you might want to

$ 118 7/15/64 Coffee house EK D 177, 185, 528, 887 K
EK made a recent trip to K [Kalymnos] and went back to the village where he was born. He hadn't been back in 22 years, and he is very ambivalent about things. On the one hand, he feels that he should be planning to retire to K. “That's what everybody around here talks about doing when they retire,” he says. On the other hand, he doesn't want to do that, and he feels a bit trapped by custom. “I really didn't feel like I belonged there any more—not to live, really. It was great to visit and to see all the people and like that, and I'd really like my kids to know the place, but I wouldn't want to live there permanently, you know?” He wonders if there is something wrong with him and then “And my wife? Forget it.”

$ 81 7/28/73 R/V TW PJ D 571.1
Although the mess is open, I rarely see any of the crew eating with the scientists on this cruise. This was the case on the other cruise, too. The crew takes a lot less time to eat than the scientists who sit around “shooting the science” after dinner, as PJ says. There is a shortage of mess seats, and people have to eat in shifts. PJ says that it annoys him to see the scientific personnel just sitting around and lingering over coffee after dinner when they could be letting others sit down. “That's just another example of how obtuse these guys are.” As I was considering his use of the word “obtuse” he said “They're so wrapped up in themselves, they just don't think about other people.”

Figure 14.2. Two field notes.

collect in a general ethnographic research project and as a template for coding data collected during field research.

Many people find the use of number codes distracting. Matthew Miles and Michael Huberman (1994), authors of a wonderful book on qualitative data analysis, advocated the use of words or mnemonics that look like the original concept. Like many researchers, they find that mnemonic codes (like ECO for economics, DIV for divorce, and so on) are easier to remember than numbers. Figure 14.4 shows a piece of Miles and Huberman’s codebook for a study they did of innovations in a school system.

Another value of using your own codes is that they develop naturally from your study and you’ll find it easy to remember them as you code your notes each day. Strauss and Corbin (1990:68) recommend in vivo codes as names for things. In vivo codes are catchy phrases or words used by informants. In

13 GIBSON (film)		**E-5 (1961) 1969 HIMBA**	
11:09:29	Picture	Bride and companion walk toward hut, then bride and unmarried girl drop to their knees and crawl into hut. People are seen sitting in front of hut as the two disappear inside.	585* 342
	Sound	The bride and their companions solemnly return to the hut in Vesenga's village where she has been staying, and she and the unmarried girl enter the hut.	
11:29:30	Picture	People sitting and standing near hut.	585*
	Sound	Women and children of the village, and those visiting, from other villages, have gathered to sit near the bride.	342 574 857
11:42:22	Picture	Boys seated eating meat.	585*
	Sound	Young boys eat together.	262 857
11:45:10	Picture	Meat in basket and men seated, eating. A man standing and eating meat off a bone, places the bone on a bush. The groom is seated, his arms folded on his knees. He takes a piece of meat from a pail on the ground between his feet.	585* 264 574
	Sound	The bridegroom and his friends are still seated by the bower, where they are finishing.	

Figure 14.3. Gibson's Coding of the Himba Films.
SOURCE: L. Kreiss and E. Stockton, "Using the Outline of Cultural Materials as a Basis for Indexing the Content of Ethnographic Films," *Behavior Science Research*, Vol. 15, pp. 281–93, 1980.

Short Description	*Code*
Adoption Process	AP
AP:Event chronology-official version	AP-chron/pub
AP:Event chronology-subterranean	AP-chron/prov
AP:Inside/outside	AP-in/out
AP:Centrality	AP-cent
AP:Motives	AP-mot
AP:User fit	AP-fit
AP:Plan	AP-Plan
AP:Readiness	AP-Redi
AP:Critical events	AP-crit

Figure 14.4. Part of Miles and Huberman's coding scheme.
SOURCE: M. B. Miles and A. M. Huberman, *Qualitative Data Analysis*, p. 59. © 1994 by Sage Publications. Reprinted by permission of Sage Publications.

his study of Alaskan fishermen, Jeffrey Johnson heard people talking about a "clown." The word turned out to be a terrific label for a type of person found in many organizations. The term emerged in vivo from the mouths of Johnson's informants. (For more on in vivo coding, see the section in chapter 17 on grounded theory in text analysis).

A good way to find in vivo codes is to use a computer program to count the number of times that words occur in your text (see appendix F for programs that do this). The nontrivial words that appear often are hints about themes in your notes. When you have a list of codes words, use your word processor to grab the codes and put them into your notes wherever you want.

If you use your own coding scheme, or if you modify an existing scheme (like the OCM), be sure to write up a verbose codebook in case you forget what "A5" or "EMP" or whatever-cute-abbreviations-you-dreamed-up-at-the-time-you-did-the-coding mean.

And don't get too picky when you make up your own codes. Coding is supposed to be data reduction, not data proliferation. Matthew Miles was involved in a big ethnographic project to evaluate six schools. All the researchers developed their own codes and the code list quickly grew to 202 categories of actors, processes, organizational forms, and efforts. Each of the six researchers insisted that his or her field site was unique and that the highly specialized codes were all necessary. It became impossible for anyone to use the unwieldy system, and they just stopped coding altogether (Miles 1983:123).

The important thing is not which coding scheme you use, it's that you code your notes and do it consistently. In most projects, the coding scheme takes shape as the notes are written. The scheme is revised a lot before it becomes stable. Some anthropologists, even those who use the OCM, wait a month or more, to see how their field notes are shaping up, before they think about how to code the notes.

The Mechanics of Coding

Put codes directly into the text of the field notes, either at the top of each note, or to the right or left side of each note. Figure 14.5 shows an example of coding across the top and of coding down the edge, using mnemonic codes.

The choice of top coding or edge coding is really a matter of taste—you can do one as easily as the other in your word processor. If you choose edge coding, just define a narrow column of, say, 15 or 20 spaces for the codes and a broad column of, say, 50 or 55 columns for the body of text.

Coding across the top	
412 MA XOR 101290 MIG WOM ECO This note is number 412. It's about an informant named MA in these notes, and she is from a village you label XOR. The date is October 12, 1990, and the note is about MA's migration from her village to the city in search of work. The note is coded using abbreviations as being about migration (MIG), about women (WOM), and about economics (ECO).	
Coding down the edge	
412, MA XOR 101290 MIG WOM ECO	This note is number 412. It's about an informant named MA in these notes, and she is from a village you label XOR. The date is October 12, 1990, and the note is about MA's migration from her village to the city in search of work. The note is coded in abbreviations as being about migration (MIG), about women (WOM), and about economics (ECO).

Figure 14.5. Coding field notes.

Coding vs. Indexing

I want to make clear the three different uses of the word "code." When I say: "Use codes for places and informant names," the word "code" means an *encryption device*. The object is to hide information, not dispense it. When I say: "After the informant name and place, leave room for topical codes," the word "code" means an *indexing device*. The object is to identify the existence of a variable. The third meaning of the word "code" is a *measurement device*.

Suppose you do 100 interviews with women about their birthing experience. If you stick the code PAIN into the text whenever a woman mentions anything about pain or about feeling hurt, you'd be using the code PAIN as an indexing device—that is, as a way to find your way back to all the places in the text where anything about pain is mentioned. It's just like the subject index to this book. It says that "quota sampling" is on page 187 and sure enough, when you go to page 187, you find you're reading about sampling.

Suppose, though, that you make judgments about the amount of pain—by counting words like "agony" as indicating more pain than words like "distress" or by looking at the content and meaning of the text and counting "It was painful, but I got through it" as indicating less pain than "I prayed I would die." You might use codes like LO-PAIN, MID-PAIN, or HI-PAIN and in this case, you'd be using codes for actual measurement. We'll talk more about this in chapter 17 on text analysis.

Analyzing Field Notes

I think it's best to start with the ocular scan method, or eyeballing. In this low-tech method, you quite literally lay out your notes in piles on the floor. You live with them, handle them, read them over and over again, tack bunches of them to a bulletin board, and eventually get a feel for what's in them. This is followed by the interocular percussion test, in which patterns jump out and hit you between the eyes. (If you take your notes on a computer, print them for this part of the analysis.)

This may not seem like a very scientific way of doing things, but I don't know any way that's better. No researcher, working alone for a year, can produce more field notes than she or he can grasp by pawing and shuffling through them. For sheer fun and analytic efficiency, nothing beats pawing and shuffling through your notes and thinking about them.

Eventually, though, you'll want to use a text management (TM) program. It's not unusual for anthropologists to produce 10,000 words some weeks in field notes. That's the equivalent of a 40-page, double-spaced paper, or about six pages a day. This won't happen every week, but when you're doing fieldwork, bombarded all day long with new sensory experiences and interviewing informants about topics that really mean something to you, writing 40 pages of field notes is easy. Even at a more modest clip, you're likely to accumulate 500–1,000 pages of notes in a year.

That pile of field notes can get pretty intimidating, and the next thing you know you're backing away from taking a lot of notes on the theory that fewer notes are easier to handle. I know; it happened to me, and it has happened to many of our colleagues. TM software can help.

TM programs make light work out of searching through tons of notes for combinations of words or phrases. With a TM program, you can ask the computer questions like: "Find every note in which I used the word *woman* but only if I also used the word *migration* within three lines of the word *woman*." Since codes are just words, you can substitute OCM code numbers or in vivo codes or mnemonic codes in the queries. For example: If you've left up to three lines at the top of each note for topical codes, you'd ask the computer: "Find 166 and 572.1 if they occur within three lines of one another."

TM programs may also tempt you to avoid coding your field notes. Resist this temptation. You can watch a wedding ceremony for 3 hours, spend a day and a half writing up 22 pages of notes on your observations, and never use the words "marriage" in your notes. If you use a text manager to find the word "marriage," you'll retrieve all the notes in which you *did* use that word, but you won't find any of the 22 pages where you wrote about that wedding ceremony you attended.

If you do edge coding, you need a slightly different search strategy. Suppose you have 33 lines of text on each double-spaced page of field notes or interview transcription. You could have codes anywhere along the edge of the page from line 1 to line 66. Decide on a marker, like the dollar sign, to delimit the top and bottom of each field note. Then ask a TM program to look for a pair or a series of codes between consecutive markers. Figure 14.6 shows one of Gene Shelley's notes coded along the edge.

$ 9589Inf#2 57 572 752.2 76 157 $	$ She says the social network is important, in her opinion. It is important to have a person to support you (emotionally and physically). Her friends and school children (she was a teacher for deaf students for a short time), called her to see how she was doing and they still get in touch with her now. However, her friends cry and say what a brave person she is and she doesn't like them to cry. "People get upset, so I don't talk to them about it." She also doesn't like to talk to people for another reason. She started dialysis in 1972. Since then, all others who started with her (in her cohort) are dead. She doesn't want to meet new people. She doesn't want to talk to other patients about personal stuff because she will get attached to them and they will die (or suffer horribly with another disease like diabetes). Even with people who are not sick, she doesn't always tell everyone about CAPD. She would rather talk to them about normal things, not her disease. $

Figure 14.6. Gene Shelley's edge-coded field note.

Gregory Truex (1993) marks off chunks of text using what he calls the "B–E convention." He marks the beginning of a chunk of related text with a code in angle brackets and tacks on the letter "B," for beginning. Then he uses the same code, again in angle brackets, with the letter "E" tacked on to mark the end of the chunk.

For example, Truex marks the beginning of any text about land use with <LANDB> and marks the end of the block with <LANDE>. Then he uses a TM program to retrieve chunks of text that begin with <LANDB> and end

with <LANDE> or chunks that begin with <LANDB>, end with <LANDE>, and contain some third code, like <AGRIC>. Truex finds that this process of "tagging and tying," as he calls it, helps him understand his corpus of text.

Database Management and Paper Notes

But what do you do if you have a big pile of paper notes from projects gone by? Or a stack of local newspaper clippings? The solution to this problem is database management, or DBM.

We use DBM all the time. If someone asks you to suggest a French restaurant in San Francisco that costs less than $100 per person (with wine), you search through your mental database of restaurants, limiting yourself to those you know in San Francisco (the first criterion). Then you look through *that* list for French restaurants and pull out only those that also satisfy the second criterion. Finally, you look through *that* list and see if any of them cost less than $100 per person (the third criterion).

If you have paper copies of interview transcripts or field notes and no computer file, number the notes, starting with 00001. Set up a database using Microsoft Access® or FileMaker Pro®. The records of the database will be the numbered pages, from 1 to *n*, and the fields of the database will include the name of the informant, the place where you did the interview, the date, and the topics covered in each note. Some notes may get one or two topical codes; others may need 10, so build 10 code spaces into the database.

It takes about 2 or 3 minutes per note to enter codes into a database, which means it only takes 30–50 hours of work at the computer to enter codes for 1,000 pages of field notes. When you ask the database "Which notes are about religion and also about political factionalism but not about generational conflict?" you'll get back answers like: "The information you want is on records (that is, pages) 113, 334, 376, 819, 820, and 1,168." You simply flip through the field notes on your lap and as you do, you'll see the entire page of each field note and you'll get a feel for the context.

You can use DBM software to manage information about paper notes, photos and slides, collections of artifacts, collections of news clippings—in short, any collection of *things*. You could code each CD you own for artist, title, publisher, date of release, and topics that describe the music. If you have 1,000 CDs, then you have 1,000 records in the database. You could code all the photos you take in the field and make each one a record in a database. Then you can ask questions like: "Which photos are about palm oil?" or "Which photos are about old men in the plaza?" or "Which are about market sellers *and* about meat *and* about servants making purchases for others?" There is nothing more

qualitative than things, so this is what qualitative database management is really about.

Local newspapers are a great source of data about communities, but once you start clipping all the interesting stories, you quickly wind up with hundreds of pieces. Just number them and code them for the topics that are germane to your research. Then, later, you can ask the database: "Which clippings are about property disputes between siblings?"

Relational Database Systems

All the database examples I've given you so far are for **flat files**, which means that the data are in a single table. Suppose you do 50 semistructured interviews. A 2-hour interview typically produces about 30 pages of transcribed, double-spaced text. If you code, on average, five chunks of text on each page, you'll wind up with

$$50 \text{ (informants)} \times 30 \text{ (pages)} \times 5 \text{ (chunks)} = 7{,}500$$

records in a flat file database—one record for each chunk.

Now, suppose that one of the things you code for is whether a particular chunk of text is about the informant's experience with migration. And suppose you want to ask the database: "Which pieces of the texts are about migration and about women who are married and under 30 years of age?" Table 14.2

TABLE 14.2
A Flat File Database

Person	*Sex*	*Age*	*Chunk*	*Married*	*Code 1 Migration*	*Code 2*	*Code 3*	*Code 4*
Josefa R.	2	22	1	Y	Y			
Josefa R.	2	22	2	Y	N			
Josefa R.	2	22	3	Y	N			
Josefa R.	2	22	.	Y	N			
Josefa R.	2	22	.	Y	Y			
Josefa R.	2	22	148	Y	N			
Roberto M.	1	47	1	N	N			
Roberto M.	1	47	2	N	N			
Roberto M.	1	47	3	N	N			
Roberto M.	1	47	.	N	N			
Roberto M.	1	47	.	N	N			
Roberto M.	1	47	160	N	N			

shows a microscopic piece of the flat file database you'd need to answer this question. Each informant has a set of records, one record for each chunk of text. You can see the problem: Each record contains information about the informant's age, sex, and marital status, plus information about the themes (codes) that are present on each page of text.

There's a better way. In a **relational database**, you'd have one file with information about the informants (you'd type that information into the database once for each informant—that is, 50 times, not 7,500 times) and another file that contains information about their transcripts.

Each of the 7,500 records in the transcript data file would contain a single code that identifies the informant and the two files would be related to each other through that code. So when you ask: "Which pieces of text are about migration and about women under 30?" the program: (1) rushes off to find all the chunks of text that you've tagged for migration; (2) makes a temporary list of those chunks; (3) looks at each chunk in the temporary list and finds the respondent's name or code; and (4) looks up the respondent in the respondent information file.

If the respondent is not a woman, or is not a woman under 30, the program drops the chunk of text from the temporary list. When the program finishes, it tells you whether any of the chunks of text conform to all the criteria you listed in your question. Asking questions like this for 7,500 records takes a couple of seconds.

Here's an example of a really interesting DBM problem in anthropology. Among the Embu of Kenya, women between the ages of 15 and 49 spend about 80% of their lives either pregnant or lactating. They average 30 months between births and, on average, breast-feed their children for 15 months. In 1985–1986, Michael Baksh and his colleagues did a 12-month time allocation study of 169 Embu households comprising 1,318 persons (Baksh et al. 1994:346). The researchers made 64 random visits to each household. They recorded what everyone was doing at the moment of the visit and they coded each lead woman (one per household) as being in one of nine reproductive status periods: the 1st, 2nd, and 3rd trimesters of pregnancy; the 1st, 2nd, 3rd, 4th, and 5th 3-month period of lactation; or NPNL (nonpregnant, nonlactating).

In the late 1980s, data had to be stored on magnetic tapes and analysis was done on a mainframe computer. Today, Baksh and his colleagues could use relational database software that operates on personal computers and set up four linked files. In one file would be data about the households (number of people, the material the house was made of, and so on). This is shown in figure 14.7a. In another file would be information about the 1,318 people in the 169 households (sex, date of birth, etc.). This is shown in figure 14.7b.

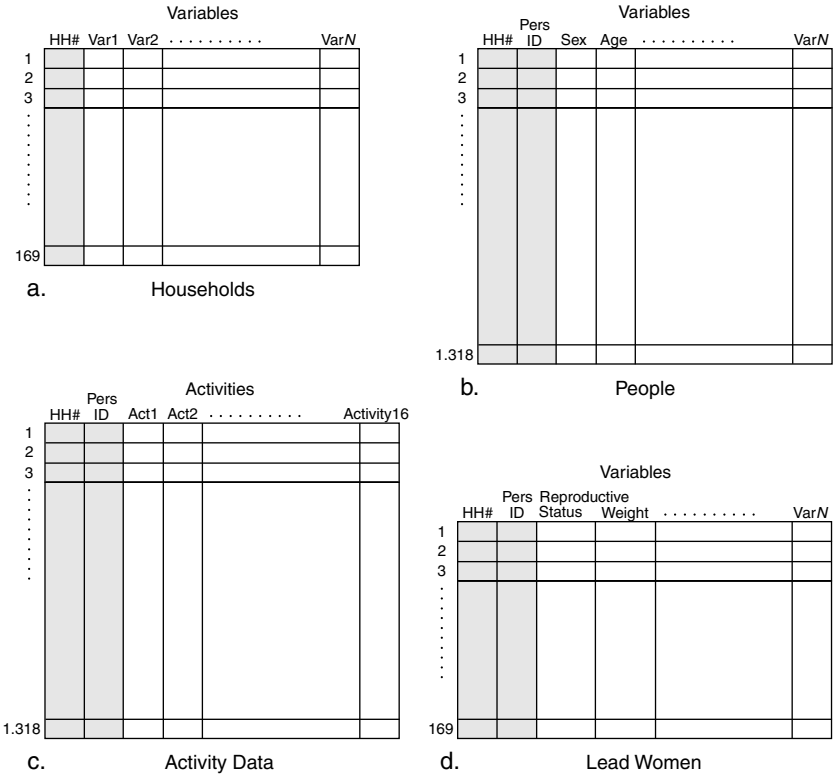

Figure 14.7. Schema for Baksh's relational database.

Baksh et al. coded for hundreds of activities, but these were combined into 16 categories for analysis (eating, subsistence agriculture, food preparation, child care, and so on). These data would be stored in a summary table of activities for the 1,318 people, as shown in figure 14.7c. Note that since there were 64 visits, the numbers in each of the 16 activity columns would range from 0 to 64.

Data on the monthly reproductive status of each lead woman would be stored in a set of 12 files, along with information about her physical functions, body mass index, and so on. This is shown in figure 14.7d.

Do you see how the files in figure 14.7 are related to one another through common features? File (a) is linked to files (b), (c), and (d) through the unique household identifier (the variable labeled HH#). Thus, for any person in file (b), we have access to all the data about the household they belong to through

this link. File (b) is linked to files (c) and (d) through the unique personal ID, or identification number. So, for each of the 169 lead women in file (d) we have access to her personal information (age, etc.) stored in file (b). The information in file (c) is linked to information about individuals and about households through the personal and household ID numbers.

Once you get accustomed to setting up databases, you'll wonder how you ever got along without them.